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NEW HAMPSHIRE ALCOHOL SAFETY ACTION PROJECT

VOLUME I - FINAL REPORT

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New Hampshire Alcohol Safety
Action Project
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16. Abstract <p>The present volume is the basic final report document of the New Hampshire Alcohol Safety Action Project. The report contains descriptive and administrative evaluation findings related to the project's operation during the five year period, 1972 - 1976. In addition, there is a series of separately bound analytic studies which present evaluation findings related to the various activities undertaken by the ASAP.</p> <p style="text-align: right;">NCJRS</p> <p style="text-align: right;">JAN 5 1981</p> <p style="text-align: right;">ACQUISITIONS</p>			
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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				
m 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

Notes: 1. 1 inch = 2.54 centimeters. 2. 1 foot = 0.3048 meters. 3. 1 yard = 0.9144 meters. 4. 1 mile = 1.60934 kilometers. 5. 1 acre = 0.404686 hectares. 6. 1 ton (short) = 2000 pounds. 7. 1 ton (metric) = 1000 kilograms. 8. 1 gallon (US) = 3.78541 liters. 9. 1 gallon (UK) = 4.54609 liters. 10. 1 cubic foot = 0.0283168 cubic meters. 11. 1 cubic yard = 0.764555 cubic meters. 12. 1 fluid ounce (US) = 29.5735 milliliters. 13. 1 fluid ounce (UK) = 28.4131 milliliters. 14. 1 pint (US) = 473.176 milliliters. 15. 1 pint (UK) = 568.261 milliliters. 16. 1 quart (US) = 946.353 milliliters. 17. 1 quart (UK) = 1136.52 milliliters. 18. 1 gallon (US) = 3785.41 milliliters. 19. 1 gallon (UK) = 4546.09 milliliters. 20. 1 cubic foot = 28.3168 liters. 21. 1 cubic yard = 764.555 liters. 22. 1 cubic meter = 35.2335 cubic feet. 23. 1 cubic meter = 1.35 cubic yards. 24. 1 liter = 1.05669 quarts (US). 25. 1 liter = 1.75975 quarts (UK). 26. 1 milliliter = 0.0338147 fluid ounces (US). 27. 1 milliliter = 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TABLE OF CONTENTS

	<u>Page</u>
I. ABSTRACT	1
II. TECHNICAL SUMMARY	2
A. Introduction	2
B. ASAP Objectives	2
C. Project Background	2
D. Results of Operations	8
E. Continuation of ASAP Activities	16
III. FISCAL AND PERSONNEL REVIEW	18
A. Personnel	18
B. Financial	19
IV. ADMINISTRATIVE EVALUATION BY MAJOR COUNTERMEASURES	22
A. Enforcement	25
B. Judicial	35
C. Rehabilitation	46
D. Legislative and Regulatory	61
E. Licensing	63
F. Public Information and Education	65
V. ANALYTIC STUDIES	77
VI. PLANS FOR ACTIVITIES AFTER TERMINATION OF THE PROJECT	82
A. ASAP Countermeasures	82
B. Evaluation Data Files	83
C. Disposition of Equipment	83
VII. SUPPLEMENTAL INFORMATION	84
A. Description of the ASAP Community	84
B. Description of Accident Experience	87
VIII. INDEX OF PROJECT REPORTS	94
A. Administrative Documents	94
B. Annual Reports	94
C. Final Reports	96
D. Other Reports	97

LIST OF TABLES AND FIGURES

<u>Table Number</u>		<u>Page</u>
1	New Hampshire ASAP Countermeasure Description	3

<u>Figure Number</u>		
1	New Hampshire Alcohol Safety Action Project-- Activities Summary	23
2	Major Elements of N. H. ASAP Rehabilitation Countermeasure	47
3	The Referral Process	48
4	The Screening Process	51
5	Driver Retraining Schools	53
6	Post-ASAP Intervention	54
7	Fatal Accidents and Fatalities in New Hampshire, 1953 - 1976	89
8	Fatalities per 100 Million Vehicle Miles	91
9	Reported Injury Accidents in New Hampshire 1953 - 1975	92

FOREWORD

During the nearly six years of planning, operation and closeout of the New Hampshire Alcohol Safety Action Project, literally hundreds of persons were directly and indirectly involved in efforts to reduce the toll of alcohol related motor vehicle accidents in the state. We gratefully acknowledge the cooperation and assistance received from all of these individuals.

Our special thanks go to Mr. Jesse E. Trow, Executive Director, and the members of the staff of the Program on Alcohol and Drug Abuse, to Mr. Thomas A. Power, Coordinator, and the staff of the New Hampshire Highway Safety Agency, to the New Hampshire State Police, Col. Paul A. Doyon, Director, to the Department of Motor Vehicles, Frederick N. Clarke, Jr., Director, and to the Bureau of Consumer Protection, Gilman K. Crowell, Chief.

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Department of Health and Welfare
Division of Public Health Services
Department of Safety
New Hampshire Liquor Commission
Department of Education
Traffic Safety Commission
Department of Public Works and Highways
New Hampshire Association of Chiefs of Police
New Hampshire Safety Council, Inc.
New Hampshire Judges Association
New Hampshire Judicial Council
New Hampshire Bar Association
National Association of Women Highway Safety Leaders, Inc.
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I. ABSTRACT

The New Hampshire Alcohol Safety Action Project (ASAP) was a federally funded, statewide effort designed to reduce the toll of alcohol related motor vehicle accidents which occurred in the state. The primary period of operation for the ASAP covered the five years from 1972 to 1976. In that time, the project accomplished the following:

- . More than a three-fold increase in the number of arrests made annually in the state for driving while intoxicated (DWI).
- . The replacement throughout the state of blood testing with breath testing for evidentiary purposes in DWI arrests.
- . The training of more than 500 police in DWI enforcement techniques and Breathalyzer operation.
- . The implementation of a comprehensive case handling system for persons convicted of DWI involving court referral, diagnosis, short term rehabilitation and possible follow-on treatment.
- . The conduct of a large scale public information program which produced measurable changes in public knowledge and attitudes regarding alcohol impaired driving.

During the five ASAP years, the average annual total of fatal accidents in the state was 12 percent less than the comparable total for the five years before the project. Also, fatal accident totals during the ASAP represent a departure from the trend in effect for a number of years prior to the project. The available evidence is largely consistent with the view that the changes that occurred were in the sub-sets of accidents which were most likely to be alcohol related. In addition, there is evidence that establishes a plausible relationship between ASAP enforcement and public information efforts and the decline in fatal alcohol related crashes.

II. TECHNICAL SUMMARY

A. Introduction

The New Hampshire Alcohol Safety Action Project (ASAP) was a state-wide traffic safety effort which had as its overall objective the reduction of alcohol related fatal and injury producing motor vehicle accidents. Funding for the ASAP came from the Office of Driver and Pedestrian Programs of the National Highway Traffic Safety Administration (NHTSA) and from the State of New Hampshire. The prime contractor for the state was the Program on Alcohol and Drug Abuse of the Division of Public Health Services. The New Hampshire ASAP conducted its primary activities for the five year period from January 1972 to December 1976.

Organizationally, the ASAP consisted of a management and support staff, with the bulk of project activities being carried out through subcontracts with relevant state agencies, or in the case of public information and evaluation, with commercial organizations. The ASAP structure, therefore, was akin to a task force in that it crossed existing governmental lines, with functions being performed by several agencies. Wherever possible, the ASAP made use of existing elements of the overall traffic safety system, augmenting capabilities where necessary and adding new capabilities when new functions had to be performed. Project management's role was to organize the functions being performed into a comprehensive system for dealing with the various facets of alcohol impaired driving.

B. ASAP Objectives

As just noted, the overall objective of the ASAP was to reduce the number of alcohol related fatal and injury producing motor vehicle accidents which occurred in the state. This overall objective was sought by implementing a set of countermeasures which dealt with differing aspects of excessive alcohol use coupled with driving. Each of these countermeasures had their own specific objectives. A brief description of the countermeasures and their objectives are contained in Table 1.

C. Project Background

During the late 1960's, personnel from the New Hampshire Program on Alcohol and Drug Abuse (PADA) had been working on quantifying the role of alcohol in highway accidents in the state. The opportunity to bid to become a

TABLE 1

NEW HAMPSHIRE ASAP COUNTERMEASURE DESCRIPTION

Activity Area	Countermeasure	Description	Objectives
Enforcement	ASAP Patrols	During 1972-1974 a squad of 11 State Police patrolled on a full time basis enforcing DWI law and providing on-the-job training to local police. During 1975-1976 state and local police performed overtime patrols on weekends.	<ul style="list-style-type: none"> To increase the DWI arrest rate statewide. To provide police with on-the-job training in DWI enforcement. To establish and maintain a deterrent effect.
	Quantitative Breath Testing	Original ASAP countermeasure to replace blood testing, developed regulations and provided some equipment. Expansion of the effort carried out with state funding.	<ul style="list-style-type: none"> To simplify the logistics of the DWI arrest by making breath testing available throughout the state.
	Alcohol Enforcement Training	Original ASAP countermeasure trained police in Breathalyzer operation and DWI enforcement. Effort continuing under N.H. Police Standards and Training Council.	<ul style="list-style-type: none"> To provide an adequate number of trained Breathalyzer operators for each installation in the state.
Judicial	Certification of Instruments and Operators	ASAP countermeasure, now state funded. Provides expert testimony on breath testing in contested DWI cases. Conducts Breathalyzer instrument and operator recertification as called for by state regulations.	<ul style="list-style-type: none"> To maintain the legally required certification of breath testing equipment and personnel and to provide as needed, expert testimony on breath test results and procedures.

Activity Area	Countermeasure	Description	Objectives
	Court Referral to ASAP	Liaison maintained with courts by rehabilitation countermeasure which sought referrals to ASAP of persons convicted of DWI.	To acquaint the courts with the services offered by the rehabilitation countermeasure and to maximize the referrals made.
Rehabilitation	Driver Screening	Conducted diagnosis for problem drinking among those referred to ASAP by the courts and other agencies. Until mid-1975, only problem drinkers were entered into the rehabilitation countermeasure. After that date, services for social drinkers were provided.	To validly diagnose persons referred as problem or social drinkers so that subsequent case handling could be properly carried out.
	Driver Retraining	Operated driver retraining schools for persons convicted of DWI and referred by the courts and other agencies. During 1972-1974 seven school sites were operated, providing services only to diagnosed problem drinkers. In 1975 the system was expanded to 14 sites to provide statewide coverage. Services to social drinkers added at that time. In mid-1976, a fee for services provision was adopted. 1977 Legislature failed to pass bill to mandate attendance among those convicted of DWI. Countermeasure terminated, therefore, in mid-1977.	To reduce the recidivism rate of the persons referred by the court below that of persons who undergo only traditional sanctions.

Activity Area	Countermeasure	Description	Objectives
	Post-ASAP Intervention	A Medical Review Board established diagnostic procedures, reviewed referred cases at the completion of driver retraining school and made recommendations to the Division of Motor Vehicles regarding license restoration.	To make valid and reliable judgments on the adequacy of participation in the rehabilitation countermeasure, on the need for further treatment, and on likelihood of repetition of the DWI offense if relicensing is immediate.
Legislative and Regulatory	Legislative Review and Proposals	ASAP Project Director in conjunction with Traffic Safety Commission and Highway Safety Agency advanced legislation concerning alcohol and traffic safety.	To propose legislation to enhance the operations of the alcohol countermeasures program.
Licensing	Computerize Driver Accident and Violation Records	Original ASAP countermeasure now state supported. Replaced manual record system which was overloaded by rise in DWI cases, with an automated record system.	To maintain and report accurate and complete driving records for drivers convicted of DWI.

Activity Area	Countermeasure	Description	Objectives
	Driver Training	Efforts to insure education on the role of alcohol in traffic accidents for student drivers.	<ul style="list-style-type: none"> To acquaint new drivers with the effects of alcohol on driving and with applicable laws and regulations.
Public Information and Education	Public Information Campaign	Developed, produced and distributed public information materials concerned with drinking and driving.	<ul style="list-style-type: none"> To increase the general public's knowledge of the traffic safety hazard posed by drunken driving.
	Speaker's Bureau	Gave presentations on the ASAP and drinking/driving to civic, social and student groups.	<ul style="list-style-type: none"> To increase the knowledge of those who can control their drinking, and those in contact with problem drinkers, regarding factual aspects of drinking and driving. To acquaint the public with the ASAP program and win support for its effort. To create a deterrent effect in conjunction with enforcement efforts, by increasing the perception of risk of apprehension. To encourage personal intervention in potential drunk driving situations.

possible site for an Alcohol Safety Action Project was seen as a logical extension of this work, and as one which would permit the state to implement more extensive countermeasures, on an earlier timetable, than would have been possible with local resources. Accordingly, a proposal was submitted to NHTSA to conduct a statewide ASAP in New Hampshire.

The state's proposal was developed by PADA working with the New Hampshire Highway Safety Agency. It incorporated the general model for an alcohol countermeasures program that was emerging from earlier ASAPs, coupled with local understanding of the problem and needs.

In mid-1971, New Hampshire was awarded a contract to develop and conduct an ASAP demonstration project. The original contract called for a six-month planning period and three years of operations. This schedule was later modified to extend the operational period for an additional two years.

Following contract award, a project director was hired and work began on developing a Detailed Plan of Operation. This was submitted to NHTSA in December 1971 and was approved shortly thereafter.

Work then began on initiating the countermeasures themselves. Certain of these (e.g., enforcement patrols) became operational early in 1972 while others (e.g., rehabilitation) took longer to implement. By the second half of 1972, however, the full range of project activities was underway.

The ASAP operated without major changes until the end of 1974. At that time, the project was among a limited number of ASAPs that were extended by NHTSA for an additional two years of evaluation. Also at this time, some project activities were transferred to a state supported basis, and major changes were made to efforts in the enforcement, rehabilitation and public information areas.

In 1976, NHTSA support for the rehabilitation countermeasure ended. At that time the effort was put on a fee-for-services basis and continued in this manner into 1977. During this period legislation was being sought to mandate the rehabilitation activity.

At the close of 1976, NHTSA funding of countermeasure activities ended. Management and evaluation efforts continued after this date to prepare the project's final report. Also, certain transitional activities were funded in anticipation of state take over of the essential elements of the ASAP system.

Unfortunately, efforts on three separate occasions, to obtain legislation regarding the rehabilitation activity were not successful. The last of these failures occurred in the 1977 legislative session. At that time, the decision was made to terminate the fee-for-services based rehabilitation countermeasure rather than to attempt to continue operation in a manner that would appear contrary to legislative will.

With this step, the ASAP was essentially dismantled as a system in New Hampshire. While some activities installed by the project will continue, the major functions performed by the ASAP have ceased in the state.

D. Results of Operations

During its operational years, the New Hampshire ASAP was a major force in the traffic safety environment of the state. The project made demonstrable progress toward most of its objectives and introduced a number of important changes in the processing of persons apprehended for operating under the influence of alcohol.

1. Enforcement

In the enforcement area, patrols sponsored by the ASAP demonstrated the arrest levels that were possible, provided on-the-job DWI enforcement training for local police and, along with public information efforts, increased the public's perception of possible apprehension.

Alcohol related traffic arrests (hereafter, DWI) had averaged about 2,500 annually in the years before the project. This total rose to over 5,500 in 1972, to 7,700 the following year and exceeded 8,500 each year from 1974 to 1976. The main factor in the upturn was increased arrests coming from regular patrols rather than those sponsored by the project. That is, the ASAP had primarily a demonstration/catalytic effect on enforcement levels.

The ASAP, in conjunction with the New Hampshire Highway Safety Agency successfully brought about the conversion from blood to breath testing for evidentiary purposes in DWI arrests. At the end of 1976, there were over 50 Breathalyzers installed in the state, with this number providing coverage for almost all arrests made.

The ASAP introduced and operated a course which trained police in Breathalyzer operation and DWI enforcement procedures. To date, over 500 police have received this training with the activity being on-going under local sponsorship. The ASAP also provided manpower to carry out periodic recertification of Breathalyzer operators and instruments and to provide expert testimony as necessary in the courts regarding breath testing methods. This capability is also on-going under state sponsorship.

The New Hampshire ASAP demonstrated two forms of patrol during its five years of operation. During 1972 - 1974, the project sponsored a full time squad of 11 State Police who operated as a unit and moved patrol areas from locale to locale around the state. During 1975 and 1976, the ASAP funded patrols using overtime state and local police manpower on weekends.

The long term nature of the full time patrol effort gave credence to the entire ASAP effort. Enforcement officials and the public are familiar with "crack downs" which are widely publicized and last for a few weeks. By contrast, the 11 man team operated for almost a full three years. The relative permanence of the operation made it possible to talk seriously about enforcement over the long term.

In viewing the team as it operated in the state, a number of advantages and disadvantages have been noted. Among the advantages are:

1. Enforcement is highly visible, leading to publicity and possible deterrent effect.
2. Team is isolated from other police responsibilities and less likely to be deviated from its primary mission.
3. Team operation builds esprit de corps and dedication to mission. Training and command emphasis focus on DWI enforcement.
4. Short term saturation enforcement can be accomplished (given the population distribution of the state).
5. Certain discretionary factors which may operate with local police do not apply to mobile team.

Among the disadvantages are:

1. Mobile concept cannot provide sustained enforcement in given locale.
2. Court scheduling more difficult than with fixed patrols.
3. Travel and lodging costs make mobile patrols more expensive to operate.
4. Over-saturation can occur in some patrol areas.

5. Nighttime work and travel required has adverse effect on morale. Team assignment not viewed as desirable.

The overtime form of patrol was found to be more cost-effective than the team approach in terms of patrol hours per arrest. The overtime approach permits emphasis to be given to peak problem periods (e.g., weekends), rather than fulltime coverage. The basic difficulty with the approach is that equipment or manpower shortages will occasionally force the cancellation of planned patrols. Also, the saturation effect possible with a team cannot be attained by overtime patrols.

2. Judicial

In the planning period for the ASAP it was determined that the District/Municipal Court system's handling of DWI cases was quite efficient, with most cases being adjudicated quickly and with a high rate of guilty outcomes. Accordingly, the ASAP did not seek to undertake any activities designed to modify or enhance the court's processing of DWI cases.

On the other hand, considerable attention was devoted to the nature of the relationship the ASAP Rehabilitation Countermeasure would have with the courts. The system ultimately adopted involved soliciting referrals of convicted DWI offenders from the courts, a post-sentence diagnosis, and entry into Driver Retraining Schools located at various sites around the state. In order to motivate the offender to attend school, a possible sentence involving a variable length license revocation period was devised and was adopted by most of the courts referring persons to ASAP.

In New Hampshire, this system proved to be both workable and desirable. Among the advantages were:

1. The absence of a mechanism imposed on the judicial process that would delay case disposition. In New Hampshire the majority of DWI cases are disposed within a month of the arrest (the average in 1976 was approximately 33 calendar days). Thus, in the ASAP planning period, the imposition of a pre-sentence investigation process between arraignment and disposition was rejected on the grounds that it would unduly disrupt court operations.
2. Minimization of personnel required. Because of the relatively large number of courts in the system, and the absence of major population centers, a centralized referral

and diagnosis process at the state level (with regional locations) minimized the number of personnel required to carry out these activities. All referrals from the course were communicated to a central office (Concord) where school assignments, correspondence, record keeping and coordination with such agencies as the Division of Motor Vehicles and alcohol treatment resources were carried out.

3. Minimization of court involvement. Because of the part-time nature of most of the courts, the system adopted minimized the workload required of the courts. That is, except for completing one form indicating that the referral had been made, no new record keeping or other involvement was required of the courts. While the courts were provided with information they may have requested, this was at their initiative rather than required of them.

Analysis of the adjudication of DWI arrests has indicated that the increased volume did not adversely affect the courts' processing of these cases. Despite a tripling of case volume, no basic change occurred in the time to adjudication, conviction rate, or appeals when the outcome of cases during the year 1976 were compared to those of 1971. The major change noted, has been an increase over the years in the average monetary fine assessed and in the increasing use of the referral resource.

3. Rehabilitation

The New Hampshire ASAP was able to install a comprehensive case handling system for persons convicted of DWI and referred by the courts. Basically, the process involved initial diagnosis for problem drinking, separate short term rehabilitation modalities for problem and social drinkers, follow on case review by a Medical Review Board and possible entry of problem drinkers into longer term treatment prior to, or as a condition of, relicensing.

During the period from 1972 to 1974 the rehabilitation countermeasure operated at seven sites in the state and provided services only for problem drinkers. During these years, 3,675 persons were referred to the countermeasure. Of this total, 436 persons did not appear for the diagnostic process. Of those who did appear, 1,809 (56 percent) were diagnosed as problem drinkers and, therefore, were required to attend an ASAP driver retraining school. Ultimately, 67 percent of those who entered, completed the process, while the remainder did not appear or began and dropped out.

In 1975, the activity was expanded to 14 sites, thereby providing statewide coverage. Also at that time, services began to be offered to diagnosed social drinkers, as well as problem drinkers. In addition, the project began to participate in the national study of short term rehabilitation modalities.

During 1975 and 1976, a total of 4,015 referrals were received, with the rate actually increasing after the project began to charge tuition. (This was likely due to intensive contact with the courts during this time period.) Of those referred, 599 (15 percent) did not appear for diagnosis. The diagnostic process identified 69 percent of those examined as problem drinkers while the remainder were considered social drinkers. Among those selected to attend the program, 88 percent graduated while the remainder did not appear or dropped out.

Evaluation of the countermeasure as operated during 1972-1974, showed that those persons referred to the effort had lower subsequent DWI re-arrest rates and fewer subsequent motor vehicle accidents than did people convicted of DWI but not referred. Because the two groups (referred and not referred) may not otherwise have been comparable, these findings are not conclusive regarding rehabilitation effectiveness, however.

Further evaluation of the rehabilitation process based on an experimental design failed to find any overall difference in subsequent DWI rearrest rate or in subsequent accidents when those exposed to the countermeasure were compared with randomly selected controls. It was found, however, that problem drinkers initially arrested with blood alcohol levels of .20 percent or more, who were assigned to a Driver Retraining School, had fewer subsequent DWI arrests than did an equivalent control group. It was also found that problem drinkers who were entered into the countermeasure, reported greater subsequent social interaction and more control over their drinking than did comparable controls.

The creation of a systematic case processing (treatment capability following adjudication of DWI offenses, finds its justification in the fact that conventional sanctions do not modify the behavior of many persons who are arrested and prosecuted. In New Hampshire, for example, nearly one of every ten persons convicted of DWI is rearrested for the same offense within a year. Also, DWI enforcement activities tend to identify persons with drinking problems at much earlier ages than when they become known by other means to alcohol treatment agencies. Thus, the linkage between adjudication and treatment is an effort to remediate drinking problems sooner in persons' lives than would otherwise occur.

Under other circumstances, the failure to find definitive evidence regarding the effectiveness of short term rehabilitation would be expected to lead to further study and program modifications, as part of a continuing search for solutions to a major social problem. Given recent legislative actions in the state such efforts are unlikely in New Hampshire in the foreseeable future.

4. Public Information

The primary Public Information and Education effort of the New Hampshire ASAP, as formulated in 1971 and carried out over succeeding years, was a large scale mass media campaign targeted at the general population of the state. A household survey conducted in early 1974 following approximately two years of ASAP PI&E efforts, showed a number of positive changes when compared to a survey carried out as the project was getting underway. Generally, the 1974 survey indicated an increased awareness among the general public of the role of alcohol in traffic accidents, greater knowledge among respondents about the legal aspects of operating a motor vehicle under the influence of alcohol, an increased perception of the possibility of apprehension for DWI, and a growing identification of the ASAP as the agency taking steps to reduce alcohol related traffic accidents.

The results of a 1975 household survey were essentially the same as those obtained in 1974. That is, there was no evidence that the third year of PI&E efforts had further increased the public's knowledge or influenced their attitudes.

Based on the available evidence, it appears that the campaign was successful in reaching the intended audience and increasing its knowledge and awareness of the DWI problem. The results attained also suggest that there are real limits to the changes which can be brought about by a large scale PI&E effort.

The New Hampshire ASAP has demonstrated that it is possible to mount a traffic safety media campaign and sustain it over a number of years. For example, the 6,595 radio PSA airings in 1976 exceeded the number attained in any of the previous four years. In addition, it has been shown that the costs of creation, development, etc., are more than offset by the value of the donated time or space. It is also likely that the ability to sustain a campaign over a number of years is related to the quality of the materials produced. That is, a long term, high volume effort requires professionally produced materials. In the case of New Hampshire, this investment was less than the value of the placements that were achieved.

Beginning in 1975, the emphasis of public information efforts centered on the theme of personal intervention in potential DWI situations. The bulk of the print and broadcast materials employed were supplied as part of the NHTSA national campaign. Telephone surveys conducted during the period showed recognition of ad content at a level equal to or greater than shown by national surveys. In addition, ad recognition levels were greater than the "recognition" of a dummy item intended to assess the effect of positive response bias among respondents.

The data from the three surveys also show some increases in the willingness to take personal action to prevent DWI situations and also to take certain steps when giving parties, to avoid problems resulting from alcohol consumption. It appears, therefore, that the national and local campaigns during 1975-1976 attained a reasonable level of impressions in the state and have produced some meaningful, self-reported behavioral changes.

5. Overall Impact

Beginning in the early 1960s, fatal traffic accident and fatality levels in New Hampshire began an upward trend that progressed in a nearly linear manner for a decade. Over this period, fatal accidents increased by an average of almost 10 per year and the number of traffic fatalities doubled comparing 1971 with 1962. In the year 1972, coincident with the ASAP, fatal accident and fatality totals declined sharply in number and thereafter established a trend that was basically different from the experience in the years before the project.

In the five years immediately prior to the ASAP (1967-1971), an annual average of 161 fatal accidents took place in the state in which 189 persons were killed. During the five ASAP years, by contrast, an average of 142 fatal accidents claiming 160 victims occurred each year. Thus, during the ASAP, average annual fatal accidents declined by 12 percent and fatalities declined by 15 percent compared with the five years before the project. These declines occurred despite the fact that exposure rates (number of drivers, annual mileage, etc.) continued to increase during the ASAP years.

Analysis of fatal and injury producing motor vehicle accidents in state during the ASAP years 1972 - 1976 and the baseline period 1969 - 1971 shows the following:

- . Statistically significant declines in the monthly level of both fatal and injury accidents in the ASAP period compared to the baseline.
- . Among single vehicle fatal accidents, approximately a 10 percent decline in the annual average of these crashes during the ASAP period in the nighttime hours of 8 p.m. to 4 a.m. and a three percent decline at other times. Also, a 22 percent decline in the crashes on weekends and a 14 percent increase on other days; a statistically significant difference.
- . Among multiple vehicle fatal accidents, a 44 percent annual average decline during the ASAP years in the criterion time period of 4 p.m. to 4 a.m. and a two percent decline at other hours, a statistically significant difference. Also a 24 percent decline in these crashes on weekends and a 30 percent decline on other days of the week.
- . No significant shift in the time distribution of single vehicle injury accidents. On the other hand, the annual average of these accidents was unchanged on weekends in the ASAP period and increased by eight percent on other days, a statistically significant shift.
- . Significantly greater declines of multiple vehicle injury crashes during the ASAP years in the 4 p.m. to 4 a.m. time period compared to other times of the day, and on weekends compared to other days of the week.
- . A statistically significant relationship between DWI arrest levels and fatal accidents. Also, measurable changes in public awareness of the drinking-driving problem and increased perception of risk of apprehension.
- . A breakdown, beginning in 1972, of a nearly unitary relationship between exposure (miles driven) and traffic fatalities that had existed in the 10 years prior to the project. Each of the ASAP years experienced fatality levels that were more than three times the standard error of estimate below the predicted level based on the regression equation fitting 1962 - 1971 data.
- . Statistically significant differences between the traffic fatality distributions (baseline and operational period) in New Hampshire as compared with the neighboring state of Vermont).

The situation, then, is that beginning in 1972 major changes took place in traffic accident patterns and levels in the State of New Hampshire. The available evidence is also largely consistent with the view that the changes that have occurred are in the sub-sets of accidents which are most likely to be alcohol related. Further, there is evidence that establishes a plausible relationship between ASAP enforcement and public information efforts and declines in alcohol related crashes.

Examination of alternate sources of explanation for the present findings tend to discount such factors as exposure and population changes, energy and speed policies, economic and other global conditions as the causative elements of the changes noted. While it is not possible to entirely rule out that some alternate factors have brought about the changes in accident levels and patterns, it is believed that the parsimonious hypothesis is that ASAP enforcement and public information efforts created a deterrent effect that modified the drinking-driving behavior of a segment of the at-risk population and that this modified behavior has led to fewer traffic accidents.

E. Continuation of ASAP Activities

As noted earlier, the failure to obtain desired legislation related to the short term rehabilitation countermeasure has led to a dismantling of the ASAP system in the state. Thus, it is unlikely that substantial efforts, like those of the ASAP, will be taking place on the topics of DWI enforcement, rehabilitation and public information.

In the future, DWI emphasis patrols may be sponsored as part of the state's 402-program. However, the present priority for special patrols in New Hampshire as elsewhere, appears to be on enforcement of the 55 mph speed limit.

The state on a number of recent occasions has sponsored traffic safety related public information campaigns which have dealt with speeding and alcohol. While no specific plans are known for this area, it is possible that future campaigns will be conducted dealing, at least in part, with alcohol and traffic safety.

At this writing, it is possible that one or more not-for-profit organizations will come into being to provide short term rehabilitation services on a regional basis to persons referred by participating courts. The possible scope and efficacy of these undertakings is unclear at present.

The New Hampshire ASAP does leave behind it some important legacies in dealing with the DWI problem. These include higher arrest rates, the quantitative breath testing program, alcohol enforcement training for police, and improvements in the driver record system. In addition, it is believed that the ASAP has increased the overall awareness of those in the state's traffic safety system regarding the role of alcohol in motor vehicle accidents, and the extent of the problem in New Hampshire. In practical terms, however, the state has essentially reverted to what existed in the year 1971 regarding an integrated, systematic approach to the problem of the alcohol impaired driver.

III. FISCAL AND PERSONNEL REVIEW

A. Personnel

The original structure of the ASAP employed during the years of 1972-1974 entailed the following staffing:

Administrative

Project Director

Secretary

Research Assistant

Accountant

Two Clerks

Enforcement

Sergeant (State Police)

Two Corporals (State Police)

Eight Troopers

Account Clerk

Judicial

Two Chemists

Rehabilitation

Rehabilitation Coordinator

Twelve part time Driver Rehabilitation Specialists

Clerk Typist

Clerk Steno

Public Information

Public Information Coordinator

Other personnel services were obtained via subcontracts for evaluation, public information and with the Department of Centralized Data Processing.

In 1975 the ASAP was extended for two additional years of operation. At that time, a number of changes were made in the structure and staffing of the project. These included:

- . The deletion of the 11 troopers and clerk in the enforcement area and the addition of an Enforcement Coordinator. Patrols in 1975-1976 were run using overtime manpower.
- . The transfer of the two chemists in the Judicial area to state funding.
- . Modification of the professional staffing of the Rehabilitation Activity to eight full time and six part time counselors. Also the addition of a second clerk typist.

B. Financial

The following shows actual project expenditures (403-funding) for each of the ASAP years. Total expenditures for the project for the planning period and five years of operation amounted to approximately \$2.3 million versus a plan of \$2.5 million.

In the time period after December 31, 1976, certain expenditures have taken place for the preparation of the project's final report. In addition, some underrun monies have been reprogrammed to fund transitional activities which were deemed desirable at the time it was believed that major project activities could be continued under state sponsorship.

	Calendar Year						Total Actual	Total Planned
	Planning Period	1972	1973	1974	1975	1976		
ADMINISTRATIVE								
Program Management	\$30,223	\$ 58,834	\$ 47,043	\$ 58,278	\$ 63,895	\$ 76,161	334,434	380,107
Salaries	20,453	34,869	35,669	38,016	43,126	48,843	220,976	248,182
Equipment	4,097	347	497	334	483	-0-	5,758	5,903
Materials	669	964	2,118	2,802	3,626	4,406	14,585	20,642
Facilities	2,644	3,525	3,525	3,631	5,500	7,055	25,880	29,293
Services	680	17,177	3,595	11,957	9,992	13,925	57,326	65,626
Other	1,680	1,952	1,639	1,538	1,168	1,932	9,909	10,461
EVALUATION	\$ 2,335	\$ 79,673	\$ 61,038	\$ 71,014	\$ 83,372	\$ 83,843	\$381,275	\$386,678
TOTAL ADMINISTRATIVE	\$32,558	\$138,507	\$108,081	\$129,292	\$147,267	\$160,004	\$715,709	\$766,785
ENFORCEMENT								
Administration	-0-	\$ 6,465	\$ 12,213	\$ 8,780	\$ 4,811	\$ 11,733	\$ 44,002	\$ 53,295
Patrols	-0-	222,612	189,747	248,056	31,811	74,443	766,669	800,652
Salaries	-0-	114,010	123,807	135,717	26,854	60,842	461,230	488,069
Equipment	-0-	63,222	5,897	44,396	-0-	-0-	113,515	113,515
Materials	-0-	1,023	1,050	3,560	247	610	6,490	12,375
Travel and Per Diem	-0-	33,302	46,453	51,776	4,710	12,991	149,232	150,779
Local Police	-0-	11,055	12,540	12,607	-0-	-0-	36,202	35,914
Enforcement Training	\$ 349	\$ 21,625	\$ 10,229	11,687	-0-	-0-	43,890	41,486
Quantitative Breath Testing	-0-	\$ 15,802	-0-	-0-	-0-	-0-	\$ 15,802	\$ 15,965
TOTAL ENFORCEMENT	\$ 349	\$266,504	\$212,189	\$268,523	\$ 36,622	\$ 86,176	\$870,363	\$911,398
Refund from Sale of Police Cruisers				(6,327) \$262,196		(5,700) \$80,476	(12,027) \$858,336	

		Calendar Years						
	Planning Period	1972	1973	1974	1975	1976	Total Actual	Total Planned
JUDICIAL								
Chemists Salaries	\$ 0	\$ 9,253	\$ 15,808	\$ 26,531	\$ 0	\$ 0	\$ 51,592	\$ 46,174
Equipment	0	0	0	5,612	0	0	5,612	5,600
Supplies	0	161	217	2,961	0	0	3,339	3,166
Travel	0	1,224	2,142	2,656	0	0	6,022	6,827
Total Judicial	\$ 0	\$ 10,638	\$ 18,167	\$ 37,760	\$ 0	\$ 0	\$ 66,565	\$ 61,767
REHABILITATION								
Driver Retraining Schools	\$ 0	\$ 23,530	\$ 28,827	\$ 38,114	\$117,640	\$104,274	\$ 312,385	\$ 408,565
Salaries	0	11,790	23,878	30,525	92,642	92,733	251,568	324,443
Equipment	0	5,065	880	2,061	6,824	238	15,068	19,031
Materials	0	4,228	3,049	3,736	12,246	4,902	28,161	40,963
Services	0	627	1,020	1,792	5,442	5,261	14,142	18,939
Facilities	0	0	0	0	486	1,140	11,626	3,400
Other	0	1,820	0	0	0	0	1,820	1,820
Medical Review Board	0	6,045	9,472	10,374	5,841	6,800	38,532	55,716
Total Rehabilitation	\$ 0	\$ 29,575	\$ 38,299	\$ 48,488	\$123,481	\$111,074	\$ 350,917	\$ 464,572
LICENSING								
Accident and Violation System	\$ 0	\$ 4,927	\$ 15,551	\$136,180	\$ 0	\$ 0	\$ 156,658	\$ 157,497
PUBLIC INFORMATION								
Media Campaign	\$ 0	\$ 14,729	\$ 27,289	\$ 31,298	\$ 6,267	\$ 26,232	\$ 105,806	\$ 108,307
Speaker's Bureau	945	16,917	12,951	16,322	19,955	15,987	83,077	104,020
Total Public Information	\$ 945	\$ 31,646	\$ 40,240	\$ 47,611	\$ 26,222	\$ 42,219	\$ 188,883	\$ 202,327
PROJECT TOTALS	\$33,852	\$481,797	\$432,527	\$661,527	\$333,592	\$393,773	\$2,337,068	\$2,502,579

IV. ADMINISTRATIVE EVALUATION BY MAJOR COUNTERMEASURES

At the foundation of the ASAP system, is the concept that an integrated set of countermeasures is required in order to lessen the role of alcohol in motor vehicle accidents. Basically, the premise is that a decrease in alcohol related crashes can be brought about by a reduction in the at risk population, i.e., in the number of persons operating motor vehicles while impaired by alcohol. The difficulty which must be confronted, however, is that there are no obvious and simple steps which will lead to such an outcome.

The use (and abuse) of alcohol is deeply rooted in our social structure and is a dynamic process in the sense that the population which may have problems associated with alcohol is continually being renewed as new, mostly young people begin experimenting with its use.

In New Hampshire, as elsewhere, the ASAP sought to reduce the alcohol impaired driving population through prevention, deterrence and remediation. Prevention was sought primarily through informational and educational efforts aimed at those rationally in control of their drinking behavior. In addition, these efforts attempted to instill a sense of responsibility and willingness to take action among persons when they are exposed to a potential alcohol impaired driving situation.

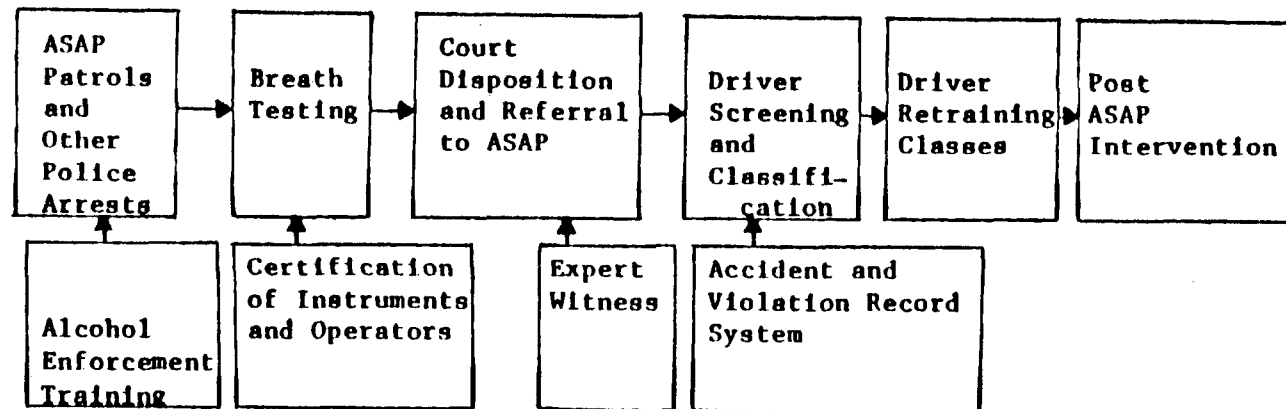
The deterrent aspects of the project involved enforcement of the drinking-driving laws, along with publicity of these efforts. The goal was to increase the perception of possible apprehension among those who drink to excess and then drive.

The remedial efforts of the ASAP were intended to install a comprehensive case handling system, on a statewide basis, to minimize repetition of alcohol impaired driving among those apprehended and prosecuted. Thus, the ASAP was implemented as an integrated set of countermeasures aimed at various facets of the problem. The relationship among the elements of the ASAP is depicted in Figure 1.

Effectiveness and administrative evaluation results for the major countermeasures of the New Hampshire ASAP are presented in a series of separately bound analytic studies which are a part of the present final report. The reader may consult Section V of this document for an index and summary of these analytic reports.

Figure 1: NEW HAMPSHIRE ALCOHOL SAFETY ACTION PROJECT - ACTIVITIES SUMMARY

ASAP Countermeasures for the Alcohol Impaired Driver



ASAP Countermeasures for the General Public

- Media Campaign
- Public Information and Education
- Legislative Review and Proposals

The purpose of the present section is to summarize the main administrative evaluation findings for the activity areas in which the project operated. The following are described:

- A. Enforcement
- B. Judicial
- C. Rehabilitation
- D. Legislative and Regulatory
- E. Licensing
- F. Public Information and Education

For each countermeasure area, a brief description of project activities is provided. This is followed, where appropriate, by a table of key performance measures and a discussion of progress and impediments in meeting performance targets. In addition, information is provided on the efficiency (cost) of activities in achieving countermeasure performance.

A. Enforcement

1. Description

During the planning period for the New Hampshire ASAP (1971), it was determined that arrests for operating motor vehicles under the influence of intoxicating beverages (hereafter, DWI) were being made at an annual rate of about 2,500 statewide. The main impediments to higher arrest levels were seen as an absence of special emphasis on DWI enforcement, an absence of training on this topic, and reliance on blood testing for evidentiary purposes. Accordingly, the ASAP undertook three countermeasures in the enforcement area. These were:

- a. ASAP patrols--police manpower dedicated to enforcing the DWI law.
- b. Quantitative breath testing--regulations and equipment to replace blood testing for evidentiary purposes.
- c. Alcohol enforcement training--a one-week training program on Breathalyzer operation and DWI enforcement.

During the course of the ASAP, two forms of enforcement patrols were funded. In the period from 1972 through 1974, a squad of 11 State Police were deployed as a team on a full-time basis, moving patrol areas from locale to locale around the state. In 1975 and 1976, ASAP patrols were conducted on weekends, on an overtime basis, by local and state police.

2. Performance Measures

	<u>Annual Totals⁽¹⁾</u>					<u>Quarterly Totals</u>				
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975⁽²⁾</u>	<u>1976</u>	<u>1975</u>	<u>1976</u>			
						<u>Q. IV</u>	<u>Q. I</u>	<u>Q. II</u>	<u>Q. III</u>	<u>Q. IV</u>
Patrol Manhours	16,293	17,758	18,700	4,385	7,532	1,917	1,746	1,367	2,700	1,719
Total Vehicle Stops	11,094	10,879	8,321	6,242	10,734	2,475	2,455	2,087	3,770	2,422
Total Arrests and Warnings	7,988	7,405	5,368	2,492	4,788	876	1,027	976	1,588	1,197
DWI Arrests	748	746	641	253	299	135	81	69	86	63
Patrol Hours per Vehicle Stop	1.5	1.6	2.2	0.7	0.7	0.8	0.7	0.7	0.7	0.7
Patrol Hours per Arrest or Warning	2.0	2.4	3.5	1.8	1.6	2.2	1.7	1.4	1.7	1.4
Patrol Hours per DWI Arrest	21.8	23.8	29.2	17.9	25.2	14.2	21.6	19.8	31.4	27.3
Vehicle Stops per DWI	14.8	14.6	13.0	24.7	35.9	18.3	30.3	30.2	43.8	38.4
Vehicle Stops per Total Arrests and Warnings	1.4	1.5	1.6	2.5	2.2	2.8	2.4	2.1	2.4	2.0

⁽¹⁾ Figures for 1972-1974 are for full-time patrols. Figures for 1975-1976 are for overtime patrols.

⁽²⁾ Because of contract delays, ASAP patrols did not operate in the first half of 1975.

3. Significant Progress

ASAP enforcement efforts led to an almost immediate and large increase in statewide DWI arrests. Annual arrest totals, which had averaged about 2,500 in the three years prior to the project, rose to over 5,500 in 1972, to 7,700 in 1973 and exceeded 8,500 in 1974 to 1976. The figures under performance measures in the previous subsection show that ASAP patrols made 748 DWI arrests in 1972, and less than this number in succeeding years. Thus, arrests by the ASAP patrols were not the main factor in the increase in statewide arrest totals. Rather, ASAP enforcement efforts are believed to have been a catalyst for regular patrols by focusing attention on the DWI problem, by providing training in DWI enforcement, by simplifying arrest procedures and by demonstrating the enforcement levels that were possible.

Based on ASAP initiatives and subsequent state support, breath testing has virtually replaced blood testing throughout the state. At this writing, there are 51 Breathalyzer sites in New Hampshire and over 500 police officers who have been trained in Breathalyzer operation and DWI enforcement methods.

Significant expansion of the number of Breathalyzer installations is not expected, as all police departments which historically have made more than a few DWI arrests, already possess the equipment. Alcohol enforcement training will be on-going, on the other hand, having been transferred to the sponsorship of the New Hampshire Police Standards and Training Council.

The increase in DWI arrest levels was experienced statewide. On a county-by-county basis, arrests increased by 112 to 313 percent comparing 1976 figures with those of the year 1971.

The increase in arrests was most pronounced during the hours from midnight to 4:00 a.m. In 1976, arrests in this time period were over 340 percent higher than in the comparable time period in 1971, while arrests at other times of day in 1976 were 138 percent above 1971 levels.

The upturn in arrests, brought with it a decline in the average Blood Alcohol Concentration (BAC) of those arrested. In 1971, for example, the mean BAC among persons arrested was .197 percent. By 1976, the figure had fallen to .150 percent. In 1976, almost 45 percent of the persons arrested by regular patrols had BACs of less than .15 percent compared with 17 percent of those arrested in 1971. These figures suggest that DWI enforcement

emphasis and training, and the availability of breath testing, make police more willing to pursue DWI charges among persons believed to be under the influence of alcohol, but not necessarily grossly intoxicated.

As has been found in most locales, young males are over-represented in alcohol related traffic events in New Hampshire, compared with their numbers in the licensed driver population. During the ASAP years, arrests among young drivers increased more rapidly than among older individuals. For example, between 1972 and 1976, there was a 191 percent increase in the number of drivers arrested for DWI who were under the age of 21. Over this same period, arrests of drivers 21 years of age or older increased by 37 percent.

4. Program Impediments

The figures under performance measures, above, show that the full-time enforcement team operated in 1972-1974 became less efficient in each year of operation. During the first six months of operation, most team members had volunteered for the duty. Thereafter, assignments were made by the State Police command.

The deployment of the team was such that its members were in travel status during the work week. This, plus the duty hours (typically 6:00 p.m. to 3:00 a.m.) created hardships for many of the troopers assigned to the team.

At the end of 1974, the ASAP was extended for an additional two years of operation with Federal funding. Because of the administrative and personnel difficulties associated with mounting the full-time team, the decision was made to discontinue it at the end of 1974. For the next two years, ASAP patrols were conducted by local and state police working on an overtime basis on weekends.

The overtime form of patrol permitted resources to be concentrated in the peak problem periods (weekends) and on a more frequent basis in the participating communities. The basic difficulty with the approach is that equipment or personnel shortages will occasionally force the cancellation of planned patrols. Also, the short-term saturation effect possible with the team cannot be achieved with the overtime approach.

5. Efficiency

Total costs for the full-time team amounted to \$670,853 for the three years of operation. The breakdown of these costs is as follows:

. Administrative Costs

Salaries	\$ 18,083	
Equipment	2,899	
Materials	<u>5,680</u>	
		\$ 26,662

. Patrol Costs

Salaries	\$365,581	
Equipment	113,515	
Materials	5,225	
Travel and Lodging	126,192	
Local Police	<u>33,678</u>	
		<u>\$664,191</u>
		<u>\$670,863</u>

The administrative costs were primarily those associated with a clerical position funded within the State Police to handle paper work covering the team operation. Of the patrol costs, approximately 57 percent were devoted to salaries, 20 percent were travel and lodging costs, 18 percent were equipment costs, with the remaining five percent going to hire local police who patrolled with the team, and for supplies and materials.

The majority of the equipment costs were for the purchase of 21 police cruisers, 11 of which were obtained at the start of the effort and then replaced about mid-way through the operation. It may be noted, also, that the travel and lodging costs required by the mobile deployment of the team amounted to a significant portion of the total budget.

Based on the total cost of the full-time team, each patrol hour cost \$12.72, while each arrest cost \$314. The travel and lodging costs involved in the team operation added \$2.39 to the cost of mounting each patrol manhour. Except for this factor, team costs should be essentially the same as regular State Police patrols.

Costs for the overtime patrols during their operational period were as follows:

Administrative	\$ 16,444
Patrol - Salaries	87,696
Patrol - Vehicle Costs*	<u>18,558</u>
	\$122,698

These figures translate into an average cost of \$10.30 per patrol manhour and \$222.28 per DWI arrest.

During its period of operation, the full-time team made about 10 percent of all DWI arrests in the state while representing about one percent of the full-time police strength. During the latter part of 1973, the State Police participated in the federally sponsored Fatal Accident Reduction Effort (FARE) which consisted of extra roadway patrols in high accident locations. The New Hampshire FARE in 1973 produced a total of 3,438 manhours of patrol concentrated primarily in the hours of noon and midnight. In all, a total of 782 traffic citations were issued including 18 DWI arrests. The DWI arrest rate for FARE was one DWI arrest for each 191 patrol manhours. The overall citation rate was one each 4.4 patrol manhours as compared with one each 2.5 patrol manhours by the Monitor Team. Thus, based on some gross comparisons, it appears that the Monitor Team made DWI arrests at a rate of up to 10 times that of regular patrols and also had an overall arrest and warning rate at least equal to that of regular patrols. In this light, the special enforcement effort must be considered highly efficient from the traffic safety point of view.

The overtime patrols produced one DWI arrest each 21.6 hours of patrol compared to one each 24.7 hours for the full-time team. As the cost of an overtime patrol hour was less than that of a team patrol hour (\$10.30 versus \$12.72), the overtime form of patrol is the more cost-effective in terms of maximizing arrests.

Analysis of the productivity of the individual officers assigned to the full-time team has shown considerable man-to-man variation. For example, the most productive officer on the team made one DWI arrest each seven patrol hours while the least productive officer made one DWI arrest each 56 patrol hours. Similarly, patrol hours per vehicle stops ranged from a low of 0.8 hours per stop to a high of 3.6 hours per stop.

*Local police were reimbursed at a flat rate of \$10 per shift to cover vehicle costs. State Police were reimbursed for actual mileage at \$.065 per mile.

The overtime patrols made one vehicle stop each 0.7 patrol hours, or more than twice as frequently as the full-time team. The fact that DWI arrest efficiency did not parallel this rate suggests that maximizing motorist contacts does not necessarily maximize DWI arrests.

Among the individual members of the full-time team, it was found that there was a negative relationship between the frequency of vehicle stops and stops per DWI arrest. That is, officers who stopped vehicles more frequently, tended to make fewer DWI arrests per stop than did officers who made fewer stops per unit time. Here, as well, it appears that maximizing stops does not necessary produce more arrests.

The availability of data on overtime patrol efficiency (manhours per DWI arrest) for a number of communities, permitted the examination of whether efficiency was related to measurable characteristics of the locales in which the patrols were conducted. As noted above, the overtime patrols conducted by local departments made 451 DWI arrests during 9,874 patrol manhours, yielding a rate of one arrest every 21.9 hours. The rates among the individual departments varied from a low of one arrest each 14.9 hours, to a high of one arrest each 40.1 hours. The following are the correlation coefficients between arrest efficiency (hours per DWI) and other characteristics of the 14 communities which conducted overtime patrols:

Correlation of manhours per DWI arrest with:

	<u>r</u>
Population	.129
Land Area	-.075
Population Density	.005
Police per 1,000 Residents	-.491
Regular Patrol DWI Arrests	.013
Regular Patrol DWI Arrests per 1,000 Residents	-.380
Regular Patrol DWI Arrests per Police Officer	-.292
Vehicle Stops per Hour	.009

These figures show no significant relationships between arrest efficiency of the special patrols and the factors listed.*

*A correlation coefficient (r) of .532 significant at $p = .05$ for 12 degrees of freedom.

It was also found that the number of DWI arrests recorded by the overtime patrols in the 14 communities bore no relationship with the number of vehicle stops made. (The partial correlation coefficient between DWI arrests and vehicle stops, with the effect of patrol hours held constant, was $-.068$.)

6. Conclusions and Recommendations

The enforcement activities sponsored by the New Hampshire ASAP brought about more than a threefold increase in the number of DWI arrests made annually in the state. The fact that the bulk of the increase was due to higher arrest levels among regular patrols suggests that the termination of the ASAP will not produce a drastic drop in arrests. On the other hand, statewide arrest totals were essentially constant during the last three years of the project (1974-1976), indicating that there are limits to enforcement levels given existing resources. That is, it is unlikely that arrest totals will continue to rise substantially in the years ahead, unless some new, large-scale emphasis program is undertaken.

The ASAP demonstrated two forms of patrols during its five years. The full-time team was well publicized and highly visible in its operation. Anecdotal reports at the time suggest that it was well known. For example, it is known that in many communities the word would spread from drinking establishment to establishment when the team was patrolling the area.

The long-term nature of the patrol effort gave credence to the entire ASAP effort. Enforcement officials and the public are familiar with "crack-downs" which are widely publicized and last for a few weeks. By contrast, the team was operated for almost a full three years. The relative permanence of the operation made it possible to talk seriously about enforcement over the long term.

In viewing the team as it operated in the state, a number of advantages and disadvantages have been noted. Among the advantages are:

- . Enforcement is highly visible, leading to publicity and a possible deterrent effect.
- . The team is isolated from other police responsibilities and less likely to be deviated from its primary mission.
- . The team operation builds esprit de corps and dedication to mission. Training and command emphasis focus on DWI enforcement.

- . Short-term saturation enforcement can be accomplished (given the population distribution of the state).
- . Certain discretionary factors which may operate with local police do not apply to the mobile team.

Among the disadvantages are:

- . Mobile concept cannot provide sustained enforcement in a given locale.
- . Court scheduling is more difficult than with fixed patrols.
- . Travel and lodging costs make mobile patrols more expensive to operate.
- . Over-saturation can occur in some patrol areas.
- . Nighttime work and travel required has adverse effect on morale. Team assignment is not viewed as desirable.

The overtime form of patrol was found to be more cost-effective than the team approach in terms of patrol hours per arrest. The overtime approach permits emphasis to be given to peak problem periods (e. g., weekends), rather than full-time coverage. The basic difficulty with the approach is that equipment or manpower shortages will occasionally force the cancellation of planned patrols. Also, the saturation effect possible with a team cannot be attained by overtime patrols.

An alcohol countermeasures program operated at the state level probably would not have the resources to fund DWI emphasis patrols on an on-going statewide basis. What can be done is to highlight the problem in public information materials, to provide the means for police training in DWI enforcement, and, as necessary and feasible, to simplify arrest and adjudication procedures.

Within such a context, it is believed that an enforcement team (full- or part-time) can have a value far in excess of the arrests made. That is, a highly visible team can give credence to overall enforcement efforts and can demonstrate the enforcement levels that are possible in individual locales.

The New Hampshire legislature has been largely negative regarding traffic safety in recent sessions, with some observers attributing this negativism to the vigorous DWI and speed enforcement efforts that have been underway. Whatever the facts may be, one risk in active highly publicized enforcement is a backlash leading to a legislative undercutting of the benefits being obtained by the effort.

B. Judicial

1. Description

An important part of the overall processing of DWI offenses is, of course, the adjudication of these cases. In contrast to many other communities which undertook ASAP projects, the situation in New Hampshire in the ASAP planning period (mid-1971) was one in which DWI cases were being adjudicated rapidly, plea bargaining was virtually nonexistent, and about 90 percent of the cases reaching the court system resulted in a guilty outcome. In addition, there appeared to be a high degree of willingness among the courts to employ the ASAP's driver re-training/rehabilitation countermeasure by referring persons found guilty of DWI.

Given these circumstances the New Hampshire ASAP did not undertake any specific activities to try to enhance the courts' processing of DWI cases. To the contrary, in planning its countermeasures the project intentionally set about to minimize the effects it would have on the court system, especially so with regard to establishing the rehabilitation countermeasure.

During the course of the ASAP, there were a number of changes in the judicial environment. Certain laws relating to DWI cases were modified, annual case loads more than tripled in number, breath testing replaced blood testing for evidentiary purposes, legal challenges and court rulings established new case law and rehabilitation was added as an option in DWI adjudication.

Analyses of the adjudication of DWI cases has shown that there were no adverse effects on the courts' processing of these offenses. To illustrate, the following summarizes the dispositions of persons arrested as first offenders in the years 1971 and 1976.

	<u>1971</u>	<u>1976</u>
Number of Cases	2236	6300
Pleas		
. Guilty	46.8%	49.6%
. Not Guilty	27.5%	30.8%
. Nolo Contende	24.2%	17.2%
. None (default)	1.5%	2.3%

	<u>1971</u>	<u>1976</u>
Findings		
. Guilty	89.0%	89.5%
. Not Guilty	2.7%	4.2%
. Nol Pros	5.9%	5.0%
. Dismissed	2.3%	1.3%
Number Guilty	1990	5483
Mean Time (days) to Disposition	32	33
Appeal Rate	12.7%	9.5%
Fines Paid		
. None	4.4%	2.4%
. \$100 or less	44.3%	17.5%
. \$101 - 200	49.6%	74.7%
. \$201 - 499	1.5%	4.5%
. \$500 - up	0.3%	0.9%
Average Fine	\$133.	\$160.
License Revocation		
. None Indicated	10.4%	0.3%
. Variable length (ASAP referral)	-	32.5%
. 60 days	62.7%	46.8%
. 90 - 120 days	19.0%	13.0%
. 121 - 364 days	4.3%	4.1%
. 1 year - up	3.4%	3.2%

a) Applicable Laws and Sanctions

In late 1973 the State adopted a new uniform criminal code which included modifications to the drinking-driving statutes. The principal change was to define the act of operating a motor vehicle while under the influence of intoxicating liquor as a misdemeanor offense punishable by possible fines up to \$1,000 and jail terms up to one-year. (In the old law, first offense convictions were punishable by fines of \$100 - \$500 and possible jail sentence of two days to six months. Second offense convictions were punishable by fines of \$500 - \$1,000 and jail sentences of 10 days to six months.)

Under both sets of laws, persons convicted as first offenders have their licenses revoked for 60 days to two years, while second offense convictions result in a three year license revocation.

Other relevant statutes are as follows:

- . Implied Consent--persons arrested for DWI who refuse to submit to a chemical test for alcohol have their licenses revoked for 90 days. Such revocations generally run concurrently with court ordered revocations stemming from disposition of the DWI case itself.

In 1975 the Legislature modified the implied consent statute to authorize return of a license should a person revoked under this provision be found not guilty of the DWI charge.

- . Evidence--New Hampshire conforms to the national standard for presumptive evidence for alcohol related traffic offenses. That is, a Blood Alcohol Concentration (BAC) of .10 percent is considered prima facie evidence that a person was under the influence of intoxicating liquor. While BAC results in the .05 to .10 range under the law are considered possible relevant evidence, the courts generally will not convict persons who have BAC's under .10 percent. Common police practice is to release (not arraign) individuals who test below the presumptive level.
- . Appeals--persons convicted of DWI who appeal the finding have their licenses suspended following the initial conviction for the period ordered by the court. This provision, established during 1973, repeals an earlier provision which enabled persons appealing to post a peace bond to retain their license until the appeal was heard. The repeal was based on the finding that the majority of appeals were withdrawn prior to being heard. That is, persons were using the peace bond provision to control when their license would be revoked.
- . Habitual Offenders--New Hampshire law provides that persons who have unusually poor driving records (generally three convictions in a five year

period for serious offenses including DWI, or 12 convictions for speeding or center-line violations) may be declared habitual offenders and have their licenses revoked for a four year period. If convicted for operating a motor vehicle during this time, the law specifies a mandatory 1-5 year jail term which cannot be suspended.

b) Description of the Courts

Cases involving the charge of operating a motor vehicle under the influence of intoxicating liquor (hereafter, DWI) are heard initially in the District/Municipal Courts. At the end of 1976 there were a total of 59 courts in this system (41 District and 18 Municipal). The Municipal Courts are gradually being phased out of the system as the judges who head them retire. When this occurs the community served is transferred into the nearest District Court or a new court is formed. The number of active courts in the system, therefore, has been gradually declining.

The geographic area and population served by any given court varies considerably across the state. For example, Nashua District Court serves an area of approximately 160 square miles with a population of some 73,000 persons, while the Conway court area has approximately 7,500 residents in 440 square miles. Similarly, the case load of individual courts varies considerably, generally in relation to the population of the area served. The most active court is located in the City of Manchester with a total annual case load in excess of 20,000. At the other extreme, there are several courts which handle only 500-600 cases per year. The average case load across all courts in the system is approximately 2,500 year per year.

The District/Municipal Courts are limited to hearing non-felony cases (violations and misdemeanors). The majority of the cases heard by the courts are traffic related, with DWI cases accounting for about five percent of total court activity. All cases before these courts, including DWI, are tried by a judge (i.e., jury trials are not available). All District Court judges are appointed by the Governor for a permanent term which extends until the judge reaches 70 years of age. All but five of the judges in the state serve on a part-time basis.

Appeals of the findings of District/Municipal courts are to the Superior Courts, of which there is one per county, or 10 throughout the state. At the Superior Court level the appellant may select a trial by jury or before a judge. Appeals as to matters of law are to the New Hampshire Supreme Court.

c) Processing of DWI Cases

Given their case load requirements, most District/Municipal courts hold sessions on a weekly basis, while some sit at more frequent intervals. With this frequency it is typical to find DWI cases being arraigned within a week of the arrest. At arraignment an individual may plead guilty, not guilty or nolo contendere. In the case of a guilty or nolo plea, a sentence is typically imposed immediately by the judge. If a not guilty plea is entered, a future trial date is set, usually within a few weeks of the initial court appearance.

In contested DWI cases in many courts, the arresting officer serves as the prosecutor of the case. Thus, except for some communities which have separate prosecutors, prosecution policy is in the hands of the arresting department (specifically the arresting officer). This procedure minimizes the amount of plea bargaining that takes place.

Following arrest, in-state residents are typically released on their own recognizance pending court appearance. Out-of-state residents, on the other hand, are required to post bond prior to their release. Persons who fail to appear (default) on the scheduled court date have their license suspended (or right to operate in New Hampshire if they are out-of-state residents), bench warrants are issued and any bond is forfeited. Under New Hampshire Law, persons conducting breath or blood tests are required to appear in court only if the defendant files notice requiring such appearance within ten days of the date of receipt of the blood alcohol test results. If such a notice is not filed, the law states that, "the official report of said test ... shall be deemed conclusive evidence of the conduct and results of said test."

The results of all DWI cases are recorded on court returns which are forwarded to the Division of Motor Vehicles where driver records are maintained. Regarding the disposition of fines, the first ten dollars and twenty percent of the remainder are retained by the courts to cover operating costs, while the rest of the fine is forwarded to the state where it becomes part of the Highway Fund.

d) ASAP Relationship with the Courts

As noted earlier, in the planning period for the ASAP it was determined that the District/Municipal Court system's handling of DWI cases was quite efficient with most cases being adjudicated quickly and with a high rate of guilty outcomes. Accordingly, the ASAP did not seek to undertake any activities designed to modify or enhance the court's processing of DWI cases.

On the other hand, considerable attention was devoted to the nature of the relationship the ASAP Rehabilitation Countermeasure would have with the courts. The system ultimately adopted involved soliciting referrals of convicted DWI offenders from the courts, a post-sentence diagnosis, and entry into Driver Retraining Schools located at various sites around the state. In order to motivate the offender to attend school, a possible sentence involving a variable length license revocation period was devised and was adopted by most of the courts referring persons to ASAP.

In New Hampshire, this system proved to be both workable and desirable. Among the advantages were:

- . The absence of a mechanism imposed on the judicial process that would delay case disposition. In New Hampshire the majority of DWI cases are disposed within a month of the arrest (the average in 1976 was approximately 33 calendar days). Thus, in the ASAP planning period, the imposition of a pre-sentence investigation process between arraignment and disposition was rejected on the grounds that it would unduly disrupt court operations.
- . Minimization of personnel required. Because of the relatively large number of courts in the system, and the absence of major population centers, a centralized referral and diagnosis process at the state level (with regional locations) minimized the number of personnel required to carry out these activities. All referrals from the courts were communicated to a central office (Concord) where school assignments, correspondence, record keeping and coordination with such agencies as the Division of Motor Vehicles and alcohol treatment resources were carried out.
- . Minimization of court involvement. Because of the part-time nature of most of the courts, the system adopted minimized the workload required of the courts. That is, except for completing one form indicating that the referral had been made, no new record keeping or other involvement was required of the courts. While the courts were provided with information they may have requested, this was at their initiative rather than required of them.

Another ASAP activity related to the judicial process was the funding of two chemists who were responsible for the periodic recertification of Breathalyzer instruments and operators and who provided expert testimony, as required, regarding breath testing in DWI cases. In 1975, the chemist positions were transferred to a state supported basis and will continue as such in the future. The workload of the chemists involved recertification of approximately 50 Breathalyzers once every two months and approximately 350 active operators, every six months. In addition, the chemists perform required maintenance on the Breathalyzer equipment.

2. Performance Measures

	Annual Totals					Quarterly Totals				
	1972	1973	1974	1975	1976	1975 Q. IV	1976 Q. I	1976 Q. II	1976 Q. III	1976 Q. IV
Total Referrals to ASAP	446	1350	1879	1773	2242	511	537	536	504	665
Court Referrals	446	1293	1807	1676	1966	474	461	455	452	598
DMV and Other Referrals	0	57	72	97	276	37	76	81	52	67
Court Referrals as Percentage of Arraignable Arrests	14.9	18.8	24.4	22.7	26.1	27.9	27.2	25.4	22.7	32.8
Court Referrals as Percentage of Conviction	21.5	24.7	34.4	30.5	33.4	34.3	34.8	33.8	31.3	40.4
Expert Witness Court Appearances	97	164	137	113	35	20	10	14	6	5

3. Significant Progress

The activities of the ASAP to encourage court referrals to the project's rehabilitation countermeasure were unable to raise the referral rate beyond about one-third of those convicted annually for DWI. The figures above show that in the first full year of activity (1973) approximately 25 percent of those convicted, were referred. The rate then rose to 34 percent in 1974 and remained at about this level thereafter.

In New Hampshire approximately 30 percent of the persons arrested (and convicted) for DWI live outside the state. While a few of those persons entered the rehabilitation process, this group was largely outside the population from which referrals were obtained. That is, the referral rate of state residents convicted of DWI in, for example 1976, was approximately 48 percent.

In the years 1972-1974 the ASAP's rehabilitation countermeasure operated at six sites in the southern, more populated section of the state. In mid-1975 the activity expanded to 12 sites providing essentially statewide coverage. It may be seen in the performance measures above that this expansion did not produce a noticeable change in the referral rate.

In mid-1976 the rehabilitation countermeasure was converted to a fee-for-services basis, with clients paying a \$60.00 tuition as a condition for attendance. The implementation of the fee-for-services approach required considerable liaison with the courts. This, generally, led to agreement to offset the fee with a reduction in the amount of fine to be paid (i. e., the cost to the defendant would be the same whether he was referred or not). Interestingly, referrals in the last quarter of 1976 were 40 percent of those convicted (approximately 58 percent of in-state residents convicted), with this level being the highest achieved by the project.

The activities of the two chemists, funded originally by the ASAP and then by the state, were concerned primarily with the periodic recertification of Breathalyzer instruments and operators. In the sub-section on performance measures, it can be seen that the number of court appearances by these individuals declined each year during the 1973-1976 period, with only 35 appearances being required in 1976. This decline is believed due to, 1) the increasing number of courts taking judicial notice of breath testing procedures, 2) State Supreme Court decisions upholding breath testing and 3) the likely learning by attorneys that attacks on breath testing procedures did not establish viable defenses for their clients.

4. Program Impediments

The 1977 session of the New Hampshire Legislature failed to pass a bill which would have established a statutory basis for the fee-for services rehabilitation effort which had been created administratively. As future operation could have been considered contrary to legislative will, the decision was made to terminate the activity in mid-1977. Thus, the court liaison-referral-rehabilitation system in DWI cases has ceased to exist as a state operated resource in New Hampshire. As noted earlier, the two chemist positions are continuing under state sponsorship.

5. Efficiency

During the period of funding by the ASAP (1972-1974) of the chemist positions, total costs were \$58,852 versus a planned amount of \$61,767. Approximately 77 percent of the total was for salaries while the remainder was for travel, equipment and supplies (note that the second chemist position was added during 1973).

As indicated earlier, the bulk of the chemist activities were concerned with the recertification process. Providing expert testimony was a decreasingly small portion of their workload and was not separately budgeted.

The process of court liaison also was not separately budgeted, but rather was a duty assigned to the ASAP Rehabilitation Coordinator and to the counselors at the various sites. It is estimated that the costs of their activity amounted to about seven percent of the total rehabilitation expenses during the ASAP years.

6. Conclusions and Recommendations

Because of the pre-existing efficiency of the New Hampshire District Courts in processing DWI cases, the ASAP undertook only limited activities in the Judicial area. The establishment of certification procedures for evidentiary blood-alcohol testing is a requirement which must be met in all locales. In New Hampshire, breath testing replaced blood testing without difficulty and the availability of two chemists was adequate to support this activity.

The establishment of the rehabilitation countermeasure and the supporting court liaison process was done administratively and ultimately floundered because of legislative unwillingness to support the program. During the ASAP years, the retraining/rehabilitation process was operable because of the willingness of the courts to make use of the resource among their sentencing options. Not all of the courts made use of the referral process and there were variations in the bases on which particular courts would refer individuals. Nevertheless, the ASAP demonstrated a workable, inexpensive system for referrals which is applicable to a dispersed, low volume court system.

C. Rehabilitation

1. Description

During the planning stages of the ASAP, a basic premise was that an overall systems approach, consisting of a series of countermeasures, could be utilized to alleviate the accident and death rate resulting from drunken driving. One of the most promising of these activities was the concept of attempting to provide rehabilitative services, of a short term duration, to individuals convicted of driving while intoxicated (DWI).

The basic approach was to provide DWI offenders with information on alcohol and its effects on the body and on driving performance, as well as with information on sources of assistance for alcohol-related problems. This information was used as a basis of personal group discussions in an attempt to encourage the participants to modify their drinking-driving behavior and, where indicated, to seek further assistance with alcohol problems.

Four major elements comprised the rehabilitation activity area (Figure 2). The referral process provided the mechanism whereby the courts and other agencies recommended individuals for participation in the program. The screening or diagnosis provided an initial evaluation of the severity of the individual's drinking problem. The Driver Retraining School provided the informational and group discussion sessions on the problem of combining drinking with driving. Finally, the Post-ASAP Intervention referred those individuals who were evaluated as having an alcohol problem, for more extensive treatment after completion of the Driver Retraining School.

a. Referral

Referrals to ASAP resulted primarily from the courts and secondarily from the Division of Motor Vehicles (DMV) and other state agencies (Figure 3).

In general, the court referral process began when the police stopped a vehicle and established that there was a probable cause for making a DWI arrest. The driver was then arrested and requested to take a chemical test to determine if he or she was intoxicated. The vast majority of chemical tests now administered in the state are taken on the Breathalyzer. If the driver refused to take the test, he or she was subject to the penalties specified in the implied consent law (mandatory 90 days' license revocation) administered by the Division of Motor Vehicles, and is still subject to DWI prosecution. If the results of the test indicated a blood alcohol concentration of .10 or over (i. e., where the driver was at or above the prima facie level for being under the influence of intoxicating liquor), the driver was

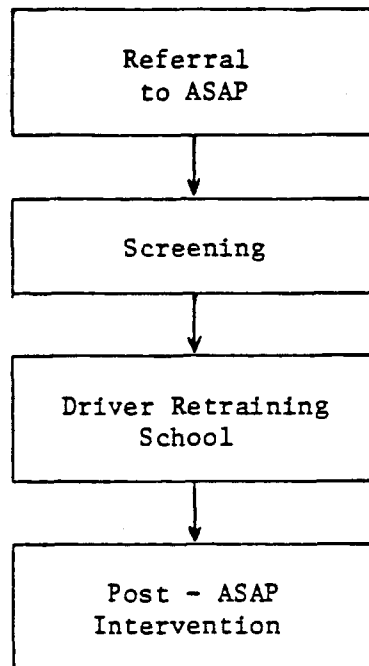


Figure 2: MAJOR ELEMENTS OF
N. H. ASAP REHABILITATION COUNTERMEASURE

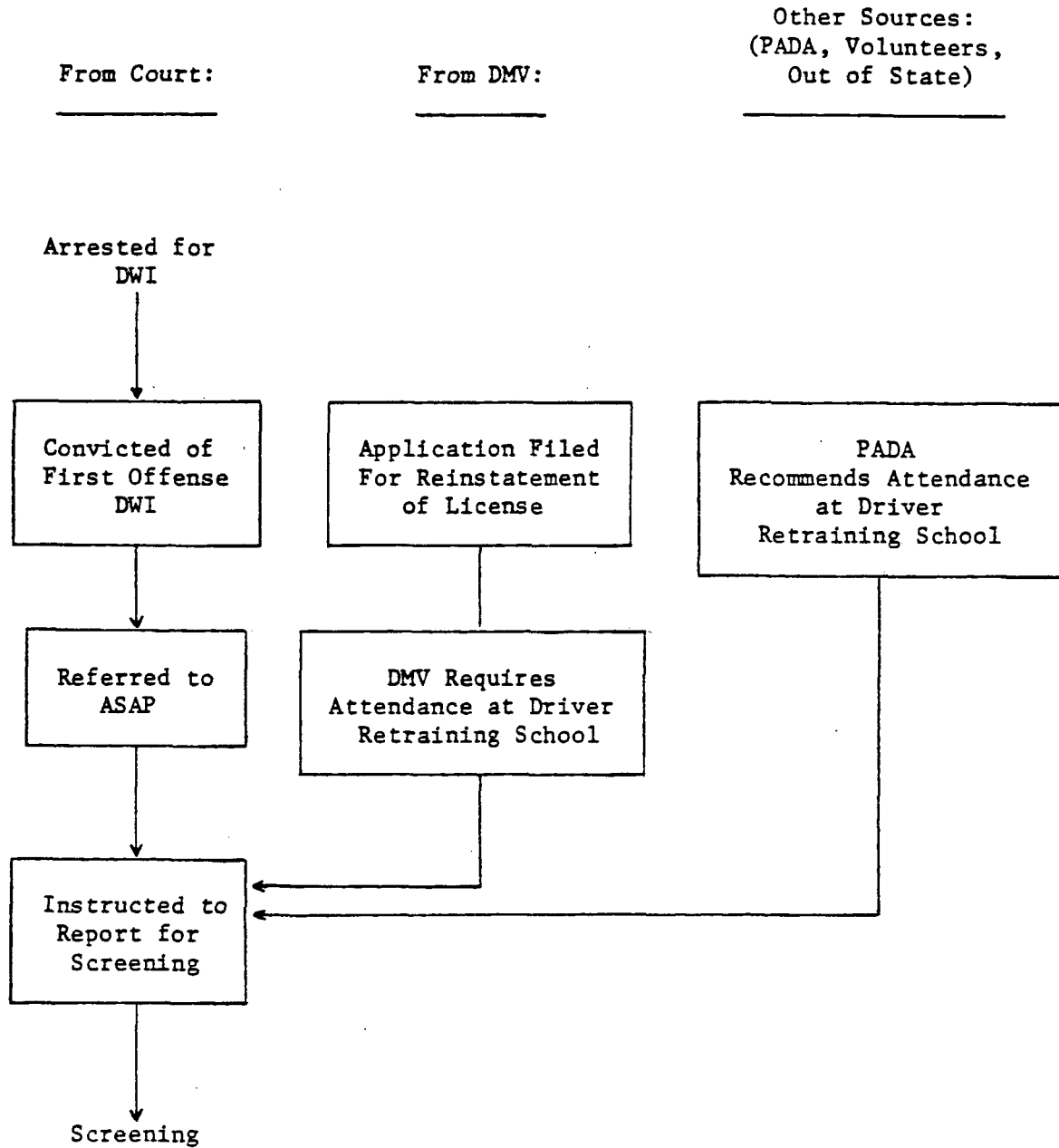


Figure 3: THE REFERRAL PROCESS

arraigned. A plea was entered and, where required, a trial was held. If the driver was found to be not guilty, he or she was released without any formal contact with ASAP. Drivers pleading or found guilty of DWI had their license revoked and, in most cases, were required to pay a fine. Most of the courts who were cooperating with the referral process employed the following sentence:

"License revoked for a minimum of 60 days or until the Medical Review Board of the Department of Health and Welfare recommends restoration of your license. Total revocation not to exceed 120 days."

DWI offenders complying with the referral procedure may have had their licenses restored after the minimum revocation period of 60 days. If they failed to comply, their licenses were revoked for the maximum 120-day period.

Several courts modified the recommended sentence, changing the 60/120-day provision to periods of 90/180 days, 60 days/6 months and 4 months/6 months. Also on occasion, a suspended jail sentence was employed to obtain driver cooperation.

The sentence was applicable only to drivers convicted of first offense DWI, since anyone convicted of a second offense faces a three-year license revocation in addition to the fine and possible imprisonment. There were, however, cases where actual second offenders were convicted of first offense DWI. This came about from plea bargaining and from cases where a thorough prior record check was not initiated. For referral purposes and subsequent Driver Retraining School attendance, individuals in this category were considered as first offenders--having a prior alcohol-related motor vehicle violation.

When the decision was made to refer a person convicted of DWI, the participating court informed the offender of the referral process and the ability to regain their license within the minimum revocation period --if they appeared for the screening.

Referrals from DMV usually resulted when an individual re-applied for a license after a period of revocation that resulted from an alcohol-related driving offense. These people had not previously attended the Driver Retraining School and were required to complete the course before being granted a license.

The other state agency which referred individuals was the Program on Alcohol and Drug Abuse (PADA). Normally, this program accepted referrals from ASAP for more intensive treatment. There were, however, cases of individuals within the PADA programs who had drinking

and driving problems and had not attended the Driver Retraining School. As part of their treatment, they were requested to complete the school.

In addition, referrals were received from out-of-state agencies and from other sources, the majority of which were volunteers. Referrals from DMV, PADA and from other sources were also requested to appear for the driver screening.

b. Screening

The screening process was used to identify problem drinkers who were then selected to attend the Driver Retraining School. Until 1975, individuals classified as social or unidentified drinker types were not required to attend the school; they were sent literature on the problems and dangers associated with driving while intoxicated, but were not requested to appear for classes after the initial diagnosis. In 1975 and 1976 retraining schools were also provided for social drinkers.

When appearing for the screening, the individual was requested to take a self-administered alcohol screening test, referred to as the Mortimer/Filkins Form A, which was used to indicate the presence of a drinking problem (Figure 4). In addition, the individual's prior driving record was checked at the Division of Motor Vehicles. Based upon the obtained information, an individual was classified as a problem drinker if he/she met certain criteria established by a Medical Review Board. This board, consisting of a physician, a psychiatrist and the Rehabilitation Coordinator, was responsible for the screening criteria and for the subsequent Post-ASAP Intervention. Any one of the following criteria classified the person as a problem drinker:

- . A conviction of first offense DWI and having a prior alcohol related motor vehicle violation.
- . A score on the Mortimer/Filkins Form A alcohol screening test indicating evidence of a problem drinker.
- . Other evidence considered as indicative of problem drinking, such as a teenager with high blood alcohol concentration (BAC) at time of arrest.

In addition, people who volunteered or who were specifically ordered by the court to attend the Driver Retraining School were also selected for school attendance.

Individuals failing to initially attend the screening session were sent follow-up letters. If there was still no response, the DMV was notified and their license revoked for the maximum period specified in the sentence.

Referred from
Courts,
Division of Motor Vehicles
Others

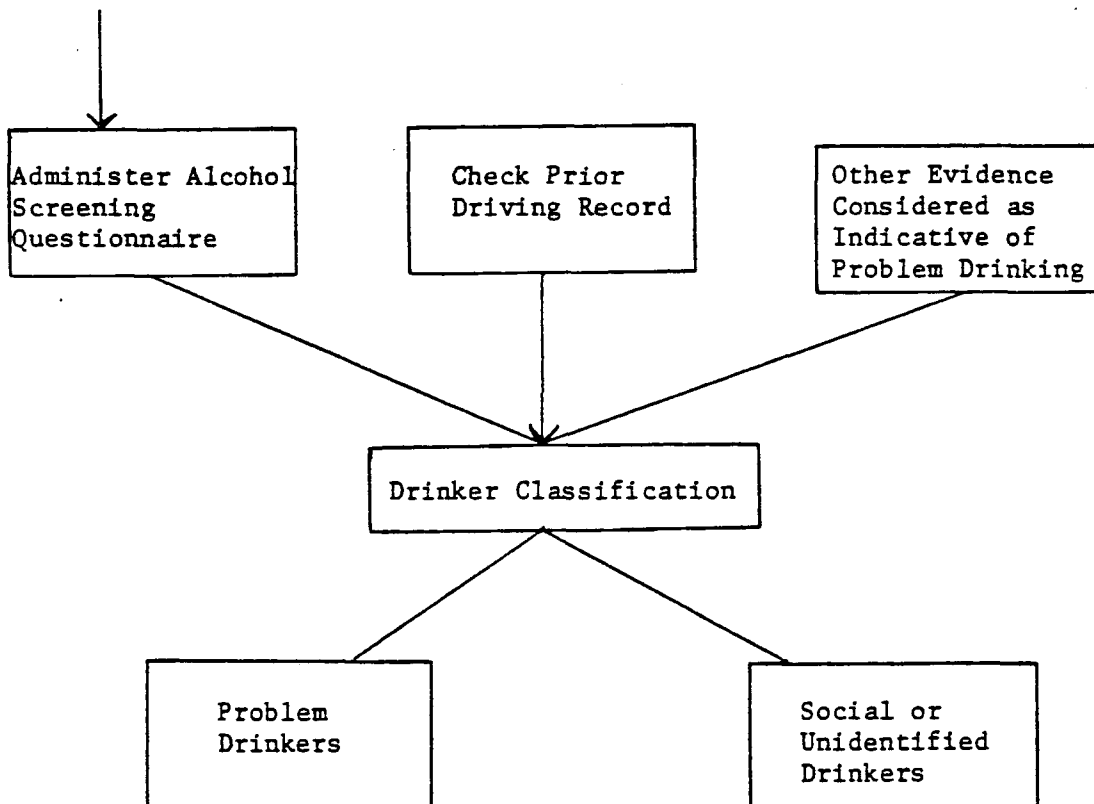


Figure 4. The Screening Process

c. Driver Retraining School

The primary goal of the driver retraining schools (Figure 5) was to modify the drinking/driving behavior of DWI offenders. The method involved a combination of providing information on the legal, social and personal issues involved in driving while intoxicated and providing the opportunity for group discussions on the subject. These discussions attempted to develop within the individual a sense of responsibility about one's drinking and driving behavior.

The schools met for approximately two and one-half hours once a week for five consecutive weeks. Each meeting was structured so as to provide an initial presentation of information followed by a relevant movie. After a brief break, the participants engaged in a group discussion on a related topic.

The major topics covered in the school included:

- . Rights, privileges and responsibilities of driving motor vehicles safely.
- . Alcohol and its effects on the human physical and mental systems.
- . The effects of alcohol impairment on safe driving.
- . Individual drinking patterns and controls.

The final session focused on personal action to avoid future instances of driving while intoxicated and ways to obtain assistance with alcohol-related problems.

Following completion of the prescribed curriculum, the Rehabilitation Counselors evaluated each of the students in terms of their success or failure with the school experience and the severity of their drinking problem. This information provided a basis for a recommendation by a Medical Review Board as to the need for further treatment and the advisability of license restoration during a phase of the program referred to as the Post-ASAP Intervention.

d. Post-ASAP Intervention

The Medical Review Board provided recommendations to the Division of Motor Vehicles for decisions regarding license restoration for the individual and the need for assistance with a drinking problem (Figure 6).

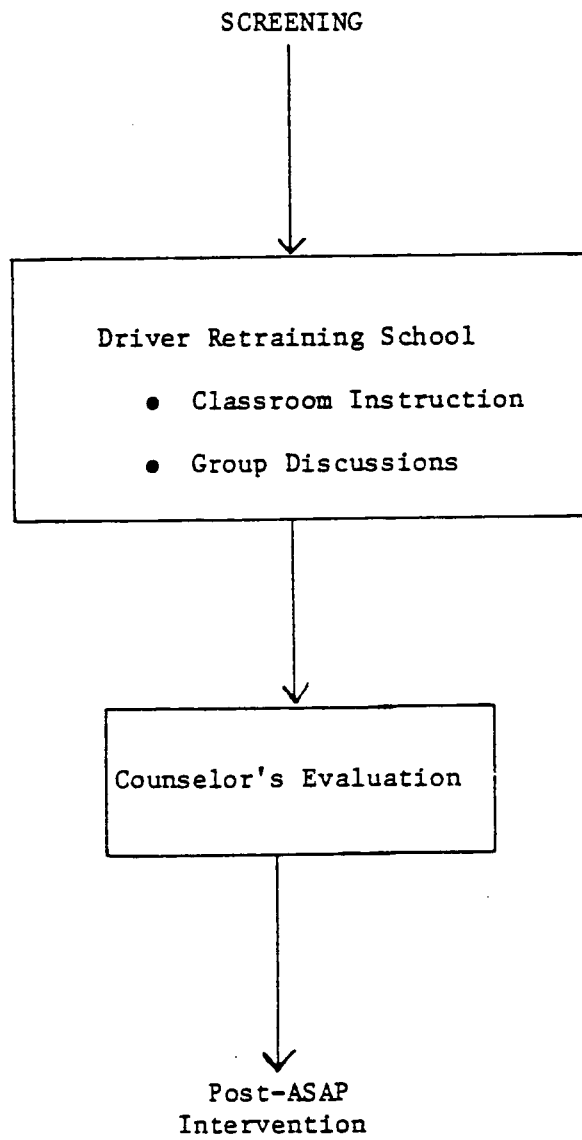


Figure 5. Driver Retraining Schools

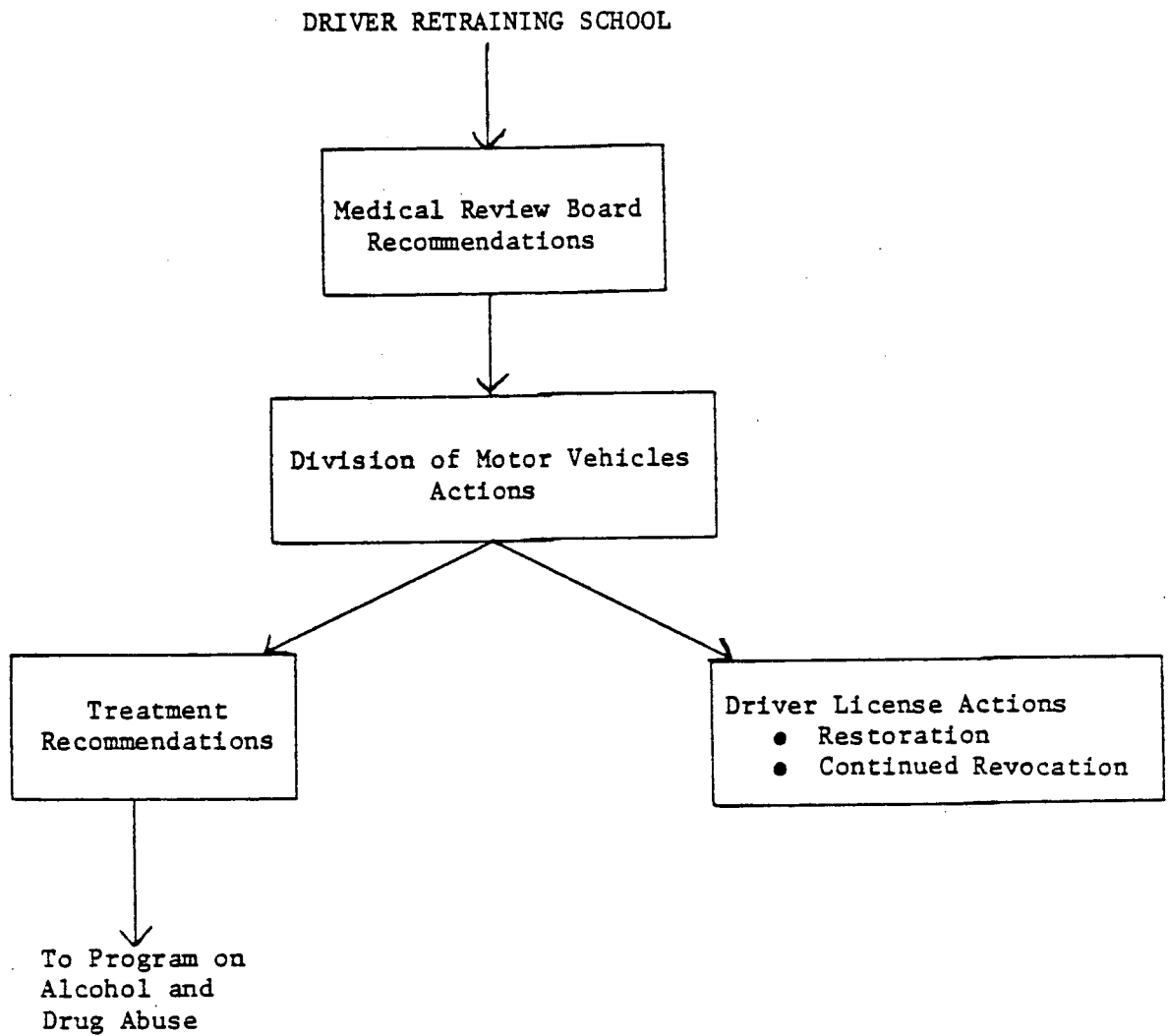


Figure 6. Post-ASAP Intervention

In general, individuals classified as problem drinkers were recommended for further treatment either as a precondition for license restoration or to coincide with license restoration. Individuals classified as social drinkers who successfully completed the Driver Retraining School program were usually recommended for license restoration.

Where further treatment beyond the ASAP Driver Retraining School was recommended, the individual was referred by DMV to the Program on Alcohol and Drug Abuse where an evaluation was conducted and appropriate referrals and in-depth counselling services were provided.

2. Performance Measures

	Annual Totals					1975 Quarterly Totals				
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>Q.IV</u>	<u>Q.I</u>	<u>Q.II</u>	<u>Q.III</u>	<u>Q.IV</u>
Background Investigations Completed	381	995	1663	1595	1930	490	457	426	449	598
No-Shows for Testing	55	165	216	178	421	42	80	89	82	170
-56- Selected for School Attendance	264	560	985	1037	1728	285	255	426	449	598
Problem Drinkers	264	560	985	811	1096	194	185	296	267	348
Others	0	0	0	226	632	91	70	130	182	250
Completed School	91	387	741	764	1372	195	238	275	484	375
Drop-outs	22	123	192	184	102	38	34	17	24	27

3. Significant Progress

The New Hampshire ASAP successfully designed and implemented a comprehensive, statewide case handling process for persons convicted of DWI and referred by the courts. In addition to the actual retraining/rehabilitation activity, the effort involved establishing interfaces with the courts, the Division of Motor Vehicles and follow-on treatment resources, and the creation of a Medical Review Board.

The system was established administratively with the agreement and cooperation of the agencies involved and within existing statutes. The process served as an adjunct to conventional court sanctions rather than a replacement thereof.

During 1972-1974, the effort dealt only with diagnosed problem drinkers, with services for social drinkers being added in 1975. The intention at the time was to run separate classes with differing content for these two groups.

At some sites, at least, case volumes were insufficient to warrant separate classes, so that problem and social drinkers were placed in the same groups. Also, no clearly different curriculum materials were developed for problem and social drinkers.

The rehabilitation program was offered as a resource to the courts with the decision regarding referral resting entirely with the judges. Not all courts made use of the process, and the courts varied in the proportion of cases they would refer. Nevertheless, the case load was expanding each year, and it is believed that most persons in the state in the criminal justice and health fields were supportive of the undertaking.

In 1976 the effort adopted a fee-for-services approach to cover the costs previously borne under the ASAP-NHTSA contract. An upturn in referrals occurred, with this likely due to intensive contacts with the courts. However, the no-show rate also increased, so that the actual case flow was about the same as in earlier periods.

The fee-for-service (\$60 per client) permitted the operation to continue on a break-even basis into 1977. However, as the program had no reserves, and under state regulation could not show a negative cash balance, the operation was very much "hand to mouth." Because of this, the decision was made during 1976 to reintroduce legislation to mandate the program, to authorize the tuition fees by law, rather than by administrative procedures, and to seek funds to establish some cash reserves.

This legislation was not passed by the 1977 session. Accordingly, the decision was made to terminate the rehabilitation program, rather than to operate counter to the will of the legislature.

4. Program Impediments

As just noted, the failure to obtain desired legislation led to the termination of the rehabilitation countermeasure and, thereby, to the dismantling of the ASAP system in New Hampshire. The reasons behind the failure are difficult to assess. The bill in question was given an "ought to pass" recommendation by the committee which held the hearings on the legislation. However, a minority report against the bill was also filed.

The legislation was supported by a wide range of organizations, by relevant state agencies and by the administration. No formal opposition was voiced in testimony during the bill's hearings. Those against the bill came from the legislature--primarily from the House Transportation Committee.

At the time the bill was considered, New Hampshire was facing severe budget problems. In the floor debate on the ASAP bill, the opposition made it appear that the legislation would be far more costly than it actually would have been and, thereby, add an additional burden on the state's general fund. In this atmosphere, a motion to table the bill was carried.

5. Efficiency

From project initiation through early 1975, the ASAP operated seven driver retraining sites run by part-time instructor-counselors. In 1975, the system was expanded to statewide coverage (14 sites) and employed eight full time and six part-time counselors.

The following cost figures relate to the major functions performed in the initial seven site system (data are for 1973 and 1974, the two full years of this form of the operation):

	<u>1973</u>	<u>1974</u>	<u>Total</u>
Referral	\$ 3,528	\$ 4,324	\$ 7,852
Screening	8,705	10,013	18,718
Driver Retraining School	30,725	37,729	68,454
Post-ASAP Intervention	12,183	13,897	26,080
Total	<u>\$55,141</u>	<u>\$65,963</u>	<u>\$121,104</u>

The costs associated with the referral process primarily include the time and travel expenses associated with soliciting and maintaining the cooperation of the judges in referring convicted DWI offenders to ASAP.

The costs associated with the screening process involve the expenses associated with administering and scoring the alcohol screening test and with checking the driver's prior record.

The primary expense associated with the Driver Retraining School consists of the salary and travel expenses for the Rehabilitation Coordinator and the Driver Retraining Specialists. Also included are the equipment expenses for films and supplies, classroom rental and the salary of the Rehabilitation clerks who maintain the record system.

The costs associated with the Post-ASAP Intervention include the fees of the members of the Medical Review Board and the expenses associated with coordinating and maintaining the record system.

The cost-per-case associated with the rehabilitation countermeasure is as follows:

- . The referral, screening and Post-ASAP Intervention processing of each of the 3,229 individuals during the period of this cost analysis averaged \$16.31 per case--excluding school costs.
- . The per-pupil cost of operating the Driver Retraining School for the 1,443 graduates and drop-outs was \$47.44.
- . The combined cost, therefore, of processing an individual who attended the Driver Retraining School was \$63.75 (\$16.31 plus \$47.44).

As noted, in 1975 the project expanded the number of personnel and sites involved in the operation. Total expenditures for the rehabilitation countermeasure during the last six months of 1975 and the first six months of 1976 amounted to \$175,236. or about \$166.00 per school graduate or drop out.

The increase in cost per graduate, compared with that of earlier years, was due primarily to the employment of full time counselors commencing in mid-1975. While the case volume was expanding, the capacity of the system was not being reached at the time the effort was terminated in mid-1977.*

*Participation in the STR experimental study also artificially held down the number of graduates during this period.

6. Conclusions and Recommendations

The organization of the rehabilitation countermeasure in New Hampshire provided a workable statewide case handling system for the DWI offender referred by the courts. The centralization of most administrative functions in the state capitol permitted efficient coordination among the countermeasure, the Medical Review Board, the Division of Motor Vehicles and follow-on treatment agencies.

The primary responsibility of the counselor staff, in addition to the actual conduct of the schools, was to maintain liaison with the courts in the areas they served. Because of the centralization of other activities the counselors were freed from diagnostic test scoring, client follow-up and most other administrative responsibilities.

The failure of the rehabilitation program structure to be established as a permanent one in the state was due to a legislative decision that was basically unrelated to the desirability, efficiency or effectiveness of the undertaking. The outcome of the recent legislative decisions is that it is unlikely that new approaches to remediating the problem of the excessive drinker-driver will emerge in the state in the foreseeable future.

D. Legislative and Regulatory

The New Hampshire ASAP did not specifically budget funds for activities in the legislative and regulatory areas. However, from time to time the ASAP Project Director worked with the State's Highway Safety Agency and other state agencies to seek legislation regarding alcohol and traffic safety.

Prior to the ASAP, the legislature had reduced the presumptive level for DWI from a blood alcohol concentration of .15 percent to .10 percent and had authorized breath testing for evidentiary purposes. The ASAP assisted the Division of Public Health Services in drafting the legally required regulations governing the breath testing program.

The 1973 legislative package contained five bills supported by the ASAP. The three which were passed were, 1) an act requiring blood testing of fatally injured drivers and adult pedestrians who die within four hours of a traffic accident, 2) an act permitting DWI arrests without warrants at accident sites, and 3) the repeal of the ability to post a Peace Bond to retain ones license when a DWI conviction is appealed.

The proposals which did not pass were, 1) an act making a BAC of .10 percent or more legally per se, and, 2) a pre-arrest screening law.

The 1975 legislative session failed to pass an ASAP bill to mandate driver retraining/rehabilitation on a fee-for-service basis. Other legislative action in that session included the following:

- . A bill to authorize pre-arrest screening. Introduced on behalf of the Highway Safety Agency and supported by the ASAP. --Defeated.
- . An act, relative to the implied consent of chemical testing of blood of boat operators or pilots who operate boats upon the public waters of the state of New Hampshire. --Defeated.
- . A bill providing that a prior conviction for operating a motor vehicle under the influence may be considered from another jurisdiction in determining second offenders. --Passed.
- . A bill to increase the time from five to 15 days in which a person charged with driving while intoxicated must file notice to require the blood test administrator to attend the trial. --Defeated.

- . An act increasing the minimum age for purchase, sale and consumption of alcoholic beverages to 21 years. --Defeated.
- . A bill authorizing the restoration of a license that had been revoked under the implied consent law, if the person was found not guilty. --Passed.

A second attempt to mandate rehabilitation was made in the special legislative session held in 1976. The bill was not passed but rather was sent to an interim study committee. This set the stage for the introduction of similar legislation in the 1977 session. As already noted, this last version of the bill was not passed.

The 1977 legislative session passed acts requiring licenses revoked under the implied consent statute to be restored if a driver is found not guilty of the DWI charge, and requiring the restoration of licenses revoked in DWI cases immediately upon completion of the term specified by the court.

The failure to pass the retraining/rehabilitation act, as noted, has led to termination of the ASAP system in the state. The provision that licenses must be returned immediately upon completion of the term specified by the court, makes it difficult or impossible for the Division of Motor Vehicles to render administrative judgements in DWI cases. Thus, the follow on system whereby problem drinkers were being required to seek treatment as a condition of re-licensing can no longer operate.

The bill requiring the return of licenses revoked under the implied consent statute if persons are not found guilty of DWI, amends a 1975 act which authorized (but did not require) the Director of Motor Vehicles to restore licenses in such instances. The new act, of course, could seriously undercut the ability of law enforcement agencies to obtain BAC data in DWI cases. Some increase in chemical test refusals was noted following passage of the 1975 revision of this act. The impact of the present version remains to be determined.

The last two regular sessions of the legislature have been essentially negative regarding laws dealing with drinking drivers. The effect has been to undercut the state's ability deal with problem drinkers beyond straight forward enforcement and adjudication. Also, even here, the change dealing with the implied consent statute may diminish enforcement-conviction levels.

E. Licensing

1. Driver Training

In the project's Detailed Plan this countermeasure was envisioned as involving the placement of alcohol related questions on the state's driver license examination and the inclusion of the topic of alcohol and traffic safety in the state issued Driver's Manual. The rationale for this effort was to attempt to force driver education courses to cover material on alcohol and traffic safety and thereby expose potential new drivers to this topic.

In 1972 the state Driver's Manual was reprinted including alcohol related material. At the same time a more direct way was found to accomplish the desired objective. That is, the project was approached by the State Department of Education to participate in a revision to the driver education curriculum. This was carried out and has resulted in a three-hour unit on alcohol and traffic safety being included in the required curriculum. The topics covered are as follows:

Hour I

- a. Alcohol in the body
- b. Effects on the body
- c. Psychological signs of intoxication
- d. Physical signs of intoxication
- e. Blood alcohol content

Hour II

- a. Tolerance
- b. Implied Consent
- c. Evidence
- d. Penalties

Hour III

- a. Judgement
- b. Vision
- c. Reaction time
- d. Insurance considerations

Thus all persons in the state completing driver education are being exposed to information on the role of alcohol in traffic safety. Also, all driver education instructors are now required to complete a college level course on alcohol and highway safety.

No direct costs were incurred by the project in this area.

2. Computerize Driver Accident and Violation Records

Within the New Hampshire Division of Motor Vehicles all driver records of accidents and violations have been maintained in manual form. This required large clerical forces to handle incoming material and made retrieval slow and at times difficult. During the planning period for ASAP, it was learned that the system was near saturation, that its use for record screening in background investigations would be cumbersome, and that significant increases in DWI arrests would seriously tax the record keeping process (this latter was so because DWI cases are among the most administratively complex handled by the Division).

To overcome these situations the ASAP contracted with the Department of Centralized Data Processing to develop an automated accident and violation driver record system for DMV. While the design objective was to provide for maintenance and retrieval of histories of alcohol related offenses, it was clear that the system should handle all traffic convictions and accident reports so that one unified data base would be established.

The planning, design and implementation of the system took considerably longer than expected. Ultimately, a software package developed by the State of Maine was obtained, modified and installed on a Honeywell 6000 series computer operated by the Department of Centralized Data Processing.

The system began capturing current accident and violation records in early 1974 and has continued to do so to the present.

The major weakness with the system has been in the loading of historical information. The approach taken was to review and convert manual driver history files. Because of personnel limitations, this process moved slowly and has not been completed at this writing. The automated system, therefore, had only marginal utility for the ASAP. Ultimately, however, it will be an important capability for the state in the driver control process.

Total ASAP expenditures for the system amounted in \$156,658 versus an original plan of \$127,278. Major support of the system has been, and is being borne by the state.

F. Public Information and Education

1. Description

Within the scope of an overall alcohol countermeasures program, public information and education (PI&E) efforts can play at least four important roles. These are:

- . PI&E activities can provide the general public with factual information on the role of alcohol in traffic accidents, with this knowledge assisting those who can control their drinking behavior in making informed decisions regarding alcohol use and motor vehicle operation.
- . By providing information on the goals and operations of an alcohol countermeasures program to the public and relevant special groups, PI&E activities can win support for the overall program.
- . By emphasizing enforcement activities, a PI&E countermeasure can contribute to a deterrent effect.
- . PI&E efforts, by defining the nature and extent of alcohol impaired driving, can motivate persons to intervene in such situations.

The organization of the New Hampshire ASAP's Public Information and Education countermeasure consisted of: 1) a Public Information Coordinator who conducted a Speaker's Bureau, assisted in the development and placement of materials, and responded to information requests directed to the project, and 2) a Public Relations Contractor who conducted a media campaign including the development, production and placements of materials. Both these activities were managed by the ASAP Project Director.

The planning and coordination of PI&E efforts were carried out at semi-monthly meetings of the ASAP Director, the PI&E coordinator and representatives of the subcontractor. At these meetings work in progress was reviewed, new themes and approaches were developed and possible new materials discussed.

The approach and scope of PI&E efforts were influenced by several factors. Among these were:

- . The overall ASAP concept, the experience of the ASAP projects which began operation earlier than New Hampshire, and information and materials provided by NHTSA.

- . Local knowledge of the nature of the state and its media.
- . Information derived from ASAP evaluation activities including a series of general population surveys.
- . Technical information exchange among the ASAPs, and information derived from the relevant literature.

In terms of the mechanics of PI&E efforts, the major influences were the demography of the state and the nature of the state's media. That is, New Hampshire is largely rural in character with few major population centers. There are nine newspapers published in the state on a daily basis, with one of these distributed statewide. There is one commercial and one public broadcast TV station in the state. Radio stations, which number approximately 28, are all local in nature (i. e., cover limited geographic areas).

Public Information and Education countermeasure activities were undertaken in the following categories:

- . Media Campaign
- . Handout Material
- . Speaker's Bureau
- . Educational Activities
- . Special Activities

The details of each of these categories are presented in the following material:

a) Media Campaign

The PI&E media campaign became operational in April 1972 and continued as originally planned until December 1974. At that time, a number of operational changes were made in the ASAP. In the PI&E area, one change involved the exclusive use of NHTSA materials for general audience targets rather than the creation of local material as had been done during 1972-1974.

The media campaign in New Hampshire was concerned with the development and placement of project advertisements, news releases and feature material. The primary media were newspapers and radio, with little effort devoted to television. This was so because there is only one commercial TV station in the state (the bulk of television coverage coming from stations located in Massachusetts and Maine).

b) Descriptions of Newspaper Materials

. Major Ads

During the period from August 1972 until December 1974, the media campaign developed and issued a new major print advertisement

approximately once every two months. The major ads were full-page size and were distributed to the nine daily and approximately 60 weekly newspapers published in the state. Distribution was in the form of mats or proofs in either full or tabloid size.

The basic layout philosophy of the major ads involved the use of headlines or graphics to attract the reader's attention to the text. Headlines and graphics ranged from the humorous to the emotional with some ads having a seasonal orientation. Ad texts, especially during the first two years, were heavily enforcement oriented. Other ads discussed the menace of drunken-driving and highlighted the difference between responsible and irresponsible drinking behavior.

An important layout feature of the major ads were the inclusion of blank areas for printing sponsor identification. That is, the majority of major ad insertions were paid for by local merchants, with their participation identified in the ad.

During the period 1972-1974, a total of 14 major ads were developed and distributed by the ASAP, with a total of 120 placements being obtained. As noted earlier, no new ads were developed after 1974. During 1975, four of the ads previously released were reissued. Only 16 total placements were obtained, however. One ad was reissued during 1976, with nine placements obtained.

Minor Ads

Beginning in July 1973, the media campaign began to release small ads (2 x 4 inches) on a two-per-month schedule. The minor ads featured a headline and brief text. Typical of these ads was one with the headline, "Drive Drunk Drivers" and the text, "A drunk person is a sick person. And he'll never get better if he's dead. Help him by taking his keys and taking him home. Help all of us by getting him off the road." From 1972 through 1976 a total of 710 placements of minor ads were attained.

One for the Road

Beginning in January 1973, the media campaign began to release a weekly feature entitled, One for the Road. The format of these features was a true-false statement relating to alcohol and traffic safety, followed by a factual answer. An example of one of these features is as follows:

"TRUE OR FALSE: Only time will reduce or eliminate effects of alcohol on a potential driver who is drunk.

TRUE: Black coffee, a cold shower or walking around does not help sober a drunk who wants to drive. Some people have the misconception there are ways to quickly sober up a drunk and thus make him capable of safe driving. This idea is wrong. Once alcohol is in the blood, there's no known method to speed up its elimination. The effects of alcohol will only disappear with time. If in doubt, don't drive... and don't let anyone else drive while they are under the influence of alcohol. Friends don't let friends drive drunk."

In 1973 and 1974 a total of 317 insertions of the feature were obtained. During the early months of 1975 no features were developed because of delays in renewing the agency's subcontract. A total of 86 insertions were obtained during the year, while 124 insertions resulted in 1976.

Press Releases

Another aspect of the media effort was the preparation and distribution of press releases concerning ASAP project activities. Such releases were made periodically throughout the term of the project to cover generally newsworthy topics, Speaker's Bureau appearances, attendance of individual police officers at the Alcohol Enforcement Training School and DWI enforcement activities.

Press Coverage

Non-ASAP originated press coverage of the project and the subject of drinking-driving occurred on a regular and sustained basis. For example, the New Hampshire press routinely reports on District Court cases, including DWI. Similarly, listings of persons whose license are revoked or suspended by the Department of Motor Vehicles are reported by several papers in the state.

More general coverage of ASAP and the DWI problem was also initiated by the press. For example, in 1973 approximately 300 relevant articles appeared over and above those reporting court cases. Several papers undertook stories dealing with such topics as enforcement efforts, Breathalyzer training and operation, and the ASAP's Driver Retraining Schools.

During the five operational years of the ASAP a total of 2,988 articles, features, editorials and ads are known to have appeared in the state's press (excluding the reporting of court cases). These items amounted to over 40,500 column inches of space, or the equivalent of 281 pages of typical newspaper size.

c) Radio Public Service Announcements

The media campaign's radio effort during 1972 - 1974 involved the generation of locally prepared spots and the use, in localized form, of spots generated by the NHTSA national campaign. Locally produced spots were prepared to coincide with the release of the major newspaper ads and generally shared the same theme. During 1975 - 1976 only PSAs produced by NHTSA, or previously issued local spots, were utilized.

The PSA distribution pattern was such that in any given month only one PSA was distributed for airing by all of the cooperating stations. This distribution method was used to insure that stations were playing the local PSAs which corresponded to the major newspaper ads. The distribution pattern also enabled the project to obtain feedback on PSA utilization. That is, each release of a new PSA included a postcard asking the stations to indicate how many airings were given to the prior month's spot. Of the radio stations in the state to which PSAs were sent, 16 cooperated with the feedback process. Over the period from 1972 to 1976, cooperating stations indicated a total of 22,284 airings of PSAs.

d) Television Spots

As noted earlier, there is only one commercial television station in the state. No locally prepared TV spots were developed by the ASAP, therefore. Instead, several TV spots developed as a part of the national campaign were distributed to the station. While it is known that these spots were aired, no precise data on frequency of use are available.

e) Handout Material

During the course of the ASAP several items were developed as handout material. These items included:

- . ASAP Brochure--descriptive brochure explaining the basic objectives of the ASAP and its countermeasures. Distributed primarily via liquor stores, Division of Motor Vehicles and speaker's bureau presentations. Approximately 275,000 copies were printed and distributed.
- . Recipes for Holiday Party Givers--co-sponsored with the New Hampshire Division of AAA and Julia Child. Pamphlet gives hosting guidelines helpful in reducing liquor consumption at parties as well as some rich and starchy recipes donated by "The French Chef."

- Congratulations, This is Your License to Drive--brochure aimed at the new driver explains the drunk-driver problem, offers some solutions and outlines the penalties for being convicted of DWI. Front page is die cut to accomodate insertion of driver's license.
- Know Your Limits--localized drink chart that coincides with national "Know Your Limits" campaign initiated by Licensed Beverage Industry. ASAP again co-sponsored this campaign with the New Hampshire Division of AAA. Other cooperating agencies included the New Hampshire State Liquor Commission and New Hampshire Safety Agency. Approximately 250,000 were printed and distributed.
- Bumper Sticker--containing the message, DWI Is a Bummer. Approximately 10,000 distributed, primarily in the high schools of the state.
- ASAP Information Bulletin--a newsletter geared primarily toward the legal-judicial system and others in contact with the ASAP containing information on drinking and driving. Several issues published early in the project and then discontinued.

f) Speaker's Bureau

The Speaker's Bureau, conducted by the ASAP PI&E Coordinator, offered an oral presentation covering the goals of the ASAP, the nature of the drinking-driving problem and discussion of applicable laws and sanctions. The primary audiences for these presentations were student groups including driver education classes and civic groups. During the five ASAP years the Speaker's Bureau gave 572 presentations before an estimated total audience of over 42,500 persons.

g) Educational Activities

- Driver Education Curriculum--In 1973 the state's Driver Education Curriculum underwent a complete revision. ASAP personnel participated in this process by preparing the material on alcohol and traffic safety which is now a three hour unit of the 30 hour course.
- Driver Education Instructor--Under regulations promulgated in 1973, all Driver Education Instructors in the state must complete a college level course on the topic of Alcohol and Traffic

Safety. This course is being offered by Keene State College with ASAP personnel having served as guest lectures.

- Police Training--During 1972 - 1974 the ASAP operated Alcohol Enforcement Training schools which trained 438 police in DWI enforcement and Breathalyzer operation. Beginning in 1975 the Alcohol Enforcement Training schools were transferred to state operation under the New Hampshire Police Standards and Training Council. During 1975 and 1976, an additional 151 police were trained by this activity.

In 1974 and 1975 the ASAP in conjunction with other agencies sponsored a series of one-day refresher training courses on the topic of DWI enforcement and Breathalyzer operation. The 1974 presentations were attended by a total of 225 police. The 1975 sessions were attended by somewhat fewer than this number.

- Judicial Seminar--In 1973 approximately 15 District Court Judges attended an ASAP sponsored seminar conducted by Indiana University. The judges discussed topics ranging from alcohol and impairment and sentencing alternatives to treatment and rehabilitation and worked toward solving the detailed problems of processing the state's DWI cases.
- Pilot Tests--During the course of the ASAP the state served as a pilot test site for three training programs developed under NHTSA sponsorship. These were training for police supervisors in DWI enforcement, a seminar briefing package for DWI defense attorneys and a seminar for motor vehicle hearing officers.

h) Special Activities

The following were among the special PI&E activities undertaken during the course of the ASAP:

- Governor's Youth Conference--In 1972 and 1973 the ASAP participated in the Governor's Youth Conference on highway safety. These programs were one day sessions intended to involve high school students in seeking solutions to the alcohol/highway safety problem.
- Celebrity Site Visit--In 1973 a visit to the state by Robert Horton sponsored by NHTSA generated seven radio interviews, two speaking engagements, one TV interview and a press conference.

- . Fairs--During the summer and fall of 1973, a mobile display booth concerning the ASAP was set up and manned at five county fairs held in the state. The consensus of those manning the booth was that insufficient interest was generated to justify the number of man-hours involved.
- . State Plan--In 1974 the ASAP Director was named chairman of the Education Subcommittee of the Advisory Council to the State Plan on Alcohol Abuse and Alcoholism.
- . Traffic Safety Campaign--In 1974 and 1975 the ASAP Director served as a member of a five person steering committee which planned a traffic safety campaign under state sponsorship. Under the slogan, Join the Drive to Stay Alive, the campaign focused on the dangers of speeding, drinking-driving and other factors related to traffic accidents.

2. Performance Measures

	<u>Annual Totals</u>					<u>Quarterly Totals</u>				
	1972	1973	1974	1975	1976	1975 QIV	1976 QI	Q2	Q3	Q4
Speakers Bureau Appearances	124	122	123	125	78	30	22	26	14	16
Major Ad Insertions	32	46	42	16	9	6	1	2	2	4
Total Newspaper Items	445	576	573	610	784	149	157	211	204	212
Total Radio Spots	1174	4762	6605	3148	6595	1538	2391	2169	1457	578

3. Significant Progress

The New Hampshire ASAP was able to mount and sustain a high volume PI&E effort in the media and with the Speaker's Bureau. The figures above for radio spot airings and newspaper items in 1976 show that media interest was not lessening even after five years of operation.

During the five ASAP years, activity totals for PI&E were as follows:

. ASAP print ads	1,382
. Total newspaper items	2,988
. Radio spots	22,284
. TV spots	312
. Speaker's Bureau appearances	572
. Speaker's Bureau audience	42,500
. Handout materials	275,000

Under federal guidelines, the ASAP was unable to purchase media space. The placement levels actually achieved suggest that traffic safety is an important community interest and that a carefully organized campaign employing professionally developed materials dealing with the topic can successfully compete for public service broadcast time and print media space.

4. Program Impediments

The Public Information and Education effort of the New Hampshire ASAP, as formulated in 1971 and carried out over subsequent years, was a successful mass media campaign targeted at the general population of the state. While some important efforts were made with special groups, these were primarily reactive in nature rather than part of a systematic communications plan.

Except for the unit on alcohol added to the driver education curriculum and the alcohol enforcement training program for police, the countermeasure did not examine alcohol and traffic safety education needs in the state and, therefore, leaves little behind it in the way of on-going information and education efforts.

5. Efficiency

The total cost for PI&E efforts during the five years of the ASAP was \$185,987 of which \$80,181, or 43 percent, were related to the Speaker's Bureau activities. Costs associated with the creation, production and distribution of materials amounted to \$105,807, or an average of \$21,161 per year.

In New Hampshire, the average cost of a 60-second radio spot is approximately \$6.50. The total value of the 22,284 airings of ASAP radio PSAs, therefore, was on the order of \$144,000, or more than the total media production and distribution costs. If the worth of print media space could be calculated, it is likely that the value of obtained placements would more than offset the entire cost of the PI&E countermeasure.

During its five years, the Speaker's Bureau made 446 presentations before an estimated audience of over 42,500 persons. The cost per appearance, therefore, was \$180. The cost per person reached was \$1.89.

6. Conclusions and Recommendations

The New Hampshire ASAP was able to mount and sustain a large scale public information campaign aimed at the general population of the state. Because of the nature of the media in the state, emphasis was given to the generation of radio and newspaper materials. The following observations pertain to the media campaign:

- . The media are generally receptive to locally sponsored public service material and often will provide useful feedback to the agency generating the material. Periodic personal contact with the media can provide useful feedback to the campaign.
- . The media will exercise judgment on the quality of the material provided and on its content. Items judged inappropriate for the audience of a particular outlet will not be used or will receive minimum exposure. This applies not only to content (e. g., editorial judgment of the material) but also to theme of presentations--for example, certain radio stations prefer PSAs consistent with the types of music they play. Also, materials of poor mechanical quality usually are rejected.
- . Newspaper ads in the form of mats or proofs are preferred. In the New Hampshire campaign, full page ads were prepared in two sizes--one for standard size newspapers and one for tabloid size weekly "shoppers."
- . Small, filler-type newspaper ads appear useful, especially to weekly papers.
- . That general releases with statewide appeal be issued to only the larger daily papers with diverse audiences, and that these releases be news oriented.

- . That an effort be made to issue releases with regional (i. e., county, metropolitan or geographical) appeal to the larger daily papers and selected weekly papers (i. e., those not in direct competition with daily papers), and that these be primarily news, and secondarily, information-orientated.
- . That weekly papers be supplied, on a periodic basis, with releases of discreet news germane to their readership, and that these releases not be provided to their competition, the larger daily papers.
- . That the theme of the Project's press relations be openly that of an information source rather than that of an information dispenser. For example, (1) several editors went out of their way to express thanks for ASAP assistance to their reporters who have done local stories on the Project; and (2) where the editors expressed an interest in doing a feature, they requested only help on details rather than providing them with a ready-to-use package.

V. ANALYTIC STUDIES

A number of separately bound analytic studies are a part of this final report. These documents present evaluation findings regarding the ASAP countermeasure activities. The following presents an index and abstracts of these reports:

1. Analysis of Overall Project Impact

Fatal and injury producing motor vehicle accidents declined in number by significant amounts during the ASAP period (1972 - 1976) as compared with the years prior to the project. These reduced accident levels represent a departure from the trend that existed in the state for at least 10 years before implementation of the ASAP.

Examination of various sub-sets of accidents show a tendency toward, or statistical confirmation of the view that the declines have occurred in the classes of accidents most likely to be alcohol related. Also, examination of alternate explanations for the noted accident declines discount changes in exposure, energy and speed policies and economic and other global conditions as possible factors.

It is suggested that ASAP enforcement and public information efforts created a deterrent effect that modified the drinking-driving behavior of a segment of the at-risk population and that this modification has led to fewer traffic accidents taking place.

2. Analysis of ASAP Patrol Activity

During the ASAP years, DWI arrests reached an annual rate more than triple that of the years prior to the project. The ASAP operated two forms of enforcement. During 1972 - 1974 a team of 11 State Police carried out enforcement patrols on a fulltime basis. During 1975-- 1976, patrols were carried out by local and State Police on an overtime basis. Both forms of patrol were found to be more effective in making DWI arrests than were regular patrols. The overtime patrols were more cost-effective in terms of patrol man-hours per DWI arrest.

Considerable variation was found among the performance of the officers assigned to the team. Officers who stopped more vehicles per unit time did not have higher DWI arrest rates.

The efficiency of local overtime patrols (man-hours per DWI arrest) was found to be unrelated to various measurable characteristics of the communities in which the patrols were conducted. Arrest levels were also unrelated to the frequency with which vehicles were stopped.

Both forms of special patrols had higher compliance rates with chemical testing procedures than did regular patrols. Special patrols also tended to make arrests at lower BACs than did regular patrols.

Young male drivers are overrepresented among those arrested for DWI, in comparison to their numbers in the licensed driver population. This group tends to be arrested later in the evening, to be at a lower BAC and to be more compliant with chemical testing than are older arrested drivers.

3. Analysis of the Adjudication of Alcohol Related Traffic Arrests

During the years of ASAP operation in New Hampshire, arrests for operating under the influence of alcohol (DWI) increased almost four-fold from the annual rates experienced in the years before the project. This increase in arrests has not adversely affected the adjudication of DWI cases. For example, 89 percent of the persons arrested and arraigned as first offenders in 1976 were found guilty, the same rate as occurred in 1971. Most DWI cases are adjudicated within about one month of the arrest, with this time span having remained relatively stable despite the increased caseload.

Of 8,578 persons arrested for DWI in 1976, 1090 had blood alcohol levels below .10 percent and were not arraigned. Of the remainder, 6,789 had been adjudicated as of April 1977 while the rest (699) were outstanding.

Of the 6,300 persons charged as first offenders, 31 percent contested the case, with this rate being essentially unchanged over the years. Eighty nine percent of the first offenders were found guilty and just under 10 percent appealed. The average fine in 1976 first offense cases was \$160, a figure that has been increasing gradually over the years. The most common license revocation period was 60 days, followed by a variable length revocation associated with court referral to the ASAP.

Comparisons of the individual courts in the system shows variation in first offense conviction rates from 66 to 100 percent, a range of average fines from \$78 to \$215 and a range of appeal rates from zero to 29 percent.

4. Rehabilitating Drinking Drivers: An Analysis of Three Years of Activities of the New Hampshire Alcohol Safety Action Project

The rehabilitation efforts of the Alcohol Safety Action Project were initiated to provide people convicted of driving while intoxicated (DWI) with re-training and resources for dealing with problems related to drinking and driving.

From mid-1972 through mid-1975, a total of 4,388 people were referred for screening to determine their eligibility to attend the Driver Retraining Schools. Of those referred, 2,160 people were selected and 1,817 were eventually graduated from the schools during the period.

To evaluate the program's effectiveness, the subsequent accident involvement and DWI rearrest records of those referred were compared with groups of not referred people.

The results indicated that the total number of subsequent accidents and DWI rearrests were less for the referred groups than they were for the not-referred groups. The differences that were found occurred within the same and subsequent year after conviction but were not present in later years.

Because of possible differences that may have existed between the groups initially, these findings, while not conclusively providing the effectiveness of the schools, do indicate that the rehabilitation experience can reduce the incidence of subsequent accidents and DWI rearrests. The cost of processing an individual who attended the Driver Retraining School was \$69.57.

5. Analysis of the Effectiveness of Driver Retraining Schools

The Rehabilitation Countermeasure of New Hampshire's Alcohol Safety Action Project provided referral, screening and a Driver Retraining School for modifying the drinking/driving behavior of individuals convicted of driving while intoxicated. Two studies using random assignments of subjects measured the effectiveness of the process.

In the first study, 500 driving while intoxicated (DWI) offenders were assigned to the Driver Retraining School and 500 DWI offenders were given no treatment and served as controls. The second study, part of a national Short Term Rehabilitation study involved 101 problem drinkers in the assigned group and 101 problem drinkers in the control group. The major findings were as follows:

- . There were no major differences between the comparison groups in the primary traffic safety measures of DWI recidivism and subsequent accidents. It was found however that problem drinkers with initial BACs of .20 and over who were assigned to the Driver Retraining School had fewer subsequent DWIs than an equivalent control group.

- . Problem drinkers who were in the assigned group reported greater social interaction and more control over their drinking, but this latter effect diminished after one year.
- 6. Description and Evaluation of the Public Information and Education Countermeasure of the New Hampshire Alcohol Safety Action Project

During the period from 1972 to 1976, the New Hampshire Alcohol Safety Action Project conducted a public information and education countermeasure with the objectives of increasing the general public's knowledge of the traffic safety hazard posed by drunken driving; increasing the knowledge of persons in control of their drinking, and those in contact with problem drinkers, regarding factual aspects of drinking and driving; acquainting the public with the ASAP program and winning support for its efforts; creating a deterrent effect in conjunction with enforcement efforts; and encouraging personal intervention in potential drunk driving situations.

During the five years of operation the campaign established and maintained a high level of activity. Included were more than 22,000 radio PSA placements, nearly 3,000 newspaper items, the distribution of several hundred thousand items of handout material, and 572 speaker's bureau appearances before an audience of some 42,500 persons.

Evaluation of the countermeasure, based on a series of household and telephone surveys, shows a number of changes in public knowledge and attitudes concerning alcohol impaired driving. Ads stressing personal intervention in potential DWI situations were found to have been recalled by significant numbers of survey respondents. Several survey items concerning self reported behavior in such situations were also found to have changed significantly during the last two years of the countermeasure.

- 7. Analysis of the Drinking Driving Attitudes of New Hampshire High School Students: Second Survey

In order to assess the attitudes and knowledge of high school students regarding alcohol, use and driving, and to determine if measurable changes have taken place in these, two rounds of surveys were conducted in six high schools in the state.

Alcohol usage was reported by 67 percent of the 1976 sample in the week prior to the survey, while 95 percent of the respondents said they had consumed an alcoholic beverage at one time or another. The high school students were more likely than the general population to report having been in

situations where someone who had been drinking heavily was about to drive a car. The students also reported somewhat greater willingness to intervene in these situations.

Seventy-six percent of the 1976 student sample reported having a driver's license, with 32 percent of those licensed owning their own car. The students indicated less frequent driving than older persons, but much more frequent driving during the nighttime hours. Approximately 31 percent of the male students and 13 percent of the females, reported occasional or frequent driving after drinking.

The responses of students to some factual and attitudinal items regarding alcohol and driving differed from the responses of older persons. For example, students perceived a greater risk of apprehension for DWI than did older persons.

Generally, there were few differences between the student responses to the 1976 survey and those obtained in the 1975 administration. There was, therefore, no evidence of impact of ASAP public information efforts with this target group during the last year of the project.

VI. PLANS FOR ACTIVITIES AFTER TERMINATION OF THE PROJECT

A. ASAP Countermeasures

As noted elsewhere in this report, the failure of the legislature to pass a bill supporting the rehabilitation countermeasure has led to a dismantling of the ASAP system in New Hampshire. On a countermeasure by countermeasure basis, the following is the likely future course of alcohol countermeasures in the state:

Enforcement

- . Special Patrols--some future patrols are possible using "402" monies. Present emphasis, however, appears to be on enforcement of 55 m.p.h. speed limit.
- . Quantitative Breath Testing--full statewide capability which is continuing.
- . Alcohol Enforcement Training--continuing under sponsorship of the New Hampshire Police Standards and Training Council.

Judicial

- . Certification of Instruments and Operators--two chemist positions have been and will be funded by the state.
- . Court Referral to ASAP--terminated.

Rehabilitation

All state operated efforts terminated. At this writing it was possible that one or more not-for-profit organizations would appear which would attempt to continue short term rehabilitation programs in conjunction with participating courts. The viability of these efforts is unclear at this time.

Legislative and Regulatory

The New Hampshire Highway Safety Agency will continue to work for desirable safety legislation. Possible future legislation concerning alcohol and traffic safety is unclear at this time.

Licensing

- . Accident and Violation System--continuing under state sponsorship.
- . Driver Training--alcohol unit in driver education curriculum continuing to be employed.

Public Information and Education

All activities terminated. No future plans known.

B. Evaluation Data Files

Evaluation data files for the New Hampshire ASAP are being retained by the evaluation subcontractor. Inquiries pertaining to these files may be addressed to:

Robert G. Ulmer
Dunlap and Associates, Inc.
One Parkland Drive
Darien, Connecticut 06820

C. Disposition of Equipment

A final inventory of ASAP equipment has been completed. The required inventory schedule and property utilization plan have been submitted to NHTSA.

VII. SUPPLEMENTAL INFORMATION

A. Description of the ASAP Community

In 1976 New Hampshire had an estimated population in excess of 825,000 persons living in the state's 9,300 square miles. The population figure represents an increase of approximately 13 percent since the 1970 census. The majority of the state's residents live in the southern and eastern parts of the state. For example, nearly 70 percent of the population resides in the three southeasterly counties of Hillsborough, Rockingham and Strafford. At the other extreme, less than 15 percent of the population live in the northern half of the state.

The character of the state is primarily rural in nature with only 13 cities and towns having over 10,000 residents. Manchester, the largest city in the state, has a population of approximately 97,000.

1. Motor Vehicle Operation

The following shows some data concerning motor vehicle operation in the state during recent years:

Year	Registered Motor Vehicles	Licensed Drivers	Vehicle Miles (Millions)
1969	447,324	N/A	4,159
1970	483,893	N/A	4,473
1971	525,500	N/A	4,787
1972	551,345	N/A	5,076
1973	556,098	505,979	5,244
1974	566,113	525,737	4,929
1975	561,299*	534,604	5,193
1976	586,048*	563,835	5,542

*Totals are affected by a change to a staggered registration system in 1975.

Generally speaking, over the eight year period 1969-1976, the state's population has been increasing, as have the number of licensed drivers, registered motor vehicles and total mileage driven. Regarding the latter, miles driven in 1975 and 1976 resumed the upward trend in effect for a number of years, following the downturn experienced in 1974 due to the gasoline shortage. It is estimated that approximately 85 percent of New Hampshire residents age 16 and older hold a driver's license.

Various surveys conducted by the ASAP have shown that the majority of males report driving 10,000 or more miles each year, while the majority of females report driving less than this amount. Males also report driving on more days of the week and more often after 8:00 p.m. than do females.

Samples of high school students in the state have indicated that approximately three out of four hold a driver's license, with males more likely so than females. Over 30 percent of the respondents in these surveys who were licensed, said they owned their own car. High school students reported less frequent driving than older drivers but drove more frequently after 8:00 p.m.

For many years the State Highway Department has operated a system of traffic counters throughout the state. A special study of these data for the year 1973 showed the following regarding the distribution of traffic counts by time of day and day of week.

<u>1973 Percent of Total Counts by Time Period</u>		<u>1973 Traffic Counts by Day of Week</u>	
Midnight - 4 a.m.	2.5%	Monday	13.5%
4 - 8 a.m.	8.9	Tuesday	13.1
8 a.m. - Noon	21.8	Wednesday	13.4
Noon - 4 p.m.	27.3	Thursday	13.6
4 - 8 p.m.	27.8	Friday	16.3
8 p.m. - Midnight	11.6	Saturday	15.4
		Sunday	14.6

These figures show that approximately 77 percent of vehicular travel is recorded between 8 o'clock in the morning and 8 at night, while the lightest period is between midnight and 4 a.m. when less than three percent of travel occurred. Regarding day of the week, the figures above show that Mondays through Thursdays had essentially the same volume levels, while somewhat higher levels were experienced on Fridays and weekends.

Traffic levels in the state are subject to large seasonal variations, due to climatic changes and an influx of tourists primarily during the summer months. To illustrate, the percentage of total 1976 traffic counts on New Hampshire turnpikes (at several locations) and the percentage of total 1976 gasoline consumption statewide were as follows during each month of the year:

<u>Month</u>	<u>Percent of Total Turnpike Traffic</u>	<u>Percent of Total Gasoline Sales</u>
January	5.3%	8.1%
February	5.8	6.5
March	5.9	7.7

April	7.1	7.9
May	8.3	7.8
June	9.2	8.8
July	13.5	9.8
August	13.6	9.4
September	9.3	8.6
October	8.5	9.2
November	7.2	7.8
December	6.4	8.5

2. Use of Alcoholic Beverages

New Hampshire is a liquor control state with packaged liquor and wine being sold from 67 state stores, while beer is sold by grocery type outlets. By dollar amounts, about 10 percent of sales are to holders of licensee permits (clubs, lounges, etc.) while the remainder are general consumer sales. Recent fiscal year sales of liquor and wines have been as follows:

1971	\$ 76,775,000
1972	90,691,000
1973	94,522,000
1974	95,834,000
1975	101,306,000

While prices have risen over the period, the bulk of the increase is believed due to increased volume. For example, over 3,700,000 more bottles of wine and liquor were sold in 1975 than in 1971.

On a per capita basis, New Hampshire liquor sales are among the highest in the country. However, sales to out of state residents confound estimates of actual in-state consumption.

There are approximately 850 on-premise drinking establishments in the state with about 30 percent of these being private clubs. Hours of sales for these establishments are from 6 a.m. to 1 a.m., except on Sunday when the hours are noon to midnight. In 1973, the legal drinking age in the state was reduced from 21 to 18 years. In 1977, the age was upped to 19 years.

A household survey conducted by the ASAP in early 1975 indicated that 84 percent of the males and 80 percent of the females responding said

they drank beer, wine or liquor, with 31 percent of these males and 11 percent of these females stating they often or occasionally drove after drinking. If these figures are projected to all licensed drivers in the state, the result would be over 439,000 drivers who drank and some 96,000 who often or occasionally drive after drinking.

In another (telephone) survey done in early 1976, approximately 73 percent of the males and 61 percent of the females indicated that at least once during the past three months they had been in a situation where alcoholic beverages were served. In this same survey, 49 percent of the males and 40 percent of the females said that in the past year they had been in one or more situations where someone had been drinking too heavily and was about to drive a car.

Questions similar to these were posed in a survey of high school juniors and seniors conducted in mid-1975. The results showed that 74 percent of the males and 58 percent of the females had consumed alcoholic beverages in the week before the survey, 27 percent of the males and 10 percent of the females often or occasionally drove after drinking, and 69 percent of the males and 61 percent of the females had been in a situation in the past year where someone had been drinking too much and was about to drive.

All of these lines show that a considerable number of New Hampshire drivers have had contact with, or involvement in drinking-driving situations. Using these figures, it is not unreasonable to project 100,000 or more alcohol impaired driving situations in the state each year. For example, if each drinking establishment in the state generated between two and three impaired drivers each week, this figure would be reached. Similarly, the State Program on Alcohol and Drug Abuse has estimated that there are some 44,000 problem drinkers in New Hampshire with about one-half this number classifiable as alcoholics. If each of these persons coupled excessive drinking with driving two or three times a year, the 100,000 impaired driving events would again be attained. From another point of view, there is general agreement that only a small percentage of alcohol impaired drivers are detected by police, with estimates of one in several hundred to one in several thousand being advanced. Assuming these estimates hold in New Hampshire, it is possible that there are two million or more occurrences in the state each year.

B. Description of Accident Experience

1. Fatal Accidents

During the final operational year of the ASAP, 1976, a total of 159 persons were killed in the 148 fatal motor vehicle accidents which occurred in the state. These figures respectively are five percent and seven percent

above comparable totals for a year earlier. For the five ASAP operational years (1972-1976) and the five years prior to the project, fatal accident experience was as follows:

	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Fatal Accidents	137	156	167	169	177	157	127	143	138	148
Victims	160	184	189	196	214	180	145	166	151	159

These data translate to an average of 161 fatal accidents and 189 victims annually in the five years before the project, and 142 fatal accidents and 160 fatalities as the average for the five ASAP years. Thus, during the ASAP, average annual fatal accidents declined by 12 percent and fatalities by 15 percent compared with the five years before the project.

Figure 7 shows the long term trend of fatal motor vehicle accidents and fatalities in New Hampshire. It can be seen in the figure that in the period from 1953 to about 1962, accident and fatality levels fluctuated on a year-by-year basis but with little, if any, upward trend. Beginning in the early 1960's, however, a general rapid rise took place. That is, over the 1962-1971 period, fatal accidents increased at an average rate of almost 10 per year and the number of fatalities doubled comparing 1971 with 1962. (During this same time span, the state's population increased by approximately 20 percent, motor vehicle registrations rose by 70 percent and annual vehicular mileage increased by 55 percent.) Finally, in 1972, coincident with the ASAP, fatal accidents and fatalities declined sharply, with this drop being a reversal of the trend in effect for a number of years before the project.

The following figures show a breakdown of fatal accidents during the 1967-1976 period by the basic type of accident involved.

	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Single Vehicle	63	84	71	81	89	80	60	70	71	83
Multiple Vehicle	56	49	59	61	58	50	38	45	37	41
Pedestrian	18	23	37	27	30	27	29	28	30	24

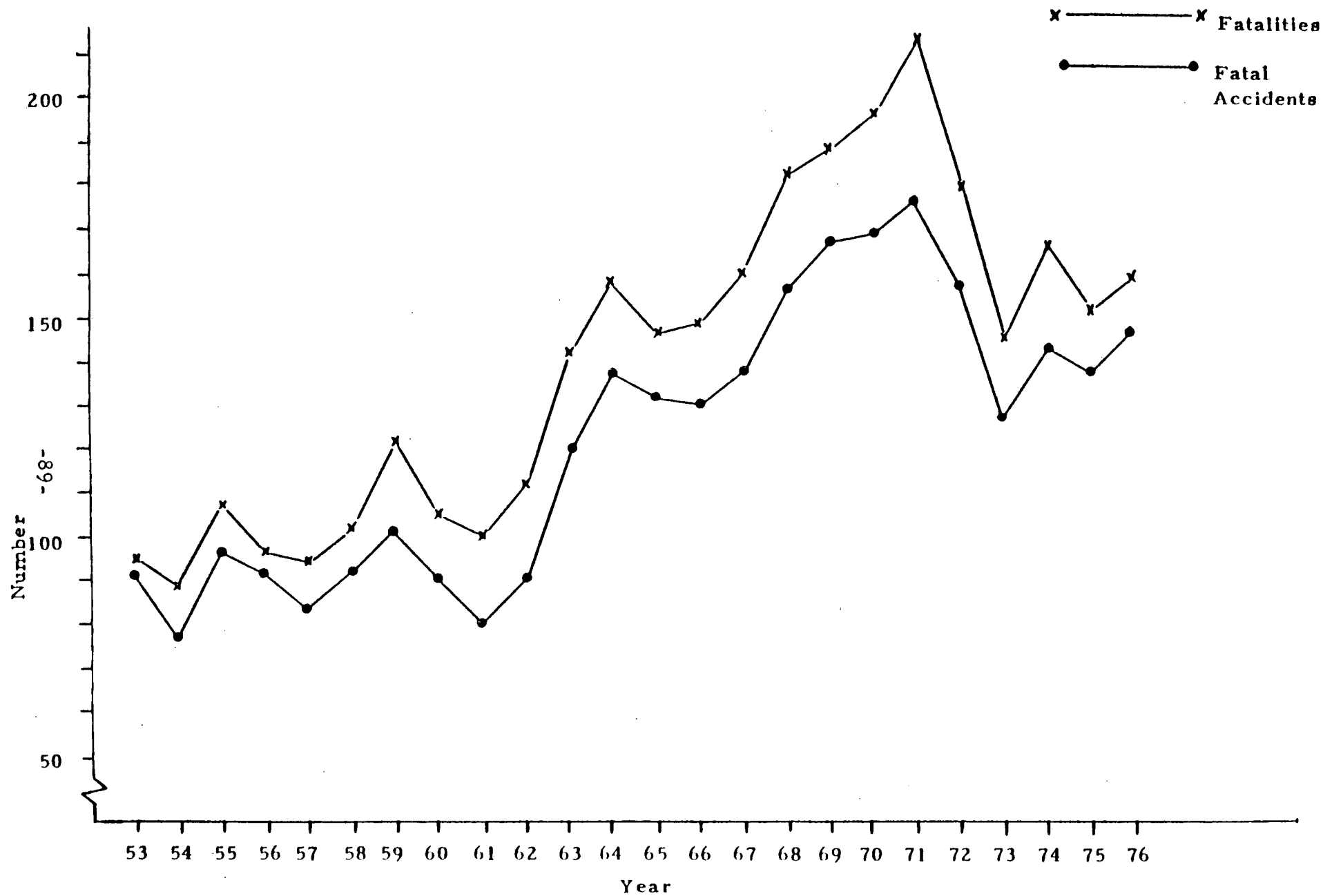


Figure 7 Fatal Accidents and Fatalities in New Hampshire, 1953-1976

In terms of annual averages, these figures yield:

	<u>1967-1971</u>	<u>1972-1976</u>	<u>Percent Change</u>
Single Vehicle	77.6	72.8	- 6.2%
Multiple Vehicle	56.6	42.2	-25.4%
Pedestrian	27.0	27.6	2.2%

It can be seen that during the ASAP years, the average number of multiple vehicle fatal accidents declined by 25 percent, single vehicle crashes declined by six percent while pedestrian accidents increased slightly compared with the averages of the five years before the project.

Figure 8 shows the motor vehicle fatality rate per 100 million vehicle miles in New Hampshire during the period 1953-1976. It may be seen that from 1953 to 1962 (when fatal accident totals were essentially constant) the fatality rate was subject to relatively large annual fluctuations, with some downward trend being evident. The upturn in accidents during the 1963-1971 period brought about a stabilizing of the fatality rate in the area of 4.5 per 100 million vehicle miles. Finally, the ASAP period saw marked reductions in the fatality rate, with the levels experienced during 1972-1976 being lower than any recorded in the state going back to at least 1931.

2. Injury Accidents

The long term trend in reported injury accidents in the state is shown in Figure 9. Here it can be seen that the annual total of these accidents was increasing in a linear manner over the 1953-1970 period. Beginning in 1971 the trend was interrupted, with reported injury accidents being relatively stable around the 6,300 level during 1971-1975.

The breakdown of injury accidents by type during four of the ASAP years* and the four years prior to the project are as follows:

*Accident details for 1976 are not available at this writing.

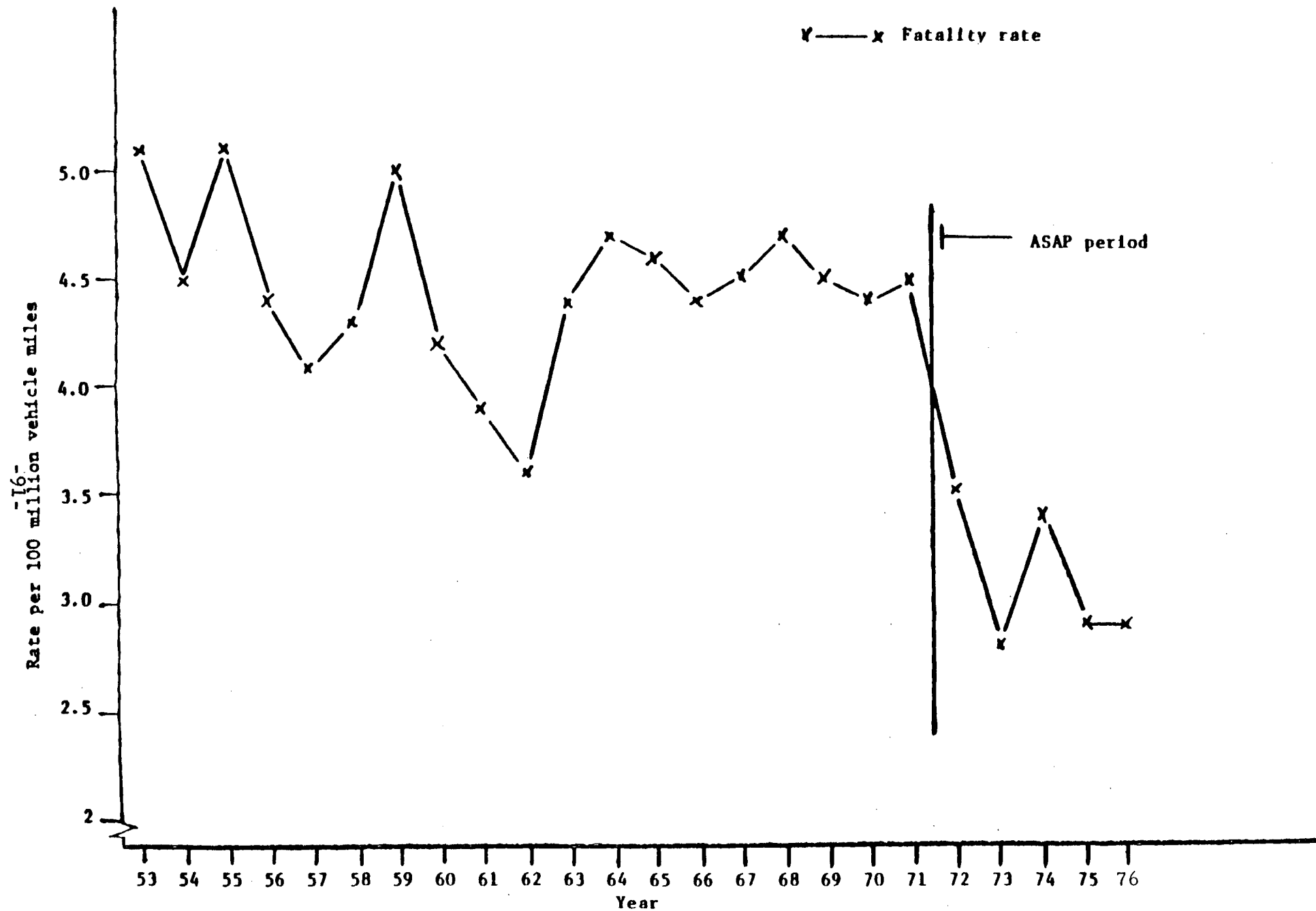


Figure 8 Fatalities per 100 Million Vehicle Miles

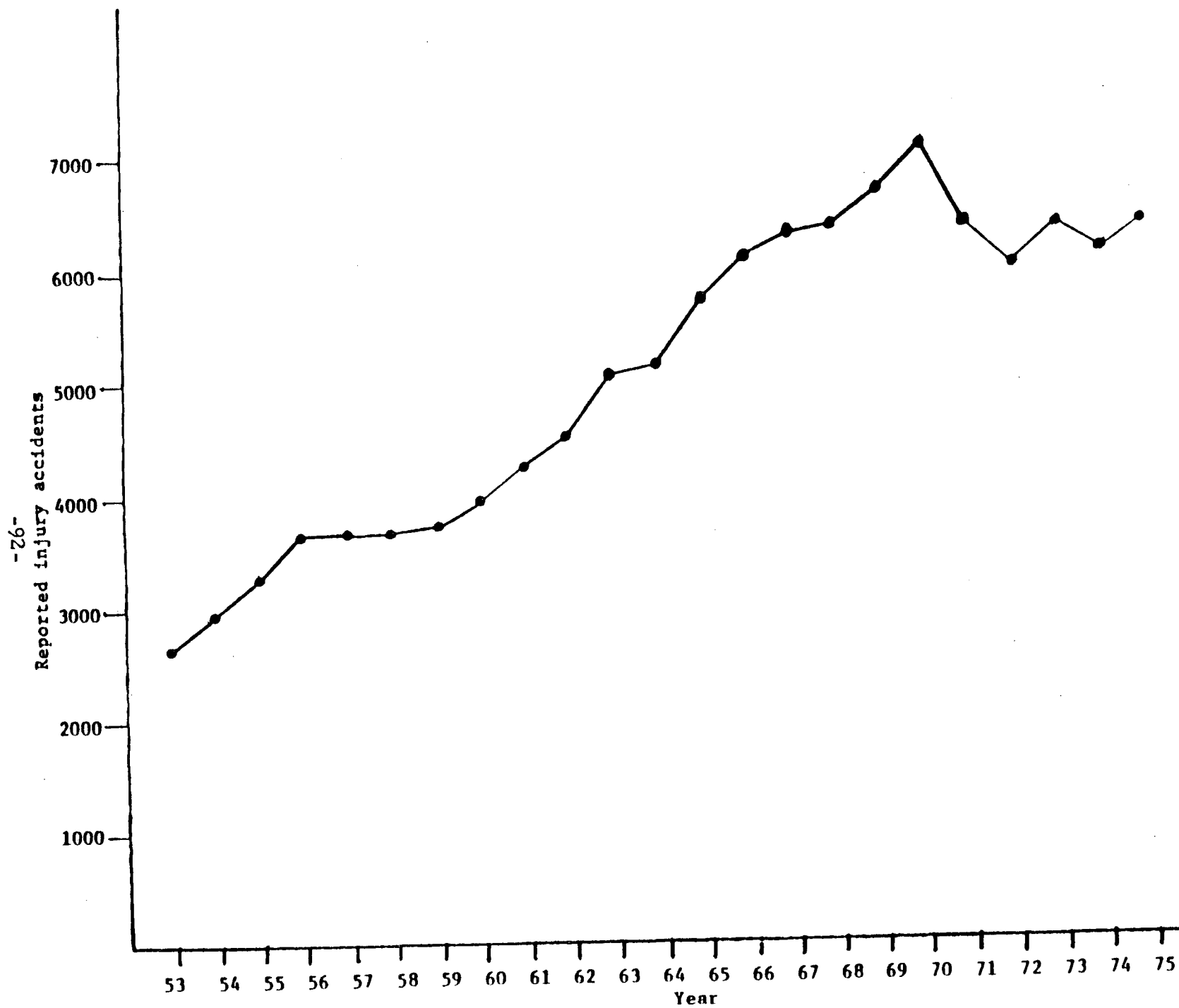


Figure 9 Reported Injury Accidents in New Hampshire 1953-1975

	1968	1969	1970	1971	1972	1973	1974	1975
Total Injury Accidents	6394	6615	7022	6342	6008	6385	6135	6414
Total Injured	9542	9682	10583	9582	8363	8703	8305	8618
Single Vehicle Accidents	1635	1685	1712	1596	1461	1778	1853	1950
Multiple Vehicle Accidents	4196	4406	4761	4187	3995	3928	3674	3835
Pedestrian Accidents	563	524	549	559	552	679	608	629

Based on annual averages, a comparison of the four ASAP years and the four years prior to the project indicates the following:

	<u>Baseline Average</u>	<u>Operational Average</u>	<u>Percent Change</u>
Total Injury Accidents	6,593	6,235	- 5.4%
Total Injured	9,847	8,497	-13.7
Single Vehicle Accidents	1,657	1,749	5.6
Multiple Vehicle Accidents	4,387	3,858	-12.1
Pedestrian Accidents	549	617	12.4

These figures indicate that while total injury accidents declined by 5.4 percent on average during the ASAP years, the decline was due entirely to fewer multiple vehicle injury crashes taking place. That is, the annual average of this type of accident declined by 12 percent while single vehicle injury accidents increased by almost six percent and pedestrian involved accidents rose by 12 percent.

VIII. INDEX OF PROJECT REPORTS

A. Administrative Documents

New Hampshire Alcohol Safety Action Project, Detailed Plan, New Hampshire Program on Alcohol and Drug Abuse, December 15, 1971.

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