

EXECUTIVE SUMMARY

BACKGROUND

Speeding has been cited as a contributing factor in nearly one-third of all fatal motor vehicle crashes. In 1996, the cost of crashes involving speeding was estimated to be \$28.8 billion. However, only limited information is available on driver attitudes and behavior regarding speeding and other forms of unsafe driving behavior, including those typically identified as aggressive driving, e.g., tailgating, weaving, running red lights, and making angry, insulting, or obscene gestures to other drivers. To help provide information in this important area, the National Highway Traffic Safety Administration (NHTSA) commissioned a national survey of the driving public to determine:

- the wide range of driver attitudes about speeding and other forms of aggressive/unsafe driving behavior;
- commonly occurring situations in which unsafe driving occurs;
- driver characteristics associated with those who commit these types of infractions; and
- the types of countermeasures the public believes are acceptable and effective for countering such behaviors.

Research of this nature supports NHTSA-sponsored efforts to more precisely specify targets (e.g., drivers, situations), and develop new or refine existing countermeasures that, ultimately, may reduce the occurrence of fatalities and injuries resulting from unsafe driving practices. (See Volume III: *Countermeasures*, for more detailed information about possible solutions.)

The survey was conducted by telephone by the national survey research organization, Schulman, Ronca and Bucuvalas, Inc. (SRBI). A national household sample was constructed using random digit dialing. Each household was screened to determine the number of adult (16 years of age or older) drivers in the household and one eligible driver was selected in each household to be interviewed for the survey. The interviews were conducted by professional interviewers, using computer-assisted telephone interviewing (CATI) to reduce interview length and minimize recording errors. A Spanish-language translation and bilingual interviewers were used to minimize language barriers to participation. The interviews, conducted between February 20 and April 11, 1997, averaged 30 minutes in length. A total of 6,000 interviews were completed with a participation rate of 73.5%. (For a detailed discussion of the methodology employed in this study, refer to Volume I: *Methodology Report*.)

Since this was the first national survey of speeding and unsafe driving practices, the number of issues to be covered was extensive. In order to accommodate the number of questions required without unduly burdening the public, two versions of the questionnaire were developed. One questionnaire focused primarily on speeding issues and the other focused primarily on other forms of unsafe driving. Each version is an independent national sample, constructed in an identical fashion. In addition, each version of the questionnaire used half-samples for some questions to extend the number of questions that could be covered in a 30 minute interview. This random assignment of questions to half of the sample within the two national cross-sectional samples effectively created four national samples. Hence, for some questions we have national estimates based on sample sizes of approximately 1,500 or 3,000, while estimates for core questions about speeding and unsafe driving, as well as driver and driving characteristics shared by both versions are based on sample sizes of 6,000.

FINDINGS

The survey examined public perceptions of the effectiveness of nine possible countermeasures that might reduce the occurrence of speeding and other forms of unsafe driving. A tenth countermeasure — photo-enforcement — was examined separately.

The countermeasure judged most effective in reducing unsafe driving, having more police assigned to traffic, was rated as very or somewhat effective by 87% of drivers. Other countermeasures similarly rated for reducing unsafe driving behaviors were more frequent ticketing (80%), double or triple fines (80%), increased public awareness (80%) and revoking licenses more often (79%). On the other hand, road design changes (71%) and encouraging citizens to report drivers (64%) were seen as less effective by drivers. Nonetheless, a majority of drivers felt that every one of these countermeasures would be at least somewhat effective in reducing unsafe driving.

In general, the rankings of these countermeasures in reducing speeding were similar to those reported for unsafe driving. More police assigned to traffic (85%), more frequent ticketing (82%), double or triple fines (81%), and revoking licenses more often (81%) were judged very or somewhat effective by drivers. On the other hand, increased insurance costs (80%) and road design changes (78%) were judged more effective for reducing speeding than for reducing unsafe driving.

A majority of drivers said that they would approve implementing each of these countermeasures in their communities to reduce speeding or unsafe driving. Most drivers would strongly or somewhat approve of increasing public awareness of risks (89%), encouraging riders to say something to drivers (84%), more frequent ticketing (83%), having more police assigned to traffic (82%) and revoking licenses more often (81%) to reduce unsafe driving. At least seven out of 10 would approve double and triple fines (77%), encouraging citizens to report (71%) and increasing insurance costs (71%) for unsafe driving. Six out of 10 (64%) would approve road design changes to reduce unsafe driving in their communities. In most of these cases, similar but somewhat lower proportions would approve these countermeasures to reduce speeding in their communities. The exceptions are about the same proportions for those who

approve road design changes (64%-63%), and a somewhat higher approval rate of increased insurance costs for speeding (75%) compared to unsafe driving (71%).

One specific countermeasure for speeding and unsafe driving that the survey examined in detail was photo-enforcement. Only about two-thirds of drivers (65%) reported that they had ever heard of this kind of traffic enforcement. Nonetheless, after this approach was described, about eight in 10 drivers thought it would have a lot (53%) or some (27%) effect on deterring drivers from running stop signs and red lights. Three out of four drivers felt it would have a lot (42%) or some (33%) effect on reducing speeding. More than six in ten drivers thought it would have a lot (29%) or some (36%) effect on reducing crashes, whereas, somewhat fewer felt it would have a lot (32%) or some (28%) effect on getting dangerous drivers off the road.

Given the perceived effectiveness of photo-enforcement, it is not surprising that seven out of 10 drivers believe that it would be a good idea to use photo-enforcement for those drivers running red lights (79%), not stopping at stop signs (74%) and speeding (71%). When asked about using photo-enforcement in specific locations, most drivers supported the implementation of photo-enforcement in hazardous locations (70% thought it very or somewhat acceptable), where crashes frequently occur (77%) and in school zones (89%).

CHAPTER I.

BACKGROUND AND OBJECTIVES

BACKGROUND

Speeding has been implicated as a contributing factor in about one-third of all fatal motor-vehicle crashes. In addition, increased attention has been given to other unsafe driving actions — running red lights, tailgating, cutting other drivers off, etc. — that may lead to crashes. However, very little information is available on when, where, and under what conditions drivers engage in speeding and other unsafe driving actions and behaviors; nor is there adequate information on the types of drivers who engage in these behaviors.

To help fill in this information gap, the National Highway Traffic Safety Administration (NHTSA) of the Department of Transportation (DOT) contracted with Schulman, Ronca, & Bucuvalas, Inc., a national survey research firm, to conduct a survey of the driving public's attitudes and experience related to speeding and other unsafe driving actions. Research of this nature supports NHTSA-sponsored efforts to more precisely specify targets (e.g., drivers, situations), and develop new or refine existing countermeasures that, ultimately, may reduce the occurrence of fatalities and injuries resulting from unsafe driving practices.

The unsafe driving behaviors examined in the survey, including tailgating, weaving, making obscene gestures to other drivers, are sometimes used as examples of "aggressive driving." There is increased public concern about the role of aggressive driving and "road rage" in crashes and traffic fatalities. Unfortunately, there is no general agreement among traffic safety experts as to what constitutes aggressive driving. Consequently, the survey focuses only on specific unsafe driving acts rather than on aggressive driving.

That the American public is very concerned about the consequences of speeding and other unsafe driving actions, can be seen from the results of NHTSA's 1997 Customer Satisfaction Survey where 87% of the driving age public said it was important that something be done to reduce speeding on highways and fully 97% said it was important to do something about speeding on residential streets.¹ In the earlier 1995 Customer Satisfaction Survey, 90% said it was important for the federal government to conduct public education campaigns to increase compliance with stop signs and signals.² The 1997 Customer survey also showed that the public believes the problem of unsafe driving is becoming worse — 60% of the driving-age public said they believe drivers were driving less safely now than 10 years ago, compared with only 8% who thought drivers are driving more safely now.

OBJECTIVES

The specific objectives of this survey were to determine:

¹ 1. U.S. Department of Transportation, National Highway Traffic Safety Administration, 1997 Customer Satisfaction Survey, April 1998.

² 2. U.S. Department of Transportation, National Highway Traffic Safety Administration, 1995 Customer Satisfaction Survey, May 1996.

- 1) The characteristics of drivers who engage in speeding and other driving actions considered as unsafe, including their demographic characteristics (such as age and gender), their driving characteristics (e.g., frequency, types of unsafe driving actions they commonly engage in), their attitudes about unsafe driving actions (which are most/least dangerous), and their attitudes about driving laws and the enforcement of them;
- 2) The situations (road type, time of day, etc.) and driver attitudes and motivations that accompany speeding and other unsafe driving actions;
- 3) The public's attitudes regarding speed limits, (e.g., are the limits too high or too low on specific road types) and the enforcement of these limits (what enforcement methods should be used, how much over the limit should be tolerated, etc.);
- 4) Activities that the public would support to reduce the occurrence of these unsafe driving actions, including use of photo-enforcement, fines and other penalties, and public information and education.

The first three objectives are the focus of Volume II: *Driver Attitudes and Behavior*. This volume, Volume III: *Countermeasures*, focuses on the fourth objective.

SAMPLE DESIGN

The survey was conducted by telephone by the national survey research organization of Schulman, Ronca & Bucuvalas, Inc. (SRBI). A national telephone household sample was constructed using random digit dialing. Each household was screened to determine the number of adult drivers (age 16 or older) in the household. One eligible driver was systematically selected in each eligible household by the interviewers. The survey was conducted using computer-assisted telephone interviewing (CATI) to reduce interview length and minimize recording errors. A Spanish-language translation and bilingual interviewers were used to minimize language barriers to participation.

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

Each of the two questionnaire versions used split-half samples for some questions to extend the number of questions that could be covered in a 30 minute interview (see

Table 1-1, below). This random assignment of questions to half of the sample within the two national cross-sectional samples effectively created four national samples. Hence, the total sample size of 6,000 drivers in the survey is comprised of four independent samples of approximately 1,500 respondents, each. Individual questions may be asked of 1,500 drivers (one national sample), 3,000 drivers (two national samples) or all 6,000 drivers.

TABLE 1-1

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

The survey was conducted between February 20 and April 11, 1997. The telephone interviews averaged 30 minutes in length. A total of 6,000 interviews were completed with a participation rate of 73.5 percent.

The completed interviews were weighted to correct for selection bias as a result of the number of telephone lines and eligible respondents in the household. The complete weighting procedure and other aspects of the survey methodology are described in greater detail in Volume I: *Methodology Report*. Copies of the survey questionnaires also appear in Volume I.

All sample surveys are subject to sampling variability or sampling error. The sampling error is the range within which sample estimates are expected to vary from true population values. At the 95 percent confidence level, the maximum expected sampling error for a simple random sample declines with size from ± 2.5 percentage points for a sample of 1,500 (i.e., 47.5%-52.5% for a sample estimate of 50%), to ± 1.8 percentage points for a sample of 3,000, to ± 1.3 percentage points for a sample of 6,000. The formula for calculating sampling variances and a table of expected sampling errors by sample size is included in Volume I: *Methodology Report*.

Some percentages in the report are based on the total sample of survey participants (6,000), while others are based on one or two of the independent samples which comprise the total sample. Each table is labeled to show the appropriate, unweighted base. Due to rounding, the percentages in some tables may add to slightly more or less than 100%. We have labeled questions that permit multiple responses because they will add to more than 100%.