



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

# **Factors Related to Increasing Safety Belt Use in States With Safety Belt Use Laws**

---

## **Second Annual Report To Congress 1988**

**Prepared in Response to House Report 100-28  
Accompanying the FY 1987  
Supplemental Appropriations Act**

**The United States Government does not endorse products or manufacturers. Trade or manufacturers' names appear only because they are considered essential to the object of this report.**

1. Report No.		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle Factors Related To Increasing Safety Belt Use In States with Safety Belt Use Laws: Second Annual Report to Congress			5. Report Date January 1989		
			6. Performing Organization Code NRD-40		
7. Author(s) M. Smith, J. Hedlund, J. Blatt			8. Performing Organization Report No.		
9. Performing Organization Name and Address Office of Driver and Pedestrian Research National Highway Traffic Safety Administration 400 7th Street, S.W. Washington, DC 20590			10. Work Unit No. (TRAIS)		
			11. Contract or Grant No.		
12. Sponsoring Agency Name and Address National Highway Traffic Safety Administration 400 7th Street, S.W. Washington, DC 20590			13. Type of Report and Period Covered Annual Report 1988		
			14. Sponsoring Agency Code		
15. Supplementary Notes					
16. Abstract  <p>This report is the second in a series of four annual reports to the Congress on provisions of state safety belt use laws and other programmatic factors related to increasing safety belt use levels.</p> <p>The first Congressional Report reviewed what was known about why some states and communities have achieved higher belt use than others under their belt use laws. It concluded that effective, well-publicized belt law enforcement is the major key to achieving greater belt use. The report identified the gaps in our knowledge of how best to conduct these programs and suggested research and demonstration activities necessary to fill these gaps.</p> <p>This second annual report describes the research and demonstration activities implemented to test alternative enforcement strategies and publicity approaches. This effort will help the NHTSA define the characteristics of effective programs for dissemination to other police agencies and communities.</p>					
17. Key Words safety belts, safety belt use laws, enforcement			18. Distribution Statement This document is available to the public through the National Technical Information Service, Springfield, VA 22151		
19. Security Classif. (of this report) unclassified		20. Security Classif. (of this page) unclassified		21. No. of Pages	22. Price

## EXECUTIVE SUMMARY

This is the second annual report to Congress on factors related to increasing safety belt use in states with safety belt use laws.

The first Congressional Report reviewed what was known about why some states and communities have achieved higher belt use than others under their belt use laws. It identified the gaps in our knowledge and proposed research and demonstration activities to fill these gaps.

This report updates the first report and describes our program to investigate the important open questions. Last year's report concluded that effective, well-publicized belt law enforcement is the key to achieving greater belt use. Research during the past year has confirmed this conclusion. The detailed program developed during the past year focuses on the two basic belt law enforcement strategies -- blitz and integrated.

A blitz strategy concentrates police resources on safety belt law enforcement for a short time (usually one to two weeks). The enforcement is accompanied by intensive publicity. Blitz enforcement programs around the world have been successful in increasing safety belt use. NHTSA's blitz demonstration program seeks experience in how such programs can be implemented in a variety of settings in the United States.

An integrated strategy combines belt law enforcement with other police traffic enforcement activities, again with appropriate publicity. As integrated enforcement does not require special police resources, it can be continued indefinitely. Previous NHTSA research suggests that integrated enforcement can achieve and sustain belt use increases with minimal impact on police operations. However, our experience is limited and many questions remain open. Our two-year integrated enforcement research program will address these questions.

Together, our blitz and integrated enforcement programs will help us define the costs and benefits of each strategy and the settings where one, or the other, or a mix of both strategies may be appropriate. To complement these detailed community studies, NHTSA will continue to assure periodic collection of statewide belt use data in a number of states by providing state survey design and analysis upon request and by funding data collection.

FACTORS RELATED TO INCREASING SAFETY BELT USE  
IN STATES WITH SAFETY BELT USE LAWS

INTRODUCTION

House Report 100-28 accompanying the FY 1987 Supplemental Appropriations Act directed the NHTSA to begin a comprehensive, systematic research program to evaluate state safety belt use laws. In particular, pages 94-95 specified that NHTSA should identify and evaluate those statutory provisions and other programmatic factors that result in the most significant increases in safety belt use. The Appropriations Committee recognized that this would require a continuing program and accordingly specified that NHTSA submit an annual status report each December through 1990.

The initial Report to Congress [1] reviewed what was known about why some states and communities have achieved higher belt use than others under their belt use laws. It identified the gaps in our knowledge and proposed research and demonstration activities to fill these gaps.

This report updates the first report and describes the programs now underway to investigate the key open questions. The Background section briefly summarizes the conclusions of last year's report. The Status section describes what we have learned since the last report. In addition, it describes how the key research questions and project outlines from the last report have been developed into detailed program plans. These plans focus on the two basic belt law enforcement strategies -- blitz and integrated. The Blitz Enforcement section discusses blitz programs and reviews NHTSA's current blitz demonstration grants. The Integrated Enforcement section describes our research program to determine whether integrated enforcement can achieve and sustain belt use increases with minimal impact on police operations. The Reports section outlines our schedule for subsequent reports to Congress.

BACKGROUND

In most states that have enacted safety belt use laws, belt use increases as soon as the law goes into effect. Some states begin with a period during which police issue only warnings, not citations, for failure to buckle up. In these states, belt use typically rises somewhat when the warning period begins and rises again when full enforcement begins. In some states belt use declines thereafter. Belt use in states with laws typically ranges from 40 to 56%, although states with belt laws have reported use rates as low as 27% and as high as 68%.

These belt use differences among states and over time are influenced by a wide range of activities, including enforcement, public information and education, community support, and employer support. Combined enforcement and publicity appear to be critical. States and communities with higher safety belt use generally have more enforcement, and better public information and education (PI&E), than those with lower use. Enforcement without appropriate PI&E, or PI&E without a well-enforced belt law, generally will not achieve high belt use. It also appears that belt use enforcement and publicity programs must have broad community support and be continued over extended periods to maintain relatively high use rates.

How can states and communities effectively publicize and enforce their safety belt use laws? Last year's report discussed the critical areas where we lack important information and outlined research to address these areas. The research goals are to compare the two basic enforcement strategies -- blitz and integrated -- in multiple sites, to determine the organizational and personnel characteristics of successful enforcement programs, to identify the roles and responsibilities of different organizations in a successful program, and to identify the elements of effective public information and education campaigns. Once these have been addressed, the results can be used to develop effective program and training information for states and communities.

## STATUS

### Belt laws and belt use

State belt laws in effect in December 1988 are very similar to those at the end of 1987. Georgia was the only state to enact a new law, which became effective in September 1988. Virginia's law, enacted during 1987, became effective in January 1988. Fines for failure to wear belts became effective during 1988 in Minnesota, Montana, and Pennsylvania. Montana's voters upheld their belt use law in a November 1988 referendum, while Oregon's voters rescinded their law. As of December 1988, belt use laws with fines are in effect in 31 states and the District of Columbia.

Belt use as measured in NHTSA's 19 City survey continued to increase during the past year. The survey has tracked belt use at the same locations in the same 19 cities since 1978. In the August-October 1987 survey, belt use by passenger car drivers, aggregated over all 19 cities, stood at 42.4 percent. Aggregate belt use was 50.3 percent in the 12 cities located in belt law states, and 29.9 percent in the remaining 7 cities. In the June-August 1988 survey, aggregate belt use had risen to 45.6 percent, 51.0 percent in belt law cities and 32.5 percent in no-law cities. Part of the increase is due to law changes affecting two of the 19 cities. In 1987, Pittsburgh was not covered by a law, but by the latest 1988 survey Pennsylvania's law with fines was in place. In 1987, Minnesota's law had no fine;

by 1988, Minneapolis-St. Paul drivers faced a fine if cited for failure to wear belts. Belt use increased substantially in each of these cities. Most other cities, with and without belt laws, enjoyed modest belt use increases.

Individual state belt use surveys confirm these impressions (see Table 1). Compared to the belt use levels given in last year's report, belt use increased substantially in Minnesota, Montana, Virginia, and Wisconsin, where new laws or fines were in force. Other states with belt use laws in effect showed small belt use decreases or increases. Unlike the 19 City survey, different states conduct their surveys in different ways and at different times of the year, so that the results may not be comparable from state to state or even from year to year within a given state.

Good belt use data are essential to measure the effects of belt use laws and programs. Since 1985 NHTSA has encouraged states to collect accurate, high-quality belt use data by providing assistance in survey design and analysis. By 1988 we have achieved regular, systematic, and comparable data collection in almost a third of the belt law states. We shall continue to assist these states in their data collection and analysis and shall encourage other states to join them. Belt use data collected regularly in a similar manner in different states will allow use rates to be compared across states and over time. They will help identify state-wide trends and may suggest whether effective community programs can be supported at the state level.

### Research results

Three research projects reported results since last year's Report to Congress that bear directly on its findings and on our plans.

Belt user characteristics in Michigan. A NHTSA-funded study [2] conducted at the University of Michigan's Transportation Research Institute observed driver belt use at intersections. Selected drivers then were interviewed at the roadside about their belt use practices and other relevant characteristics. Unlike previous studies, this study could compare the drivers' responses to their actual observed use, not just their self-reported use. Most drivers reported that they use belts either all the time or not at all -- relatively few changed their belt use depending on specific situations. The strongest influence on belt use was the belt use law itself. Many non-users said that they would increase their belt use if there were higher fines or primary belt law enforcement.

Belt user crash involvement in North Carolina. This NHTSA-funded study [3] was conducted at the University of North Carolina's Highway Safety Research Center. It matched data from roadside belt use observations, mailback surveys, accident and violation

Table 1  
Belt Use Survey Results by State

State	Year Enacted	Belt Use August 1987 %	Belt Use 1988 %
California	1986	47	51
Colorado	1987	(51)	50
Connecticut	1986	56	--
D.C.	1985	55	--
Florida	1986	60	47
Georgia	1988	--	--
Hawaii	1985	64	68
Idaho	1986	27	32
Illinois	1985	47	40
Indiana	1987	52	43
Iowa	1986	63	--
Kansas	1986	44	--
Louisiana	1986	35	36
Maryland	1986	66	62
Massachusetts	1986	25 *	--
Michigan	1985	47	45
Minnesota	1986	32	47
Missouri	1985	40	--
Montana	1987	(46)	62
Nebraska	1985	29 *	31
Nevada	1987	(47)	--
New Jersey	1985	41	--
New Mexico	1986	50	--
New York	1984	48	--
North Carolina	1985	65	64
Ohio	1986	41	40
Oklahoma	1987	35	32
Oregon	1987	35	-- **
Pennsylvania	1987	--	44
Tennessee	1986	28	27
Texas	1985	60	60
Utah	1986	22	29
Virginia	1987	(38)	56
Washington	1986	51	53
Wisconsin	1987	(26)	56

Notes

1988 belt use data and 1987 data in parentheses from NHTSA's Office of Driver and Pedestrian Research, "Observed Safety Belt Statistics by State, October 1988", as updated. Remaining 1987 data from [1].

-- no survey data available for this year.

\* law repealed November 1986

\*\* law repealed November 1988

records, and telephone interviews. It found that those who did not wear belts had relatively more traffic crashes and violations than belt users. As in Michigan, the belt law itself and fear of being cited for failure to wear belts were the primary reason given for starting to wear belts. Non-users suggested that greater enforcement and more effective PI&E could increase their belt use.

Belt use compared to belt law enforcement in Texas. A study [4] conducted by Texas A&M University's Texas Transportation Institute compared safety belt use to belt law enforcement in 12 Texas cities. Greater enforcement (measured by belt use law citations per population) generally was associated with higher belt use. However, the relation was not strong. The study did not assess how belt law enforcement was publicized in the 12 cities or what the driving public believed their risk of being ticketed to be.

#### Research program

The additional information gained during 1988 confirms the position taken in last year's Report: that belt law enforcement with associated publicity is the most effective way to increase belt use. We have seen belt use increases in states and communities where new laws were implemented or new fines enforced, but have seen few changes, and even some declines, elsewhere. The three research studies described above all suggest that belt law enforcement is the key to increasing use, but they also suggest that we have much more to learn on how to design and implement cost-effective enforcement and publicity programs.

Our research program addresses these needs. It began with the fundamental issue identified in last year's report: what are the relative advantages and costs of the two basic enforcement strategies, blitz and integrated? It established a basic framework for studying this issue. Within this framework, the other important issues also can be addressed. How should effective enforcement programs be organized and staffed? What are the roles and responsibilities of different organizations within an effective overall program? What are the elements of effective publicity and education campaigns?

We are studying blitz and integrated enforcement in different ways, appropriate to the knowledge we already have and the open questions for each. We know that blitzes can work. We need to demonstrate the basic blitz program in a variety of settings, to see how well different communities can adapt the program to their local conditions. Our demonstration grants will satisfy this goal.

We have far less experience with integrated enforcement. The limited evidence to date suggests that integrated enforcement may be a

cost-effective complement or alternative to blitzes. We need to study integrated enforcement carefully, in several communities, to verify that it works and see how it should be organized.

Our major research program will provide this information. It will establish and study integrated enforcement programs in four communities (with two control communities) in two states. We will collect data on belt use, belt law citations and their disposition, PI&E, public attitudes and awareness, and program management. The results from both blitz and integrated programs will be used to develop program management and training materials for states and communities.

#### BLITZ BELT LAW ENFORCEMENT GRANT PROGRAM

Special "blitz" safety belt law enforcement programs have been shown many times to increase safety belt use. Blitz programs (sometimes called Selective Traffic Enforcement Programs, or STEPs), concentrate police resources on safety belt law enforcement for a short time period (usually one to two weeks). The enforcement is accompanied by intensive publicity. Belt use during the blitz program usually increases substantially. Following the program, belt use often declines as drivers realize that belt law enforcement is no longer being emphasized, but belt use remains higher than its pre-blitz level. In Canada, successive blitz programs at six to twelve month intervals for several years have succeeded in raising base belt use rates considerably.

Blitz enforcement programs are designed to be short-term, and require substantial police and media resources for a short time period. The Canadian experience suggests that blitz programs must be repeated over several years to achieve substantial long-term belt use increases. Most blitz programs to date have been conducted in "primary" law jurisdictions, in which the police can make a traffic stop based solely on a safety belt violation, rather than in "secondary" jurisdictions, in which a safety belt citation can only be given to someone who has been stopped for another traffic infraction.

Blitz enforcement clearly works in other countries, though it has been used relatively infrequently in the United States. To gain experience with blitz programs in this country, NHTSA awarded Safety Belt Law 403 Implementation Grants to 16 states. The states will demonstrate community enforcement and education programs modeled after the Insurance Institute for Highway Safety's blitz enforcement program conducted in Elmira, New York. Individual programs are being conducted in approximately 50 communities throughout the 16 states.

Each community's program follows the same basic outline. Belt law enforcement is increased substantially for a limited time, first with warnings and then with citations. Extensive publicity precedes and

accompanies the increased enforcement. Within this framework, each community designs its own PI&E and enforcement program to best serve its own needs and conditions. Most communities conduct two blitz periods, or waves, separated by several months. Each community measures belt use before, during, and after their program.

Some blitz programs began early in 1988, while others did not begin until later this year. Preliminary data are now available from some communities. The data received so far suggest considerable belt use increases in some communities but small or no increases in others. NHTSA will examine project reports and data to study the reasons for these differences.

All programs should be completed and all evaluation reports received by the end of FY 89. NHTSA will then conduct an overall evaluation of the results.

#### INTEGRATED BELT LAW ENFORCEMENT RESEARCH AND EVALUATION PROGRAM

Integrated enforcement describes a program in which the police enforce the belt law at the same time that they enforce other traffic laws. For example, if a driver is stopped for speeding or reckless driving and is not wearing a belt, then a belt law citation is written. This enforcement approach also is publicized widely. Integrated enforcement does not require special police resources. With strong command support for belt law enforcement, it can be continued indefinitely.

An evaluation conducted in the State of New York compared blitz and integrated enforcement strategies [5]. The blitz program immediately increased belt use by 13 percentage points. Eight months later, belt use had declined to the pre-program level. The integrated program, using only secondary enforcement practices, raised belt use by 17 percentage points at the end of the formal program. Eight months later, belt use remained 18 percentage points above the pre-program level. These results suggest that integrated enforcement may be an effective and inexpensive method for increasing and sustaining belt use.

We have far less experience with integrated than with blitz enforcement, and many questions must be answered before it can be recommended widely. First, the New York study used a single integrated site. This experience must be validated in other sites. Second, New York is a primary enforcement state, but the integrated enforcement program in New York used secondary enforcement practices. The same enforcement and associated PI&E program conducted in a secondary enforcement state may not have the same outcome. Third, the PI&E programs for the New York blitz and integrated programs differed in important ways. The integrated PI&E program used police to emphasize the safety aspects of belts, while the blitz PI&E program emphasized enforcement. We do not know if

this safety PI&E strategy is essential for the integrated program. Finally, we do not know whether integrated enforcement will continue to increase belt use over an extended period of time.

These questions on the integrated strategy, together with the other issues raised in last year's report, have defined our research plans. In FY 1989, NHTSA will begin a major research and evaluation study of integrated safety belt law enforcement strategies. The basic goal is to determine whether the New York experience will work elsewhere: can secondary belt law enforcement, integrated with other police enforcement activities and supported by appropriate PI&E, increase and maintain belt use levels? In addition, we will study the amount of enforcement necessary for this strategy. We will examine the effects of different PI&E strategies used in different communities, to identify the elements of effective PI&E strategies. We will study the organization and operation of the belt law enforcement programs in the study communities; to identify the appropriate roles and responsibilities of different organizations and the organizational and personnel characteristics of successful enforcement programs.

The program will be conducted in six communities, three each in two states. The states will allow only secondary enforcement of their safety belt laws. In each state, two of the communities will conduct integrated belt law enforcement and PI&E programs, with different belt enforcement levels. The third community will be a control site where no special enforcement or PI&E will take place. The enforcement programs will be maintained for 12 months. Data will be collected on belt law citations and their disposition, PI&E, belt use, public attitudes and awareness, and program management.

#### Objectives

The program will study the following:

- o The amount of belt law enforcement, integrated into regular police traffic enforcement activities, that is necessary to increase and maintain belt use levels;
- o The amount and type of PI&E necessary to support police belt law enforcement, including the frequency and nature of mass media coverage;
- o The public's awareness of the various PI&E activities;
- o Changes in the observed and self-reported rates of safety belt and child safety seat use;
- o The disposition of safety belt and child safety seat law citations;

- o Community support for (or opposition to) the program;
- o How safety belt law enforcement at different levels affects other police enforcement activities, and vice versa; and
- o Characteristics and responsibilities of those organizations and personnel that significantly influenced the success or failure of the programs.

### Methods

Enforcement. During the program, safety belt and child safety seat law violations will be routinely enforced as part of officers' regular traffic duties. The level of secondary enforcement can be measured by safety belt citations issued as a percent of the number of citations given for hazardous moving violations. The potential safety belt law enforcement levels range from 0 (no enforcement) to around 25 percent or higher. A 25 percent rate is close to the maximum possible enforcement of belt law violations if the safety belt use rate is 50 percent and officers are able to detect only about half of the safety belt violations during regular traffic enforcement stops. As safety belt use increases, the maximum possible enforcement level drops as a percentage of hazardous moving violations. Thus, under the above assumptions but with a 70 percent use rate, an enforcement level of 15 percent would be close to the maximum level possible.

The evaluation will test two levels of safety belt enforcement: a relatively low level (3-7 percent) and a relatively high level (13-17 percent). Procedures will be developed to assure that the enforcement levels being tested are maintained throughout the 12 months of the formal program. These procedures will be compatible with existing administrative police procedures and be of such a nature that they could be routinely adopted by police agencies elsewhere.

Police officers from the four test communities will receive training on the enforcement of safety belt and child safety seat laws and the safety benefits derived from using occupant protection devices. The officers also will learn exactly what is expected of them during the evaluation. They will be required to a) enforce the safety belt and child safety seat use laws in conjunction with their enforcement of other traffic law violations for a 12 month period; b) issue citations to violators of the law at either the low or high enforcement level as required; c) inform motorists about correct use of safety restraints; d) record safety belt enforcement contacts with the motoring public and whatever resulting actions the officer took; and e) record the status of safety belt and child safety seat use by crash victims as a part of accident investigations.

Public Information and Education (PI&E). The purpose of PI&E is to make motorists aware of the safety reasons for the law and that the law is being enforced. It is important that motorists perceive that the law is being enforced, as previous research shows that safety messages alone will not change the belt use of many motorists. However, enforcement messages alone may achieve only grudging, short-term belt use increases. Both messages together are necessary.

Our approach is to use the police to deliver messages on the safety benefits of belts and child safety seats. This will give the police a positive role -- they will be helping people instead of threatening them. But it also will create a subtle message that there is a belt law, that the law is important, and that it is being enforced.

Innovative approaches to assure adequate press coverage of the program and other related police activities will be developed and evaluated. For example, special vehicle inspection or speed enforcement activities by police tend to receive good press coverage. The police also could use these contacts to enforce the safety belt use laws. Thus, the press coverage on vehicle inspection and speed could include occupant protection information. Another example is that the press tends to cover major traffic accidents, and often interviews the police regarding the crash. Safety belt information such as whether or not belts were used and how belt use affected occupant injuries could be provided during the interview.

#### Data to be Collected

The following data will be collected before, during, and after the formal program activities to assess the feasibility, impact and cost effectiveness of the belt law enforcement, PI&E, and overall program.

Enforcement data - Number of warnings, citations, and convictions for safety belt and child safety seat violations; number of warnings, citations, and convictions for hazardous moving violations; nature and amount of police occupant protection and enforcement training; nature and extent of police personnel safety belt use, safety belt use policies and the enforcement of the policies; and resources (costs for materials and people) needed for the program beyond those required for normal traffic enforcement operations.

PI&E data - What safety belt and child safety seat PI&E is used in the communities, both generated by the police and by others; number and type of media used (electronic, print, other); and frequency and content of messages directly or indirectly resulting from the program.

Belt Use data - Observed use of safety belts and child safety seats by the public, and observed use of safety belts by enforcement officers. In both test and comparison communities, belt use will be observed prior to the program, at least once during the program, and after the program. Safety belt use by the police also will be observed during the same time periods but only in the four test communities.

Public awareness data - Telephone surveys of the public's attitudes, beliefs and perceptions of occupant protection, safety belt use laws, awareness of programs and enforcement of these laws, and self-reported use and reported reasons for any change in occupant protection use. Surveys will be conducted before, during, and after the program, in coordination with belt use observations.

Other data - Focus groups and informal interviews will be conducted in the four test communities with the police, judiciary, public officials, community leaders, related special interest groups, and any others who were affected by the program to determine how the program was implemented, how they participated in the program, and their reactions to the program. Focus group discussions and interviews also will provide information on interagency cooperation, division of operational duties, and characteristics of agencies and personnel that influenced the program's success.

### Community Characteristics

The communities to be used in the integrated enforcement program will have the following characteristics.

#### All Six Communities:

- o The two states will have basically equivalent safety belt use laws. The laws require drivers and front seat passengers to use safety belts and only permit citations to be issued to occupants who are unbelted when their vehicle has been stopped for another traffic violation (secondary enforcement).
- o The preprogram safety belt use rate is less than 50 percent. The three communities within each state will have similar safety belt use rates.
- o No major safety belt or child safety seat enforcement or PI&E activities have been conducted in the communities for 12 months before the program begins.
- o Each community will have a population of at least 100,000 (within its metropolitan area) and a local major mass media market. Each community will be relatively isolated

geographically, so that confounding activities, such as safety belt or child safety seat programs from other communities, have little effect.

Additional Characteristics For The Four Enforcement Communities:

- o A police department that is willing to comply with the requirements of the evaluation, and will enforce safety belt use laws at one of the two test levels (5% or 15% of hazardous moving violations).
- o A police department having or willing to initiate a safety belt use policy and willing to enforce that policy.
- o A police department willing to generate the needed PI&E activities.
- o A police department where seat belt citations have been less than 3 percent of hazardous moving violations.

Schedule

Contracts supporting the integrated enforcement program study are scheduled for award in summer 1989. The formal program activities then will be conducted from January 1990 through December 1990 and the evaluation completed in summer 1991. If the results are positive, an operational guideline for use by police officials in enforcing safety belt use laws and managing related PI&E will be prepared. The guideline will include the recommended enforcement procedures, the most cost effective level of enforcement, and the necessary related PI&E activities. Information gained about program operation, including the roles and responsibilities of various organizations and the important characteristics of key personnel, will be used to develop program management and training materials.

REPORTS

The December 1989 Annual Report to Congress will summarize the information available from the blitz demonstration grants. It will describe the integrated programs' development and initial implementation. If the integrated program contracts are awarded as scheduled, the 1989 report will include preprogram belt use and PI&E awareness survey results. The December 1990 report will contain the first substantial data from the integrated program, together with final results from the blitz demonstration grants. The final integrated project report will be available in 1991.

## REFERENCES

- [1] "Report to Congress on Provisions of State Safety Belt Use Laws and Other Programmatic Factors Related to Increasing Safety Belt Use Levels," U.S. Department of Transportation, National Highway Traffic Safety Administration, Washington, DC, February 1988.
- [2] "Factors Related to Nonuse of Seat Belts in Michigan," A.C. Wagenaar, F.M. Streff, L.J. Molnar, K.L. Businski, and R.H. Schultz, University of Michigan Transportation Research Institute, Ann Arbor, MI, September 1987; DOT HS 807 217.
- [3] "Overrepresentation of Seat Belt Non-Users in Traffic Crashes," W.W. Hunter, J.C. Stutts, J.R. Stewart and E.A. Rodgman, Highway Safety Research Center, University of North Carolina, Chapel Hill, NC, April 1988; DOT HS 807 326.
- [4] "Local Mandatory Usage Law (MUL) Enforcement Levels and Observed Safety Belt Use in Selected Texas Cities," N.H. Mounce and W.M. Hinshaw, Proceedings of the 32nd Annual Conference of the Association for the Advancement of Automotive Medicine, p. 271-283, September 1988.
- [5] "Selective Traffic Enforcement Program For Occupant Restraints," Institute for Traffic Safety Management and Research, State University of New York, Albany, NY, April 1987, DOT-HS-807-120.

DOT HS 807 409  
NRD-40