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Traffic Safety
Administration**

Public Acceptability of Highway Safety Countermeasures

Volume I
Background of Study and Methodology

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16. Abstract

This study provides information about public attitudes towards proposed highway safety countermeasures in three program areas: alcohol and drugs, unsafe driving behaviors, and pedestrian safety. This volume describes the three research methodologies employed in the project. First, focus group discussions were conducted to identify the nature of public concerns about, and attitudes towards, the countermeasures in order to develope a questionnaire for use in a general public survey. Second, a statistically generated sample of the general public was surveyed to produce estimates of acceptability that could be projected to the national adult population. Third, special interest case studies were conducted in each of ten states to obtain qualitative perspectives from experts in key organizations that were believed to have special interest or expertise in the countermeasure areas under investigation.

Specific information on the results of each methodology for each countermeasure area can be found in other volumes of this report as follows: Volume II--Safe Driving Conformance Research; Volume III--Alcohol and Drug Rsearch; and Volume IV--Pedestrian Safety. Finally, Volume V (Summary Report) is a condensation of each of the detailed reports, concisely summarizing the principal results of each of the countermeasures studied and providing guidelines for successful implementation of highway safety countermeasures.

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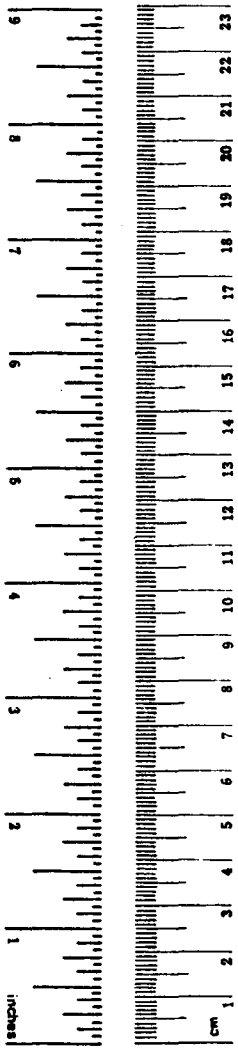
METRIC CONVERSION FACTORS

Approximate Conversions to Metric Measures

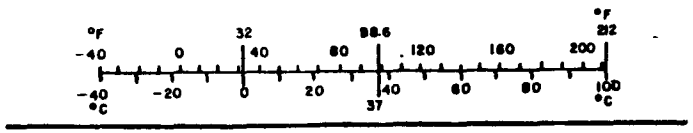
Symbol	When You Know	Multiply by	To Find	Symbol
	LENGTH			
in	inches	*2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
	AREA			
in^2	square inches	6.5	square centimeters	cm^2
ft^2	square feet	0.09	square meters	m^2
yd^2	square yards	0.8	square meters	m^2
mi^2	square miles	2.6	square kilometers	km^2
	acres	0.4	hectares	ha
	MASS (weight)			
oz	ounces	28	grams	g
lb	pounds	0.45	kilograms	kg
	short tons (2000 lb)	0.9	tonnes	t
	VOLUME			
tsp	teaspoons	5	milliliters	ml
Tbsp	tablespoons	15	milliliters	ml
fl oz	fluid ounces	30	milliliters	ml
c	cups	0.24	liters	l
pt	pints	0.47	liters	l
qt	quarts	0.95	liters	l
gal	gallons	3.8	liters	l
ft^3	cubic feet	0.03	cubic meters	m^3
yd^3	cubic yards	0.76	cubic meters	m^3
	TEMPERATURE (exact)			
°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C

*1 in = 2.54 (exactly). For other exact conversions and more detailed tables, see NBS Misc. Publ. 286, Units of Weights and Measures, Price $2.25, SD Catalog No. C13.10:286.



Approximate Conversions from Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
	LENGTH			
mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meters	3.3	feet	ft
m	meters	1.1	yards	yd
km	kilometers	0.6	miles	mi
	AREA			
cm^2	square centimeters	0.16	square inches	in^2
m^2	square meters	1.2	square yards	yd^2
km^2	square kilometers	0.4	square miles	mi^2
ha	hectares (10,000 m^2)	2.5	acres	
	MASS (weight)			
g	grams	0.035	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	
	VOLUME			
ml	milliliters	0.03	fluid ounces	fl oz
l	liters	2.1	pints	pt
l	liters	1.06	quarts	qt
l	liters	0.26	gallons	gal
m^3	cubic meters	35	cubic feet	ft^3
m^3	cubic meters	1.3	cubic yards	yd^3
	TEMPERATURE (exact)			
°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F



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The conceptual framework for the study and the overall design of the project were developed by Irving Crespi, who served as Principal Investigator for most of the project's duration. Despite his departure from Mathematica Policy Research prior to project completion, his insights and perspectives are imprinted on the basic orientation of the study and are reflected throughout this report.

The project greatly benefited from the encouragement and assistance provided by Michael Goodman and Maria Vegega, who were the Contract Technical Managers at NHTSA. Valuable input was also received from a number of other individuals at NHTSA, especially Steven Benson and Mark Anderson.

Although many people contributed to the completion of the survey, several individuals deserve special recognition for their roles at various stages of the project. Jan Stiefel and Christine Loy-Kennedy supervised the survey interviewers, using a computer-assisted telephone interviewing system that was fairly new at MPR. Dick Dame performed the programming necessary for the computer-assisted telephone interviewing system; Linda Sperling performed the programming for the numerous cross-tabulations required for the analysis. William Borden was responsible for constructing the many tables needed to present the general-public survey results, and also assisted in the analysis of the special-interest group data. Editing of the final report was performed by Thomas Good, who also coordinated the compilation of the final report product.

Andrea M. Vayda
Project Director

ADDENDUM

Final Report to "Public Acceptability of Highway Safety Countermeasures"

The purpose of this project was to obtain information about public attitudes on highway safety countermeasures in three program areas: alcohol and drugs, unsafe driving actions, and pedestrian safety. To this end, three methodologies were employed: Focus Group Discussions, Special Interest Case Studies, and a General Public Survey. This addendum discusses some critical issues related to interpretation of the project's results.

Focus Group Discussions were employed in the design and pilot stages of this project for the purpose of identifying relevant public acceptance issues worthy of investigation. Members of special interest groups often have access to highway safety policy makers and may be in positions to facilitate or thwart countermeasure implementation. Hence, the Special Interest Case Studies were conducted in an effort to obtain expert opinions about possible differences in perceptions of these highway safety countermeasures. The General Public Survey was conducted to obtain measures of general public views about highway safety issues and proposed countermeasures.

Of the three methodologies employed, only the General Public Survey was based on a statistically predictive sample and yielded quantitative data which are valid and can be interpreted as reflective of overall public opinion on specific issues. Both the Focus Group Discussions and the Special Interest Case Studies resulted in qualitatitive analyses which provide the reader with a broader perspective about the kinds of issues and concerns which may be associated with countermeasure implementation. However, the results from both the Focus and the Special Interest Groups cannot be generalized as representative of acceptability concerns in the general population.

It is important to realize that the Focus Group Discussions and the Special Interest Case Studies were informal, open-ended discussions. No attempt was made to supply respondents with additional information not included in the prepared countermeasure descriptions, or to correct any misunderstandings which respondents may have had. As a result, readers should realize that some of the judgments and reactions may have been based on misunderstandings of the issues. This was particularly the case in discussion of the Automated Speed Enforcement Device (ASED) and the Passive Breath Tester (PBT). Since the countermeasure description of the ASED was

vague with respect to how a photograph would be taken, some respondents incorrectly interpreted a "photograph of the car" to mean "a photograph of the driver." With this interpretation, invasion of privacy issues were raised. If the ASED were to be used in speed-enforcement, a photograph would only be taken of the rear of the vehicle (i.e., the objective would be to identify the license plate; vehicle occupants would not be identifiable). Hence, this particular privacy concern (i.e., photographing vehicle occupants) should not constitute a problem. In the case of the PBT, acceptance issues revolved primarily around legal concerns. As the legal issues associated with the PBT were not addressed in the countermeasure description, some respondents incorrectly interpreted the PBT as a test to quantitatively measure a suspected drunk driver's blood alcohol content (BAC). This interpretation raised issues concerning unreasonable search and seizure. The PBT was intended to collect evidence of alcohol presence in normally expelled breath, providing a foundation for further testing. Since expelled breath is considered "plain view" observation, its use is not considered a search and thus is not governed by Fourth Amendment standards of reasonableness, which do govern the use of the active, deep-lung air sample tests more familiar to respondents. Since the use of the PBT does not intrude on a driver's "reasonable expectation of privacy," search and seizure issues are not applicable. Readers should be aware however, that the technical feasibility of the PBT has not been established, and it is unlikely that further developmental efforts will be undertaken at this time. Finally, users of this report should be aware that these problems of misinterpretation were not evident in the General Public Survey, which provides the most definitive information regarding public acceptance of the countermeasures studied.

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I. INTRODUCTION

This study of public acceptability is designed to provide the National Highway Traffic Safety Administration (NHTSA) with information about public attitudes toward proposed highway-safety countermeasures. An assessment of public acceptability is part of a broader NHTSA effort to develop and promote countermeasures that will reduce the toll of motor-vehicle accidents. Since successful implementation of certain countermeasures depends on public acceptability, preliminary indications of public response can guide decisions about whether to proceed with or discontinue a particular strategy. The nature of public reactions can also provide a basis for modifying countermeasure designs and for developing implementation programs specifically targeted to address those aspects of the countermeasure that tend to trigger public support or opposition.

During the past decade, the death toll from motor-vehicle accidents exceeded one million, with approximately 40 times as many injuries.[1/] The NHTSA has initiated a number of efforts to identify, develop, and promote countermeasures to reduce the incidence and severity of motor-vehicle accidents.

Some countermeasures, such as those involving performance and design standards for tires and bumpers, have been implemented without direct involvement by the general public, primarily because the effectiveness of such countermeasures is largely independent of public acceptance or rejection. Other countermeasures, however, can be effective only to the extent that they engender public support. Although highway safety may be a generally accepted goal, specific strategies for promoting highway safety sometimes elicit very strong negative public reactions, which can undermine the potential effectiveness of the countermeasure or may cause the cancellation of the program. Two well-known examples of countermeasure efforts which have been resoundingly rejected by the public are the seat-belt-interlock and motorcycle-helmet laws. Despite their documented value in reducing the incidence and the severity of accidents, the seat-belt-interlock laws were eliminated entirely and the motorcycle-helmet laws have been revoked in many states because of public protest. The experience with

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[1/] U.S. Bureau of the Census. Statistical Abstract of the United States: 1979 (100th edition). Washington, D.C., 1979.

these two countermeasures illustrates the power of public response in blocking technically effective but publicly unacceptable highway-safety strategies. Given the continued controversy surrounding seat belts and air bags, it is quite apparent that the successful implementation of countermeasures can be thwarted when public reaction to them is negative.

Interest in taking public reactions into account during developmental and implementation stages has been prompted by three considerations in particular. First, objections to a particular strategy may have a carry-over effect and can endanger an overall highway-safety program. Second, some countermeasures may require relatively minor modifications to remove the basis of public rejection. Without this adjustment, however, a highly worthwhile countermeasure may be needlessly eliminated. Third, the development and implementation of countermeasures is a very expensive process. The monies could best be utilized on strategies that are technically effective and also have great potential for gaining public cooperation and acceptance.

A. COUNTERMEASURES INCLUDED IN THE STUDY

The countermeasures, and countermeasure approaches, included in this study are at various stages in their development and implementation. Some are at the concept stage; others have been, or are being, developed and are at the pre-implementation stage; still others have been implemented and are currently in effect.

This study also includes two areas of interest to NHTSA that are not countermeasures in themselves. First, in some instances, public acceptability is particularly relevant for a novel or potentially controversial component of a broader countermeasure--for example, using roadside breath testers for detecting whether drivers may be under the influence of alcohol. Second, to guide countermeasure development, it may be necessary to collect information about drivers. Methods of data collection on the characteristics of drivers are also included in this study because they raise issues about public acceptability that are similar to those associated with the countermeasures per se.

Despite these variations, all of the approaches included in this study are directly or indirectly geared toward mitigating driver and/or pedestrian behavior that is likely to cause accidents. The effectiveness of all these approaches depends, in part, on public acceptability.

The countermeasure approaches included in this study represent three NHTSA research program areas: (1) Alcohol and Drug Research, (2) Safe Driving Conformance Research, and (3) Pedestrian Research. The specific countermeasures are the following:

The 55 mile per hour Speed Limit

Speed Detection Methods

- Radar
- Vascar
- Speedometer
- Automated speed enforcement device

Careful versus Negligent Driving

- Citizen's band radio
- Newspaper reporting
- Traffic observers

Drunk-Driver Deterrence Methods

- Model traffic violations law
- Drunk driver warning system
- Continuous monitoring device
- Restricted hours
- Impairment resistance

Breath Testers

- Roadside testing
- Passive breath tester
- Self-tester

Roadside Surveys

- Stopping methods
- Body-fluid samples

Pedestrian Safety

- Street-safety training
- Model vendor law
- Model parking law

To thoroughly analyze public attitudes that affect the acceptability of highway-safety countermeasures, the research design employed three complementary research procedures. First, focus-group discussions were conducted to identify the nature of public beliefs, concerns, and feelings about these countermeasures; issues that surfaced during these discussions were incorporated into the questionnaire for the general-public survey. Second, a sample survey

of the general public was conducted to produce measurements of acceptability that could be projected to the national adult population. Third, interviews were conducted in ten states with representatives of specific groups and organizations that have a special interest in or a perspective about highway-safety countermeasures.

This volume of the report on the Public Acceptability of Highway Safety Countermeasures presents a detailed description of the methodologies employed for each of the three studies. Section A describes the design and implementation of the focus-group discussions; descriptions of the general-public survey methodology and the special-interest case studies follow in Sections B and C.

II. METHODOLOGY

A. THE DESIGN OF THE FOCUS GROUP DISCUSSIONS

Focus-group discussions are a qualitative research tool that were used in this study to develop an understanding of salient countermeasure-acceptability issues. Primarily an exploratory method, the focus-group discussions served two purposes in this study--one substantive and one methodological. Substantively they contributed to a qualitative understanding of the dynamic interaction among relevant beliefs, concerns, feelings, and goals in specific situational contexts. Methodologically they furthered questionnaire development for the two survey phases, by identifying variables to be measured and suggesting question phraseology.

1. Characteristics of the Groups

Nineteen (19) focus-group discussions were conducted--13 with members of the general public, and 6 with representatives of special-interest groups. In order to obtain a comprehensive assessment of the acceptability of these countermeasures, and in light of the fact that attitudes toward driving differ by both age and sex, the general-public groups consisted of both younger and older drivers and males and females. We thus divided the general-public groups into two types: (1) male and female drivers under age 30, and (2) male and female drivers age 30 and older. (The general-public participants included only those persons with a valid driver's license.) In addition, because certain industries and organizations are particularly interested in driving- and highway-safety issues and are thus likely to play key roles in the implementation of highway-safety countermeasures, we thought it important to obtain reactions from representatives of various "special interest" groups. Because representatives from special-interest groups may have a more sophisticated level of expertise, special-interest group discussions were held separately from those with the general public. Thus, all participants were homogeneously grouped along these dimensions.

Finally, to allow for regional variability in attitudes toward driving and highway safety, we conducted the 19 groups in 5 different sites: Trenton, Atlanta, Denver, Cincinnati, and Seattle. The types and number of groups conducted at each site are shown in Table II.1.

TABLE II.1

NUMBER OF GROUPS BY TYPE AND SITE

Site	Type of Group			
	18-29	30+	Special Interest	Total
Trenton	2	1	1	4
Atlanta	1	1	2	4
Denver	2	1	1	4
Cincinnati	1	1	1	3
Seattle	1	2	1	4
Total	7	6	6	19

a. Recruitment Procedures

Because participants in group discussions do not have a known probability of selection, they cannot be considered representative of any definable universe. Nevertheless, to obtain a broad-based cross-section of attitudes and opinions, it is necessary (1) that group participants be drawn from a variety of population segments or groups, and (2) that self-selection on the part of participants be minimized. To meet the diverse requirements of the general-public and special-interest groups, we followed certain recruitment procedures.

For the "under 30" and "over 30" general-public groups, our objective was to recruit persons from many different segments of the driving public. They were recruited in two ways: (1) by contacting organizations in the focus-group area, and (2) by randomly selecting names from telephone directories. It should be noted that organizations were used primarily as a convenient way to identify individuals; the members of the general-public groups were not there to represent their respective organizations or any organizational viewpoint.

To have comparable participants across sites, as well as to broaden the base for selection, we recruited five participants from five types of sources at each site. Thus, depending on age and the availability of participants, each group contained participants recruited from several, but not necessarily all, of the following sources:

1. Education: PTAs, nursery schools

2. Church Groups: various denominations, to include both women's and men's groups

3. Community/Civic Organizations: American Legion, Masons, Elks, Knights of Columbus, volunteer firemen, Boy and Girl Scouts, YMCA/YWCA, neighborhood/block associations, garden clubs

4. Business and Labor: Jaycees and businessmen or merchants associations of (area/street)

5. Community Residents: persons selected randomly from the telephone directory

In contrast to the types of sources used to select members for the general-public groups, recruiting participants for the special-interest groups was based on specific institutional interests in and concerns about driving and highway safety. Special-interest group participants were representing their respective institutional viewpoints, although they were not necessarily official spokespersons. Organizations in each of the following categories were contacted at each site; special-interest groups consisted of representatives from several, but not necessarily all, of the following sources:

1. Automobile Dealers: General Motors, Ford, Chrysler, VW, Datsun

2. Manufacturers of Automobile Equipment: manufacturing divisions from the same companies listed above

3. Insurance Companies: Allstate, Prudential, Aetna, State Farm

4. Consumer Groups

5. Automobile Clubs: AAA, Motor Club of America

6. State or Local Police Departments

Because potential participants may be skeptical of requests to participate in group discussions, a major recruitment objective was to offset the tendency for only certain types of people, perhaps the more curious or more outspoken, to attend. The advantage in using organizations as recruiting contacts was that they legitimized the request and helped ensure actual attendence at the session. In a further effort to encourage participation, we offered a $10 incentive payment. For the general-public groups, the payment was

given to the participant; for the special-interest groups, the payment was donated to the charity of each participant's choice.

b. Size and Composition of the Groups

The objective was to include approximately 8 to 10 persons in each group. The most common group size in the study was 8 participants. With nonattendance and over-recruitment, the size of the groups fluctuated from as small as 6 participants to as large as 13 in one case. Among the general-public groups, the total distribution of participants by sex was quite balanced--49 percent male and 51 percent female. Both males and females were represented in all general-public groups. In contrast, the special-interest groups were almost exclusively male; only one group (Seattle) had a female participant. Table II.2 shows the size and sex composition of each group by type and site.

2. Moderator's Guides

The discussions were conducted by trained moderators, in accordance with a moderator's guide. The guide was used as an agenda for topics of discussion. Twenty-three (23) highway-safety countermeasures were included in the study. To fully examine all of these countermeasures within a reasonable length of time, three versions of the moderator's guide were first developed; each version covered a different set of countermeasures. Table II.3 shows the set of countermeasures included in each version. Because of NHTSA priorities, two versions included speed-detection countermeasures and the 55 mph speed limit. Similarly, because drunk-driver deterrence measures and roadside surveys are of particular interest to NHTSA, a fourth version concerning only those countermeasures was created for use during one group discussion.

Separate versions of the moderator's guide were also developed for the general-public and the special-interest groups. While the distribution of countermeasures was the same for both groups, the issues for discussion were based on their relevance to each group. A copy of the moderator's guide for both the general-public and special-interest groups can be found in Appendix A.

The different moderator's guides were randomly assigned to sites and age groups. Table II.4 shows the distribution of the versions by both type of group and site.

3. Conducting the Groups

The 19 focus-group discussions were conducted by three moderators. To ensure that the moderators were thoroughly acquainted with the countermeasure

TABLE II.2

SIZE AND SEX COMPOSITION OF EACH GROUP

Site and Group Type	Number of Participants		
	Total	Male	Female
Trenton			
Under 30	10	7	3
Under 30	10	6	4
Over 30	10	4	6
Special interest	6	6	-
Atlanta			
Under 30	13	5	8
Over 30	11	4	7
Special interest	9	9	-
Special interest	8	8	-
Denver			
Under 30	8	5	3
Under 30	6	3	3
Over 30	8	4	4
Special interest	8	8	-
Cincinnati			
Under 30	10	2	8
Over 30	11	3	8
Special interest	11	11	-
Seattle			
Under 30	11	5	6
Over 30	9	6	3
Over 30	8	4	4
Special interest	9	8	1

TABLE II.3

COUNTERMEASURES BY MODERATOR'S GUIDE VERSIONS

VERSION A

Speed Detection
- Radar
- Vascar
- Speedometer
- Orbis III

55 mph Speed Limit

Breath Testers
- Self Tester
- Passive Breath Tester
- Evidential Roadside Tester

Negligent Driving
- Newspaper Reporting
- Citizen's Band
- Citizen Reporting

VERSION B

Pedestrian Protection
- Vendor Regulations
- Parking Regulations
- Vehicle Overtaking Regulations
- Special Classes

Roadside Surveys
- Stopping Methods
- Body Fluid Tests

Impairment Resistance
- Special Driver Training
- Changes on Roads and Highways

VERSION C

Drunk Driver Deterrence
- Driver Warning System
- Operating Time Recorder
- Continuous Monitoring Device
- Model Traffic Violations Law

Speed Detection
- Radar
- Vascar
- Speedometer
- Orbis III

55 mph Speed Limit

Roadside Surveys
- Stopping Methods
- Body Fluid Samples

VERSION D

Drunk Driver Deterrence
- Driver Warning System
- Operating Time Recorder
- Continuous Monitoring Device
- Model Traffic Violations Law

Roadside Surveys
- Stopping Methods
- Body Fluid Tests

TABLE II.4

DISTRIBUTION OF FOCUS GROUPS BY DIFFERENT VERSIONS OF MODERATOR'S GUIDE, TYPE OF FOCUS GROUP, AND SITE

Site/Type of Focus Group	Moderator's Guide Versions A	B	C	D	Total
Trenton					
18-29	1			1	2
30+			1		1
Special interest		1			1
Atlanta					
18-29	1				1
30+	1				1
Special interest		1	1		2
Denver					
18-29		1	1		2
30+	1				1
Special interest			1		1
Oakland					
18-29			1		1
30+		1			1
Special interest	1				1
Seattle					
18-29		1			1
30+		1	1		2
Special interest	1				1
Total					
18-29	2	2	2	1	7
30+	2	2	2		6
Special interest	2	2	2		6
					19

scenarios and issues in the study, a two-day training session was held in Princeton. In addition to a thorough review of the moderator's guide, each moderator led a group discussion for training purposes only.

The moderator's role was to present the countermeasures and the topics for discussion, keep the discussion focused on these issues, encourage active discussion among all discussants, be on the alert for opportunities to probe, and maintain an orderly discussion.

Each focus-group discussion was scheduled for one and a half hours. A few extended approximately 30 minutes longer, but most were completed within the target time period. Each group discussion was audio-taped, which, together with summary narratives prepared by the moderators, served as the data for analysis.

4. Analytical Procedures

Our analysis of the focus-group discussion data deals in large part with the types of concerns that the public might have about each countermeasure if it were introduced, without measuring how serious a barrier to acceptance these concerns are likely to be. The survey phase of the study was designed to address this latter issue. The analysis was qualitative in nature and was not intended to provide generalized, quantitative conclusions about the acceptability of specific highway-safety countermeasures. To do otherwise would have been invalid because of the nature of focus-group discussions. Focus groups are characterized by the free-flowing interchange of thoughts, beliefs, information, and feelings of a relatively small number of people about some specified topic. The size of the groups, and the fact that it is impossible to recruit participants in a manner that even approaches probability sampling, means that statistically projectable conclusions cannot be drawn. In addition, the semistructured nature of the discussions, as well as the fact that individual participants vary appreciably in the extent of their participation, makes any attempt at quantification impossible.

In light of these limitations, we used an analytic procedure that is applicable to qualitative data and which meets the criteria of being systematic and objective. In involved developing a typology of variables through a systematic review of all types of feelings, beliefs, and reactions expressed when the individual countermeasures were discussed. This procedure is directly comparable to the process of developing codes for open-ended questions in a quantitative survey, with categories developed from and defined by verbatim quotes. This was done separately for each countermeasure by listening to

recordings of all the discussions and taking notes of what was discussed. These notes were then systematically reviewed to identify discrete types or categories of reactions. When the analyses of the individual countermeasures were completed, they were reviewed to determine whether any all-encompassing typology could be developed.

B. THE DESIGN OF THE GENERAL PUBLIC SURVEY

The procedures used to conduct the general-public survey are presented below in four parts: (1) questionnaire design; (2) sample design; (3) response rates; and (4) demographic characteristics of the samples. In addition, two final sections describe the statistical procedures and overall framework used to analyze the general-public survey data.

1. Questionnaire Design

The questionnaires used in this survey were the result of an extensive design effort. First, the complexity of the countermeasures posed special difficulties for developing questions that were technically precise and comprehensive, yet which presented the concepts in straightforward and simple terms. While it was important to depict all of the key features of each countermeasure, it was equally important that the item be comprehensible to a wide range of respondents. A second component of questionnaire development was the identification and selection of relevant attitudinal issues that could help explain public acceptance or rejection of a countermeasure. The specification of attitudinal dimensions of interest was largely guided by the analysis of focus-group discussions. (This is discussed more fully in the analytical framework section of this chapter.)

In order to limit the burden on respondents, the countermeasures included in this study were divided between three questionnaire forms. A three-way split sample design was used, with each form administered to a different subsample. All the questionnaire forms, however, included standard questions about the demographic characteristics of respondents. In addition, each form included questions about the 55 mile per hour speed limit. The composition of the three forms was as follows:

FORM 1: 55 Mile Per Hour Speed Limit
Ice Cream Vendors and Anti-Dart-Out Training
Roadside Surveys:
  Stopping methods
  Body-fluid tests
Demographic Characteristics

FORM 2: 55 Mile Per Hour Speed Limit
Pedestrian Safety
Drunk Driver Deterrence
Citizen's Band
Dangerous and Negligent Driving
Demographic Characteristics

FORM 3: 55 Mile Per Hour Speed Limit
Breath Tests
Speed Detection and Deterrence
Demographic Characteristics

A copy of the questionnaire forms can be found in Appendix B.

A draft set of questionnaires were pretested for question flow and clarity. Thirty-six (36) pretest interviews were conducted; however, each item was pretested with only 9 respondents. Pretest respondents were drawn from one location in each of four regions; telephone numbers were selected at random from telephone books from each location. No major difficulties were encountered, although several minor modifications were made as a result of the pretest.

2. Sample Design

The study of public acceptability was designed to provide nationally projectable estimates of public reactions to the countermeasures. The study was based on a telephone survey of three subsamples of approximately 500 respondents each. Sample selection required two sets of procedures--one to choose the telephone numbers to be called, and the other to choose the individual to be interviewed within each household that was reached.

The sample design that was used was based on the method proposed by Mitofsky and Waksberg (1978) for conducting national random-digit-dialing surveys. This method ensures that households are randomly selected, and that each residential number has the same probability of selection.

The steps in the sample selection were as follows:

1. All active exchanges were listed by area code for the contiguous 48 states plus the District of Columbia. To increase sample efficiency, we stratified this array by region.

2. A randomly generated two-digit number was added to the area code and the exchange prefix, producing an eight-digit number that identified a bank of 100 telephone numbers (e.g., 609-799-2600/99).

3. Within each region, one bank was selected at random, as was one number within the bank. That number was called to determine whether it was a working residential number. If

it was, the bank was retained; if not, it was dropped. This procedure was repeated until the desired number of clusters within each region was selected. (The successive samplings of banks were conducted with replacement to maintain initial equal probabilities of selection. The inclusion or exclusion of a bank on the basis of the screening call resulted in selection proportionate to actual size.)

4. Within each selected bank, a specified number of telephone numbers were selected in a random manner.

Each of the three subsamples in the survey constituted a probability sample of the universe being surveyed. The basic structure of and procedure for the survey were the same for all three subsamples; the only difference was that a different questionnaire version was used for each subsample. Thus, the results from the three subsamples are statistically comparable within the limits of sampling error.

Persons who answer the telephone in a specific household do not represent a random selection among all possible respondents in the household. Certain household members may regularly assume the role of answering the telephone. In addition, the telephone is more likely to be answered by household members who are unemployed or not engaged in other activities outside the home, rather than by household members who are working, attending school, or engaged in other activities. Thus, a randomizing procedure was necessary to select the respondent in each household whose telephone number was called. The method that was used was developed by Trodahl and Carter (1964) and required that two items be ascertained at the outset of the telephone contact: (1) the number of persons 18 years of age or older living in the household, and (2) the number of household members who were men. One of four respondent-selection tables were randomly assigned to each number called. By referring to the particular selection table, the interviewer identified the appropriate randomly selected respondents. The four tables are shown in Table II.5. The primary advantage of the Trodahl and Carter method over more conventional enumeration procedures for random selection within households was improved response rates. Evaluations of this method have noted that the procedure does exclude persons in households that have three or more adults of the same sex when the person is neither the oldest nor the youngest (see Dillman, 1978, and Nicholls, 1977). This bias, however, is judged to be less serious than biases that stem from higher overall nonresponse rates with the enumeration method.

TABLE II.5

FOUR VERSIONS OF SELECTION TABLES USED IN TRODAHL AND CARTER RANDOM SELECTION PROCEDURES

Total Number of Men in Household	Total Number of Adults in Household			
	1	2	3	4 or more
Version I				
0	Woman	Oldest woman	Youngest woman	Youngest woman
1	Man	Man	Man	Oldest woman
2		Oldest Man	Youngest man	Youngest man
3			Youngest man	Oldest man
4+				Oldest man
Version II				
0	Woman	Youngest woman	Youngest woman	Oldest woman
1	Man	Man	Oldest woman	Man
2		Oldest man	Woman	Oldest woman
3			Youngest man	Woman or oldest woman
4+				Oldest man
Version III				
0	Woman	Youngest woman	Oldest woman	Oldest woman
1	Man	Woman	Man	Youngest woman
2		Youngest man	Oldest man	Oldest man
3			Oldest man	Youngest man
4+				Youngest man
Version IV				
0	Woman	Oldest woman	Oldest woman	Youngest woman
1	Man	Woman	Youngest woman	Man
2		Youngest man	Woman	Youngest woman
3			Oldest man	Woman or youngest woman
4+				Youngest man

3. Survey Operations and Response Rates

Interviewing began October 31, 1979, and continued over a period of approximately eight weeks, with a cutback in operations during the Christmas-holiday period. Interviews were conducted primarily during weekday evenings and weekends--at times when adults were most likely to be home. In cases of "no answers," busy signals, or the unavailability of a selected respondent, up to five additional contacts were made to obtain an interview.

The final statuses for all of the telephone numbers attempted for each form are shown in Table II.6. On the whole, the refusal rates are somewhat higher than rates typically associated with national telephone surveys. One possible explanation for this, frequently noted by interviewers during the survey, was the nature of the introductory statement. Respondents were informed of the auspices of the survey, that participation was voluntary, and that their answers would be kept confidential. The length of this statement may have caused some respondents to become impatient. Further, for purposes of random within-household selection, it was necessary to ask persons who answered the telephone the number of persons age 18 and older who lived in the household. Again according to the interviewer reports, some respondents found the question threatening.

Verification that interviewing was being conducted in accordance with sampling and interviewing instructions was performed by interviewer supervisors. On a random basis, using a silent call monitor, supervisors monitored interviewers' work by listening to a sample of interviews in progress. The survey was conducted on a computer-assisted telephone interviewing system that automatically performs editing and quality-control checks. Interviewers enter responses directly into a terminal; the system is programmed to check for out-of-range values and for internal consistency as the data are entered.

4. Characteristics of the Samples

The eligible respondents for this survey were household members age 18 or older. The distributions of the subsamples and of the total sample along three demographic characteristics (geographic region, sex, and age) are presented in Table II.7, along with comparable distributions for the national population. Because the reactions of drivers are of particular interest in this survey, Table II.7 also shows distributions of drivers only--for the subsamples, total sample, and the country as a whole. Although the respondents in the telephone survey were randomly selected, the extent to which they represent an accurate cross-section of the country is an important factor in our ability to

TABLE 11.6

DISTRIBUTION OF FINAL STATUSES AND RESPONSE RATES, BY FORM

	Final Statuses								Rates[d]	
Form	Completed	Partial Completes	Refused	Correct Respondent Could not by Reached[a]	No Answer/ Busy[a]	Other[b]	Not a Working Number[c]	Total Final Status	Response Rate	Refusal Rate
Form 1	525	41	116	33	69	59	401	1,244	67.0	23.0
Form 2	495	41	98	19	20	31	376	1,080	73.6	21.9
Form 3	485	32	151	17	20	23	365	1,093	68.8	27.4
Total	1,505	114	365	69	109	113	1,142	3,417	69.6	24.1

[a] After a minimum of five attempts.

[b] Includes non-English, mentally retarded, and unavailable during survey period.

[c] Includes changed numbers, disconnected numbers, or nonresidential numbers

[d]
$$\text{Response rate} = \frac{\#\ \text{Completed}}{\text{Total Final Statuses} - (\#\ \text{Not Working Numbers} + \#\ \text{Other})}$$

$$\text{Refusal rate} = \frac{\#\ \text{Refused} + \#\ \text{Partially Complete}}{\#\ \text{Completed} + \#\ \text{Refused} + \#\ \text{Partially Complete}}$$

TABLE II.7

DISTRIBUTION OF SURVEY RESPONDENTS AND NATIONAL POPULATIONS, BY REGION, SEX, AND AGE
(Distributions are presented separately for Drivers-Only and for Each Subsample)

	All Survey Respondents					Drivers Only				
	Subsamples			Total	U.S. Population[a]	Subsamples			Total	U.S. Drivers[b]
	1	2	3	Sample		1	2	3	Sample	
Region										
Northeast	20.9	24.1	21.9	22.3	23.5	22.0	23.5	21.3	22.3	20.5
South	33.8	33.1	32.5	33.1	32.0	34.8	31.5	33.2	33.2	32.9
Midwest	29.9	26.3	25.9	27.4	26.7	28.4	27.3	25.3	27.0	27.7
West	15.4	16.5	19.7	17.1	17.8	14.8	17.7	20.2	17.5	18.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	(521)	(490)	(483)	(1,494)		(454)	(429)	(431)	(1,314)	
Sex										
Male	42.1	48.3	44.1	44.8	47.4	42.8	51.6	47.2	47.8	53.5
Female	57.9	51.7	55.9	55.2	52.6	57.2	48.4	52.8	52.2	46.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	(525)	(495)	(485)	(1,505)		(457)	(434)	(432)	(1,323)	
Age										
18-24	15.5	13.1	14.9	14.6	18.6	15.4	12.9	14.7	14.4	19.0
25-34	25.5	30.6	29.5	28.4	21.5	27.4	33.4	31.0	30.5	25.1
35-44	20.6	16.4	17.5	18.2	15.6	21.6	17.8	18.7	19.5	17.4
45-54	14.1	16.6	14.3	15.0	16.0	13.8	17.3	13.7	14.9	15.1
55-64	10.8	11.4	12.0	11.4	13.5	10.9	10.7	11.2	10.9	12.8
65+	13.4	11.9	11.8	12.4	14.8	10.9	7.9	10.7	9.8	10.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	(509)	(464)	(475)	(1,448)		(442)	(410)	(422)	(1,274)	

[a] Current Population Reports, Population Characteristics, Demographic, Social and Economic Profile of States: Spring 1976. Published January 1979, Bureau of the Census. Total U.S. Population 18 years and older = 145,368,000.

[b] Regional distributions are taken from Drivers Licenses--1978, U.S. Department of Transportation, Federal Highway Administration (HHP-43), Table DL-1B; Total Drivers = 140,089,000. Sex and age distributions are from an October 1979 update using estimated statistics for 1979; Total Drivers 18 and older = 138,227,000.

generalize the rates of countermeasure acceptability of the U.S. population as a whole. One source of difference between the two distributions is that Census data include both persons without telephones and those not living in households; in addition, the population figures are also subject to both sampling and nonsampling errors.

Across regions, the survey samples appeared to represent fairly accurately both the total populations of persons age 18 and older and the population of drivers. For two of the subsamples (#2 and #3), there was no more than a 2.4 percentage-point difference between the samples and their respective population distributions. For the total subsample #1, however, there was a slight overrepresentation of respondents from the Midwest, with a 3.2 percentage-point difference between the sample and the general population. Also for subsample #1, there was a slight underrepresentation of drivers in the West; the difference was 4.1 percentage points.

The survey resulted in an oversampling of females (for both the total subsamples and for drivers only)--especially in subsample #1 and, to a lesser extent, in subsample #3. While for all three subsamples combined the representation of females in the survey (55.2) was only 2.6 points greater than in the general population of persons age 18 or older (52.6), the difference was 5.3 percent for subsample #1. The differences were higher when drivers only were considered. For subsample #1, the proportion of female drivers in the sample was 10.7 points higher than the proportion of female drivers among drivers as a whole. Some disparity in representativeness also occurred in subsample #3, for which females were oversampled by 6.3 percent. Subsample #2, both in total and for drivers only, closely resembled the population breakdown for males and females.

As a general pattern, all three survey subsamples tended to underrepresent younger respondents (ages 18 to 24). Respondents in the 25- to 34-year-old age range, on the other hand, tended to be overrepresented. The differences were most pronounced for subsample #2: 13.1 percent of the subsample was age 18 to 24, as compared to 18.6 percent of the population in this age group; 30.6 percent of the subsample was age 25 to 34, as compared to 21.5 percent of the population. For purposes of evaluating representativeness, it should be noted that these differences occurred in contiguous-age categories; when the broader younger age group (18 to 34) was considered, the percentage differences between the subsample and the population were reduced to 3 points for the total and 2.2 points for drivers. Finally, the samples showed a slight underrepresentation

among the older (45 to 54) age groups; the largest of these differences (2.7 points) occurred for drivers in subsample #2 who were over age 65.

In summary, the distribution of the subsample and the total samples are fairly proportionate to the population along the characteristics considered, with one exception. Focusing on drivers only, subsample #1 shows an overrepresentation of female drivers. In order to obtain estimates of acceptability and other attitudes that take into account the female overrepresentation in subsample #1, for those variables along which males and females show statistically significant differences in response ($p < .05$), weighted distributions were developed to reflect the proportion of male and female drivers nationally. The weighting values used were as follows: males = 1; females = .8124. Specific instances in which the weighting procedure was applicable were noted in the text; corresponding tabulations and cross-tabulations based on unweighted observations are shown in the Appendices of the specific volumes.

5. Statistical Procedures

Percentage distributions are the primary method of presenting the results of the general-public survey. Although probability samples of the size used in this study can accurately represent the population of the United States, the results are nonetheless subject to sampling error--that is, the difference between the survey results and those that would be obtained by surveying the entire population. Table II.8 shows the allowance that should be made, in percentage points, for various percentages of response at the 95 percent confidence level. Thus, the population percentage will fall within plus or minus the sampling error of the sample value in 95 cases out of 100. However, it is important to note that these confidence bands do not allow for respondent refusals or other nonsampling errors.

Chi-square tests were performed to examine the extent of the association between response and the main independent variables. References in the text to statistical significance (or lack thereof) use the .05 criterion (that is, the probability is .05 or less that the observed association occurred by chance). Statistically significant relationships are indicated in the tables, along with whether the probability is less than .001, .01, or .05. Since "Don't Know" responses were not of primary research interest and represented a fairly small proportion of the sample (less than 5 percent), on most items they were excluded from the chi-square calculations. The chi-square statistics may not be valid when expected cell frequencies are less than 5; excluding "Don't Know" responses reduces the number of instances to which this restriction would apply.

Because this analysis is intended primarily to be descriptive of the levels of public acceptance or rejection of particular countermeasures, an important limitation of this analysis should be recognized. The inability to control simultaneously for the possible interaction of several variables that may influence acceptance (e.g., perceptions of countermeasure effectiveness and educational level) may result in spurious associations or may cause true associations to be obscured. Analysis beyond the scope of this present effort will be required to permit possible interactive effects of variables to be controlled.

TABLE II.8

ALLOWANCE FOR SAMPLING ERROR IN PERCENTAGE POINTS
AT THE 95 IN 100 CONFIDENCE LEVEL

Response Percentages Near	Sample Size					
	1,500	500	400	300	200	100
50	2.5	4.4	5.0	5.7	7.5	10.0
40 or 60	2.5	4.3	4.9	5.5	6.9	9.8
30 or 70	2.3	4.0	4.6	5.2	6.5	9.2
20 or 80	2.0	3.5	4.0	4.5	5.7	8.0
10 or 90	1.5	2.6	3.0	3.4	4.2	6.0

6. Analytical Framework

Public acceptability of each set of countermeasures was analyzed from the following three vantagepoints:

a. A Descriptive Analysis of the Level of Acceptability for Each Countermeasure

One major aim of this study is to provide systematic data on the degree to which specific countermeasures do, or do not, elicit positive public reactions. This analysis includes a comparison of acceptability levels within sets of countermeasures. Each set is designed to deal with a particular highway-safety problem (for example, the relative acceptability of different speed-detection countermeasures).

While licensed drivers are of central concern to the objectives of the study, input from nondrivers is also relevant. As safety-promoting strategies, the countermeasures would benefit the population at large, including nondrivers. The analysis examines whether drivers differ from nondrivers in their reactions to countermeasures.

b. An Analysis of Variation in Acceptability Among Key Segments of the General Public

On the basis of previous research about the acceptance of other highway-safety countermeasures, and because the countermeasures under study will differentially affect some segments of the population, we expect that acceptance will be associated with certain demographic characteristics. Both education and sex appear to be characteristics that are significantly associated with the acceptability of highway-safety countermeasures. For example, the use of seat belts has been found to be related to education (see Fhaner and Hane, 1973; Robertson, O'Neil, and Wixon, 1972; and Hofner, 1973), while the acceptance of the 55 mph speed limit has been linked to sex (see Gallup Opinion Index, September 1973, July 1974, and January 1975). Because age is significantly related to both accident and citation rates (see McGuire, 1972), we can infer that the acceptance of safety countermeasures is likely to vary according to the age of an individual. Because driving habits and attitudes are known to vary between different geographic segments of the country, regional differences in acceptance are also expected.

Further, some countermeasures (such as model laws that regulate ice-cream-vendor vehicles) are of particular importance in preventing injurious or fatal accidents involving children. Thus, it was a reasonable hypothesis that parents of pre-school and school-age children would be particularly likely to accept these countermeasures.

c. An Analysis of Factors Identified as Influences on Acceptability.

An important feature of this study is that not only does it measure the level of public acceptability, but it also examines the factors that underlie positive or negative reactions to specific highway-safety countermeasures. The specific attitudinal factors are drawn primarily from two sources: (1) issues and attitudes that surfaced during the focus-group discussions, and (2) discussions with NHTSA about technical and operational characteristics that might affect acceptability.

We identified four types of attitudes that were important in understanding why a countermeasure does or does not achieve public acceptance. The first three types concern values or standards that define the context, or frame of reference, in which a countermeasure is developed. The fourth concerns knowledge or expectations about issues that are relevant to the acceptability of certain countermeasures.

One value applicable to acceptability is the perceived need for intervention in a particular highway-safety area. It is expected that the acceptability of a specific countermeasure depends on the nature of public concern regarding highway safety in general, and specifically on public receptivity toward the purpose behind that countermeasure. Thus, acceptability will be examined in relation to respondents' definitions of highway-safety problems. An example of a measure of perceived need is the extent to which drunk driving is regarded as a serious highway-safety problem.

A second value, applicable to each countermeasure, is its perceived effectiveness. It is expected that the acceptability of a countermeasure depends on whether the public believes that its adoption will result in definable benefits--that is, the countermeasure must be perceived as "making a difference." Further, acceptance may vary according to who is seen to benefit and under what conditions. Perceived effectiveness has been measured primarily in terms of (1) the extent to which the number or certain types of accidents will be reduced, or (2) the extent to which dangerous driving behavior (such as speeding and drinking and driving) will be reduced.

A third type of attitude addresses the issues that are raised by the countermeasures. Where the characteristics of a particular countermeasure raise controversial issues that may be salient for acceptability, the attitude of respondents toward these issues will be analyzed in relation to acceptability. For example, we expect that the perception that traffic observers or the automated speed recorder constitute an invasion of privacy is related to acceptability. For roadside surveys, acceptance is expected to be a function of perceived safety and voluntariness and of beliefs that the data will be kept confidential and will be valid.

The fourth type of attitude includes respondents' knowledge of or attitudes toward general issues that, while independent of the countermeasures themselves, may influence drivers' reactions to certain countermeasures. Two examples of such issues are (1) knowledge of and opinions about car-owner

liability for driver-incurred fines, and (2) knowledge of pre-arrest laws governing tests for blood-alcohol levels.

Specific attitudes that are relevant to particular sets of countermeasures are discussed at the outset of each general-public survey chapter.

C. THE DESIGN OF THE SPECIAL INTEREST CASE STUDIES

The objective of the special-interest case studies is to identify expert and leadership opinion about the highway-safety countermeasures included in this study. Special-interest perspectives are important to this study because certain industries and organizations are directly involved, or are particularly interested, in driving and highway-safety issues, and would thus play key roles in implementing highway-safety countermeasures. In order to complete the picture of public acceptability, it was necessary to supplement general-public reactions to the countermeasures with the attitudes and concerns of certain special-interest groups.

Special-interest group input contributes to this study in several ways. First, special-interest groups bring a professional expertise to bear on the assessment of countermeasures. This expertise can stem from:

- Greater knowledge (than the general public) of the technical feasibility and the intrinsic quality of the countermeasures
- Professional judgments about the responsiveness of these countermeasures to highway-safety needs and priorities
- Awareness of the implications these countermeasures may have for citizen or consumer rights, as well as insight to the appropriateness of the public intrusion implied by some of the countermeasures
- Awareness of the business implications for particular industries (automotive, insurance, and trucking)

Second, special-interest groups often are in a position to facilitate or thwart implementation of highway-safety countermeasures. They are frequently consulted by state legislatures and can be influential in administrative decisions. Support from these groups may also be important for the ongoing efficacy of the countermeasures. For example, passive or reluctant implementation may eventually lead to a disregard or disintegration of the countermeasure program. Third, special-interest groups serve as "opinion leaders" for the general public. Special-interest representatives are often regarded as authoritative spokespersons, and their views are often taken into

account by the general public. As a result of this span of influence, special-interest reactions are an important barometer of public acceptability.

1. Selection of States and Respondents

Special-interest groups were defined as those likely to play a leadership role in public discussion and debate about the proposed countermeasures. Given that the implementation and enforcement of highway-safety programs either directly involves, or indirectly impinges on, certain agencies and organizations within a state, it was most appropriate to identify special-interest groups on a state basis. Reactions to the countermeasures were obtained from a particular configuration of special-interest representatives in each state; because the collective opinion of key special-interest groups within a state is an important aspect of countermeasure implementation, reactions of respondents in each of the states constituted a case study.

The case studies were conducted in 10 states. A stratified random sampling procedure was used to select the states: one state was drawn randomly from each of the ten NHTSA Regions. This stratification was used to obtain geographic distribution and to meet NHTSA interest in having regional representation. The 10 states were as follows: Maine, New York, Pennsylvania, Florida, Illinois, Louisiana, Nebraska, Montana, California, and Washington.

Within each state, respondents were drawn from particular special-interest groups. The nine groups can be clustered into three broad types:

1. State Highway Safety Department, State Police, and Police Chiefs Association: respondents would have a great awareness of highway-safety issues; the countermeasures would have direct implications for their planning and enforcement activities.

2. State Bar Association and State Civil Liberties Union: these groups were included because a number of the countermeasures may raise issues of a legal nature or may be considered an infringement on constitutional rights.

3. American Automobile Association (AAA), Leading State Insurance Companies, State Trucking Associations, and State Automobile Dealers Association: respondents would be knowledgeable about highway-safety problems and programs; the countermeasures may conflict, or be consistent, with particular consumer or business interests.

With one exception, identification of the nine types of special-interest groups within each state was a straightforward process. For insurance companies, the

criterion "the largest company serving the state" (using state-insurance-commission statistics) was problematic because the largest company often was not headquartered in the state, and sometimes did not have an appropriate executive in the state. In these instances, we selected another large company that was headquartered, or had a major regional office, in the state.

Finally, within each of the organizations, our objective was to interview the highest-level person who could best speak about the issues of highway safety from a broad organizational or corporate perspective. In each organization, our initial contact was with the chief executive officer or the equivalent (i.e., the Director, President, or Chairman of the Board). To introduce the study, we sent each chief executive officer an advance letter which described the study and indicated the importance of their cooperation.

Since the sample size for each of the special-interest groups was very small, it was critical that cooperation be obtained from each of the groups in the sample states. To establish that the organization would participate and to determine the correct person to be interviewed, we contacted each chief executive officer by telephone. Initial agreements to participate were obtained from each of the groups in nine of the states originally sampled. In one state, a key respondent refused to participate; that state was replaced with another state from the same NHTSA region. For four respondents, unexpected circumstances during the time of our site visit prevented them from keeping their appointment; two of these interviews were subsequently conducted by telephone; respondents for the other two would not agree to a telephone interview. Another factor which accounts for the fact that fewer than 90 interviews were completed is that the state police were added to the list of special-interest groups after the start of interviewing; this group was therefore not included for three of the states. Finally, in one state, there was no state highway-safety agency; this function was under the jurisdiction of the State Patrol. In all, a total of 84 interviews were completed for the special-interest case studies.

Table II.9 shows the distribution of respondents by type of group and position of respondent. (When the interview was conducted with more than one respondent, for purposes of this chart, the higher-level respondent was counted.) As indicated by the distribution of positions, the interviews were conducted largely with people in the top executive positions of the special-interest groups. Two groups that diverged from this pattern were bar-association and AAA respondents; in both instances, the positions included were quite appropriate in the context of this study.

TABLE II.9

DISTRIBUTION OF POSITIONS HELD BY RESPONDENTS, BY TYPE OF SPECIAL-INTEREST GROUP

Special Interest Group	Position: President Executive Director Director/ Administrator/ Superintendent	Executive Vice President/ Vice President/ Executive Secretary/ Associate Director/ Assistant Commander	General Counsel/ Committee Chairman[a]	Public Relations Director	Total
Highway Safety Department	8	1			9
State Police	4	2		1	7
Police Chiefs Association	7	3			10
Bar Association	3	1	6		10
ACLU	9	1			10
AAA	2	3	1	4	10
Insurance Industry	2	4		3	9
Trucking Association	7	3			10
Auto Dealers Association	5	4	—	—	9
TOTAL	47	22	7	8	84

[a] Includes chairmen of the following committees or sections: committee on civil rights, committee on criminal justice, committee on insurance, committee on rules of the road, and trial lawyers section.

2. Topic Guide

The focus of the special-interest interviews was on organizational responses (i.e., preliminary indications of institutional support or opposition) that may affect public acceptability of the countermeasures. Respondents were asked to speak as professionals in the field and, if appropriate, on behalf of the group or organization they represented within their state. The interviews were intended to identify the actual or projected official stance of the organization, and the nature of intra-organizational discussion, with respect to each of the countermeasures.

The objective of the special-interest case studies was to develop a qualitative understanding of expert and leadership opinion, an objective that can best be achieved through informal interviewing methods. An informal, semistructured interview is a more productive approach with expert respondents than is a structured interview based on "closed-end" questions. The data collection material for the case studies consisted of two parts: (1) a topic guide and (2) descriptions of each of the countermeasures, which were handed to the respondents during the interview. The topic guide was used as an "agenda" for the interview, and not as a formal structured questionnaire. The topic guide included several general-discussion questions--which served to start the interview and to provide us with basic contextual information on that special-interest group--followed by a series of topics to be covered with respect to each of the countermeasures. Specifically, respondents were asked to evaluate the countermeasures along three dimensions:

- The effectiveness of the countermeasure in preventing accidents or reducing the severity of injuries
- Expectations of likely public reaction to the countermeasure
- Likely position of the special-interest group with respect to the countermeasure

In addition, for general countermeasure areas (Alcohol and Drugs, Speed Detection, and Pedestrian Safety), respondents were asked what the role of the federal government should be in developing and promoting countermeasures in these areas. (A copy of the data collection package used by interviewers can be found in Appendix C.)

Since the number of respondents affiliated with each of the special-interest groups was fairly small (N = 10), it was important to cover each countermeasure with each respondent. In order to maintain respondent interest

for the 20 countermeasures, they were presented during the interview in reverse-priority order--that is, as part of the initial general discussion, respondents were asked to rank the three highway-safety problem areas according to the organization's actual or potential interest in those areas. Interviewers then covered the lowest-priority countermeasure areas first. Depending on the time available to the respondent and the discursiveness of the respondent, the interviews were from one to three hours in duration, with most of the interviews lasting approximately two hours.

Interviews with the special-interest respondents were conducted by three experienced and trained interviewers. A two-day training session was held which covered the objectives of the study and data collection responsibilities, and which also provided interviewers with extensive background information on the characteristics of the countermeasures and issues associated with their implementation. Interviewing was conducted over a five-week period--beginning January 14, 1980, with field work completed by February 15, 1980.

3. Analytical Procedures

Given the heterogeneity of interests and concerns represented by the special-interest groups, summary tabulations of support or opposition are less meaningful than a qualitative analysis. Analysis of the special-interest interview data was based on a qualitative approach. The analysis sought to identify the conditions under which acceptance from special-interest groups was likely, or unlikely, to occur and the reasons why, rather than to produce a measure of the rate of acceptance. Specifically, this analysis was geared toward three questions:

1. What are the opinions and concerns of special-interest groups with respect to each countermeasure?

2. Are these opinions held by special-interest groups in general, or are certain reactions associated primarily with particular perspectives on highway safety or with particular special interests?

3. Do special-interest reactions to the countermeasures tend to be specific to certain states, and do the reactions tend to be homogeneous within states?

Analysis along state lines did not prove to be a fruitful framework. We could not discern state-specific patterns of response to the countermeasures. With the exception of a few instances in which respondents indicated specific regulations that were unique to their state which might affect countermeasure

implementation, the reactions cut across state lines. (These exceptions are noted in the text.) Although qualitative in nature, analysis of the interview data was based on a process which meets the criteria of being systematic, comprehensive, and objective. For each countermeasure, the responses recorded by interviewers were systematically examined; on the basis of this review, relevant dimensions and underlying themes were identified. These themes served to organize the presentation of special-interest reactions to the countermeasures. This procedure is essentially an inductive one, in which the reactions summarized and discussed in the report are derived from the particular issues and opinions raised by respondents during the interviews.

The interviews with special-interest respondents were designed to elicit their professional assessments of the countermeasures. Thus, the respondents were likely to evaluate the countermeasures in terms of potential difficulties or problems. The reader should be aware that, in providing a critique, the respondents may have been more inclined to identify, and elaborate on, negative rather than positive aspects of the countermeasures. As reflected in the analysis of special-interest reactions, positive comments tended to be succinct. The analysis is geared toward identifying the types of issues raised; quantitative weight should not be attached to these reactions.

It is also important to underscore that the sample of respondents for the special-interest case studies is a judgmental one and does not permit national projections of survey results to be drawn to states or to special-interest organizations. For example, we could not project the reactions of bar associations in the 10 sample states to state bar associations in general. Since the special-interest respondents hold key state-level positions, in order to protect the confidentiality of the respondents, they are identified only in terms of their organizational affiliation and not by state.

At this time, there is little, if any, systematic empirical information available on the nature of the responses to these countermeasures from these influential groups. These data will provide an indication of the type of preliminary data, persuasion, or other attention particular groups may warrant in the event a countermeasure program would be implemented. The reactions of the special-interest respondents can be especially useful to highway-safety planners in formulating a basis for structuring implementation strategies that may increase both the efficacy and the acceptability of a countermeasure strategy. Special-interest perceptions can also serve as vital indications of areas in which additional information on highway-safety problems is needed.

III. ORGANIZATION OF THE REPORT

The report on the Public Acceptability of Highway Safety Countermeasures consists of five volumes. The organization of the report is guided by an interest in bringing together, by countermeasure, the findings from the focus-group discussions, the general-public survey, and the special-interest case studies.

In addition to this volume, which describes the methodologies employed for each of the three studies, Volumes II, III, and IV each present findings on countermeasures in a specific NHTSA program area. Volume V is a summary report which presents the highlights of the results for specific countermeasures and includes an overview of factors that influence the acceptability of highway-safety countermeasures to the general public and to special-interest groups.

Specifically, the five volumes of the report are organized as follows:

VOLUME ONE: BACKGROUND OF STUDY AND METHODOLOGY

- CHAPTER I Introduction
- CHAPTER II Methodology
- CHAPTER III Organization of the Report: Volumes I-V

VOLUME TWO: SAFE DRIVING CONFORMANCE RESEARCH

- CHAPTER I The 55 MPH Speed Limit
- CHAPTER II Speed Detection and Deterrence
- CHAPTER III Dangerous and Negligent Driving Deterrence

VOLUME THREE: ALCOHOL AND DRUG RESEARCH

- CHAPTER I Breath Testers
- CHAPTER II Drunk Driving Deterrence
- CHAPTER III Roadside Surveys
- CHAPTER IV. Impairment Resistance

VOLUME FOUR: PEDESTRIAN SAFETY

- CHAPTER I Focus Group Discussions
- CHAPTER II General Public Survey
- CHAPTER III Special Interest Case Studies

VOLUME FIVE: SUMMARY REPORT

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APPENDIX A

VERSIONS OF THE MODERATOR'S GUIDE

FOR THE

GENERAL PUBLIC FOCUS GROUPS

VERSION A

MODERATOR'S GUIDE

GENERAL PUBLIC FOCUS GROUP DISCUSSIONS

INTRODUCTION

My name is _____, I'm with Mathematica Policy Research.

As you already know we are doing a study of highway safety for the U.S. Department of Transportation. The Department of Transportation is interested in getting your opinions and reactions to some highway safety programs that they are considering. Your opinions will be used by the Department of Transportation in deciding about putting these programs into effect. I hope you will all be frank and candid in your reactions.

I would like to start by having everyone introduce themselves and say something about themselves as a driver. That is, what type of a driver are you? . . . Cautious? . . . Speedy? . . . Do you drive a great deal or just a little? Do you drive a large, small or medium car?

TO MODERATORS: Mention that the discussion is being taped.

Attitudes Toward Specific Highway Safety Countermeasures

Now we'd like to discuss some ways of reducing the number of highway accidents, or of making them less serious. Some of these safety methods are currently in effect; others are not now in effect but are being considered. We'd like to get your opinions and feelings about various approaches.

1. **There are several ways of identifying cars that are speeding.**

   Here are four ways; each could result in a warning or a ticket:

   a. **The use of radar to detect speeding**

      A police officer points a radar unit (device) at a car suspected of speeding. Radio waves are reflected off the car and the actual speed of the car is indicated on the radar unit.

   b. **The use of vascar to detect speeding**

      The police officer measures a particular section of a highway and registers the distance between those two points into a vascar unit. When the officer sees a car suspected of speeding, he or she clicks a switch on the unit when the car is at the first point and again when the car passes the second point. The unit indicates how fast that car was going.

   c. **The use of a speedometer to detect speeding.**

      Police follow a car suspected of speeding keeping a constant distance between them. Police follow the car for a specified distance, checking their own speedometer to determine how fast that car is actually going.

   d. **The use of a speed measuring and photography device to detect speeding, for example, one of them is called Orbis III.**

      This device operates by itself, day or night, and does not require a police officer to operate it.

      Electric sensors measure the time it takes for a car to pass through two points on a highway. The speed is registered on a meter. A camera is set to go off if a car is exceeding the speed limit. If a car is speeding, a camera photographs both (1) the meter readings (date, time of day, speed), and (2) either the front or the back of the car, showing the license plate number.

(1) What questions do you have about each of these and how will they operate?

(2) How do they compare in how effective each is likely to be in reducing the number or seriousness of speeding accidents?

(3) Are there any objections to any of them? To which? What objections?

(4) With the speed measuring and photography device, if the front of the car is photographed, the picture will show the faces of the people in the front seat. Would you object to this?

(5) Which of these approaches do you think should be adopted and which rejected? Why?

(6) Which of them are most likely to affect your driving speed?

2. As you may know, a few years ago the federal government set a 55 mph speed limit throughout the country. The maximum speed limit on all highways in the U.S. is 55 mph.

(1) How effective do you think this is in reducing the number or seriousness of accidents?

(2) Do you object to this speed limit? What do you think the speed limit should be?

(3) What speed do you usually find yourself driving at when you're on a highway? Why?

3. Another type of accident occurs when a driver is incapacitated because of drinking. Here are three measures for dealing with drivers who have been drinking:

   a. The Self Tester is a portable alcohol breath tester to be used by drivers in deciding whether or not to drive after drinking. A person would breathe into the Tester, which would show if he/she is intoxicated. The Tester is intended for personal use on a voluntary basis. The Tester could be purchased, loaned out or made available at drinking establishments.

   b. The Passive Breath Tester is used by a police officer after a car is stopped because "drinking while driving" is suspected. The Tester is small and is held in front of the driver's face during questioning. The driver's cooperation is not required. This device indicates whether further testing is necessary.

   c. The Evidential Roadside Tester is used by a police officer after a car is stopped for suspicion of drunken driving. The driver is asked to breathe into the Tester. The Tester indicates the driver's blood-alcohol level. Where the alcohol level exceeds the limit the driver is prevented from driving by the officer and is subject to arrest. The Evidential Roadside Tester is accurate enough to meet legal standards of intoxication in court.

(1) What questions do you have about each of these and how they will operate?

(2) How do they compare in how effective each is likely to be in reducing the number or seriousness of accidents which are associated with drinking?

(3) Are there any objections to any of these approaches? To which? What objections?

(4) Which of these approaches do you think should be adopted and which rejected? Why?

(5) If it were available to you do you think you would be likely to use the Self-Tester or not?

(6) Other than the Self-Tester, which of the other two would you be most amenable to if you were stopped by a police officer?

4. Other ways of increasing highway safety are geared toward deterring negligent driving by increasing the chances of getting caught at it and by heightening public awareness of the risks.

   a. Using a Newspaper Reporting approach, newspapers would periodically report a specific highway crash. The report would describe how the accident happened and would suggest how it could have been avoided.

   b. Citizens Band (CB) radio would be actively used by police to deter speeding. It could be used in two ways:

      (1) announcements would be made that, for the next few hours, special police patrols would be in effect on certain streets and highways;

      (2) the exchange of information among drivers as to whether a particular stretch of highway is being patrolled, or not, would be intercepted by police; police would then patrol the area considered safe.

   c. With Citizen Reporting, observers, trained by the government, would be sent out to various places to look for unsafe driving actions. When unsafe driving actions occurred, they would make a record of the license number of the car involved. This record would be used by the police to issue a warning notice to the car owner.

(1) What questions do you have about each of these and how they would operate?

(2) How do they compare in how effective each is likely to be in reducing the number or seriousness of accidents?

(3) Are there any objections to these approaches? To which? What objections?

(4) Which of these approaches do you think should be adopted and which rejected? Why?

(5) Which of these are most likely to affect your driving?

VERSION B

MODERATOR'S GUIDE

GENERAL PUBLIC FOCUS GROUP DISCUSSIONS

INTRODUCTION

My name is _____, I'm with Mathematica Policy Research.

As you already know we are doing a study of highway safety for the U.S. Department of Transportation. The Department of Transportation is interested in getting your opinions and reactions to some highway safety programs that they are considering. Your opinions will be used by the Department of Transportation in deciding about putting these programs into effect. I hope you will all be frank and candid in your reactions.

I would like to start by having everyone introduce themselves and say something about themselves as a driver. That is, what type of a driver are you? . . . Cautious? . . . Speedy? . . . Do you drive a great deal or just a little? Do you drive a large, small or medium car?

TO MODERATORS: Mention that the discussion is being taped.

Attitudes Toward Specific Highway Safety Countermeasures

Now we'd like to discuss some ways of reducing the number of highway accidents, or of making them less serious, that are being considered. We'd like to get your opinions and feelings about some approaches that are under consideration or have already been adopted in some communities.

1. One type of accident occurs when pedestrians are hit by a car. Here are four ways of dealing with pedestrian accidents that are being considered; these are largely directed at accidents involving children or older people.

    a. A Vendor Regulation would require vendor trucks, such as ice cream trucks, to have a warning signal. When the truck is stopped cars must come to a full stop and then proceed with caution.

    b. Parking Regulations would be put into effect which (1) would forbid parking near street corners and crosswalks and (2) would require that parking be parallel to sidewalks, as opposed to parking at an angle to sidewalks. These regulations are intended to make pedestrians and oncoming cars more easily visible.

    c. A Vehicle Overtaking Regulation would require a driver to stop the car if another car has stopped at a crosswalk. The driver proceeds only after checking that the crosswalk is clear.

    d. Schools would give special classes for all children up to the age of eight. Children would be taught not to dart out into the street without first checking for cars. The training would be done using both films and practice in class and on the streets.

(1) What questions do you have about each of these and how they will operate?

(2) How do they compare in how effective each is likely to be in reducing the number or seriousness of pedestrian accidents?

(3) Are there any objections to these approaches? To which? What objections?

(4) Which of these approaches do you think should be adopted and which rejected? Why?

2. In order to develop effective highway safety programs it is important to find out about people's driving habits, for example, what proportion of people on the road have high alcohol or drug levels. One way of getting such information is to conduct Roadside Surveys, that is, stop drivers along roads or highways and ask them to take part in the survey.

Participation would be completely voluntary. Also, the results of a survey are completely confidential. If a driver has an alcohol or drug level high enough to affect his or her driving skills, the research team would offer to take the driver home or make provisions for that driver not to drive.

There are several ways of stopping drivers for Roadside Surveys and I would like to get your reactions to them:

a. As cars approach the survey point on a road or highway a police officer, on a random periodic basis, pulls a car over. The police officer introduces a researcher who describes the purpose of the survey and asks the driver to participate.

b. As cars proceed down a road or highway a police officer, on a random, periodic basis, pulls a car over and directs the car to a research area. This area is located at the stop point but is not visible from the stop point. The police officer does not know if the person took part in the study or not. A researcher describes the purpose of the study and asks the driver to participate.

c. A researcher approaches a driver at a natural stop point, such as a traffic light or stop sign, and asks the driver to participate in a research study.

(1) What questions do you have about each of these methods of stopping drivers and how they operate?

(2) Are there any objections to any of these methods of stopping drivers? To which? What objections?

(3) Which of these methods would be most likely to get you to participate? Why? Least likely? Why?

(4) Do you think all three methods of stopping drivers are equally voluntary?

(5) If announcements were made in advance on local T.V. and in local newspapers that a Roadside Survey would be taking place somewhere in the community, would this affect your decision to participate? Why?

(6) Would time of day, for example, nighttime versus day time, affect your decision to participate?

(7) I would also like to talk about the specific tests that are used in these to test for the presence of alcohol or other drugs. There are four different ways of testing for alcohol or other drugs:

1. Urine Sample: the driver is asked to walk over to a mobile medical unit where specially trained personnel ask the driver to provide a urine sample. A test would be done of the alcohol or drug level.

2. Breath Sample: specially trained personnel would ask the driver to breathe into a breath tester collection device. A test would be done of the alcohol level.

3. Saliva Sample: specially trained personnel would obtain a saliva sample from the driver. A test would be done of alcohol or drug level.

4. Blood Sample: the driver is asked to walk over to a mobile medical unit where medically trained personnel would obtain a blood sample from the driver's arm. A test would be done of the alcohol or drug level.

All four types of tests are now being considered for use in research Roadside Surveys and with no records kept to identify individuals.

(a) What questions do you have about each of these types of tests and how they will operate?

(b) Are there any objections to them? To which measures? What objections?

(c) Given a choice, which of the samples--blood, urine, saliva, breath--would you most object to give? Why? Which would you find least objectionable? Why?

(d) These samples can be grouped according to how much information you can get from them. Blood and urine samples are both good for testing for alcohol and also for a number of different drugs. Saliva and breath samples are mostly useful to test for alcohol but not for other drugs. Does this difference in the usefulness of the tests make any difference to you in terms of how acceptable they are to you?

(e) Would the likelihood of your participating in any of these tests (breath, saliva, blood, urine) be related to the method used to stop the driver?

PROBE: Would you be more or less likely to participate in a blood or urine test if a police officer were present when you were asked to participate?

Would you be more or less likely to participate if stopped on a highway than at a stop sign?

3. Recognizing that some people will drive when impaired--because of drinking, fatigue, or some other reason--another approach to highway safety is designed to keep a driver's skills at a safe level in order to reduce the chance of them being in an accident.

   a. This could be done by: giving a special driver-training course that would train drivers how to drive safely when they are tired or have had several alcoholic drinks.

   b. Another way would be to make changes on roads and highways that would aid alertness, such as increasing the size and frequency of signs or changing highway surfaces.

   (1) What questions do you have about each of these and how will they operate?

   (2) How do they compare in how effective each is likely to be in reducing the number or seriousness of accidents?

   (3) Are there any objections to these approaches? To which? What objections?

   (4) Which of these approaches do you think should be adopted and which rejected? Why?

   (5) Which one do you think would be more effective for you, if you had to drive after you had been drinking or when you were tired?

VERSION C

MODERATOR'S GUIDE

GENERAL PUBLIC FOCUS GROUP DISCUSSIONS

INTRODUCTION

My name is _____, I'm with Mathematica Policy Research.

As you already know we are doing a study of highway safety for the U.S. Department of Transportation. The Department of Transportation is interested in getting your opinions and reactions to some highway safety programs that they are considering. Your opinions will be used by the Department of Transportation in deciding about putting these programs into effect. I hope you will all be frank and candid in your reactions.

I would like to start by having everyone introduce themselves and say something about themselves as a driver. That is, what type of a driver are you? . . . Cautious? . . . Speedy? . . . Do you drive a great deal or just a little? Do you drive a large, small or medium car?

TO MODERATORS: Mention that the discussion is being taped.

Attitudes Toward Specific Highway Safety Countermeasures

Now I would like to discuss some ways of reducing the number of highway accidents, or of making them less serious. I'd like to get your opinions and feelings about some measures that are under consideration.

1. One type of accident occurs when a driver is incapacitated because of alcohol.

   Here are four ways of dealing with such accidents that are being considered.

   a. The Driver Warning System is a device installed in the car which prevents normal operation of the car unless the driver passes a (psychomotor) test. For example, there might be a screen on the steering wheel with a moving pointer. The driver would have to keep the pointer at a certain spot on the screen. If the test shows that the driver's ability is impaired the car's lights would flash if the car was driven at less than ten miles per hour. Driving above ten miles per hour would cause the lights to flash and the horn to sound.

   b. The Operating Time Recorder is a device installed in the car which records when that car is driven. It is intended to deter driving on the part of convicted drinking drivers during those hours when alcohol related accidents are most likely to happen. The device would be installed as a condition of sentencing or probation, and the driver would not be allowed to drive during high risk hours. The record would be turned in to a probation officer.

   c. The Continuous Monitoring Device is a mechanism installed in the car which monitors the performance level of the driver continually as he/she drives the car. For example, excessive movement in the steering wheel could be picked up. If his/her performance were to fall below a certain level, the car's lights would flash and the horn would sound.

   d. A Model Traffic Violations Law would make special provisions for drivers who committed a dangerous moving violation and who had a significant blood-alcohol level. They would receive punishments greater than for those for a dangerous moving violation without alcohol even though the blood alcohol level was below the limit for Driving When Intoxicated Laws.

(1) What questions do you have about each of these and how they will operate?

(2) How do they compare in how effective each is likely to be in reducing the number or seriousness of "drinking and driving" accidents?

(3) Are there any objections to any of them? To which? What objections?

(4) Of the mechanical devices, would you have any of these installed in your car for your protection?

(5) Are there any persons for whom (any of) these should be required, that is, mandatory? Which? For whom?

(6) Focusing, for the moment, on the Driver Warning System, which do you think would be more effective in reducing alcohol-related accidents: (a) requiring a person convicted of drunk driving to install a DWS or (b) suspending their license? Why?

(7) Let's suppose, if you were convicted of drunk driving, which would you prefer?

2. Another type of accident we hear about occurs when someone is speeding.

There are several ways of identifying cars that are speeding.

Here are four ways; each could result in a warning or a ticket:

a. The use of <u>radar</u> to detect speeding

A police officer points a radar unit (device) at a car suspected of speeding. Radio waves are reflected off the car and the actual speed of the car is indicated on the radar unit.

b. The use of <u>vascar</u> to detect speeding

The police officer measures a particular section of a highway and registers the distance between those two points into a vascar unit. When the officer sees a car suspected of speeding, he or she clicks a switch on the unit when the car is at the first point and again when the car passes the second point. The unit indicates how fast that car was going.

c. The use of a <u>speedometer</u> to detect speeding.

Police follow a car suspected of speeding keeping a constant distance between them. Police follow the car for a specified distance, checking their own speedometer to determine how fast that car is actually going.

d. The use of a speed measuring and photography device to detect speeding, for example, one of them is called <u>Orbis III</u>.

This device operates by itself, day or night, and does not require a police officer to operate it.

Electric sensors measure the time it takes for a car to pass through two points on a highway. The speed is registered on a meter. A camera is set to go off if a car is exceeding the speed limit. If a car is speeding, a camera photographs both (1) the meter readings (date, time of day, speed), and (2) either the front or the back of the car, showing the license plate number.

(1) What questions do you have about each of these and how will they operate?

(2) How do they compare in how effective each is likely to be in reducing the number or seriousness of speeding accidents?

(3) Are there any objections to any of them? To which? What objections?

(4) With the speed measuring and photography device, if the front of the car is photographed, the picture will show the faces of the people in the front seat. Would you object to this?

(5) Which of these approaches do you think should be adopted and which rejected? Why?

(6) Which of them are most likely to affect your driving speed?

3. As you may know, a few years ago the federal government set a 55 mph speed limit throughout the country. The maximum speed limit on all highways in the U.S. is 55 mph.

(1) How effective do you think this is in reducing the number or seriousness of accidents?

(2) Do you object to this speed limit? What do you think the speed limit should be?

(3) What speed do you usually find yourself driving at when you're on a highway? Why?

4. In order to develop effective highway safety programs it is important to find out about people's driving habits, for example, what proportion of people on the road have high alcohol or drug levels. One way of getting such information is to conduct Roadside Surveys, that is, stop drivers along roads or highways and ask them to take part in the survey.

Participation would be completely voluntary. Also, the results of a survey are completely confidential. If a driver has an alcohol or drug level high enough to affect his or her driving skills, the research team would offer to take the driver home or make provisions for that driver not to drive.

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(7) I would also like to talk about the specific tests that are used in these surveys to test for the presence of alcohol or other drugs. There are four different ways of testing for alcohol or other drugs:

1. Urine Sample: the driver is asked to walk over to a mobile medical unit where specially trained personnel ask the driver to provide a urine sample. A test would be done of the alcohol or drug level.

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(a) What questions do you have about each of these types of tests and how they will operate?

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(c) Given a choice, which of the samples--blood, urine, saliva, breath--would you most object to give? Why? Which would you find least objectionable? Why?

(d) These samples can be grouped according to how much information you can get from them. Blood and urine samples are both good for testing for alcohol and <u>also</u> for a number of different drugs. Saliva and breath samples are mostly useful to test for alcohol but not for other drugs. Does this difference in the usefulness of the tests make any difference to you in terms of how acceptable they are to you?

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PROBE: Would you be more or less likely to participate in a blood or urine test if a police officer were present when you were asked to participate?

Would you be more or less likely to participate if stopped on a highway than at a stop sign?

VERSION D

MODERATOR'S GUIDE

GENERAL PUBLIC FOCUS GROUP DISCUSSIONS

INTRODUCTION

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   c. The Continuous Monitoring Device is a mechanism installed in the car which monitors the performance level of the driver continually as he/she drives the car. For example, excessive movement in the steering wheel could be picked up. If his/her performance were to fall below a certain level, the car's lights would flash and the horn would sound.

   d. A Model Traffic Violations Law would make special provisions for drivers who committed a dangerous moving violation and who had a significant blood-alcohol level. They would receive punishments greater than for those for a dangerous moving violation without alcohol even though the blood alcohol level was below the limit for Driving When Intoxicated Laws.

(1) What questions do you have about each of these and how they will operate?

(2) How do they compare in how effective each is likely to be in reducing the number or seriousness of "drinking and driving" accidents?

(3) Are there any objections to any of them? To which? What objections?

(4) Of the mechanical devices, would you have any of these installed in your car for your protection?

(5) Are there any persons for whom (any of) these should be required, that is, mandatory? Which? For whom?

(6) Focusing, for the moment, on the Driver Warning System, which do you think would be more effective in reducing alcohol-related accidents: (a) requiring a person convicted of drunk driving to install a DWS or (b) suspending their license? Why?

(7) Let's suppose, if you were convicted of drunk driving, which would you prefer?

2. In order to develop effective highway safety programs it is important to find out about people's driving habits, for example, what proportion of people on the road have high alcohol or drug levels. One way of getting such information is to conduct Roadside Surveys, that is, stop drivers along roads or highways and ask them to take part in the survey.

Participation would be completely voluntary. Also, the results of a survey are completely confidential. If a driver has an alcohol or drug level high enough to affect his or her driving skills, the research team would offer to take the driver home or make provisions for that driver not to drive.

There are several ways of stopping drivers for Roadside Surveys and I would like to get your reactions to them:

a. As cars approach the survey point on a road or highway a police officer, on a random, periodic basis, pulls a car over. The police officer introduces a researcher who describes the purpose of the survey and asks the driver to participate.

b. As cars proceed down a road or highway a police officer, on a random, periodic basis, pulls a car over and directs the car to a research area. This area is located at the stop point but is not visible from the stop point. The police officer does not know if the person took part in the study or not. A researcher describes the purpose of the study and asks the driver to participate.

c. A researcher approaches a driver at a natural stop point, such as a traffic light or a stop sign, and asks the driver to participate in a research study.

(1) What questions do you have about each of these methods of stopping drivers and how they operate?

(2) Are there any objections to any of these methods of stopping drivers? To which? What objections?

(3) Which of these methods would be most likely to get you to participate? Why? Least likely? Why?

(4) Do you think all three methods of stopping drivers are equally voluntary?

(5) If announcements were made in advance on local T.V. and in local newspapers that a Roadside Survey would be taking place somewhere in the community, would this affect your decision to participate? Why?

(6) Would time of day, for example, nightime versus day time, affect your decision to participate.

(7) I would also like to talk about the specific tests that are used in these surveys to test for the presence of alcohol or other drugs. There are four different ways of testing for alcohol or other drugs:

1. Urine Sample: the driver is asked to walk over to a mobile medical unit where specially trained personnel ask the driver to provide a urine sample. A test would be done of the alcohol or drug level.

2. Breath Sample: specially trained personnel would ask the driver to breathe into a breath tester collection device. A test would be done of the alcohol level.

3. Saliva Sample: specially trained personnel would obtain a saliva sample from the driver. A test would be done of alcohol or drug level.

4. Blood Sample: the driver is asked to walk over to a mobile medical unit where medically trained personnel would obtain a blood sample from the driver's arm. A test would be done of the alcohol or drug level.

All four types of tests are now being considered for use in research Roadside Surveys and with no records kept to identify individuals.

(a) What questions do you have about each of these types of tests and how they will operate?

(b) Are there any objections to them? To which measures? What objections?

(c) Given a choice, which of the samples--blood, urine, saliva breath--would you most object to give? Why? Which would you find least objectionable? Why?

(d) These samples can be grouped according to how much information you can get from them. Blood and urine samples are both good for testing for alcohol and <u>also</u> for a number of different drugs. Saliva and breath samples are mostly useful to test for alcohol but not for other drugs. Does this difference in the usefulness of the tests make any difference to you in terms of how acceptable they are to you?

(e) Would the likelihood of your participating in any of these tests (breath, saliva, blood, urine) be related to the method used to stop the driver?

PROBE: Would you be more or less likely to participate in a blood or urine test if a police officer were present when you were asked to participate?

Would you be more or less likely to participate if stopped on a highway than at a stop sign?

VERSIONS OF THE MODERATOR'S GUIDE

FOR THE

SPECIAL INTEREST FOCUS GROUPS

VERSION A

MODERATOR'S GUIDE FOR

SPECIAL-INTEREST FOCUS GROUP DISCUSSIONS

INTRODUCTION

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I would like to start by having everyone introduce themselves.

NOTE TO MODERATORS: Mention that the discussion is being taped.

A. General Attitudes Toward Highway Safety Countermeasures

1. Over the past few years many different approaches have been tried to reduce the number and seriousness of highway accidents, with considerable variation in effectiveness and public acceptance. Some of these approaches, such as highway design, can be effective whether or not individuals try to cooperate. Other approaches, however, are dependent upon individual attitudes for their effectiveness. They must not only by technically effective, they must be accepted by the public in practice.

    a. What approaches that have been used in the past few years that depend on public acceptance are "success stories" in your field, and what accounts for their being successes?

    b. What accounts for the fact that some approaches have been readily accepted by people in your field while others have been strongly resisted?

B. Attitudes Toward Specific Highway Safety Countermeasures

1. One type of accident occurs when someone is speeding. Here are four measures for identifying cars that are speeding; each could result in a warning, a citation or prosecution.

    a. The use of radar to detect speeding

        A police officer points a radar unit (device) at a car suspected of speeding. Radio waves are reflected off the car and the actual speed of the car is indicated on the radar unit.

b. The use of vascar to detect speeding

The police officer measures a particular section of a highway and registers the distance between those two points into a vascar unit. When the officer sees a car suspected of speeding he or she clicks a switch on the vascar unit when the car is at the first point and again when the car passes the second point. The vascar unit indicates how fast that car was going.

c. The use of a speedometer to detect speeding

Police follow a car suspected of speeding, keeping a constant distance between them. Police follow the car for a specified distance, checking their own speedometer to determine how fast that car was going.

d. The use of a speed measuring and photography device to detect speeding, for example, one of them is called Orbis III.

This device operates by itself, day or night, and does not require a police officer to operate it.

Electric sensors measure the time it takes for a car to pass through two points on a highway. The speed is registered on a meter. A camera is set to go off if a car is exceeding the speed limit. If a car is speeding a camera photographs both (1) the meter readings (date, time of day, speed) and (2) either the front or the back of the car, showing the license plate number.

(1) What questions do you have about each of these methods and how it will operate?

(2) How do they compare in terms of how effective each is likely to be in reducing the number or seriousness of speeding accidents?

(3) Which of them would you most like to see adopted?

(4) What problems in getting acceptance from people in your field can be anticipated of any if these approaches are put into effect?

(5) What aspects of these approaches are likely to elicit a positive reaction from people in your field? What aspects are likely to elicit a negative reaction?

2. One highway safety countermeasure that has been put in effect is the change in speed limit.

   a. A 55 mph speed limit

      As you know, a few years ago the federal government set a 55 mph speed limit throughout the country. The maximum speed limit on all highways in the U.S. is 55 mph.

   (1) How effective do people in your field think a 55 mph speed limit is in reducing the number or seriousness of highway accidents?

   (2) Do people in your field see any problems or negative side-effects of the 55 mph speed limit?

   (3) What aspects of the 55 mph speed limit have elicited positive reaction from people in your field? What aspects have elicited a negative reaction?

3. Here are three approaches which are being considered for dealing with drivers who have been drinking:

   a. The Self Tester is a portable alcohol breath tester to be used by drivers in deciding whether or not to drive after drinking. A person would breathe into the Tester, which would show if he/she is intoxicated. The Tester is intended for personal use on a voluntary basis. The Tester could be purchased, loaned out or made available at drinking establishments.

   b. The Passive Breath Tester is used by a police officer after a car is stopped because "drinking while driving" is suspected. The Tester is small and is held in front of the driver's face during questioning. The driver's cooperation is not required. This device indicates whether further testing is necessary.

   c. The Evidential Roadside Tester is used by a police officer after a car is stopped for suspicion of drunken driving. The driver is asked to breathe into the Tester. The Tester records the driver's blood-alcohol level. Where the alcohol level exceeds the limit the driver is prevented from driving by the officer and is subject to

arrest. The Evidential Roadside Tester is accurate enough to meet legal standards of intoxication in court.

(1) What questions do you have about each of these methods and how it will operate?

(2) How do they compare in terms of how effective each is likely to be in reducing the number or seriousness of alcohol related accidents?

(3) Which of them would you most like to see adopted?

(4) What problems in getting acceptance from people in your field should be anticipated if any of these approaches are put into effect?

(5) What aspects of these approaches are likely to elicit a positive reaction from people in your field? What aspects are likely to elicit a negative reaction?

4. Another set of highway safety counter measures being considered are intended to deter negligent driving by increasing the chances of getting caught and by heightening public awareness of the risks.

a. Using a Newspaper Reporting approach, newspapers would periodically report a specific highway crash. The report would describe how the accident happened and would suggest how it could have been avoided.

b. Citizens Band (CB) radio would be actively used by police to deter speeding. It could be used in two ways:

(1) announcements would be made that, for the next few hours, special police patrols would be in effect on certain streets and highways;

(2) the exchange of information among drivers as to whether a particular stretch of highway is being patrolled, or not, would be intercepted by police; police would then patrol the area considered safe.

c. With Citizen Reporting, observers, trained by the government, would be sent out to various places to look for unsafe driving actions. When unsafe driving actions occurred, they would make a record of the license number of the car involved. This record would be used by the police to issue a warning notice to the car owner.

(1) What questions do you have about each of these methods and how it will operate?

(2) How do they compare in terms of how effective each is likely to be in reducing the number or seriousness of highway accidents?

(3) Which of them would you most like to see adopted?

(4) What problems in getting acceptance from people in your field should be anticipated if any of these approaches are put into effect?

(5) What aspects of these approaches are likely to elicit a positive reaction from people in your field? What aspects would elicit a negative reaction?

VERSION B

MODERATOR'S GUIDE FOR

SPECIAL-INTEREST FOCUS GROUP DISCUSSIONS

INTRODUCTION

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1. Over the past few years many different approaches have been tried to reduce the number and seriousness of highway accidents, with considerable variation in effectiveness and public acceptance. Some of these approaches, such as highway design, can be effective whether or not individuals try to cooperate. Other approaches, however, are dependent upon individual attitudes for their effectiveness. They must not only be technically effective, they must be accepted by the public in practice.

   a. Which approaches to highway safety that have been used in the past few years that depend on public acceptance are "success stories" in your field, and what accounts for their being successes?

   b. What accounts for the fact that some approaches have been readily accepted by people in your field while others have been strongly resisted?

B. Attitudes Toward Specific Highway Safety Countermeasures

1. Here are four counter measures for dealing with pedestrian accidents that are being considered. They are largely directed at accidents involving children or older people.

   a. A Vendor Regulation would require vendor trucks (such as ice cream trucks) to have a warning signal to alert or stop other cars.

   b. Parking Regulations would be put into effect which (1) would forbid parking near street corners and crosswalks and (2) would require that parking be parallel to sidewalks (as opposed to parking at an angle to sidewalks). These regulations are intended to make pedestrians and oncoming cars more easily visible.

   c. A Vehicle Overtaking Regulation would require a driver to stop his car (that is, not pass the car) if another car has stopped at a crosswalk.

   d. Schools would give special classes for all children age six to eight. Children would be taught not to dart out into the street without first checking for cars. The training would be done using both films and practice in class and on the streets.

   (1) What questions do you have about each of these approaches and how it will operate?

   (2) How do they compare in terms of how effective each is likely to be in reducing the number and seriousness of pedestrian accidents?

   (3) Which of them would you most like to see adopted?

   (4) What problems in getting acceptance from people in your field should be anticipated if any of these approaches were to be put into effect?

   (5) What aspects of these approaches are likely to elicit a positive reaction from people in your field? What aspects are likely to elicit a negative reaction?

2. In order to develop effective highway safety programs it is important to find out about people's driving habits, for example, what proportion of people on the road have high alcohol or drug levels. One way of getting such information is to conduct Roadside Surveys, that is, stop drivers along roads or highways and ask them to take part in the survey.

Participation would be completely voluntary. Also, the results of a survey are completely confidential. If a driver has an alcohol or drug level high enough to affect his or her driving skills, the research team would offer to take the driver home or make provisions for that driver not to drive.

There are several ways of stopping drivers for Roadside Surveys and I would like to get your reactions to them:

a. As cars approach the survey point on a road or highway a police officer, on a random, periodic basis, pulls a car over. The police officer introduces a researcher who describes the purpose of the survey and asks the driver to participate.

b. As cars proceed down a road or highway a police officer, on a random, periodic basis, pulls a car over and directs the car to a research area. This area is located at the stop point but is not visible from the stop point. The police officer does not know if the person took part in the study or not. A researcher describes the purpose of the study and asks the driver to participate.

c. A researcher approaches a driver at a natural stop point, such as a traffic light or a stop sign, and asks the driver to participate in a research study.

(1) What questions do you have about each of these methods for stopping drivers and asking them to participate in a Roadside Survey?

(2) Which of these approaches would you most like to see adopted?

(3) What problems in getting acceptance from people in your field should be anticipated if any of these approaches were to be put into effect?

(4) What aspects of these approaches are likely to elicit a positive reaction from people in your field? What aspects are likely to elicit a negative reaction?

(5) If announcements were made in advance on local TV and in local newspapers that a Roadside Survey would be taking place somewhere in the community, would that change things?

(6) I would also like to talk about the specific tests that are used in these surveys to gest for the presence of alcohol or other drugs. There are four different ways of testing for alcohol or other drugs:

1. Urine Sample: the driver is asked to walk over to a mobile medical unit where specially trained personnel ask the driver to provide a urine sample. A test would be done of the alcohol or drug level.

2. Breath Sample: specially trained personnel would ask the driver to breathe into a breath tester collection device. A test would be done of the alcohol level.

3. Saliva Sample: specially trained personnel would obtain a saliva sample from the driver. A test would be done of alcohol or drug level.

4. Blood Sample: the driver is asked to walk over to a mobile medical unit where medically trained personnel would obtain a blood sample from the driver's arm. A test would be done of the alcohol or drug level.

1. What questions do you have about each of these tests and how it would be used in a Roadside Survey?
2. Which of these tests would you most like to see adopted?
3. What problems should be anticipated in getting public acceptance from people in your field if any of these tests were used in Roadside Surveys?
4. What aspects of these tests are likely to elicit a positive reaction from people in your field? What aspects are likely to elicit a negative reaction?
5. These tests can be grouped according to how much information you can get from them. Blood and urine samples are both good for testing for alcohol and also for a number of different drugs. Saliva and breath samples are mostly useful to test for alcohol but not for other drugs. Would this difference in the usefulness of the tests make any difference to people in your field?

3. Recognizing that some people will drive when impaired--because of drinking, fatigue or some other reason--another approach to highway safety is designed to keep impaired drivers' skills at a safe level, in order to reduce the chances of their being in an accident.

   a. This could be done by giving special driver training courses that would train drivers how to drive when they are tired or have had several alcoholic drinks.

   b. Another way would be to make changes on roads and highways that would aid alertness, such as increasing the size and frequency of signs or changing highway surfaces.

   (1) What questions do you have about each of these methods and how they will operate?

   (2) How do they compare in terms of how effective each is likely to be in reducing the number or seriousness of highway accidents?

   (3) Which of them would you most like to see adopted?

   (4) What problems should be anticipated in getting acceptance from people in your field if either of these approaches were to be put into effect?

   (5) What aspects of these approaches are likely to elicit a positive reaction from people in your field?
   What aspects are likely to elicit a negative reaction?

VERSION C

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SPECIAL-INTEREST FOCUS GROUP DISCUSSIONS

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   b. What accounts for the fact that some approaches have been readily accepted by people in your field while others have been strongly resisted?

B. Attitudes Toward Specific Highway Safety Countermeasures

1. One type of accident occurs when a driver is impaired because of alcohol.

   Here are four approaches that are being considered for dealing with such accidents:

   a. The Driver Warning System is a device installed in the car which prevents normal operation of the car unless the driver passes a (psychomotor) test. For example, there might be a screen on the steering wheel with a moving pointer. The driver would have to keep the pointer at a certain spot on the screen. If the test shows that the driver's ability is impaired the car's lights would flash if the car was driven at less than ten miles per hour. Driving above ten miles per hour would cause the lights to flash and the horn to sound.

b. The Operating Time Recorder is a device installed in the car which records when the car is driven It is intended to deter driving on the part of convicted drunken drivers during those hours when alcohol related accidents are most likely to happen. The device would be installed as a condition of sentencing or probation, and the driver would not be allowed to drive during high risk hours. The record would be turned in to a probation officer.

c. The Continuous Monitoring Device is a mechanism installed in the car which monitors the performance level of the driver continually as he/she drives the car. For example, excessive movement in the steering wheel could be picked up. If his/her performance were to fall below a certain level, the car's lights would flash and the horn would sound.

d. A Model Traffic Violations Law would make a special provision for drivers who committed a dangerous moving violation and who had a significant blood-alcohol level. They would receive punishments greater than those for a dangerous moving violation without alcohol even though the blood-alcohol level was below the limit for Driving When Intoxicated Laws.

(1) What questions do you have about each of these methods and how it will operate?

(2) How do they compare in terms of how effective each is likely to be in reducing the number or seriousness of accidents in which the driver had been drinking?

(3) Which of them would you most like to see adopted?

(4) What problems in getting acceptance from people in your field should be anticipated if any of these approaches are put into effect?

(5) What aspects of these approaches are likely to elicit a positive reaction from people in your field? What aspects are likely to elicit a negative reaction?

2. Another type of accident occurs when someone is speeding.

Here are four ways of identifying cars that are speeding; each could result in a warning or a ticket.

a. The use of radar to detect speeding

A police officer points a radar unit (device) at a car suspected of speeding. Radio waves are reflected off the car and the actual speed of the car is indicated on the radar unit.

b. The use of vascar to detect speeding

A police officer measures a particular section of a highway and registers the distance between those two points into a vascar unit. When the officer sees a car suspected of speeding he or she clicks a switch on the vascar unit when the car is at the first point and again when the car passes the second point. The vascar unit indicates how fast that car was going.

c. The use of a speedometer to detect speeding

Police follow a car suspected of speeding keeping a constant distance between them. Police follow the car for a specified distance, checking their own speedometer to determine how fast that car was going.

d. The use of a speed measuring and photography device to detect speeding, for example, one of them is called Orbis III.

This device operates by itself, day or night, and does not require a police officer to operate it.

Electric sensors measure the time it takes for a car to pass through two points on a highway. The speed is registered on a meter. A camera is set to go off if a car is exceeding the speed limit. If a car is speeding, a camera photographs both (1) the meter readings (date, time of day, speed) and (2) either the front or the back of the car, showing the license plate number.

(1) What questions do you have about each of these methods and how it will operate?

(2) How do they compare in terms of how effective each is likely to be in reducing the number or seriousness of speeding accidents?

(3) Which of them would you most like to see adopted?

(4) What problems in getting acceptance from people in your field can be anticipated if any of these approaches are put into effect?

(5) What aspects of these approaches are likely to elicit a positive reaction from people in your field? What aspects are likely to elicit a negative reaction?

3. One highway safety countermeasure that has been put in effect is the change in speed limit.

a. A 55 mph speed limit

As you know, a few years ago the federal government set a 55 mph speed limit throughout the country. The maximum speed limit on all highways in the U.S. is 55 mph.

(1) How effective do people in your field think a 55 mph speed limit is in reducing the number or seriousness of accidents?

(2) Do people in your field see any problems or negative side-effects of the 55 mph speed limit?

(3) What aspects of the 55 mph speed limit have elicited a positive reaction from people in your field?

(4) What aspects have elicited a negative reaction?

4. In order to develop effective highway safety programs it is important to find out about people's driving habits, for example, what proportion of people on the road have high alcohol or drug levels. One way of getting such information is to conduct Roadside Surveys, that is, stop drivers along roads or highways and ask them to take part in the survey.

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c. A researcher approaches a driver at a natural stop point, such as a traffic light or a stop sign, and asks the driver to participate in a research study.

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(2) Which of these approaches would you most like to see adopted?

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3. What problems should be anticipated in getting public acceptance from people in your field if any of these tests were used in Roadside Surveys?
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5. These tests can be grouped according to how much information you can get from them. Blood and urine samples are both good for testing for alcohol and also for a number of different drugs. Saliva and breath samples are mostly useful to test for alcohol but not for other drugs. Would this difference in the usefulness of the tests make any difference to people in your field?

APPENDIX B

HIGHWAY SAFETY QUESTIONNAIRE

FORMS 1, 2, 3

FORM 1

[ ][ ] : [ ][ ] 1 AM 2 PM

TIME BEGAN

55 MPH SPEED LIMIT

1.a. Whether or not you yourself drive, in general, what do you think the speed limit for passenger cars should be on major highways?

[ ][ ]

( ) DON'T KNOW

b. In your opinion, should the maximum speed limit be the same throughout the country, or, should each state set its own speed limit?

( ) SAME

( ) EACH STATE

( ) DON'T KNOW

2. Do you have a currently valid driver's license?

( ) YES

( ) NO

INTERVIEWER: NOTE THAT SOME QUESTIONS ARE ASKED ONLY OF RESPONDENTS WITH A DRIVER'S LICENSE.

ASK Q.3 ONLY IF RESPONDENT HAS LICENSE

3. Suppose you're on a highway with a 55 mile per hour speed limit, that it is daytime, the weather is good and traffic is moderate. In that case, what is the actual speed you normally find yourself driving at? (PROBE) What would your best estimate be?

[ ][ ]

( ) DON'T KNOW

4. In your opinion, does strict enforcement of the 55 mile per hour speed limit reduce the number of highway accidents a lot, a little, or not at all?

( ) LOT

( ) LITTLE

( ) NOT AT ALL

( ) DON'T KNOW

ICE CREAM VENDOR LAWS AND ANTI-DARTOUT TRAINING

5. Now I would like to get your reaction to some ideas for increasing the safety of children:

One idea is to give children up to the age of eight special training on street safety. Training would be given in streets that have been closed off, except for cars driven by specially trained drivers. Training would cover situations in which children make the most serious mistakes, such as crossing in the middle of the block or playing near streets. They would then be shown what they <u>should</u> do in such situations to avoid an accident.

Do you favor, or do you oppose, giving children up to the age of eight <u>this kind</u> of training to teach them how to act safely in the street? (IF UNDECIDED): As of now, do you lean more in favor of this idea, or more against it?

( ) FAVOR

( ) LEAN IN FAVOR

( ) LEAN AGAINST

( ) OPPOSE

( ) UNDECIDED AFTER PROBE

6. a. Some people say that giving this kind of safety training to children eight years or younger is the parents' responsibility only. Others say that schools should <u>also</u> give this kind of training. What is your opinion?

( ) ONLY PARENT'S RESPONSIBILITY

( ) SCHOOLS SHOULD ALSO

( ) DON'T KNOW

IF "SCHOOLS SHOULD ALSO," ASK Q. 6b and 6c.

b. Do you think the training should take place during, or after, regular school hours?

( ) DURING REGULAR HOURS

( ) AFTER REGULAR HOURS

( ) DON'T KNOW

c. Do you think it should be required of all children, or should it be up to parents to decide whether their children will attend?

( ) REQUIRED

( ) UP TO PARENTS

( ) DON'T KNOW

7. Another suggestion has to do with trucks that have stopped at the side of a road or street to sell ice cream. It has been proposed that a law be passed that these ice cream trucks turn on a special signal light that would require cars coming from either direction to stop before passing.

a. Do you favor or oppose such a law? (IF UNDECIDED): As of now, do you lean more in favor of such a law, or more against it?

( ) FAVOR

( ) LEAN IN FAVOR

( ) LEAN AGAINST

( ) OPPOSE

( ) UNDECIDED AFTER PROBE

b. In your opinion, do trucks selling ice cream to children on the street create a very serious, somewhat serious, or not too serious a safety problem?

( ) VERY SERIOUS

( ) SOMEWHAT SERIOUS

( ) NOT TOO SERIOUS

( ) DON'T KNOW

8. At the present time the Government does not have enough information about how and why accidents happen for it to develop better ways of preventing accidents. The only way to get the needed information is to conduct surveys at certain points along a road or highway. In general, do you favor or do you oppose carrying out surveys at certain points along roads or highways to get this kind of information.

(IF UNDECIDED): Do you lean more in favor of this, or more against it?

( ) FAVOR

( ) LEAN IN FAVOR

( ) LEAN AGAINST

( ) OPPOSE

( ) DON'T KNOW

9. There are a number of different ways of carrying out surveys on roads and highways. I am now going to describe one way and then I will ask you some questions about it.

Signs would be placed along the roadway to indicate that there is a voluntary survey ahead and that you may be asked to stop and participate. A police officer would select a car at random and have it pull over to the side of the road. The police officer tells the driver that a survey is in progress, and directs the driver to researcher. The researcher explains to the driver that the purpose of the research is to develop better ways of preventing accidents, and that participation is voluntary. The researcher also shows the driver a certified letter from a high government official stating that the results will be completely confidential.

	YES	NO	DON'T KNOW
a. Would you be concerned about your personal safety in this situation?	( )	( )	( )
b. Would you believe that the results will be kept confidential in this situation?	( )	( )	( )
c. Do you think most people will give honest answers in this situation?	( )	( )	( )

IF RESPONDENT HAS LICENSE, ASK Q. 9d, 9e, AND 9f.

d. How likely is it that you would agree to participate in this situation -- very likely, somewhat likely, or not likely?

( ) VERY LIKELY

( ) SOMEWHAT LIKELY

( ) NOT LIKELY

( ) DON'T KNOW

IF SOMEWHAT LIKELY OR NOT LIKELY, ASK 9e.

e. What can be done to make it more likely that you would participate?

RECORD RESPONSES VERBATIM

_____

_____

_____

f. Would you feel you could refuse to participate in this situation?

( ) YES

( ) NO

( ) DON'T KNOW

10. Now I am going to describe another way of carrying out surveys on roads and highways.

In this approach the signs would also be used to indicate that there is a voluntary survey ahead and that you may be asked to stop and participate. Again the officer will select a car at random and direct it to an area off to the side of the road. In this case, however, the police officer does not talk to the driver and cannot see the research area. A person easily identified as a researcher then explains to the driver that the purpose of the research is to develop better ways of preventing accidents and that participation is voluntary. The researcher also shows the driver a certified letter from a high government official stating that the results will be completely confidential.

	YES	NO	DON'T KNOW
a. Would you be concerned about your personal safety in this situation?	( )	( )	( )
b. Would you believe that the results will be kept confidential in this situation?	( )	( )	( )
c. Do you think most people will give honest answers in this situation?	( )	( )	( )

IF RESPONDENT HAS LICENSE, ASK Qs. 10d, 10e, AND 10f.

d. How likely is it that you would agree to participate in this situation -- very likely, somewhat likely, or not likely?

( ) VERY LIKELY

( ) SOMEWHAT LIKELY

( ) NOT LIKELY

( ) DON'T KNOW

IF SOMEWHAT LIKELY OR NOT LIKELY, ASK Q. 10e

e. What can be done to make it more likely that you would participate?

RECORD RESPONSES VERBATIM

_____

_____

_____

f. Would you feel you could refuse to participate in this situation?

( ) YES

( ) NO

( ) DON'T KNOW

11. A third way of carrying out a roadside survey would also use signs to indicate that there was a voluntary survey ahead. A person clearly identified as a researcher would come up to a car at a natural stop point such as a traffic light, stop sign or gas station, explain that the purpose of the research is to develop better ways of preventing accidents and that participation is voluntary. The researcher also shows the driver a certified letter from a high government official stating that the results will be completely confidential. The researcher asks the driver to drive to a nearby research area if the driver is willing to participate. A police officer is not present in this situation.

	YES	NO	DON'T KNOW
a. Would you be concerned about your personal safety in this situation	( )	( )	( )
b. Would you believe that the results will be kept confidential in this situation?	( )	( )	( )
c. Do you think most people will give honest answers in this situation?	( )	( )	( )

IF RESPONDENT HAS LICENSE, ASK Q.11d, Q. 11e AND Q. 11f.

d. How likely is it that you would agree to participate in this situation -- very likely, somewhat likely, or not likely?

( ) VERY LIKELY
( ) SOMEWHAT LIKELY
( ) NOT LIKELY
( ) DON'T KNOW

IF SOMEWHAT LIKELY OR NOT LIKELY, ASK Q. 11e.

e. What can be done to make it more likely that you would participate?

RECORD RESPONSES VERBATIM

_____

_____

_____

f. Would you feel you could refuse to participate in this situation?

( ) YES
( ) NO
( ) DON'T KNOW

IF RESPONDENT HAS LICENSE, ASK Q. 12 TO Q. 15.

12. For these kinds of surveys for how many minutes do you think it is reasonable to ask people to stop?

RECORD '0-0" FOR "NO MINUTES" OR "IT'S NOT REASONABLE AT ALL."

[ ][ ] MINUTES

( ) DON'T KNOW

13. For some surveys it may be necessary for the driver to get out of the car and walk over to a nearby research station,such as an office trailer. Would having to get out of the car make you less likely to participate, more likely to participate, or would it not make any difference in whether you would participate?

( ) LESS LIKELY TO PARTICIPATE

( ) MORE LIKELY TO PARTICIPATE

( ) WOULDN'T MAKE ANY DIFFERENCE

( ) DON'T KNOW

14. One reason for conducting roadside surveys is to find out if the use of certain medicines or other drugs causes highway accidents. To do this it is necessary to find out how many drivers on the road have been taking these medicines or drugs.

There are several ways of getting information on the presence of medicines or drugs in the body -- for example, testing samples of a driver's breath, blood, saliva, or urine.

Suppose a roadside survey was set up to test for the presence of medicines or drugs in drivers. All tests would be given by medically qualified people. The results of these tests would not be available until the next day or later.

If you were asked to participate in a roadside survey would you agree to give. . .

ASK IN ORDER, STARTING WITH STARRED ITEM.

	YES	NO	DON'T KNOW
a. A blood sample	( )	( )	( )
b. A breath sample	( )	( )	( )
c. A saliva sample	( )	( )	( )
d. A urine sample	( )	( )	( )

BE SURE TO ASK ABOUT ALL FOUR.

(ASK FOR TESTS ANSWERED "NO" IN Q. 14).

15. Why would you not agree to give. . .

a. a blood sample?_____

_____

b. a breath sample?_____

_____

c. a saliva sample?_____

_____

d. a urine sample?_____

_____

BACKGROUND QUESTIONS

The last few questions are to get some statistical information about the sample of people interviewed for this survey.

16. a. Do you, or does any member of your household, own a car, a station wagon, or truck? (IF YES): How many in total? (CIRCLE NUMBER)

0 = none 1 2 3 4 5 or more

IF ONE OR MORE CARS OWNED, ASK Q.1b.*

b. Do you have CB equipment in (any of your cars)/(your car)?

( ) YES
( ) NO

17. Other than for a parking violation, have you or any other member of your household gotten a ticket or been arrested for a moving violation within the past five years--that is, since June 1974?

( ) YES, RESPONDENT ONLY
( ) YES, OTHER ONLY
( ) YES, BOTH RESPONDENT AND OTHER
( ) NO

18. Do you have any children:

a. Four years or younger? ( ) YES ( ) NO

b. Five through eight? ( ) YES ( ) NO

c. Nine through fifteen? ( ) YES ( ) NO

d. Sixteen through twenty-five? ( ) YES ( ) NO

---

*To be asked only on Questionnaire form that contains CB module (form 2).

19. What was the last grade or class you completed in school?

( ) EIGHTH GRADE OR LESS
( ) GRADE 9-11 - HIGH SCHOOL INCOMPLETE
( ) HIGH SCHOOL GRADUATE - 12th GRADE
( ) COLLEGE INCOMPLETE (LESS THAN 4 YEARS)
( ) COLLEGE - GRADUATE
( ) POST GRADUATE

20. a. Is your total family income before taxes, including all members of your immediate family living in your household, less than $12,000 a year, or $12,000 or more?

( ) LESS THAN $12,000
( ) $12,000 OR MORE
( ) REFUSED

IF "LESS THAN $12,000," ASK Q. 20b.

b. Is that less than $6,000?

( ) YES
( ) NO
( ) REFUSED

IF "$12,000 OR MORE," ASK Q.20c.

c. Is that more than $20,000?

( ) YES
( ) NO
( ) REFUSED

21. a. Do you have occasion to use alcoholic beverages such as liquor, wine or beer, or are you a total abstainer?

( ) YES, USE ALCOHOLIC BEVERAGES
( ) TOTAL ABSTAINER

IF YES TO Q.21, AND A LICENSED DRIVER, ASK Q.21b.

b. Do you ever drive when you have had something alcoholic to drink?

( ) YES
( ) NO

22. May I have your age? _____

This is the end of the interview. Thank you very much for your cooperation.

23. RECORD:

( ) MALE
( ) FEMALE

_____ _____
INTERVIEWER'S SIGNATURE DATE

		:			AM / PM

TIME ENDED

FORM 2

[ ][ ] : [ ][ ] 1 AM 2 PM

TIME BEGAN

55 MPH SPEED LIMIT

1.a. Whether or not you yourself drive, in general, what do you think the speed limit for passenger cars should be on major highways?

[ ][ ]

( ) DON'T KNOW

b. In your opinion, should the maximum speed limit be the same throughout the country, or, should each state set its own speed limit?

( ) SAME

( ) EACH STATE

( ) DON'T KNOW

2. Do you have a currently valid driver's license?

( ) YES

( ) NO

INTERVIEWER: NOTE THAT SOME QUESTIONS ARE ASKED ONLY OF RESPONDENTS WITH A DRIVER'S LICENSE.

ASK Q.3 ONLY IF RESPONDENT HAS LICENSE

3. Suppose you're on a highway with a 55 mile per hour speed limit, that it is daytime, the weather is good and traffic is moderate. In that case, what is the actual speed you normally find yourself driving at? (PROBE) What would your best estimate be?

[ ][ ]

( ) DON'T KNOW

4. In your opinion, does strict enforcement of the 55 mile per hour speed limit reduce the number of highway accidents a lot, a little, or not at all?

( ) LOT

( ) LITTLE

( ) NOT AT ALL

( ) DON'T KNOW

PEDESTRIAN SAFETY

5. I would also like to get your reaction to some proposed laws intended to increase the safety of pedestrians crossing the street.

   a. One suggestion for making it easier for drivers and pedestrians crossing the street to see each other is not to allow cars to park near street corners. Do you favor or oppose a law prohibiting parking near street corners? (IF UNDECIDED): As of now, do you lean more in favor of this idea, or more against it?

      ( ) FAVOR
      ( ) LEAN IN FAVOR
      ( ) LEAN AGAINST
      ( ) OPPOSE
      ( ) DON'T KNOW

   b. In your opinion, when cars are <u>not</u> allowed to park near street corners, does this reduce the number of pedestrian accidents a lot, a little, or not at all?

      ( ) REDUCE A LOT
      ( ) REDUCE A LITTLE
      ( ) NOT AT ALL
      ( ) DON'T KNOW

6. a. Two ways that cars can be parked are (1) parallel, with the side of the car right next to the curb, or (2) at an angle, where you drive the <u>front</u> of the car up to the curb. If someone were crossing the street between two parked cars, when would it be <u>easier</u> for a driver and a pedestrian to see each other--when cars are parked next to the curb, or when they are parked at an angle to the curb?

      ( ) NEXT TO CURB
      ( ) ANGLE
      ( ) BOTH SAME (VOLUNTEERED)
      ( ) DON'T KNOW

   b. (As you know/Actually) it is easier for pedestrians--especially children--and drivers to see each other when cars are parked at an angle to the curb. It has therefore been suggested that in areas with lots of children and which have wide enough streets, the law requires cars to park at an angle to the curb. Do you favor, or do you oppose such a law? (IF UNDECIDED): As of now, do you lean more in favor of such a law, or more against it?

      ( ) FAVOR
      ( ) LEAN IN FAVOR
      ( ) LEAN AGAINST
      ( ) OPPOSE
      ( ) DON'T KNOW

DRUNK DRIVER DETERRENCE

7. a. The next question is about drivers who commit a moving traffic violation after they have been drinking, but who are not legally drunk. It has been proposed that even though they are not legally drunk such drivers be punished more severely than if they had not been drinking. Do you favor or oppose such a law? (IF UNDECIDED): As of now, do you lean more in favor of such a law, or more against it?

( ) FAVOR

( ) LEAN IN FAVOR

( ) LEAN AGAINST

( ) OPPOSE

( ) DON'T KNOW

b. What if drivers were punished more severely for traffic violations committed after they had been drinking, even though they were not legally drunk. Do you think fewer people would drink and drive as a result?

( ) YES

( ) NO

( ) DON'T KNOW

8. Of the people whose licenses have been suspended or revoked for driving while legally drunk, how many do you think regularly drive without a license anyway--most, about half, less than half, or very few?

( ) MOST

( ) ABOUT HALF

( ) LESS THAN HALF

( ) VERY FEW

( ) DON'T KNOW

9. (In fact) many people whose licenses have been suspended or revoked for driving while legally drunk regularly drive without a license. To deal with this problem, it has been suggested that instead of suspending or revoking their license, convicted drunk drivers be allowed to drive, but only under special conditions. In general, does this sound like a good idea, or a bad idea, to you?

( ) GOOD IDEA

( ) BAD IDEA

( ) DON'T KNOW

10. One condition might be to allow convicted drunk drivers to drive only if the car is equipped with a Drunk Driver Warning System. This device would not prevent the car from being driven, but would test whether someone has had too much to drink to drive safely. If a driver's coordination and alertness are below a certain level, and the driver drove anyway, the device would make the car's emergency lights flash on and off. If the car went faster than 10 miles an hour the horn would honk as well.

Do you favor, or do you oppose, allowing convicted drunk drivers to drive cars with this device? (IF UNDECIDED): As of now, do you lean more in favor of this idea, or more against it?

( ) FAVOR
( ) LEAN IN FAVOR
( ) LEAN AGAINST
( ) OPPOSE
( ) DON'T KNOW

11. Suppose convicted drunk drivers were allowed to drive, but only in cars with this device. In your opinion:

a. How likely is it that if the device indicates drivers are not in condition to drive safely, they will do so anyway--very likely, fairly likely, or not likely?

( ) VERY LIKELY
( ) FAIRLY LIKELY
( ) NOT LIKELY
( ) DON'T KNOW

b. What effect do you think having such a device in their cars would have on whether convicted drunk drivers will drink when they expect to be driving? Do you think it would reduce that happening a lot, a little, or not at all?

( ) A LOT
( ) A LITTLE
( ) NOT AT ALL
( ) DON'T KNOW

c. Would such a warning system help police a lot, a little, or not at all in identifying and controlling drunk drivers?

( ) A LOT
( ) A LITTLE
( ) NOT AT ALL
( ) DON'T KNOW

12. Another suggestion is to allow convicted drunk drivers to drive, but only cars that have a special device called a Continuous Monitoring Device. The difference is that in this case, the device measures the drivers' coordination and alertness all the time while they are driving, not before they start driving. If a driver is not driving safely, the car's emergency lights would flash on and off. If the car was driven faster than 10 miles per hour, the horn would honk as well. Do you favor, or do you oppose, allowing convicted drunk drivers to drive cars with this device? (IF UNDECIDED): As of now, do you lean more in favor of this idea, or more against it?

( ) FAVOR

( ) LEAN IN FAVOR

( ) LEAN AGAINST

( ) OPPOSE

( ) DON'T KNOW

13. Suppose convicted drunk drivers were allowed to drive, but only in cars with this device. In your opinion:

a. How likely is it that a driver will continue to drive, even if the lights are flashing and the horn is honking--very likely, fairly likely, or not likely?

( ) VERY LIKELY

( ) FAIRLY LIKELY

( ) NOT LIKELY

( ) DON'T KNOW

b. What effects do you think this kind of warning system would have on whether convicted drunk drivers will drink and drive anyway? Do you think it would reduce that happening a lot, a little, or not at all?

( ) A LOT

( ) A LITTLE

( ) NOT AT ALL

( ) DON'T KNOW

c. Would this kind of warning system help police a lot, a little, or not at all in identifying and controlling drunk drivers?

( ) A LOT

( ) A LITTLE

( ) NOT AT ALL

( ) DON'T KNOW

14. Do you think warning systems like the two we've just talked about should be used to identify drivers who are only moderately or slightly drunk as well as those who are very drunk?

( ) YES

( ) NO

( ) DON'T KNOW

15. If a device was inaccurate, it could lead someone who had too much to drink to believe he could drive safely. Or, it might identify a sober person as an unsafe driver. How accurate do you think one of these devices should be before it is used--accurate 75 percent of the time, 85 percent of the time, 95 percent of the time, 99 percent of the time, or what?

RECORD EXACT NUMBER

[ ][ ][ ]

( ) DON'T KNOW

16. Another idea is to allow convicted drunk drivers to drive, but only during those hours when accidents involving drunk drivers are least likely to happen. Do you favor, or do you oppose, that idea? (IF UNDECIDED): As of now, do you lean more in favor of this idea, or more against it?

( ) FAVOR

( ) LEAN IN FAVOR

( ) LEAN AGAINST

( ) OPPOSE

( ) DON'T KNOW

17. Do you think this would reduce the number of accidents involving drunken driving a lot, a little, or not at all?

( ) A LOT

( ) A LITTLE

( ) NOT AT ALL

( ) DON'T KNOW

18. Suppose convicted drunk drivers were allowed to drive, but only during certain hours. How likely do you think it is that they would drive at other times any way--very likely, fairly likely, or not likely?

( ) VERY LIKELY

( ) FAIRLY LIKELY

( ) NOT LIKELY

( ) DON'T KNOW

19. Some people say that since it is always possible to get around mechanical devices, they should not be used as a condition for allowing convicted drunk drivers to drive. Others say that even if a few people find a way to get around them, they can still be useful. What is your opinion?

( ) DO NOT USE

( ) CAN STILL BE USEFUL

( ) DON'T KNOW

20. Once any of these devices is installed in a convicted drunk driver's car, the use of that car by other drivers--such as other family members--would also be controlled or monitored. Because of this, some people say these devices should not be used. Others say that the need to do something about convicted drunk drivers justifies using these devices. What is your opinion?

( ) DO NOT USE

( ) USE JUSTIFIED

( ) DON'T KNOW

21. Of the following two ways, which do you think is the better way of handling people convicted of drunken driving--installing special devices in their cars that reduce the likelihood that they will drive while drunk, or, suspending their driver's license?

( ) SPECIAL DEVICES

( ) SUSPEND LICENSE

( ) BOTH (VOLUNTEERED)

( ) NEITHER (VOLUNTEERED)

( ) DON'T KNOW

The next few questions are about the speed limit

22. A method being considered to encourage drivers to stay within the speed limit would use the Citizens Band, or CB, equipment that many cars have and that drivers use to listen or talk to each other. One way to use CB is for police to make announcements on it that, for the next few hours, there would be special police patrols on certain streets and highways.

a. Suppose police used CB this way. Do you think that the number of people speeding in the announced areas would be reduced a lot, a little, or not at all?

( ) REDUCED A LOT

( ) REDUCED A LITTLE

( ) NOT AT ALL

( ) DON'T KNOW

b. If it were announced that there are police patrols in certain areas, do you think the number of people speeding in <u>other</u> areas would be reduced, would stay the same, or would increase?

( ) REDUCED

( ) STAY THE SAME

( ) INCREASE

( ) DON'T KNOW

c. Regardless of how effective it would be, do you think it is proper, or improper, for police to use CB to make these announcements?

( ) PROPER

( ) IMPROPER

( ) DON'T KNOW

23. Another way in which police can use CB is to listen in when drivers pass on information about avoiding police patrols. Police could then patrol those areas where drivers say there aren't any police patrols.

a. Suppose police in your area used CB this way. Do you think that the number of people stopped for speeding would be increased a lot, a little, or not at all?

( ) INCREASED A LOT

( ) INCREASED A LITTLE

( ) NOT AT ALL

( ) DON'T KNOW

b. Regardless of how effective it would be, do you think it is proper, or improper, for the police to use CB to listen in on drivers?

( ) PROPER

( ) IMPROPER

( ) DON'T KNOW

CAREFUL VERSUS NEGLIGENT DRIVING

Now I'd like to get your reaction to some other ways of getting people to drive carefully.

24. One idea is to have newspapers report in detail <u>how</u> selected accidents happened, instead of only reporting that there was an accident and who was hurt. Do you think that people who read such news reports would drive a lot more carefully, a little more carefully, or about the same as they do now?

( ) A LOT MORE CAREFULLY

( ) A LITTLE MORE CAREFULLY

( ) SAME AS NOW

( ) DON'T KNOW

25. Another idea is for the government to train a staff of traffic observers to spot unsafe driving actions--such as weaving in and out of lane, tailgating, or not coming to a full stop at a stop sign. These traffic observers would be stationed at spots where many highway accidents happen. They would hand in reports of all unsafe driving incidents they see, along with the license plate numbers of the vehicles involved. These observers would <u>not</u> have any authority to stop anybody to arrest them or give them a ticket. However, their reports could be used by the police or other government agency to issue warning notices or tickets.

Do you favor, or do you oppose, this kind of traffic observer program? (IF UNDECIDED): As of now, do you lean more in favor of this idea, or more against it?

( ) FAVOR

( ) LEAN IN FAVOR

( ) LEAN AGAINST

( ) OPPOSE

( ) DON'T KNOW

26. The traffic observers would keep a record of license plate numbers of all vehicles observed committing driving violations.

a. Should these records be turned in to the police or should they be turned in to another government agency?

( ) POLICE

( ) ANOTHER GOVERNMENT AGENCY

( ) EITHER (VOLUNTEERED)

( ) NEITHER (VOLUNTEERED)

( ) DON'T KNOW

b. Do you think tickets, or just warning notices, should be issued as a result of these observations?

( ) TICKETS

( ) WARNING NOTICES

( ) EITHER (VOLUNTEERED)

( ) NEITHER (VOLUNTEERED)

( ) DON'T KNOW

c. The ticket or warning notice will be sent to the owner. If someone else had been driving, should the owner be responsible anyway or should the ticket or warning notice be intended for the driver?

( ) OWNER RESPONSIBLE

( ) INTENDED FOR THE DRIVER

( ) DON'T KNOW

IF RESPONSE TO Q.26c WAS "INTENDED FOR THE DRIVER", ASK Q.26d.

d. If a ticket were issued, who should be held responsible for giving it to the person who was driving the car--the owner or the police?

( ) OWNER

( ) POLICE

( ) DON'T KNOW

27. In your opinion, would it be proper, or improper, for the government to use traffic observers in this way to identify vehicles that are driven in an unsafe manner?

( ) PROPER

( ) IMPROPER

( ) DON'T KNOW

CROSS CUTTING ISSUES

Before finishing, I'd like your opinions on just another question.

28. In your opinion, in general, how serious a safety problem are drinkers who drive after having two or three drinks -- very serious, somewhat serious, or not too serious?

( ) VERY SERIOUS

( ) SOMEWHAT SERIOUS

( ) NOT TOO SERIOUS

( ) DON'T KNOW

The last few questions are to get some statistical information about the sample of people interviewed for this survey.

29. a. Do you, or does any member of your household, own a car, a station wagon, or truck? (IF YES): How many in total? (CIRCLE NUMBER)

0 = none 1 2 3 4 5 or more

IF ONE OR MORE CARS OWNED, ASK Q. 29b.*

b. Do you have CB equipment in (any of your cars)/(your car)?

( ) YES
( ) NO

30. Other than for a parking violation, have you or any other member of your household gotten a ticket or been arrested for a moving violation within the past five years--that is, since June 1974?

( ) YES, RESPONDENT ONLY
( ) YES, OTHER ONLY
( ) YES, BOTH RESPONDENT AND OTHER
( ) NO

31. Do you have any children:**

a. Four years or younger? ( ) YES ( ) NO

b. Five through eight? ( ) YES ( ) NO

c. Nine through fifteen? ( ) YES ( ) NO

d. Sixteen through twenty-five? ( ) YES ( ) NO

---

*To be asked only on Questionnaire form that contains CB module (form 2).

32. What was the last grade or class you completed in school?

( ) EIGHTH GRADE OR LESS
( ) GRADE 9-11 - HIGH SCHOOL INCOMPLETE
( ) HIGH SCHOOL GRADUATE - 12th GRADE
( ) COLLEGE INCOMPLETE (LESS THAN 4 YEARS)
( ) COLLEGE - GRADUATE
( ) POST GRADUATE

33. a. Is your total family income before taxes, including all members of your immediate family living in your household, less than $12,000 a year, or $12,000 or more?

( ) LESS THAN $12,000
( ) $12,000 OR MORE
( ) REFUSED

IF "LESS THAN $12,000," ASK Q. 33b.

b. Is that less than $6,000?

( ) YES
( ) NO
( ) REFUSED

IF "$12,000 OR MORE," ASK Q. 33c.

c. Is that more than $20,000?

( ) YES
( ) NO
( ) REFUSED

34. a. Do you have occasion to use alcoholic beverages such as liquor, wine or beer, or are you a total abstainer?

( ) YES, USE ALCOHOLIC BEVERAGES
( ) TOTAL ABSTAINER

IF YES TO Q.34, AND A LICENSED DRIVER, ASK Q. 34b.

b. Do you ever drive when you have had something alcoholic to drink?

( ) YES
( ) NO

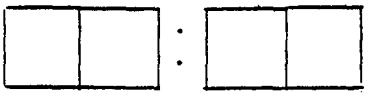
35. May I have your age? _____

This is the end of the interview. Thank you very much for your cooperation.

36. RECORD:

( ) MALE
( ) FEMALE

_____ _____
INTERVIEWER'S SIGNATURE DATE



TIME ENDED

FORM 3

[ ][ ] : [ ][ ] 1 AM 2 PM

TIME BEGAN

55 MPH SPEED LIMIT

1.a. Whether or not you yourself drive, in general, what do you think the speed limit for passenger cars should be on major highways?

[ ][ ]

( ) DON'T KNOW

b. In your opinion, should the maximum speed limit be the same throughout the country, or, should each state set its own speed limit?

( ) SAME

( ) EACH STATE

( ) DON'T KNOW

2. Do you have a currently valid driver's license?

( ) YES

( ) NO

INTERVIEWER: NOTE THAT SOME QUESTIONS ARE ASKED ONLY OF RESPONDENTS WITH A DRIVER'S LICENSE.

ASK Q.3 ONLY IF RESPONDENT HAS LICENSE

3. Suppose you're on a highway with a 55 mile per hour speed limit, that it is daytime, the weather is good and traffic is moderate. In that case, what is the actual speed you normally find yourself driving at? (PROBE) What would your best estimate be?

[ ][ ]

( ) DON'T KNOW

4. In your opinion, does strict enforcement of the 55 mile per hour speed limit reduce the number of highway accidents a lot, a little, or not at all?

( ) LOT

( ) LITTLE

( ) NOT AT ALL

( ) DON'T KNOW

BREATH TESTERS

5. There are a number of different ways of testing drivers suspected of driving while intoxicated. One way is for the police officer to take the suspected driver to a police station or medical facility where they have equipment that can determine the alcohol level in a person's blood or breath. These tests are given by qualified people.

   a. Have you ever heard of such tests before?

   ( ) YES

   ( ) NO

   b. In your opinion, should police officers be required to arrest suspected drivers before taking them in to be tested, or should the police be allowed to take them in for a test without arresting them?

   ( ) ARREST FIRST

   ( ) ALLOW TO TEST WITHOUT ARREST

   ( ) DON'T KNOW

   c. To the best of your knowledge, in your community, at this time, must police officers arrest drivers before they can be taken in for testing, or are they allowed to test drivers before arresting them?

   ( ) MUST ARREST FIRST

   ( ) ALLOWED TO TEST WITHOUT ARREST

   ( ) DON'T KNOW

6. Some types of breath testing equipment now being developed are small enough to fit into a police car so that tests can be conducted at the roadside instead of taking them to a testing facility.

   a. In general, do you favor or oppose police conducting roadside breath tests of suspected drunk drivers? (IF UNDECIDED): As of now, do you lean more in favor of roadside breath tests, or more against it?

   ( ) FAVOR

   ( ) LEAN IN FAVOR

   ( ) LEAN AGAINST

   ( ) OPPOSE

   ( ) DON'T KNOW

   b. Should the police officer be required to arrest a driver before a roadside breath test is given, or not?

   ( ) YES

   ( ) NO

   ( ) DON'T KNOW

IF RESPONDENT IS LICENSED DRIVER, ASK Q.7.

7. If a police officer stopped you on suspicion of driving while intoxicated, which would you prefer--to be given a roadside breath test, or, to be taken to a police station or medical facility for a breath test?

( ) ROADSIDE TEST

( ) POLICE STATION/MEDICAL FACILITY

( ) DON'T KNOW

8. It may be possible to develop roadside breath testers that will work just by holding them near the drivers face. The driver does not have to breath directly into them. These breath testers can therefore be used without a driver's consent. Do you favor, or do you oppose, police using this type of tester? (IF UNDECIDED): As of now, do you lean more in favor of this idea, or more against it?

( ) FAVOR

( ) LEAN IN FAVOR

( ) LEAN AGAINST

( ) OPPOSE

( ) DON'T KNOW

9. In your opinion, would using this kind of breath tester without a driver's consent be an invasion of privacy, or not?

( ) YES

( ) NO

( ) DON'T KNOW

10. a. Another kind of breath tester is called the Self-Tester. When you breath into the Self-Tester, it shows whether your alcohol level is above the legal limit for driving, near that limit, or well below it.

IF RESPONDENT IS NOT A LICENSED DRIVER, ASK Q.10b.

b. Suppose Self-Testers were put in places where drinks are sold. How likely do you think it is that people would use the testers to help them decide whether they should drive--very likely, fairly likely, or not likely?

( ) VERY LIKELY

( ) FAIRLY LIKELY

( ) NOT LIKELY

( ) DON'T KNOW

IF RESPONDENT HAS LICENSE, ASK Q.10c, 10d, AND 10e.

c. Suppose that you had been drinking at a tavern and that a Self-Tester were available at no cost. How likely is it that you would use it to help you decide whether you should drive--very likely, somewhat likely, or not at all likely?

( ) VERY LIKELY

( ) SOMEWHAT LIKELY

( ) NOT LIKELY

( ) NEVER DRINK (VOLUNTEERED)

( ) DON'T KNOW

IF "NEVER DRINK," SKIP TO NEXT MODULE

d. Suppose that you had been drinking at a tavern and that a Self-Tester were available at a cost of 25¢. How likely is it that you would use it to help you decide whether you should drive--very likely, somewhat likely, or not likely?

( ) VERY LIKELY

( ) SOMEWHAT LIKELY

( ) NOT LIKELY

( ) DON'T KNOW

e. And suppose that you had been drinking at a friend's house and that a Self-Tester were available. How likely is it that you would use it to help you decide whether you should drive--very likely, somewhat likely, or not likely?

( ) VERY LIKELY

( ) SOMEWHAT LIKELY

( ) NOT LIKELY

( ) DON'T KNOW

SPEED DETECTION AND DETERRENCE

11. There are a number of different ways police officers can check whether a car is going faster than the speed limit. Some of them you may know, while others will be new to you. One way is to use radar. For example, when a police officer uses a radar unit he may point it at a stretch of highway or a specific car. Radio waves are reflected off a car and its speed is indicated on the radar unit. Do you favor, or do you oppose, using radar to check a car's speed? (IF UNDECIDED): As of now, do you lean more in favor of using radar, or more against it?

( ) FAVOR
( ) LEAN IN FAVOR
( ) LEAN AGAINST
( ) OPPOSE
( ) DON'T KNOW

12. Do you think radar is:

a. A very accurate, fairly accurate, or inaccurate way of identifying speeders?

( ) VERY ACCURATE
( ) FAIRLY ACCURATE
( ) INACCURATE
( ) DON'T KNOW

b. Very effective, fairly effective, or ineffective in discouraging drivers from speeding?

( ) VERY EFFECTIVE
( ) FAIRLY EFFECTIVE
( ) INEFFECTIVE
( ) DON'T KNOW

c. A fair way, or an unfair way, for police to check a car's speed?

( ) FAIR
( ) UNFAIR
( ) DON'T KNOW

13. Another way for police to check whether a car is speeding is called Vascar. A specially trained police officer first measures a particular section of a highway and registers the distance into the Vascar unit. When the officer sees a car he thinks is speeding, he clocks how long it takes the car to go that distance by clicking a switch on the unit when the car begins that section of the highway, and again when the car reaches the end of that section. The Vascar unit then calculates how fast the car was going. Do you favor, or do you oppose, using Vascar to check a car's speed? (IF UNDECIDED): As of now, do you lean more in favor of using Vascar, or more against it?

( ) FAVOR
( ) LEAN IN FAVOR
( ) LEAN AGAINST
( ) OPPOSE
( ) DON'T KNOW

14. Do you think Vascar is:

a. A very accurate, fairly accurate, or inaccurate way of identifying speeders?

( ) VERY ACCURATE
( ) FAIRLY ACCURATE
( ) INACCURATE
( ) DON'T KNOW

b. Very effective, fairly effective, or ineffective in discouraging drivers from speeding?

( ) VERY EFFECTIVE
( ) FAIRLY EFFECTIVE
( ) INEFFECTIVE
( ) DON'T KNOW

c. A fair way, or unfair way, for police to check a car's speed?

( ) FAIR
( ) UNFAIR
( ) DON'T KNOW

15. A third way for police to check whether a car is speeding is for them to patrol a highway, and when they see a car they think is speeding to follow it--keeping a constant distance between them. They check their own speedometer to determine how fast that car is actually going.

Do you favor, or do you oppose, using this speedometer method to check a car's speed? (IF UNDECIDED): As of now, do you lean more in favor of using this speedometer method, or more against it?

( ) FAVOR
( ) LEAN IN FAVOR
( ) LEAN AGAINST
( ) OPPOSE
( ) DON'T KNOW

16. Do you think the speedometer method is:

a. A very accurate, fairly accurate, or inaccurate way of measuring a car's speed?

( ) VERY ACCURATE
( ) FAIRLY ACCURATE
( ) INACCURATE
( ) DON'T KNOW

b. Very effective, fairly effective, or ineffective in discouraging drivers from speeding?

( ) VERY EFFECTIVE

( ) FAIRLY EFFECTIVE

( ) INEFFECTIVE

( ) DON'T KNOW

c. Do you think this is a fair way, or an unfair way, for police to check a car's speed?

( ) FAIR

( ) UNFAIR

( ) DON'T KNOW

17. A fourth way of checking for speeders uses an Automatic Speed Recorder. These devices operate by themselves, day or night, and do not require a police officer to operate them once they have been set up. They have meters which show the speed of cars that pass them, and also a camera. If a car is speeding, the camera automatically takes a picture of both the meter--showing the speed, date and time of day, and also the car--showing the license plate. A ticket for speeding would be sent to the car's owner.

a. Do you favor, or do you oppose, using this type of automatic camera device to identify speeders? (IF UNDECIDED): As of now, do you lean more in favor of using such devices, or more against it?

( ) FAVOR

( ) LEAN IN FAVOR

( ) LEAN AGAINST

( ) OPPOSE

( ) DON'T KNOW

b. Suppose somebody other than the car's owner was driving and that the police cannot identify who it was. It that case, do you think that the owner should be required to pay a fine?

( ) YES

( ) NO

( ) DON'T KNOW

c. In order to identify who was actually driving the car, the camera could be aimed so that both the driver and the car's license plate appear in the picture. Do you favor or do you oppose this way of identifying the driver? (IF UNDECIDED): As of now, do you lean more in favor of this idea, or more against it?

( ) FAVOR

( ) LEAN IN FAVOR

( ) LEAN AGAINST

( ) OPPOSE

( ) DON'T KNOW

18. In your opinion, is using an Automatic Speed Recorder likely to be:

a. A very accurate, fairly accurate, or inaccurate way of identifying speeders?

( ) VERY ACCURATE
( ) FAIRLY ACCURATE
( ) INACCURATE
( ) DON'T KNOW

b. Very effective, fairly effective, or ineffective in discouraging drivers from speeding?

( ) VERY EFFECTIVE
( ) FAIRLY EFFECTIVE
( ) INEFFECTIVE
( ) DON'T KNOW

c. Do you think it is, or is not, an invasion of privacy to take a photograph of people in the car?

( ) IS
( ) IS NOT
( ) DON'T KNOW

CROSS CUTTING ISSUES

Before finishing, we'd like your opinion on just a few questions.

19. In your opinion, in general, how serious a safety problem are drinkers who drive after having two or three drinks--very serious, somewhat serious, or not too serious?

( ) VERY SERIOUS

( ) SOMEWHAT SERIOUS

( ) NOT TOO SERIOUS

( ) DON'T KNOW

20. a. Suppose the owner of a car lets someone else drive it, and that the driver gets a ticket for a moving violation. In your opinion, should the owner be required to pay a fine?

( ) YES

( ) NO

( ) DON'T KNOW

b. To the best of your knowledge, does the law now require the owner to pay a fine for a ticket issued to the driver?

( ) YES

( ) NO

( ) DON'T KNOW

The last few questions are to get some statistical information about the sample of people interviewed for this survey.

21. a. Do you, or does any member of your household, own a car, a station wagon, or truck? (IF YES): How many in total? (CIRCLE NUMBER)

0 = none 1 2 3 4 5 or more

IF ONE OR MORE CARS OWNED, ASK Q.1b.*

b. Do you have CB equipment in (any of your cars)/(your car)?

( ) YES
( ) NO

22. Other than for a parking violation, have you or any other member of your household gotten a ticket or been arrested for a moving violation within the past five years--that is, since June 1974?

( ) YES, RESPONDENT ONLY
( ) YES, OTHER ONLY
( ) YES, BOTH RESPONDENT AND OTHER
( ) NO

23. Do you have any children:

a. Four years or younger? ( ) YES ( ) NO

b. Five through eight? ( ) YES ( ) NO

c. Nine through fifteen? ( ) YES ( ) NO

d. Sixteen through twenty-five? ( ) YES ( ) NO

*To be asked only on Questionnaire form that contains CB module (form 2).

24. What was the last grade or class you completed in school?

( ) EIGHTH GRADE OR LESS
( ) GRADE 9-11 - HIGH SCHOOL INCOMPLETE
( ) HIGH SCHOOL GRADUATE - 12th GRADE
( ) COLLEGE INCOMPLETE (LESS THAN 4 YEARS)
( ) COLLEGE - GRADUATE
( ) POST GRADUATE

25. a. Is your total family income before taxes, including all members of your immediate family living in your household, less than $12,000 a year, or $12,000 or more?

( ) LESS THAN $12,000
( ) $12,000 OR MORE
( ) REFUSED

IF "LESS THAN $12,000," ASK Q.25b.

b. Is that less than $6,000?

( ) YES
( ) NO
( ) REFUSED

IF "$12,000 OR MORE," ASK Q.25c.

c. Is that more than $20,000?

( ) YES
( ) NO
( ) REFUSED

26. a. Do you have occasion to use alcoholic beverages such as liquor, wine or beer, or are you a total abstainer?

( ) YES, USE ALCOHOLIC BEVERAGES
( ) TOTAL ABSTAINER

IF YES TO Q. 26 AND A LICENSED DRIVER, ASK Q.26b.

b. Do you ever drive when you have had something alcoholic to drink?

( ) YES
( ) NO

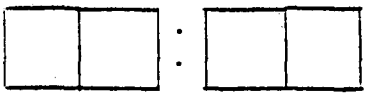
27. May I have your age? _____

This is the end of the interview. Thank you very much for your cooperation.

28. *RECORD:*

( ) MALE
( ) FEMALE

_____ _____
INTERVIEWER'S SIGNATURE DATE



TIME ENDED

APPENDIX C

DATA COLLECTION PACKAGE

SPECIAL INTEREST CASE STUDIES

COUNTERMEASURE COVERAGE BY TOPIC

	Effectiveness	Likely Public Reaction	Likely Position of GROUP	Mode of Group Support or Opposition	Preferred Role of Federal Governemnt in this CM Area
55 mph Speed Limit	●	●	●	●	
SPEED DETECTION					●
Radar	●	●	●	●	
Vascar	●	●	●	●	
Speedometer	●	●	●	●	
Automated Enforcement	●	●	●	●	
ALCOHOL/DRUGS AND DRIVING					●
Drunk Driver Deterrence					
Model Traffic Violations Law	●	●	●	●	
Driver Warning System	●	●	●	●	
Continuous Monitoring Device	●	●	●	●	
Operating Time Recorder	●	●	●	●	
Breath Testers					
Passive Breath Tester	●	●	●	●	
Self Tester	●	●	●	●	
Roadside Surveys					
Stopping Methods	●	●	●	●	
Body Fluid Samples	●	●	●	●	
PEDESTRIAN SAFETY					●
Pedestrian Safety					
Vendor Regulation	●	●	●	●	
Parking Regulations (2)	●	●	●	●	
Special Classes for Children	●	●	●	●	
Negligent Driving Deterrence					
Newspaper Reporting	●	●	●	●	
Citizens Band	●	●	●	●	
Citizen Reporting	●	●	●	●	

SPECIAL INTEREST CASE STUDIES

TOPIC GUIDE

INTRODUCTION

A. Description of Study

B. Identification of highway safety areas addressed by countermeasures, and overview of what interview will cover.

GENERAL DISCUSSION (BRIEF)

A. Role GROUP plays with respect to highway safety countermeasures.

- Does GROUP seek to influence highway safety policy in the state? With whom would GROUP communicate about highway safety issues? Is there a formal or informal mechanism for responding to or promoting highway safety countermeasures? Has GROUP taken a stand on highway safety issues in the past year? Any plans for future action?

- Does GROUP receive input from public on highway safety issues? Is there an existing vehicle for input? What impact has public opinion had on positions taken by GROUP?

B. Given three types of highway safety problems --

Speed Enforcement
Alcohol, Drugs and Driving
Pedestrian Safety --

Could you put these into order of priority with respect to your group's actual, or potential, interest in these highway safety areas.

INTERVIEWER: BEGIN WITH THE LOWEST PRIORITY COUNTERMEASURE AREAS; COVER HIGHEST PRIORITY COUNTERMEASURE AREAS LAST.

FOR EACH SET OF COUNTERMEASURES

A. Effectiveness of COUNTERMEASURES in (Speed Detection/ Drunken Driver Deterrence/Pedestrian Safety

   (also, effectiveness in reducing number of violations in SPECIFIC HIGHWAY SAFETY AREA)

B. Expectations as to likely public reaction

*C. Likely position of GROUP with respect to COUNTERMEASURES

   (implications of COUNTERMEASURES for the GROUP; consistency or conflict with GROUP interests)

D. Way in which GROUP is likely to support or oppose a specific COUNTERMEASURE

FOR EACH HIGHWAY SAFETY AREA

A. What can the federal government do with respect to the development and implementation of COUNTERMEASURES in SPECIFIC AREA?

   (role that the federal government should play -- from setting guidelines to withholding funds for noncompliance with federal standards)

ADDITIONAL COMMENTS, RECOMMENDATIONS, AREAS OF HIGHWAY SAFETY CONCERN

DRUNKEN DRIVER DETERRENCE

A Model Traffic Violations Law would make special provisions for drivers who committed a dangerous moving violation and had a significant blood-alcohol level, but who were not legally drunk. Such drivers would be punished more severely than if they had not been drinking.

The following three devices would be installed in the cars of convicted drunken drivers, in lieu of suspending or revolking their licenses.

The Drunk Driver Warning System would require drivers to take a (psychomotor) test right after they started their car to determine if they had had too much to drink to drive safely. If a driver's coordination and alertness were found to be below a certain level, and the driver drove anyway, the device would make the car's emergency lights flash on and off. If the car went faster than 10 miles an hour, the horn would honk as well.

The Continuous Monitoring Device would measure a driver's coordination and alertness continuously while driving, not just before driving. If a driver was not driving safely, the car's emergency lights would flash on and off. If the car was driven faster than 10 miles per hour, the horn would honk as well.

Restricted Driving Hours as a condition of sentencing convicted drunken drivers would allow them to drive only during certain hours. The Operating Time Recorder would record when a car is driven. This record would be turned in to a probation officer.

SPEED DETECTION

The use of radar to detect speeding.

A police officer points a radar unit at a car suspected of speeding. Radio waves are reflected off the car, and the actual speed of the car is indicated on the radar unit.

The use of Vascar to detect speeding.

The police officer measures a particular section of a highway and registers the distance between those two points into a Vascar unit. When the officer sees a car suspected of speeding, he or she clicks a switch on the unit when the car is at the first point and again when the car passes the second point. The unit indicates how fast that car was going.

The use of a speedometer to detect speeding.

Police follow a car suspected of speeding, keeping a constant distance between them. Police follow the car for a specified distance, checking their own speedometer to determine how fast that car is actually going.

The use of an automated speed enforcement device -- for example Multi-nova, Traffipax.

The speed of cars on highways would be measured by electronic means and recorded on a meter. A camera is set to go off if the car is exceeding the speed limit. If a car is speeding, the camera would photograph the car and the meter readings (date, time of day, speed). A ticket or warning notice would be sent to the car's owner.

ROADSIDE SURVEYS -- SAMPLES

One type of information important for counter-measure development is the extent to which drivers use certain medicines or drugs.

There are several ways of getting information on the presence of medicines or drugs in the body -- specifically, by testing samples of a driver's breath, blood, saliva, or urine.

Roadside surveys would be set up to test for the presence of medicines or drugs in drivers and drivers would be asked to give

a) a breath sample
b) a blood sample
c) a saliva sample or
d) a urine sample.

All tests would be given by medically qualified people. The results of these tests would not be available until the next day or later.

ROADSIDE SURVEYS METHODS

To get information needed for the development of highway safety countermeasures it is necessary to conduct surveys at certain points along roads and highways.

Three different ways of carrying out surveys on roads and highways are described below. In each case, the driver will be informed that participation in the survey is voluntary. Also, drivers will be shown a certified letter from a high government official stating that the results will be completely confidential.

a. Signs would be placed along the roadway to indicate that there was a voluntary survey ahead and that drivers might be asked to stop and participate. A police officer would select a car at random and have it pull over to the side of the road. The police officer would tell the driver that a survey was in progress, and direct the driver to the researcher. The researcher would explain the purpose and ask the driver to participate.

b. Signs would be placed along the roadway to indicate that there was a voluntary survey ahead and that drivers might be asked to stop and participate. Again, the officer would select a car at random and direct it to an area off to the side of the road. In this case, however, the police officer would not talk to the driver and could not see the research area. A person easily identifiable as a researcher would then explain the purpose of the research and ask the driver to participate.

c. A third way of carrying out a roadside survey would also use signs to indicate that there was a voluntary survey ahead. A person clearly identified as a researcher would come up to a car at a natural stop point (such as a traffic light, stop sign or gas station), explain the purpose of the research and ask the driver to participate. If the driver was willing to participate, the researcher would ask him/her to drive to a nearby research area. A police officer would not be present in this situation.

PEDESTRIAN SAFETY

Special training on street safety would be given to children up to the age of eight. Training would be given in streets that have been closed off, except for cars driven by specially trained drivers. Training would cover situations in which children make the most serious mistakes, such as crossing in the middle of a block or playing near streets. Children would then be shown what they should do in such situations to avoid an accident.

Vendor regulations would require ice cream trucks to turn on a special signal light when they have stopped at the side of a road or street. Cars coming from either direction would have to come to a stop before passing.

Parking Regulations would be put into effect that would (1) forbid parking near street corners and crosswalks, and (2) require that parking be at an angle to sidewalks, as opposed to parking parallel to sidewalks. These regulations are intended to make pedestrians and oncoming cars more easily visible.

NEGLIGENT DRIVING DETERRENCE

With Newspaper Reporting, newspapers would describe in detail how selected accidents happened, instead of only reporting that there was an accident and who was hurt.

With Citizen Reporting, the government would train a staff of traffic observers to spot unsafe driving actions--such as weaving in and out of lanes, tailgating, or not coming to a full stop at a stop sign. These traffic observers would be stationed at spots where many highway accidents happen. They would hand in reports of all observed unsafe driving incidents, along with the license plate numbers of the vehicles involved. These observers would not have any authority to stop individuals to arrest them or give them a ticket. However, their reports could be used by the police or other government agencies to issue warning notices or tickets.

Citizens' Band (CB) Radio would be actively used by police to deter speeding. It could be used in two ways:

(1) Announcements would be made that for the next few hours, special police patrols would be in effect on certain streets and highways.

(2) The exchange of information among drivers as to whether a particular stretch of highway was being patrolled, or not, would be intercepted by police; police would then patrol the area considered safe.

BREATH TESTERS

The Passive Breath Tester would be used by a police officer after a car is stopped because "drinking while driving" is suspected. The Tester is small and is held near the driver's face during questioning. The Tester can, therefore, be used without the driver's consent. This device indicates whether further testing is necessary.

The Self-Tester is a portable alcohol breath tester that can be used by drivers to decide whether to drive after drinking. A person breaths into the Tester, which shows if his/her alcohol level is above the legal limit for driving, near that limit, or well below it. The Tester is intended for personal use on a voluntary basis. The Tester could be purchased, loaned out, or made available at drinking establishments.