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X ANALYTICAL STUDY NO. 3  
AN ANALYSIS OF ASAP PATROL ACTIVITY

D. A. REEDER  
G. L. DAVIDSON  
M. J. MILLER

MAUCHLY WOOD SYSTEMS CORPORATION  
102 SOUTH 27TH  
SUITE 100  
BOISE, IDAHO 83706

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16. Abstract <p>The Idaho ASAP began in June of 1972 and was in full operation by September 1972. All other countermeasures were successfully implemented and functioned throughout the operational project period.</p> <p>In June of 1975, after three years of operation, the full federal funding of the program expired. However, a modified version of the program was continued under state funding. The regional ASAP coordinators were discontinued and only the central project director in Boise was continued. The Public Information and Education countermeasure was discontinued. The ASAP Enforcement Patrol of twenty-six specially trained state policemen, the presentence investigation team, and the ASAP project management continued, using state funding drawn from a two percent state liquor tax surcharge. The Alcohol Data Bank and the Evaluation Information System were continued under a special ASAP evaluation extension in order to report on the effectiveness of the ASAP in its modified version.</p> <p>Although the Idaho ASAP and its integrated countermeasure approach has expired, many of the functions will continue.</p>			
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# METRIC CONVERSION FACTORS

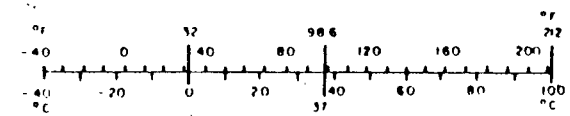
## Approximate Conversions to Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
<b>LENGTH</b>				
m	inches	2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
<b>AREA</b>				
m <sup>2</sup>	square inches	6.5	square centimeters	cm <sup>2</sup>
ft <sup>2</sup>	square feet	0.09	square meters	m <sup>2</sup>
yd <sup>2</sup>	square yards	0.8	square meters	m <sup>2</sup>
mi <sup>2</sup>	square miles	2.6	square kilometers	km <sup>2</sup>
	acres	0.4	hectares	ha
<b>MASS (weight)</b>				
oz	ounces	28	grams	g
lb	pounds	0.45	kilograms	kg
	short tons (2000 lb)	0.9	tonnes	t
<b>VOLUME</b>				
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 <sup>3</sup>	cubic feet	0.03	cubic meters	m <sup>3</sup>
yd <sup>3</sup>	cubic yards	0.76	cubic meters	m <sup>3</sup>
<b>TEMPERATURE (exact)</b>				
F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	C

1. The metric system is based on the meter, the gram, and the liter. The metric system is used in most countries of the world, including the United States and Mexico. The metric system is also used in the United Kingdom and Australia.

## Approximate Conversions from Metric Measures

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



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## ABSTRACT

Analytic Study Number 3 addresses the productivity, efficiency and impact of the Idaho ASAP Alcohol Emphasis Patrol. The Alcohol Emphasis Patrol (AEP) is a specially-trained 26-man patrol force which is deployed statewide. The AEP functions as a subunit of the Idaho State Police which provides a patrol captain and three regional sergeants to administer the patrol.

Section 2 analyzes ASAP patrol activity. In 1975, six, of 23.1 percent of the Alcohol Emphasis Patrol terminated or transferred to other law enforcement agencies.

Actual manpower utilization during 1975 differed little from the planned distribution by time of day. The 8 a.m. - 8 p.m. period had an excessive representation of patrol hours by the Alcohol Emphasis Patrol and the 8 p.m. - 8 a.m. period showed a deficient representation in patrol hours. This variation held true when we compared the distribution of alcohol-related accidents by time of day to Alcohol Emphasis Patrol deployment by time of day.

When comparing the distribution of alcohol-related accidents by day of week to Alcohol Emphasis Patrol deployment by day of week, we noted no significant differences.

Section 2.2 analyzes the relationship between ASAP patrol activity and accident reduction. There was a significant increase in the percentage of people that believe their chance of arrest for DWI is greater than 50 percent.

Section 2.4 provides a comparison of DWI offenders by the Alcohol Emphasis Patrol and the Idaho State Police to fatally injured drivers, the average Idaho Driver and Baseline DWI offenders.

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## 1.0 INTRODUCTION

This report is an analysis of the full three operational years of the Idaho Alcohol Safety Action Project (ASAP). This is the fourth in a series of annual analytic studies which are written in an effort to determine the effects of the project in Idaho. The first series of studies dealt with only six months of operational data collected during the start-up period. The present series of studies will primarily analyze the data collected during 1973, 1974 and 1975. Data previous to 1973 is mainly indicative of the drinker-driver situation before the ASAP began impacting the community towards the close of 1972.

The Idaho ASAP began in June of 1972 and was in full operation by September of 1972. Twelve countermeasures, as listed below, were utilized in the design of the project:

- Project Management
- Enforcement
- Judicial and Prosecution Assistance
- Expert Witness/Chemical Laboratory
- Education/Re-education
- Rehabilitation
- Driver Testing, Licensing and Regulation
- Public Information and Education
- Legislative and Regulatory
- Medical Advisory Board
- Alcohol Data Bank
- Information Services

The Prosecution Assistance function was intended to aid monetarily in the prosecution of DWI cases, but was discontinued due to resistance from the prosecution office. A team of twelve presentence investigators was created and functional throughout the project period. These investigators reviewed the background of convicted DWI's and presented recommendations on sentencing and rehabilitation.

The medical advisory board, intended to develop criteria for withholding licenses for medical reasons, was not implemented and was also discontinued. This function is carried out by the Idaho Licensing sub-division of the Department of Law Enforcement.

All other countermeasures were successfully implemented and functioned throughout the operational project period.

In June of 1975, after three and one-half years of operation, the full federal funding of the program expired and the program was continued, although in a somewhat modified version. The Public Information and Education countermeasure was discontinued. The ASAP enforcement patrol of twenty six specially trained state policemen and the presentence investigation team and the ASAP project management continued, using state funding drawn from a three percent state liquor tax surcharge. The Alcohol Data Bank and the Evaluation Information System were continued under a special ASAP evaluation extension in order to report on the effectiveness of the ASAP in its modified version. The remainder of the countermeasure functions were continued in the state agencies in which they originally evolved.

In June of 1976, the ASAP project management will be discontinued. However, two countermeasures which are perhaps the most effective will be continued. The team of pre-sentence investigators will be continued under the Probation and Parole Department and under this agency their function will be extended to criminal as well as DWI offenses. The ASAP Alcohol Emphasis Patrol will be continued as long as their funding is renewed each year by the legislature.

The final post-ASAP analytic studies will be completed in June of 1977.

This study is Analytic Study Number 3 of the series, An Analysis of ASAP Patrol Activity,

Prior to the implementation of the ASAP Emphasis Patrol in June of 1972, the Idaho State Police had a patrolling force of 104 men. It was possible during early morning hours to have no State Police on duty in many areas of the state.

As a result of Idaho's participation in the ASAP project, the Idaho State Police patrolling force has increased 25% and the entire State Police force has been rescheduled, so there are always State Police on duty.

The Alcohol Emphasis Patrol (AEP) is a 26-man force specially trained in the detection and apprehension of drinking drivers. Each man received the standard State Police training as well. These men operate from cars marked like regular State Police cars. Because of the increased emphasis on the drinker-driver by the AEP; the regular State Patrol, the county sheriffs, and the city police of Idaho have also increased their emphasis on drinker-driver apprehension. ASAP patrol activity has contributed to public awareness of the Idaho Alcohol Safety Action Project. A major point of interest throughout Idaho has been the number of State Police that ASAP added to the force.

This report describes the special ASAP patrol enforcement countermeasure operation and strategies. The report also attempts to explore relationships between levels of enforcement and levels of accident occurrence. Demographic profiles of arrested DWI's are compared with profiles of fatally injured drivers to determine whether the target group is the same group at which enforcement is aimed. In addition, the efficiency of the patrol and its effect on other patrol activity in the state is discussed.

## 1.1 DESCRIPTION OF THE ASAP COMMUNITY

In order to understand the nature of the drinking driving problem with which the Idaho ASAP must deal, an understanding of the characteristics of the community is desirable. Exhibit 1.1-1 presents a summary of community descriptor data relating to the Idaho ASAP. Other less tangible aspects of the Idaho ASAP community are also described in this section.

Idaho is a largely rural state of approximately five hundred miles in length and three hundred miles in width. Most of the inhabitants live in population centers under 50,000. There are approximately 56,000 miles of roads in the state with only 142 state patrolmen in addition to local enforcement to provide traffic law enforcement. Many of the state's roads are through winding mountainous areas which are slick with ice and snow in the winter. There is a migrant farm labor population during the summer, along with Indian reservations and military bases which account for a disproportionate number of DWI offenders. During the recreational season, normal traffic is swelled with a large tourist population. All these factors combine to make Idaho's fatality rate the fourth highest in the nation.

Against these factors, the Idaho ASAP is attempting to reduce alcohol-related fatality and injury accidents, but there are many obstacles. The extent of the drinking problem is severe with the average positive BAC (before ASAP) being .15 percent. It is illegal in Idaho to publicly identify the BAC of a fatally injured driver, so that this must be done indirectly with many BAC samples going unmatched, unidentified, not submitted, taken after four hours from the time of the accident, or contaminated with embalming fluid. Less than 50 percent of the fatal blood samples are received. Most recordkeeping is done manually and the few automated systems that do exist keep only that data required for internal use, and much of this is entered with no data verification. The drinking age was lowered to 19 in July of 1972. There is no lesser violation to which a DWI can be plea bargained down to and still retain its indication as an alcohol-involved arrest. A DWI is routinely treated as a misdemeanor. Subsequent DWI violations may be treated as a felony, but this requires special action on the part of the prosecutor. Withheld judgements are not considered to be convictions by the court, and they are not always included in the driver's record.

According to current statutes, it is legal to have an open container of beer in the driver's compartment, because the amount of alcohol in beer does not meet the definition of an alcoholic beverage. These factors combine to make alcohol involvement a large factor in accidents.

In order to operate the ASAP project on a statewide basis, Idaho has been divided into three administrative regions with a functional coordinator reporting to Project Management in each region. These regional coordinators act as a localized management in each region and provide aid to the separate countermeasures in carrying out their operations. In addition, these coordinators oversee the roadside surveys and address civic groups and various community organizations, thereby aiding in the dissemination of information regarding ASAP goals and activities and soliciting public support.

EXHIBIT 1.1-1  
ASAP COMMUNITY DESCRIPTOR

<u>Annual Alcohol Consumption Rate</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1973-1974 Variance</u>	<u>1974-1975 Variance</u>
Beer (Million Gallons)	17.5	18.9	17.5	8.0%	- 7.4%
Wine (Thousand Gallons)	935	975	1114	4.4%	14.3%
Liquor (Thousand Gallons)	977	1032	1131	5.6%	9.6%
Equivalent Drinks (Millions)*	300	321	319	7.0%	- .6%
Per Capita Drink Consumption**	386.6	412.1	386.6	6.4%	- 6.2%
<u>Licensed Drivers (Thousands)</u>	540	551	567	2.0%	2.9%
<u>Fuel Consumption (Million Gallons)</u>	469	443	486	-5.5%	9.7%
<u>Miles Driven (Billion Miles)</u>	5.455	5.387	5.828	-1.2%	8.2%
<u>Accidents</u>					
Fatal Accidents	277	281	237	1.4%	-15.7%
A/R Fatal Accidents	92	93	89	1.1%	- 4.3%
Fatalities	349	327	281	-6.3%	-14.1%
Injury Accidents	7533	7234	7362	-4.0%	- 1.8%
A/R Injury Accidents	910	977	766	7.4%	-21.6%
<u>ASAP Data - H Tables</u>					
DWI Arrests	6892	7719	6504	12.0%	-15.7%
DWI Convictions	5995	7118	5644	18.7%	-20.7%
	(87.2%)	(92.2%)	(86.8%)		
BAC's Taken	2965	3652	3235	23.2%	-11.4%
	(43.2%)	(51.3%)	(49.7%)		
Presentence Investigations	2749	2991	2545	8.8%	-14.9%
	(45.8%)	(42.0%)	(39.1%)		

\* Equivalent Drinks: 12 oz. beer = 4 oz. wine - 1.5 oz. liquor

\*\* Based on population respectively for 1973, 1974 and 1975 of 776,000, 779,000, and 825,000.

ASAP project personnel consists of a project director, an assistant project director, and three regional coordinators. A functional coordinator for each countermeasure represents the agency which is directly involved in the countermeasure activities. Active countermeasures are Evaluation, Public Information, Project Management, Court Alcohol School (Alcohol Safety School), Driver Testing and Licensing, Driver Regulation, Magistrate Training, Alcohol Emphasis Patrol, Social Rehabilitation, Chemical Laboratory and Expert Witness, and the Alcohol Data Bank. Inactive countermeasures are the Medical Advisory Board and Prosecution Assistance.

The Chemical Laboratory is operated by the Idaho State Department of Health and Welfare. Public Information and Education has been subcontracted to an advertising agency. The Court Alcohol School is operated by the State Department of Education on a self-paying basis. Driver Testing, Licensing, and Regulation, along with Legal Advisory, are fulfilled by the State Department of Law Enforcement. The 26 man Alcohol Emphasis Patrol is managed by the Idaho State Police. Eleven presentence investigators and a supervisor are directed by a functional coordinator from the Supreme Court. Rehabilitation is provided by the Court Alcohol School established as an ASAP countermeasure, the Driver Improvement Counseling Program operated by the driver licensing division of the State Department of Law Enforcement, Defensive Driving Course and other rehabilitation agencies, such as Halfway House, AA, private hospitals, Mental Health facilities, and other available rehabilitation in each region.

Because of the lack of centralized administration of the State's rehabilitation facilities, and the independent operating characteristics of the local judiciaries, no attempt has been made to initiate control groups for the purpose of evaluating rehabilitation treatment modalities.

## 1.2 EVALUATION INFORMATION SYSTEM

The evaluation of the Idaho ASAP was contracted to a private systems development corporation. In order to accomplish the objectives of evaluation, an Evaluation Information System was developed. This system is composed of an Alcohol Data Bank, the computer programs which create and maintain it; and the evaluation computer programs which create Appendix H quarterly and annual tables and data analyses included in the analytic studies. In addition, the project evaluators prepare the data collected from various agencies for data entry to the Alcohol Data Bank and aid Project Management in decision-making activities by providing information and special reports on an on-request basis.

When the ASAP program was in the planning stage, alcohol-related data was gathered by many different agencies for internal use in a multitude of data organization techniques. In order to facilitate the integration of data concerning each individual who came in contact with the ASAP system, the Alcohol Data Bank was established. This file acts as a central repository of data concerning each individual and is organized so that pertinent data can be easily retrieved by authorized personnel to form a case history of an individual. Data from participating agencies is collected on an on-going basis as subjects have initial or repeat contacts with an agency.

Exhibit 1.2-1 summarizes the data elements collected from various agencies within the ASAP system. All elements taken together constitute a very complete picture of the history and present status of any individual in the system. In practice, defendant data is complete only to the extent that it is collected by each agency. For instance, demographic data is available only for valid, licensed drivers. Out-of-state drivers and unlicensed drivers do, in fact, account for a significant number of drivers arrested for DWI. Other demographic data such as family income, education, employment status, occupation, religious preference, etc., is collected by the presentence investigator in approximately ninety percent of the investigations. Since presentence investigations are requested in 42% of the convictions, then this data is present approximately 37.8% of the time. If a driver has recently moved to Idaho, then his driver history folder will not contain his past violations. A driver arrested for DWI who forfeits bond will not have a record of the arrest in the driver file unless the arrest was made by the Idaho State Police. Courts are only required to record convictions, and because withheld judgments are not considered to be convictions by the court, they go unreported unless the disposition was recorded by the Idaho State Police or a presentence investigator and reported to the Alcohol Data Bank.

As with all computer systems, the data that comes out is only as good as the data that goes in, and the Evaluation Information System is no exception. The pre-ASAP baseline data that was collected going back to the year 1969 reflects to a large extent the recent upgrades made to Idaho's traffic records data. The Department of Law Enforcement began recording DWI convictions statewide in 1969. Some records of withheld judgments were submitted by the courts, but none were entered on the driver records file. In 1969, only accidents that occurred on State and Federal highways were recorded centrally. In 1970, all accidents



## 1.2 EVALUATION INFORMATION SYSTEM (Continued)

were recorded by the locations in which they occurred, but the license numbers of the participants were not recorded. In 1972, the Department of Highways constructed a manual index from police and citizen's accident reports to connect driver license numbers with accident report numbers. The index was built to gain statistical data from the accident files, and it was created using no controls. The accident report number changed format several times, further complicating the matching process. In April 1972, the Department of Law Enforcement began its own accident index and the Department of Highways abandoned its accident index, except for the copy retained by ASAP. Using the combined accident index files of the two departments, the accident history file is passed against the Alcohol Data Bank and accident segments are added whenever there is a match on drivers license numbers. Using this technique, 40% of the accidents requested from the baseline history tape were added to the Alcohol Data Bank.

The extent of alcohol involvement is understated for the Pre-ASAP period due to the small number of blood alcohol tests taken and the low sample rate of autopsy BACs. The Had Been Drinking indicators on traffic tickets are seldom used by officers because they may become personally liable if they cannot furnish proof of the implication of drinking. Referrals to rehabilitation agencies are recorded when they are made by an ASAP presentence investigator. The actual attendance of the rehab is currently only known in the case of Court Alcohol School. In other cases, there are no records of no-shows, drops, or satisfactory completion.

## EXHIBIT 1.2-1

## ALCOHOL DATA BANK DATA ELEMENTS

Information	Source
Subject Demographic Data	DLE Driver Licensing Data
License Suspension Data	DLE Driver History File
Driver Improvement Counseling Program Data	DLE Driver History File
Blood Alcohol Test Data	DH&W Chem Lab
Court Alcohol Attendance Data	Department of Education
Autopsy BAC Data	DH&W Chem Lab
BAC Test Refusal Data	DLE Driver Records
Accident Data	DLE Accident History
Driving Violation History	DLE Driver History File
DWI Conviction Data	DLE Driver History File
DWI Trial Data	Presentence Investigator
DWI Arrest Data	Idaho State Police
Probation Follow-Up Data	Presentence Investigator
Records Check History	Presentence Investigator
Defendant Interview Data	Presentence Investigator
Family Interview Data	Presentence Investigator
Rehab Agency Contact Data	Presentence Investigator
Criminal Investigation Division Data	Presentence Investigator
Employer Interview	Presentence Investigator
Drinker Classification	Presentence Investigator

## 2.0 ANALYSIS OF ASAP PATROL ACTIVITY

The 26-man Alcohol Emphasis Patrol is faced with the task of patrolling the entire State of Idaho. In order to accomplish this, the patrol is broken up into three sections with one section headquartered in each ASAP management region. Although the number of miles of roadway in the state totals over 56,000, the population of Idaho centers around three major clusters, one in each management region. This allows the patrol to center its activity near or between the more populous sections where the majority of alcohol-related accidents occur.

Because the patrol units must be spread over such large areas of the state, it is impractical to use specialized techniques developed and successfully used in other states such as mobile blood alcohol testing vans or centralized arresting or booking units for efficient processing of DWI's. Pre-arrest breath testing devices are not used in Idaho simply because there are no statutes which give the officer the authority to administer such a test, nor does it appear that the political climate is right for passing such a law. Video tape is available in a few enforcement centers. However, video tape is not part of the standard arrest procedures.

Although no special techniques are used, the ASAP patrol continues to arrest over two and one-half times the number of DWI's projected, and the conviction rate of DWI cases is at the 90% level.

### 2.1 ASAP ARREST PROCEDURE AND STRATEGY

The purpose of this section is to provide a backdrop against which Idaho ASAP Alcohol Emphasis Patrol (AEP) activities may be viewed. The selection and training of the original members of the Alcohol Emphasis Patrol unit and the selection and training of replacement personnel are briefly described. General operating characteristics, arrest procedures, and deployment strategies are also discussed.

#### 2.1.1 SELECTION AND TRAINING OF ASAP PERSONNEL

Since there were six personnel turnovers among the 26 AEP officers in 1975 (no personnel turnovers occurred among the three regional sergeants or the Captain of the AEP), attention will also be given to the selection and training of replacements.

##### 2.1.1.1 SELECTION AND TRAINING OF THE ORIGINAL AEP UNIT

The original AEP unit was composed of seven experienced Idaho state Police troopers and nineteen new recruits. These men were hand-picked by the AEP Captain based on personal interviews and entrance examination scores.

The 26 members of the AEP and their three regional sergeants were given an intensive sixty-hour course on DWI arrest procedures, collection of evidence, etc., in addition to their regular POST training.

This course was conducted by instructors from the International Association of Chiefs of Police. Both pre- and post-instructional tests were administered. A statistical analysis of these tests was performed and is documented in Evaluation Report DRC-72-001-I, dated August 1, 1972. An abstract of that report follows.

#### 2.1.1.1 SELECTION AND TRAINING OF THE ORIGINAL AEP UNIT (Continued)

##### STATISTICAL ANALYSIS OF ALCOHOL EMPHASIS PATROL TRAINING--ABSTRACT

This report concerns the evaluation of the Alcohol Emphasis Patrol Training Countermeasure. Under this countermeasure, 44 policemen (26 Alcohol Emphasis Patrolmen and 18 regular Idaho State Policemen) received sixty hours of specialized training directed at the problem drinker-driver. This course was administered by instructors from the International Association of Chiefs of Police.

Evaluation of this countermeasure involves analysis of "pre" and "post" test scores to determine if the participants learned from the course and, of so, was this increase in knowledge statistically significant.

The average pre-test score for the 26 Alcohol Emphasis Patrolmen was 34.69. The average post-test score was 39.27, an increase of 4.58 points or 13%. Using Fisher's "t" test for determining significant differences between sample means, this increase was proven to be statistically significant with a 99% level of confidence.

The 13% increase in knowledge fell short of the targeted 25% increase; however, a background check of the 26 patrolmen tested revealed that they had a combined experience background of 53 years in police work. That is an average of 2.03 years per man. In light of this fact, the 13% increase obtained is a notable achievement.

Forty-four policemen successfully completed the course. This was four more than the number targeted. The total cost of the training, including the salaries of the policemen attending, was \$9,975.75, or \$226.72 per man. Relating this cost to the knowledge gained, the cost of bringing a new recruit to the knowledge level of an experienced officer was only \$226.72.

#### 2.1.1.2 SELECTION AND TRAINING OF AEP REPLACEMENTS

When AEP officers were transferred to other regular ISP force or left the force, replacements had to be selected quickly in order to maintain the full patrol strength. The choice of officers who might be replacements is limited; therefore, when the vacancies occurred in 1975, the replacements were selected through negotiations of the AEP commanding officer and his superior. These selections were based primarily on the AEP commanding officer's judgment and his negotiation skills.

The turnover rates of Alcohol Emphasis Patrol personnel are presented in Exhibit 2.1-1. We noted a 23.1% turnover rate in personnel in 1975. To date, 13 of the original AEP force have transferred to the regular ISP force or terminated. Replacements did not go through the same training as the original force.

To date, only 50% of the original force remains. The experience level of the Alcohol Emphasis Patrol force has decreased because the replacements have little or no prior police experience.

2.1.1.2 SELECTION AND TRAINING OF AEP REPLACEMENTS (Continued)

EXHIBIT 2.1-1  
ALCOHOL EMPHASIS PATROL TURNOVER ANALYSIS

	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Patrolmen	26	26	26	26
Turnover	2	3	6	6
Turnover %	7.7%	11.5%	23.1%	23.1%
Original Force Left	24	21	15	13
% Original Force Left	92.3%	80.8%	57.7%	50%

2.1.1.3 GENERAL OPERATION CHARACTERISTICS

The Idaho ASAP Alcohol Emphasis Patrol operates as a sub-unit of the Idaho State Police. The AEP officers have the same responsibilities and authority as regular Idaho State Police officers. The following data describes the general operating characteristics of the Alcohol Emphasis Patrol.

Personnel Assignment

Full-time assignments are used. Individual officers may work overtime if required; however, this is not part of the operating plan.

Vehicle

Vehicles marked and equipped identically to regular Idaho State Police vehicles are used.

Type of Unit

One-man patrol units are employed.

Patrol Unit Density

Due to the large geographic area patrolled, patrol unit densities are normally single units. The patrol is allowed the flexibility to assign multiple units at the Regional ASAP Sergeant's discretion.

Patrol Area

The average patrol route involves approximately 150 patrol miles per shift. These are typically State and Federal highways with occasional patrol on county roads. The land use characteristics in these areas are generally rural and agricultural. Approximately eighty-seven percent of all Idaho fatal accidents occur on rural roads.

Duration

Patrol duration is normally nine hours per day, with one hour off for lunch. Actual hours expended exceed this amount by 1.16 hours per day.

Time Frame

The Alcohol Emphasis Patrol is deployed in the shifts as follows:

Shift 1 - 0900 to 1800 = 19% of available force

Shift 2 - 1600 to 0100 = 34% of available force

Shift 3 - 1800 to 0300 = 47% of available force

BAC Tests

BAC tests are taken at the site of arrest, using portable (SM-7) Mobile Breath Alcohol Test kits (MOBAT).

#### 2.1.1.2 SELECTION AND TRAINING OF AEP REPLACEMENTS (Continued)

##### Physical Coordination Tests

Physical coordination tests are conducted at the site of arrest. The following tests are used:

- Balance
- Walking
- Finger to Nose
- Pick Up

##### Disposition of Arrestee

The arrestee is transported to the nearest law enforcement complex where he may elect to be released on bail or be incarcerated.

#### 2.1.2 DWI ARREST PROCEDURES

DWI arrest procedures for the Alcohol Emphasis Patrol unit are the same as those used by the regular Idaho State Police force. A brief description of this procedure is contained in this section. For a detailed description of Idaho State Police DWI arrest procedures, the reader is referred to Section 3.6 of the Idaho ASAP Detail Plan.

##### Arrest Procedure

The ASAP officer when on patrol observes a DWI--he stops the vehicle. The officer observes the physical condition and gives the subject the tests from the Alcoholic Influence Report Form. At this time, the officer determines if he will arrest, orally warn, or arrest for a lesser offense.

He then arrests the violator, gives the Miranda Warning, and gets a chemical test from the offender. Upon refusal, the officer reads the offender 49-352, Refusal Code, and makes note of refusal on the citation for the Headquarters file. Upon refusal, an Affidavit of Refusal will be filled out, notarized, and sent to Boise.

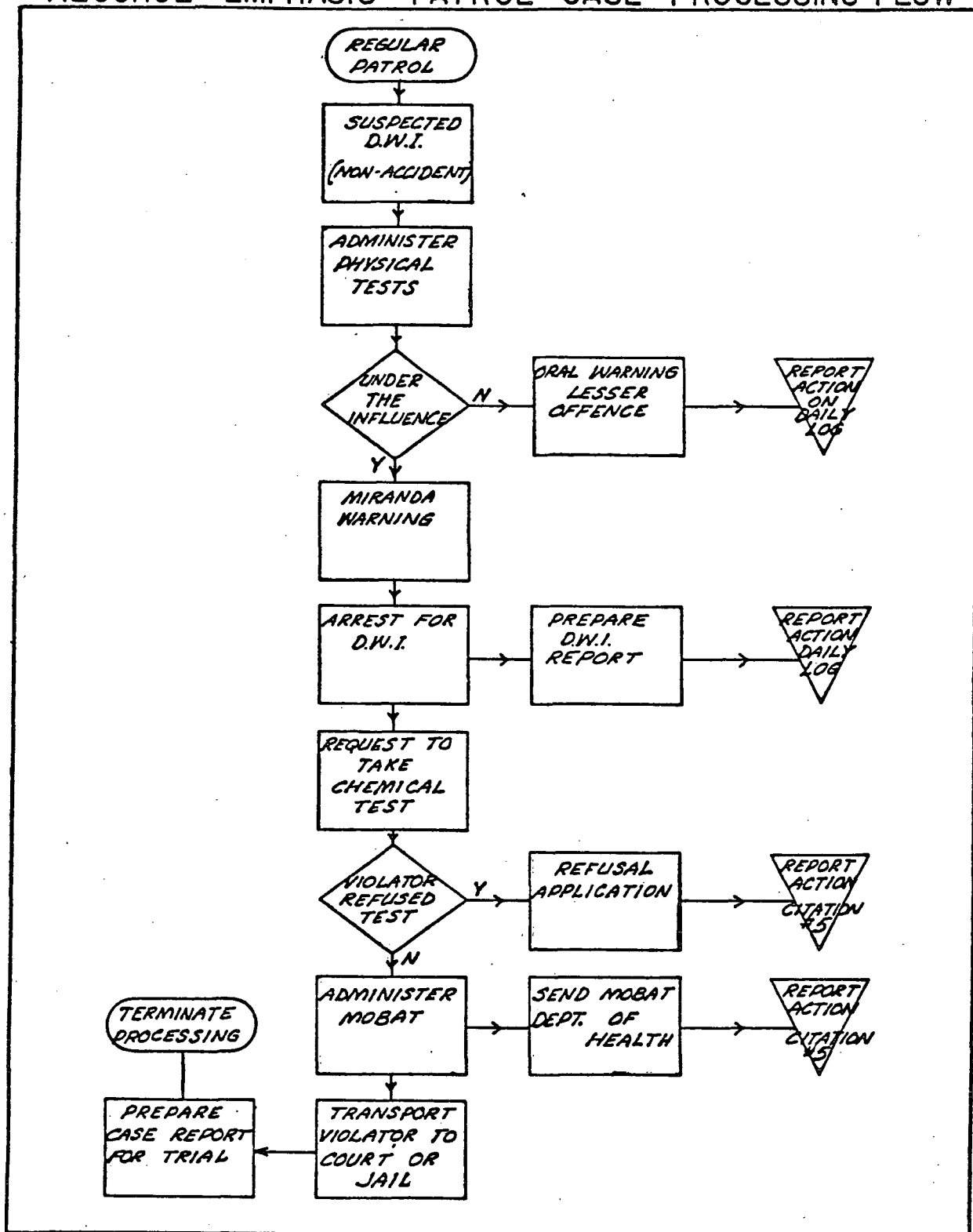
Upon administering a MOBAT (Mobile Breath Alcohol Test), the finished MOBAT is mailed to the nearest Department of Environmental and Community Services Laboratory.

MOBAT taken, not taken, refused, or not offered is noted on citation. The suspect is transported to county jail, is either submitted to bail or jail. The officer then prepares his case for court.

A visual flow chart of this process is presented in Exhibit 2.1-2.

EXHIBIT 2.1-2

ALCOHOL EMPHASIS PATROL CASE PROCESSING FLOW



### 2.1.3 CURRENT DEPLOYMENT STRATEGY DESCRIPTION

The current AEP deployment strategy is contained in this section. Those persons desiring more detailed information are referred to Section 3.6.4.4.3.1 of the Idaho ASAP Detailed Plan.

The Alcohol Emphasis Patrol operates on a rural patrol basis where 86.9% of all fatal accidents occur. The AEP is deployed in areas with a high level of alcohol-related traffic incidents. These were determined by an analysis of the times and locations of past alcohol-related traffic accidents and citations.

#### 2.1.3.1 REGIONAL DEPLOYMENT

Based upon the high accident locations (see Exhibit 2.1-3) in each region, the twenty-six ASAP patrolmen are deployed as follows:

One sergeant and eight troopers are assigned to Region I. The sergeant and five troopers are stationed at Coeur d'Alene. Three troopers are stationed at Lewiston.

One sergeant and eight troopers are assigned in Region II and are stationed in the Boise Valley area.

One sergeant and ten troopers are stationed in Region III. The sergeant and five troopers live in Twin Falls; three troopers in Pocatello; and two troopers at Idaho Falls.

#### EXHIBIT 2.1-3

##### NUMBER OF MEN PER REGION

<u>Basis for Deployment</u>	<u>Region I</u>	<u>Region II</u>	<u>Region III</u>
According to DWI (1971)	6.76	4.94	14.3
According to Accidents	7.54	7.02	11.44
Combined DWI and Accident Rates	7.59	6.78	11.61
Officers Assigned	8	8	10

Alcohol Emphasis Patrolmen have been deployed in accordance with the combined DWI and accident rates shown in the above table, except one man was moved from Region III to Region II because of the population density in Region II.

#### 2.1.3.2 ALCOHOL EMPHASIS PATROL DEPLOYMENT BY TIME OF DAY

The Alcohol Emphasis Patrol is deployed in three shifts as follows:

1. Shift 1 - 0900 to 1800 = 19% of available force
2. Shift 2 - 1600 to 0100 = 34% of available force
3. Shift 3 = 1800 to 0300 = 47% of available force

Planned and actual manpower distributions for 1974 and 1975 are presented in Exhibit 2.1-4.



EXHIBIT 2.1-4  
ALCOHOL EMPHASIS PATROL MANPOWER DISTRIBUTION

Time of Day	Plan	1974			1975		
		Actual Hours	Actual %	Cum %	Actual Hours	Actual %	Cum %
4 am - 4 pm	.147	9,019	.154	.154	9,647	.166	.166
4 pm - 8 pm	.853	17,362	.296	.450	17,412	.299	.465
8 pm - M	.853	19,643	.335	.785	18,674	.321	.786
M - 4 am	.853	12,630	.215	1.000	12,501	.215	1.000
		<hr/> 58,654			<hr/> 58,254		

EXHIBIT 2.1-5  
IDAHO FATAL AND INJURY A/R ACCIDENTS  
BY TIME OF DAY

Time of Day	1972			1973			1974			1975		
	A/R	%	Cum %	A/R	%	Cum %	A/R	%	Cum %	A/R	%	Cum %
Noon - 4 pm	79	.078	.078	82	.082	.082	91	.085	.085	73	.085	.085
4 pm - 8 pm	225	.223	.301	206	.206	.288	192	.180	.265	148	.173	.258
8 pm - Midnight	309	.306	.607	309	.309	.597	361	.339	.604	204	.238	.496
Midnight - 4 am	322	.319	.926	328	.328	.925	338	.317	.921	256	.299	.795
4 am - 8 am	39	.039	.965	40	.040	.965	47	.045	.966	62	.073	.868
8 am - Noon	30	.030	.995	25	.025	.990	29	.027	.993	40	.046	.914
Unknown	6	.006	1.000	10	.010	1.000	8	.007	1.000	72	.084	1.000
Total	1010			1000			1066			855		

KS Values for P = .05

1972 vs 1973 .0606  
 1972 vs 1974 .0596  
 1973 vs 1974 .0599  
 1972 vs 1975 .0632  
 1974 vs 1975 .0624

### 2.1.3.2 ALCOHOL EMPHASIS PATROL DEPLOYMENT BY TIME OF DAY (Continued)

The basis for deployment by time of day is the time of day when alcohol-related accidents occurred based on Fatal Accidents. As reported in Exhibit 2.1-5, the periods of highest alcohol involvement were from 8 pm to midnight and from midnight to 4 am. The next period of moderate involvement was from 4 pm to 8 pm. In order to patrol during these times, the patrol would have to be deployed in twelve-hour shifts. This was not possible. The basic patrol period was from 1800 or 6 pm to 0300 or 3 am.

We compared and tested the distribution of alcohol-related accidents for 1972, 1973, 1974, and 1975. We utilized the Kolmogorov-Smirnov technique described in Section 3.3. The results of these tests are also presented in Exhibit 2.1-5. In comparing 1974 and 1975, there is a significant decrease in the number of A/R fatal and injury accidents in the 8 pm to midnight time period. There is also a significant increase in the "unknown" time period accident class.

We also compared and tested the distribution of Alcohol Emphasis Patrol hours by time of day. We utilized the Kolmogorov-Smirnov technique described in Section 3.3. The results of these tests are presented in Exhibit 2.1-6. We found no significant differences in the distribution by time of day of AEP patrol hours.

EXHIBIT 2.1-6  
ALCOHOL EMPHASIS PATROL HOURS DISTRIBUTION  
BY TIME OF DAY

	1974			1975		
	Patrol Hours	%	Cum %	Patrol Hours	%	Cum %
Noon - 4 pm	6186	.1055	.1055	5888	.101	.101
4 pm - 8 pm	17362	.2960	.4015	17412	.299	.400
8 pm - Midnight	19643	.3349	.7364	18764	.322	.722
Midnight - 4 am	12630	.2153	.9517	12501	.214	.936
4 am - 8 am	651	.0101	.9628	482	.008	.944
8 am - Noon	2182	.0372	1.0000	3277	.056	1.000
	<hr/> 58654			<hr/> 58234		

KS @ P.05 = .007

### 2.1.3.2 ALCOHOL EMPHASIS PATROL DEPLOYMENT BY TIME OF DAY (Continued)

Comparing 1974 and 1975 patrol hour distributions, there has been a decrease in hours from 8 pm to midnight, and an increase in patrol hours in the 8 am to noon slot because of the schedule change in July, 1975.

We compared and tested the 1975 distributions of alcohol-related accidents and Alcohol Emphasis Patrol patrol hours. We utilized the Kolmogorov-Smirnov technique described in Section 3.3. These results are presented in Exhibit 2.1-7. We noted a significant increase or overabundance in the deployment of AEP personnel during the 4 pm - 8 pm time period. A significant decrease or lack of AEP personnel being deployed during the midnight to 4 am time period was noted.

EXHIBIT 2.1-7  
A/R ACCIDENTS VS PATROL HOURS

	A/R Accidents			Patrol Hours		
		%	Cum %		%	Cum %
Noon - 4 pm	73	.085	.085	5,888	.101	.101
4 pm - 8 pm	148	.173	.258	17,412	.299	.400
8 pm - Midnight	204	.238	.496	18,764	.322	.722
Midnight - 4 am	256	.299	.795	12,501	.214	.936
4 am - 8 am	62	.073	.868	482	.008	.944
8 am - Noon	40	.046	.914	3,277	.056	1.000
Unknown	72	.084	1.000	0	.000	1.000
Total	855			58,234		

\* KS for P = .05 is .047

\*\*KS for P = .01 is .056

#### 2.1.3.3. ALCOHOL EMPHASIS PATROL DEPLOYMENT BY DAY OF WEEK

A normal work week consists of forty hours of effort less fringe benefits, such as vacation, sick leave, etc. If an officer worked forty hours per week in five 8-hour shifts, he could expend 40 percent of his time on Friday and Saturday nights. Based on Exhibit 2.1-8, Fatal and Injury Accidents by Day of Week, it appears that an optimum deployment by day of week would dictate a Thursday through Monday work week. However, current Idaho State Police policy and Idaho State Personnel Commission policy establish that an officer's work schedule shall be four periods of six days on and two days off followed by one period of six days on and four days off.

We compared and tested the distribution of alcohol-related accidents by day of week. We utilized the Kolmogorov-Smirnov technique described in Section 3.3. The results of these tests are presented in Exhibit 2.1-8. We noted no significant variation in the distribution of alcohol-related accidents by day of week.

We wanted to compare and test the distribution of Alcohol Emphasis Patrol patrol hours by day of week and the distribution of alcohol-related accidents to the deployment distribution by day of week. However, this data was not readily available and, therefore, the analysis is not included in this study.

#### 2.1.4 SPECIAL ASPECTS

No special equipment or procedures are employed by the Alcohol Emphasis Patrol. Because of the large geographic area covered by the Alcohol Emphasis Patrol, the use of specialized techniques, such as mobile blood alcohol testing vans or centralized booking units are impractical.

The only special aspect to be noted is that the Alcohol Emphasis Patrol does not patrol in cities of over 5,000 population, but rather patrols rural highways. This aspect is special only in comparison to other ASAP's since the regular State Police also patrol rural highways.

Geographically, Idaho is a large area (83,557 square miles) with 56,049 miles of road. The population of Idaho is 712,267 (all figures are 1970). Thus, for a small number of people, it has large physical size. This low population density means that the ASAP patrol must travel a great distance to achieve reasonable exposure to the driving public.

EXHIBIT 2.1-8  
IDAHO FATAL AND INJURY ACCIDENTS BY DAY OF WEEK

Day of Week	1972				1973			
	Total	A/R	%	Cum %	Total	A/R	%	Cum %
Monday	1068	96	.094	.095	1019	89	.089	.089
Tuesday	1140	81	.080	.174	1058	99	.099	.188
Wednesday	1008	91	.089	.263	1010	91	.091	.279
Thursday	1091	108	.106	.369	1049	112	.112	.391
Friday	1384	155	.152	.521	1235	158	.158	.549
Saturday	1511	279	.274	.795	1388	246	.246	.795
Sunday	1188	208	.204	1.000	1056	205	.205	1.000
TOTAL	8390	1018			7815	1000		

Day of Week	1974				1975			
	Total	A/R	%	Cum %	Total	A/R	%	Cum %
Monday	964	82	.076	.076	969	87	.102	.102
Tuesday	977	113	.106	.182	966	86	.100	.202
Wednesday	1003	110	.103	.286	914	94	.110	.312
Thursday	1023	121	.113	.399	1195	123	.144	.456
Friday	1140	163	.152	.552	1346	177	.207	.663
Saturday	1307	280	.262	.815	1137	177	.207	.870
Sunday	1001	197	.184	1.000	1019	108	.126	.996
Unknown		0			53	3	.004	1.000
TOTAL	7415	1066			7599	855		

KS @ P .05

1972 vs 1973 = .0606  
1972 vs 1974 = .0596  
1973 vs 1974 = .0599

1972 vs 1975 = .0632  
1973 vs 1975 = .0633  
1974 vs 1975 = .0634

## 2.2 RELATIONSHIP BETWEEN ASAP PATROL ACTIVITY AND ACCIDENT REDUCTIONS

### 2.2.1 CROSS CORRELATIONS AS LAG CORRELATIONS

NHTSA guidelines for this section of the analytical study suggest correlating changes in ultimate performance measures with changes in patrol activity in each countermeasure evaluation area. Relationships may exist between evaluation and performance measures; however, these relationships may not be simple enough to be observed by cross correlations. For this reason, lagged cross correlations (also known as cross spectral correlations) of evaluation and performance measures were performed. Lagged correlations differ from cross correlations in that an observation of one variable is compared with a later observation in another variable. Lagged correlations will detect if the number of arrests in one time period have an effect on crashes in a later time period.

In this study, monthly data for the following crash subsets were lag correlated with monthly DWI arrest volumes.

- Fatal and Injury Crashes
- Injury Crashes
- Fatal Crashes
- Single Vehicle Fatal & Injury Crashes
- Single Vehicle Injury Crashes
- Single Vehicle Fatal Crashes
- Weekend Fatal & Injury Crashes
- Weekend Injury Crashes
- Weekend Fatal Crashes
- Nighttime Fatal & Injury Crashes
- Nighttime Injury Crashes
- Nighttime Fatal Crashes

### 2.2.2 RESULTS OF CORRELATION OF LEVELS OF ARRESTS VERSUS LEVELS OF ACCIDENT OCCURRENCE

The results of the lag correlation of various crash subsets with DWI and volumes are presented in Exhibit 2.2-1. Significant correlations were found for the single vehicle injury crash and single vehicle injury and fatal crash subsets for lags of one, two and three periods. These were significant at  $P < .01$  for lags one and two and  $P < .05$  for lag 3. Significant correlations were also observed for total fatal and injury crashes or the injury crash subset with  $P < .05$  for lags one and two. A significant  $P < .05$  correlation was observed for the Weekend Fatal and Injury Crash subset for lag period one.

All relationships identified were positive. One possible explanation is that both arrests and accidents are increasing at a steady rate, thus showing a positive relationship. If this is the case, then there does not seem to be any significant relationship between DWI arrest and crash levels.

2.2.2 RESULTS OF CORRELATION OF LEVELS OF ARRESTS VERSUS LEVELS OF  
ACCIDENT OCCURRENCE (Continued)

Log correlations were not re-calculated in 1975. Arrest levels were down 7.5 percent in 1975 as compared to 1974. At the same time, the number of accidents during high alcohol involvement periods decreased. Any correlations resulting from further analysis would tend to show that accidents decrease when arrest levels decrease. Although no causal relationship is implied, this result is opposed to general findings of the other ASAP projects.



## EXHIBIT 2.2-1

## ARREST/CRASH SUBSETS LAG CORRELATION TABLE

Degrees of Freedom	71	70	69	68	67	66	65	64	63	62	61	60
Lag Periods	1	2	3	4	5	6	7	8	9	10	11	12
Crash Category												
Fatal & Injury	*.280	*.240	.201	.109	-.054	-.009	-.001	-.014	-.053	-.127	-.112	-.066
Injury	*.277	*.238	.200	.108	-.049	-.003	-.003	-.019	-.058	-.136	-.121	-.074
Fatal	.164	.128	.101	-.051	-.066	-.053	-.048	-.059	-.048	-.018	-.017	-.011
Single Vehicle Fatal & Injury	**345	**312	*.286	.210	.158	.121	.111	.108	-.085	-.046	-.075	.100
Single Vehicle Injury	**350	**318	*.296	.219	.162	.122	.114	.109	-.088	-.047	-.071	-.098
Single Vehicle Fatal	.181	.129	-.078	-.034	-.060	-.055	-.038	-.053	-.022	-.015	-.090	-.096
Weekend Fatal & Injury	*.232	.142	.121	-.019	-.019	-.035	-.016	-.029	-.093	-.176	-.116	-.069
Weekend Injury	.217	.129	.104	-.005	-.002	-.017	-.034	-.048	-.116	-.202	-.140	-.089
Weekend Fatal	.225	.153	.179	.123	.150	.148	.109	-.096	.120	.119	.138	.133
Nighttime Fatal & Injury	.175	.113	-.082	-.006	-.037	.060	-.056	-.065	-.086	-.116	-.084	-.028
Nighttime Injury	.171	.111	-.082	-.008	-.037	-.061	-.059	-.069	-.092	-.116	-.079	-.019
Nighttime Fatal	-.083	.029	-.009	-.037	-.021	-.037	-.059	-.055	-.074	-.091	-.105	-.125

\* P .01    \*\*p .05

### 2.2.3 AWARENESS OF RISK OF ARREST FOR DRIVING WHILE INTOXICATED

To obtain information on the public's perceived risk of arrest for driving while intoxicated, household survey respondents were asked, "If you drive after drinking too much, what are your chances of being arrested by the police?"

The results of the 1972, 1973, 1974 and 1975 household surveys are presented in Exhibit 2.2. We compared and tested the perception percentages for significance using a test for the significance of the difference between percentages described in Section 3.1. The results of these tests are presented in Exhibit 2.2-3 and 2.2-4.

Comparison of 1974 and 1975 results show a significant increase in the percentages of respondents that believe their chance of arrest is greater than 50 percent ( $P < .01$ ,  $CR = 4.90$ ).

EXHIBIT 2.2-2  
RISK OF ARREST PERCEIVED BY RESPONDENTS  
IN 1972, 1973, 1974 AND 1975 HOUSEHOLD SURVEYS

Year	Respondents	Chance of Arrest		
		Less Than 50%	50%	More Than 50%
1972	637	.322	.391	.287
1973	483	.293	.370	.337
1974	829	.330	.352	.318
1975	496	.266	.308	.425

EXHIBIT 2.2-3  
1974 vs 1975

Chance of Arrest	Degrees of Freedom	Ppop	$\sigma\%$	CR	P Value
< 50%	1325	.306	.02615	2.416	< .02
50%	1325	.336	.02681	1.632	< .11
> 50%	1325	.358	.02722	3.929	< .01

EXHIBIT 2.2-4  
1972 vs 1975

Chance of Arrest	Degrees of Freedom	Ppop	$\sigma\%$	CR	P Value
< 50%	1131	.297	.02735	1.97	< .05
50%	1131	.354	.02863	2.82	< .01
> 50%	1131	.347	.02850	4.90	< .01

## 2.3 ASAP PATROL ARREST EFFICIENCY

The following are ratios for comparison of the efficiency of the combined regular State Police and Alcohol Emphasis Patrols, regular State Police, and Alcohol Emphasis Patrol units. Comparison of the Alcohol Emphasis Patrol to the regular Idaho State Police is not valid, since the State Police provide the overhead facilities, such as radio dispatchers, district offices, etc., for the Alcohol Emphasis Patrol.

The time expended for the various components of the arrest procedure is not recorded in sufficient detail for analysis of the relative time and cost of each of these components.

Calculation of efficiency rates includes the ASAP regional sergeants and the regular patrol sergeants, even though they may not be actively patrolling. The cost and efficiency rate comparisons of the ISP and AEP were not done for 1974 and 1975 because fiscal control was given to the state and federal funds were not used.

### 2.3.1 ASAP PATROL DWI ARREST EFFICIENCY

#### Efficiency Rates Per Patrolmen: (Arrests/Patrolmen)

	<u>1973</u>		<u>1974</u>		<u>Variance</u>
ISP & AEP	$\frac{2949}{139}$	21.21	$\frac{3154}{148}$	21.31	.5%
ISP	$\frac{1154}{110}$	10.49	$\frac{1177}{119}$	9.89	- 5.7%
AEP (Including Sgts)	$\frac{1795}{29}$	61.89	$\frac{1977}{29}$	68.17	10.1%
AEP (Excluding Sgts)	$\frac{1795}{26}$	69.03	$\frac{1977}{26}$	76.04	10.2%

#### Efficiency Rates Per Patrol Hour

	<u>1972</u>		<u>1973</u>		
ISP & AEP	$\frac{391,533}{2,949}$	132.76	$\frac{325,128}{3,154}$	103.08	- 22.4%
ISP	$\frac{327,730}{1,154}$	283.99	$\frac{266,472}{1,177}$	226.39	- 20.3%
AEP	$\frac{63,803}{1,795}$	35.54	$\frac{58,654}{1,977}$	29.67	- 16.5%

### 2.3.1 ASAP PATROL DWI ARREST EFFICIENCY (Continued)

The efficiency of the Alcohol Emphasis Patrol by time of day is presented in Exhibit 2.3-1. The results showed that patrol hours to a DWI arrest have been decreasing. We noted a 33.3% decrease from project startup through 1974, and a 30.0% increase in 1975 from 1974 levels for an overall 13.3% decrease since project startup.

#### EXHIBIT 2.3-1

#### AEP PATROL EFFICIENCY BY TIME OF DAY 1972 - 1975 (Patrol Hours /Arrests)

<u>Time of Day</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Midnight - 4 AM	17	17	13	16
4 AM - 8 AM	207	113	72	40
8 AM - Noon	372	102	436	33
Noon - 4 PM	391	234	163	218
4 PM - 8 PM	144	120	114	123
8 PM - Midnight	38	35	29	36
AVERAGE	45	37	30	39

#### Efficiency Rates in Terms of Cost: (Per Arrest)

		<u>1973</u>		<u>1974</u>	<u>Variance</u>
ISP & ASAP	$\frac{3,377,182}{2,949}$	1145.20	$\frac{3,552,293}{3,154}$	1126.28	- 1.7%
ISP	$\frac{3,062,626}{1,154}$	2653.92	$\frac{3,079,043}{1,177}$	2616.01	- 1.4%
ASAP	$\frac{314,556}{1,795}$	175.24	$\frac{473,250}{1,977}$	239.38	36.6%

### 2.3.2 ASAP PATROL MOVING TRAFFIC VIOLATION (MTV) ARREST EFFICIENCY

#### Efficiency Rates Per Patrolman:

		<u>1973</u>		<u>1974</u>	<u>Variance</u>
ISP & AEP	$\frac{40,139}{139}$	288.76	$\frac{44,254}{148}$	299.01	3.5%
ISP	$\frac{32,178}{110}$	292.52	$\frac{36,472}{119}$	306.49	4.8%
AEP (Including Sgts)	$\frac{7,961}{29}$	274.51	$\frac{7,782}{29}$	268.34	- 2.2%
AEP (Excluding Sgts)	$\frac{7,961}{26}$	306.19	$\frac{7,782}{26}$	299.31	- 2.2%

2.3.2 ASAP PATROL MOVING TRAFFIC VIOLATION (MTV) ARREST EFFICIENCY  
(Continued)

Efficiency Rates Per Patrol Hour: (Patrol Hours - Arrests)

		<u>1973</u>		<u>1974</u>	<u>Variance</u>
ISP & AEP	$\frac{391,533}{40,139}$	9.75	$\frac{325,128}{44,254}$	7.35	- 24.6%
ISP	$\frac{327,730}{32,178}$	12.16	$\frac{266,472}{36,472}$	7.31	- 39.9%
AEP	$\frac{63,803}{7,961}$	8.01	$\frac{58,654}{7,782}$	7.53	- 6.0%

Efficiency Rates in Terms of Cost: (Per Arrest)

		<u>1973</u>		<u>1974</u>	<u>Variance</u>
ISP & AEP	$\frac{3,377,182}{40,139}$	84.14	$\frac{3,552,293}{44,254}$	80.27	- 4.6%
ISP	$\frac{3,062,626}{32,178}$	95.18	$\frac{3,079,043}{36,472}$	84.42	-11.3%
AEP	$\frac{314,556}{7,961}$	39.51	$\frac{473,250}{7,782}$	60.81	52.3%

2.3.3 ASAP PATROL CRIMINAL ARREST EFFICIENCY

The data available for this analysis was insufficient for any meaningful analysis.

## 2.4 PROFILE COMPARISONS

In considering the arrest strategy and deployment pattern of the Alcohol Emphasis Patrol, the target group of the arrest strategy must be considered. The objective of the ASAP's is to decrease the incidence of alcohol-related fatal and injury accidents; thus, one facet of the ASAP patrol arrest strategy should be to apprehend those drunk drivers whose profiles most closely match the profiles of drivers involved in fatal alcohol-related accidents. In reality, however, the patrolman has no real opportunity to make this type of judgment; he merely investigates any and all occurrences of unusual driving behavior. If, as a result, the profile of arrested DWI's does not match the profile of drivers causing alcohol-related fatal accidents, then the other factors must be examined, such as the distribution of deployment hours versus the distribution of alcohol-related accident occurrence, or the locations of deployment versus the locations of alcohol-related accidents. Another factor to be considered is that, while two-thirds of the alcohol-related fatalities involve problem drinkers, a majority of apprehended DWI's are social drinkers. In this section, comparisons were made between profiles of drivers arrested, and profiles of fatally injured drivers, and between ASAP DWI arrested drivers and drivers arrested by the regular patrol. Following the comparisons is a detailed presentation of the profile data for each group and a section on profile methodology.

### 2.4.1 COMPARISON OF ARRESTED DWI OFFENDERS, FATALLY INJURED DRIVERS AND AVERAGE IDAHO DRIVERS

Comparative data for these sets of profiles are presented in Exhibit 2.4-1.

The distribution of drivers by sex is similar for fatally injured drivers and the average Idaho driver. However, the percentage of male drivers arrested appeared higher than the percentage of male drivers in other groups. We compared and tested the sex distribution utilizing the Kolmogorov-Smirnov technique described in Section 3.3. We found male representation in year 3 (1975) operational DWI's significantly higher with a value of  $P < .05$ . In other words, male drivers are over-represented in DWI arrests.

When observing the age distribution of the three groups, it appeared that fatally injured drivers under 25 were higher than either DWI arrests or the average Idaho driver samples. We compared and tested the age distribution utilizing the Kolmogorov-Smirnov technique described in Section 3.3. We found no significant difference in the age distributions.

2.4.1 COMPARISON OF ARRESTED DWI OFFENDERS, FATALLY INJURED DRIVERS  
AND AVERAGE IDAHO DRIVERS (Continued)

EXHIBIT 2.4-1  
PROFILE TABLE

	Fatally Injured Drivers	DWI Arrests Year 3	Average Idaho Drivers
<u>Sex</u>	N=(51)	N=(300)	N=(212)
Male	.725	.893	.696
Female	.275	.107	.340
<u>Age Distribution</u>	N=(53)	N=(415)	N=(212)
< 20	.226	.171	.142
20-24	.189	.183	.170
25-29	.094	.156	.100
30-34	.057	.101	.071
35-39	.075	.067	.146
40-44	.057	.089	.052
45-49	.075	.077	.075
50-59	.057	.113	.123
60 +	.170	.040	.123
Average Positive BAC	.171	.153	



#### 2.4.2 PROFILE COMPARISON OF DRIVERS ARRESTED BY ASAP PATROLS, REGULAR PATROLS AND BASELINE DATA

Comparisons of profile data for drivers arrested by the AEP patrol with profile data for drivers arrested by the regular patrol were made using the following factors. The results of these comparisons are presented in Exhibit 2.4-2.

- Sex Distribution
- Income Distribution
- Age Distribution
- BAC Distribution

##### 2.4.2.1 SEX COMPARISON

We compared and tested the sex distribution utilizing the Kolmogorov-Smirnov technique described in Section 3.3. We noted no significant differences in the male/female distribution.

##### 2.4.2.2 INCOME DISTRIBUTION

We included income as an observable factor because the age and condition of a vehicle has good correlation with a level of income. We compared and tested the cumulative distributions of income levels below \$6,000.00, \$8,000.00 and \$10,000.00 per annum utilizing the Kolmogorov-Smirnov technique described in Section 3.3. We noted no significant difference in the sampled groups.

##### 2.4.2.3 AGE DISTRIBUTION

We compared and tested the cumulative age distributions of the following groups utilizing the Kolmogorov-Smirnov technique described in Section 3.3.

- Fatally injured drivers
- Average Idaho drivers
- Year 3 operational DWI's
- Baseline DWI's
- Alcohol Emphasis Patrol DWI's
- Regular DWI's

The results of these tests are presented in Exhibit 2.4-3. We noted no significant difference in age distributions of any of the profiles compared.

##### 2.4.2.4 BAC DISTRIBUTION

We compared and tested the cumulative distributions of the following groups utilizing the Kolmogorov-Smirnov technique described in Section 3.3.

- Fatally injured drivers
- Baseline DWI's
- Alcohol Emphasis Patrol DWI's 1974
- Alcohol Emphasis Patrol DWI's 1975
- Regular DWI's 1974
- Regular DWI's 1975

#### 2.4.2.4 BAC DISTRIBUTION (Continued)

The results of these tests are presented in Exhibit 2.4-4. The Kolmogorov-Smirnov values for the various comparisons are presented in Exhibit 2.4-5. We noted significant increases in Alcohol Emphasis Patrol DWI's arrested at BAC's below .15 when compared to fatally injured drivers. The percentages of arrestees by the Alcohol Emphasis Patrol and the Regular patrol were significantly higher for BAC below .15 when compared to Baseline DWI's. After noting the significant increase in 1975 DWI's at BAC levels below .15, we then compared and tested the distribution of violations for offenders arrested in the Alcohol Emphasis Patrol and the Regular patrol utilizing the Kolmogorov-Smirnov technique described in Section 3.3. The results of these tests are presented in Exhibit 2.4-6.

#### EXHIBIT 2.4-2 PROFILE COMPARISON ASAP ARRESTED OFFENDERS VERSUS REGULAR PATROL ARRESTS

	<u>AEP</u>	<u>Regular</u>
<u>Sex</u>	N = (264)	N = (342)
Male	88.2	86.8
Female	11.8	13.1
<u>Income</u>	N = (141)	N = (172)
< 6,000.00	.446	.499
< 8,000.00	.623	.655
< 10,000.00	.786	.823
Average Positive BAC	.144	.153

## EXHIBIT 2,4-3

## AGE DISTRIBUTION

	Fatally Injured Drivers		Baseline DWI's		1975 AEP DWI's		1975 Reg DWI's		Average Idaho Drivers		Year 3 Operational DWI's	
n	53		390		292		348		212		415	
	%	Cum %	%	Cum %	%	Cum %	%	Cum %	%	Cum %	%	Cum %
< 20	.226	.226	.010	.010	.089	.089	.129	.129	.142	.142	.171	.171
20 - 24	.189	.415	.118	.128	.174	.263	.186	.315	.170	.311	.183	.354
25 - 29	.094	.509	.179	.308	.157	.420	.160	.475	.100	.410	.156	.510
30 - 34	.057	.566	.136	.444	.099	.519	.094	.568	.071	.481	.101	.611
35 - 39	.075	.641	.108	.551	.109	.628	.068	.637	.146	.627	.067	.678
40 - 44	.059	.698	.082	.633	.095	.723	.071	.708	.052	.679	.089	.767
45 - 49	.075	.773	.110	.743	.102	.825	.103	.811	.075	.755	.077	.844
50 - 59	.057	.830	.169	.913	.092	.917	.132	.943	.123	.877	.113	.957
60 +	.170	1.000	.087	1.000	.078	1.000	.051	1.000	.123	1.000	.040	1.000

## EXHIBIT 2.4-4

## BAC DISTRIBUTION

	Fatally Injured Drivers		Baseline DWI's		1974 AEP DWI's		1974 Reg DWI's		1975 AEP DWI's		1975 Reg DWI's	
n	65		68		291		276		292		266	
	%	Cum %	%	Cum %	%	Cum %	%	Cum %	%	Cum %	%	Cum %
.00 - .04	.092	.092	.015	.015	.045	.045	.051	.051	.044	.044	.056	.056
.05 - .09	.092	.184	.044	.059	.141	.186	.072	.123	.123	.167	.097	.153
.10 - .14	.200	.384	.176	.235	.320	.505	.337	.460	.332	.499	.312	.465
.15 - .19	.231	.615	.338	.574	.333	.838	.322	.783	.339	.838	.319	.784
.20 - .24	.154	.769	.191	.765	.137	.976	.145	.928	.133	.971	.116	.900
.25 +	.231	1.000	.235	1.000	.024	1.000	.072	1.000	.027	1.000	.097	1.000
Average Positive BAC	.171		.197		.143		.156		.142		.160	

EXHIBIT 2.4-5

TABLE OF KS VALUES FOR BAC DISTRIBUTIONS

	95%	99%
Fatally Injured vs Baseline	.236	.283
Fatally Injured vs 74 AEP	.187(1)	.224
Fatally Injured vs 74 Reg	.187	.225
Fatally Injured vs 75 AEP	.187(2)	.224
Fatally Injured vs 75 Reg	.188	.226
Baseline vs 74 AEP	.183	.220(3)
Baseline vs 74 Reg	.184	.221
Baseline vs 75 AEP	.183	.219 (4)
Baseline vs 75 Reg	.184	.221

- (1) Significant at BAC levels below .15, below .20 and below .25  
 (2) Significant at BAC levels below .20, below .25  
 (3) Significant at BAC levels below .15, below .20 and below .25  
 (4) Significant at BAC levels below .15 and below .20

# EXHIBIT 2.4-6

## VIOLATIONS

n	Baseline		1974 AEP		1974 Reg		1975 AEP		1975 Reg	
	400		400		400		400		400	
	%	Cum %	%	Cum %	%	Cum %	%	Cum %	%	Cum %
1	.818	.818	.713	.713*	.718	.718*	.715	.715	.697	.697
2	.168	.985	.183	.895	.193	.910	.187	.902	.187	.884
3	.013	.998	.073	.968	.073	.983	.070	.972	.087	.971
4	.000	.998	.025	.993	.008	.990	.020	.992	.012	.983
5 +	.002	1.000	.007	1.000	.010	1.000	.007	1.000	.007	1.000
Average	1.20		1.43		1.41		1.41		1.48	

\* KS @ P < .01 = .096

### 2.4.3 PROFILE DEVELOPMENT METHODOLOGY

In order to develop a profile of a specific group, the Alcohol Data Bank was utilized as an input source because of its data content and organization. As previously discussed in Section 1.2 (Evaluation Information System), the Alcohol Data Bank is organized so that all available information from participating agencies relevant to an individual's case history is stored as a case, so that the data can later be analyzed to provide a more complete picture in terms of alcohol-related data than can be obtained anywhere else in the State.

Exhibit 2.4-7 depicts all possible data that is available for compilation. If this data were present in all cases, the resulting profile would be very complete. In actuality, however, data is available from an agency only if that agency has had contact with the individual. For instance, PHYSICAL CHARACTERISTICS are gathered from the Driver Licensing Bureau and available to ASAP through the Department of Law Enforcement. In a random sample of one hundred individuals arrested for DWI, this information was present in only 71 percent of the cases, because the arrest population is drawn not only from licensed Idaho drivers but also from out-of-state drivers touring in Idaho, migrant farm laborers, unlicensed rural inhabitants and Indian populations, and out-of-state military servicemen temporarily stationed in Idaho. PERSONAL DATA is collected by the presentence investigator in the process of gathering subject information but, in 1973, only 46 percent of the convicted DWIs received a presentence investigation and, of those, only approximately 90 percent required an in-depth investigation. Therefore, presentence investigation data that is presented cannot be represented as a percentage of the sample group, but as a percentage of the number in the sample group which had presentence investigations done on them. For example, the RACIAL CHARACTERISTICS for the profile of drivers arrested and referred to the combined treatment modalities of Court Alcohol School and the Driver Improvement Counseling Program are presented below.

Race		Percent
White	160	88.3
Black	1	.5
American Indian	10	5.5
Mexican	9	4.9
Oriental	0	0.0
Latin	1	.5
Other races	0	0.0
Race data total	181	99.7

In this example, the sample size was 228, and racial characteristics were available for 181 or 79.4 percent of the sample. Of the total reported racial characteristics, 160 were white. This represents 88.397 percent of the total racial sample. The reported percentages do not total up to one hundred percent because of the truncation of the least significant digits.

REHABILITATION DATA is included in the profile and is collected from the Court Alcohol School and the Driver Improvement Counseling Program (DICP). Anyone in the sample who attends the program may be reported

## EXHIBIT 2.4-7

## PROFILE DATA

Alcohol Data Bank Data	Data Source
PHYSICAL CHARACTERISTICS Age Sex Height Weight	Department of Law Enforcement
DRIVER EDUCATION Defensive Driving	Driver Improvement Counseling Program Data
REHABILITATION ATTENDANCE Court Alcohol School Driver Improvement Counseling Program	Court Alcohol School Instructor Data Driver Improvement Counseling Program Data
BAC TEST DATA BAC Test Results Refusals to Take BAC Test	Department of Health and Welfare Department of Law Enforcement
DRIVING VIOLATION HISTORY Non-Alcohol-Related Violations Alcohol-Related Violations DWIs Accidents	Department of Law Enforcement/Idaho State Police/Court Conviction Data
PERSONAL DATA Employment Status Occupation Marital Status Years Married Years in Idaho Years Education Income Number Dependents Ethnic Group Religion	Presentence Investigator
ALCOHOL-RELATED PERSONAL DATA ALCADD Test Score Drinker Classification	Presentence Investigator
CRIMINAL HISTORY Misdemeanors Felonies Alcohol-Related Misdemeanors Alcohol-Related Felonies	Idaho Criminal Investigation Division/ FBI. Reported by presentence investigators.
DRINKER/DRIVER SUMMARIZATION DATA DWI Arrest Recidivism Rate DWI Arrest and Crash Recidivism Rate Estimated Drinker Classification	ASAP Evaluation Information System



#### 2.4.3 PROFILE DEVELOPMENT METHODOLOGY (Continued)

by that agency as having attended; therefore, the percentages as given below represent the percentage of the total sample that were reported as having attended the treatment.

Rehabilitation Data		Percent
Attended Defensive Driving	31	13.5
Attended DICP	88	38.5
Attended Court Alcohol School	144	63.1

Using the sample as above, 31 out of 228 completed the Defensive Driving Course or 13.5, where 228 was the total sample size.

The DICP attendance figure is based on a record of completion. This does not include subjects who are currently enrolled in the program or subjects who attended one or more sessions and then dropped out or were dropped from the program. The number of subjects who attended Defensive Driving represent subjects who attended the Driver Improvement Counseling Program and were referred by one of the DICP Counselors to Defensive Driving.

Court Alcohol School pre- and post-test score data is presented to indicate the improvement of knowledge level of the student. It should be noted that a zero improvement may be a student who had a perfect score on both the pre- and post-test. A negative improvement means that the student scored higher on the pre-test than on the post-test. The percentages given are based on the total number of scores available for those persons attending Court Alcohol School.

BAC data is analyzed to determine the average BAC and the average positive BAC. In addition, the number of subjects having only one BAC record, the number of subjects having two BAC records, three BAC records, etc., are tabulated, along with the percentage each group represents in relation to the total number of persons who had at least one BAC. The average BAC is calculated for each group. For example:

	Percent
Average if 1 BAC	.077
Average if 2 BACs	.156
Average if 3 BACs	.173
Average if 4 BACs	.165

For that group who had three BACs, the average of their BACs was .17 percent. For DWIs that refused to take a BAC test, the percentage of the total sample that refused, once, twice, or three or more times is calculated.

ALCADD tests are administered by the presentence investigators during the defendant contact interview. Although every presentence investigation is supposed to include the test, use varies widely according to the habits of the individual presentence investigators. In a sample of 300 presentence investigations, an ALCADD score greater than 00 was reported in 118 (39 percent) cases. ALCADD scores of 00 were not considered in the analysis, because it was not known whether this field was left blank or filled with zeroes when the test was not administered.

#### 2.4.3 PROFILE DEVELOPMENT METHODOLOGY (Continued)

Another consideration is that there is a high probability that even an occasional drinker will answer yes to at least one question, so that a score of 00 is questionable for all but total abstainers.

Drinker classes are presented whenever presentence investigation (PSI) data classifying problem drinkers was present. The percentages represent the category divided by the sum of the occurrences of each category.

Estimated Problem Drinkers classification is a computer-assigned classification based on information contained in the Alcohol Data Bank. The percentage is calculated from the total sample, because each member of the sample goes through the estimation process, not just those that have had presentence drinker classifications conducted on them. The Estimated Problem Drinkers Classification was developed for the profile analysis to validate the PSI drinker classification techniques. Because of the fact that PSI drinker classifications are not always made, a classification of Non-Problem Drinker may be made by the PSI on an initial arrest and on a subsequent arrest may not be updated or perhaps a presentence investigation was not requested by the judge. The Estimated Problem Drinker classification, however, is based on the latest data and may be conducted at any time. The only limitation is that Non-Problem Drinkers cannot be isolated from Undefined without defendant contact data, so that only problem drinkers are identified.

The Evaluation Information System uses the following criteria in identifying problem drinkers.

1. PSI reported subject was diagnosed as an alcoholic by a competent medical or treatment facility
2. PSI reported subject admits being alcoholic or problem drinker
3. Subject has more than two DWI arrests
4. Subject has two DWIs and a BAC of .15 or greater
5. Subject has two DWIs and an ALCADD score of 12 or greater as reported by a PSI
6. Subject has one DWI, a prior plea bargained arrest (inattentive or reckless driving) and an ALCADD score of 12 or greater

For each profile, the number of violations stored on the Alcohol Data Bank are tallied and reported. Those subjects having only one DWI are tallied, the number having two DWI arrests are tallied, and so forth. The size of each group is expressed as a percentage of the total group of subjects having one or more DWIs.

<u>Violations on Alcohol Data Bank</u>		<u>Percent</u>
1 DWI	165	72.3
2 DWIs	49	21.4
3 DWIs	12	5.2
4 DWIs	1	0.4
5+DWIs	1	0.4
Average Number DWIs 1.35		

For example, one-time recidivists (those with two DWIs) represented 21.4 percent of the sample who had one or more DWIs  $49 = 214 (165+49+12+1+1)$ .

### 2.4.3 PROFILE DEVELOPMENT METHODOLOGY (Continued)

The average number of DWIs is calculated by adding the total of all DWIs divided by the total sample size. The average number of non-alcohol-related violations is calculated by dividing violation groups by the number of cases that contained moving violation history obtained from the Department of Law Enforcement. The reason for this is because the Department of Law Enforcement is the sole source for non-alcohol-related violations, whereas DWI violations may be obtained from many sources. Accident average is calculated by dividing by the total sample size.

<u>Criminal investigation data</u>		<u>Percent</u>
1-2 Misdemeanors	41	48.8
3-4 Misdemeanors	19	22.6
5+ Misdemeanors	24	28.5
Average number misdemeanors		3.47

For those subjects who had misdemeanors reported by a PSI, 48.8 percent had one or two misdemeanors (41 of 41+19+24). The average number of misdemeanors for those people who had misdemeanors was 3.47.

For each profile group, three types of recidivism are calculated.

Type 1	DWI arrest
Type 2	DWI arrest or crash
Type 3	DWI arrest, crash, or A/R violation

A/R violation means a traffic violation with a BAC test or affidavit or refusal taken on the same day.

Average days to recidivism are calculated for 1, 2, 3, 4, 5 time recidivists for each of the three classes of recidivists.

## 2.5 CATALYTIC EFFECT ON ASAP ON THE REGULAR PATROL

During the Idaho ASAP planning phase, the close coordination with the Idaho State Police in establishing the Alcohol Emphasis Patrol and the publicity given the developing ASAP project contributed to an increase in the number of DWI arrests by state and local agencies. At the same time, the Department of Environmental and Community Services Laboratory Division and the Idaho Traffic Safety Commission implemented a program to provide MOBAT training and certification of peace officers. As part of this program, the state provides MOBAT kits to the enforcement agencies at no cost to the agency. This project was a spin-off of the Idaho ASAP planning activity.

Together these two factors significantly impacted DWI enforcement in the State of Idaho. Exhibit 2.5-1 shows DWI arrest activity by quarter for the years 1969 through 1975. As can be seen from this Exhibit, DWI arrest volumes have increased steadily since the beginning of the ASAP planning phase January 1, 1972 except for the decrease in 1975.

## 2.6 EFFECT OF ASAP PATROL ACTIVITY ON OTHER ASAP COUNTERMEASURES AND THE OVERALL TRAFFIC SAFETY SYSTEM

The most obvious effect of the ASAP patrol activities is the increased number of DWI cases and other moving traffic violations which are entering the court system. This increased load offers more opportunities for use of presentence investigation. Furthermore, the increased number of persons referred to various rehabilitation modalities are partially due to the DWI arrest made by the Alcohol Emphasis Patrol.

EXHIBIT 2.5-1  
DWI ARRESTS BY QUARTER  
1969 - 1975

Year - Qtr	ASAP	Non-ASAP	Qtr Total	Year Total	Variance
1969 - Q1		395	395		
Q2		449	449		
Q3		419	419		
Q4		472	472	1735	
1970 - Q1		497	497		
Q2		510	510		
Q3		530	530		
Q4		480	480	2017	162.5%
1971 - Q1		553	553		
Q2		735	735		
Q3		683	683		
Q4		695	695	2666	32.2%
1972 - Q1		930	930		
Q2		1123	1123		
Q3	328	1352	1680		
Q4	400	1383	1783	4516	69.4%
1973 - Q1	384	1383	1767		
Q2	429	1317	1746		
Q3	447	1247	1694		
Q4	537	1154	1689	6896	52.7%
1974 - Q1	591	1341	1932		
Q2	459	1426	1885		
Q3	515	1523	2038		
Q4	412	1452	1864	7719	11.9%
1975 - Q1	402	1340	1742		
Q2	416	1404	1820		
Q3	393	1210	1603		
Q4	300	1039	1339	6504	-15.7%

### 3.0 METHODOLOGY

Descriptions of the various statistical methodologies used in this study are presented in this section. Also included is a description of the methodology used to develop group profiles for analysis.

#### 3.1 SIGNIFICANCE OF THE DIFFERENCE BETWEEN PERCENTAGES

In much experimental work, we are able to get the percent occurrence of a given behavior in two or more independent samples. We then want to know whether the incidence of this behavior is reliably different in the two groups. The following problem will provide an illustration.

Example: In a study of cheating among elementary-school children, 144 or 41.4% of 348 children from homes of good socio-economic status were found to have cheated on various tests. In the same study, 133 or 50.2% of 265 children from homes of poor socio-economic status also cheated on the same tests. Is there a true difference in the incidence of cheating in these two groups?

Let us set up the hypothesis that no true difference exists as between the percentages cheating in the two groups and that, with respect to cheating, both samples have been randomly drawn from the same population. A useful procedure in testing this null hypothesis is to consider  $P_1$  (41.4%) and  $P_2$  (50.2%) as being independent determinations of the common population parameter,  $P$ ; and to estimate  $P$  by pooling  $P_1$  and  $P_2$ . A pooled estimate of  $P$  is obtained from the equation:

$$P = \frac{N_1 P_1 + N_2 P_2}{N_1 + N_2}$$

$Q$  being, of course,  $(1 - P)$ .

The estimated percentages,  $P$  and  $Q$ , may now be put in formula to give the SE of the difference between  $P_1$  and  $P_2$ .

$$\sigma_{P_1 - P_2} = \sigma_{P_1 - P_2} = \sqrt{\sigma_{P_1}^2 + \sigma_{P_2}^2}$$

or

$$= \sqrt{PQ \left[ \frac{1}{N_1} + \frac{1}{N_2} \right]}$$

(SE of the difference between two uncorrelated percentages)

In the present example,  $P = \frac{348 \times 41.4 + 265 \times 50.2}{348 + 265}$  or 45.2% and

$Q = (1 - P)$  or 54.8%. Substituting these two values, we get

$$\sigma_{P_1 - P_2} = \sqrt{45.2 \times 54.8 \left[ \frac{1}{348} + \frac{1}{265} \right]} = 4.06\%$$

The difference between the two percents  $P$  and  $P$  is 8.8% (50.2 - 41.4); and dividing by 4.06 ( $CR = \frac{P_1 - P_2}{\sigma_{P_1 - P_2}}$ ) we get a CR of 2.17. Entering the table of CR values presented in Exhibit 3.1-1, we find that our CR exceeds 1.96 (.05 level) but does not reach 2.58 (.01 level).

# EXHIBIT 3.1-1

Table of CR Values, for use in determining the significance of statistics

Example: When the *df* are 35 and *cr* = 2.03, the .05 in column 3 means that 5 times in 100 trials a divergence as large as that obtained may be expected in the positive and negative directions under the null hypothesis.

Degrees of Freedom	Probability (P)			
	0.10	0.05	0.02	0.01
1	CR = 6.34	CR = 12.71	CR = 31.82	CR = 63.66
2	2.92	4.30	6.96	9.92
3	2.35	3.18	4.54	5.84
4	2.13	2.78	3.75	4.60
5	2.02	2.57	3.36	4.03
6	1.94	2.45	3.14	3.71
7	1.90	2.36	3.00	3.50
8	1.86	2.31	2.90	3.36
9	1.83	2.26	2.82	3.25
10	1.81	2.23	2.76	3.17
11	1.80	2.20	2.72	3.11
12	1.78	2.18	2.68	3.06
13	1.77	2.16	2.65	3.01
14	1.76	2.14	2.62	2.98
15	1.75	2.13	2.60	2.95
16	1.75	2.12	2.58	2.92
17	1.74	2.11	2.57	2.90
18	1.73	2.10	2.55	2.88
19	1.73	2.09	2.54	2.86
20	1.72	2.09	2.53	2.84
21	1.72	2.08	2.52	2.83
22	1.72	2.07	2.51	2.82
23	1.71	2.07	2.50	2.81
24	1.71	2.06	2.49	2.80
25	1.71	2.06	2.48	2.79
26	1.71	2.06	2.48	2.78
27	1.70	2.05	2.47	2.77
28	1.70	2.05	2.47	2.76
29	1.70	2.04	2.46	2.76
30	1.70	2.04	2.46	2.75
35	1.69	2.03	2.44	2.72
40	1.68	2.02	2.42	2.71
45	1.68	2.02	2.41	2.69
50	1.68	2.01	2.40	2.68
60	1.67	2.00	2.39	2.66
70	1.67	2.00	2.38	2.65
80	1.66	1.99	2.38	2.64
90	1.66	1.99	2.37	2.63
100	1.66	1.98	2.36	2.63
125	1.66	1.98	2.36	2.62
150	1.66	1.98	2.35	2.61
200	1.65	1.97	2.35	2.60
300	1.65	1.97	2.34	2.59
400	1.65	1.97	2.34	2.59
500	1.65	1.96	2.33	2.59
1000	1.65	1.96	2.33	2.58
∞	1.65	1.96	2.33	2.58

### 3.2 SIGNIFICANCE OF THE DIFFERENCE BETWEEN MEANS

To discover whether two groups differ sufficiently in mean performance to enable us to say with confidence that there is a difference between the means of the populations from which the samples were drawn, we need to know the standard error of the difference between the two sample means. Two situations arise with respect to differences between means: those in which the means are *uncorrelated* and those in which the means are *correlated*. Means are uncorrelated or independent when computed from different samples or from uncorrelated tests administered to the same sample.

THE SE OF THE DIFFERENCE ( $\sigma_D$ ) WHEN MEANS ARE UNCORRELATED AND SAMPLES ARE LARGE.

The formula for the SE of the difference between uncorrelated or independent means is

$$\sigma_D = \sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}$$

(standard error of the difference between uncorrelated means)  
in which:

$\sigma_{M1}$  = the SE of the mean of the first sample  
 $\sigma_{M2}$  = the SE of the mean of the second sample  
 $\sigma_D$  = the SE of the difference between the two sample means  
 $N_1$  and  $N_2$  = sizes of the two samples

Application of this formula to a problem is shown in the following example:

Example: In a study of abstract reasoning, a sample of 83 twelfth-grade boys and a sample of 95 twelfth-grade girls scored as shown below on a test of abstract reasoning:

Sex	N	Mean	$\sigma$
Girls	95	29.21	11.56
Boys	83	30.92	7.81

Assuming that our samples are random, would further testing of similar groups of boys and girls give virtually the same result: or would the difference in means be reduced to zero or even reversed in favor of the girls?

To answer these questions, we must compute the SE of the difference between the two means.

$$\begin{aligned}\sigma_D &= \sqrt{\frac{(7.81)^2}{83} + \frac{(11.56)^2}{95}} \\ &= \sqrt{2.1415} \\ &= 1.46 \text{ (to two decimals)}\end{aligned}$$



### 3.2 SIGNIFICANCE OF THE DIFFERENCE BETWEEN MEANS (Continued)

The obtained difference between the means of the boys and girls is 1.71 (i.e.,  $30.92 - 29.21$ ); and the SE of this difference ( $\sigma_D$ ) is 1.46. As a first step in determining whether twelfth-grade boys and girls actually differ in mean ability, we shall set up a null hypothesis. This hypothesis asserts that the difference between the population means of boys and girls is zero and that--except for sampling accidents--mean differences from sample to sample will all be zero. Is the obtained mean difference of 1.71--in view of its SE--large enough to cast serious doubt on this null hypothesis?

To answer this question, we must compute a critical ratio or CR found by dividing the difference between the sample means by its standard error ( $CR = D/\sigma_D$ ). This operation reduced the obtained difference to a  $\sigma$  score, and enables us to measure it off along the base line of the sampling distribution of differences. In the present problem,  $CR = 1.71/1.46$  or 1.17. When the N's of the samples are large (30 or more is "large"), the distribution of CR's is known to be normal around the true difference between the population means. In testing the null hypothesis, we set up a normal sampling distribution. The mean difference is set at zero (true difference) and the SD of this distribution of differences is  $1.46(\sigma_D)$ . Our CR falls at 1.17 on the base line to the right of the mean of 0, and also at -1.17 to the left of this mean. We need to measure in both directions, since under the null hypothesis (true difference of zero) differences between sample means are as likely to be plus as minus--to fall above as below the mean difference of zero.

From a Table of Areas under the Normal Curve, Exhibit 3.2-1, we can determine that  $38\% \times 2$  or  $76\%$  of the cases in a normal distribution fall between the mean and  $\pm 1.17\sigma_D$ ; and  $24\%$  of the cases fall outside these limits. This means that under the null hypothesis we can expect CR's as large as or larger than  $\pm 1.17$  to occur "by chance" 24 times in 100 comparisons of the means of samples of twelfth-grade boys and girls on this test. A mean difference of  $\pm 1.71$  (i.e., a CR of  $\pm 1.17$ ), therefore, might easily arise as a sampling fluctuation from zero, and is clearly not significant. Accordingly, we retain the null hypothesis since--as far as our tests to--there is no reason to believe twelfth-grade boys and girls actually differ in mean performance on abstract reasoning tests. With respect to reasoning as represented by our test, the two groups could well have been random samples from the same population.

## EXHIBIT 3.2-1

TABLE OF AREAS OF THE NORMAL CURVE

$\frac{z}{\sigma}$	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
0.0	.0000	.0040	.0080	.0120	.0159	.0199	.0239	.0279	.0319	.0359
0.1	.0398	.0438	.0478	.0517	.0557	.0596	.0636	.0675	.0714	.0753
0.2	.0793	.0832	.0871	.0910	.0948	.0987	.1026	.1064	.1103	.1141
0.3	.1179	.1217	.1255	.1293	.1331	.1368	.1406	.1443	.1480	.1517
0.4	.1554	.1591	.1628	.1664	.1700	.1736	.1772	.1808	.1844	.1879
0.5	.1915	.1950	.1985	.2019	.2054	.2088	.2123	.2157	.2190	.2224
0.6	.2257	.2291	.2324	.2357	.2389	.2422	.2454	.2486	.2518	.2549
0.7	.2580	.2612	.2642	.2673	.2704	.2734	.2764	.2794	.2823	.2852
0.8	.2881	.2910	.2939	.2967	.2995	.3023	.3051	.3078	.3106	.3133
0.9	.3159	.3186	.3212	.3238	.3264	.3289	.3315	.3340	.3365	.3389
1.0	.3413	.3438	.3461	.3485	.3508	.3531	.3554	.3577	.3599	.3621
1.1	.3643	.3665	.3686	.3708	.3729	.3749	.3770	.3790	.3810	.3830
1.2	.3849	.3869	.3888	.3907	.3925	.3944	.3962	.3980	.3997	.4015
1.3	.4032	.4049	.4066	.4082	.4099	.4115	.4131	.4147	.4162	.4177
1.4	.4192	.4207	.4222	.4236	.4251	.4265	.4279	.4292	.4306	.4319
1.5	.4332	.4345	.4357	.4370	.4382	.4394	.4406	.4418	.4430	.4441
1.6	.4452	.4463	.4474	.4485	.4495	.4505	.4515	.4525	.4535	.4545
1.7	.4554	.4564	.4573	.4582	.4591	.4599	.4608	.4616	.4625	.4633
1.8	.4641	.4649	.4656	.4664	.4671	.4678	.4686	.4693	.4699	.4706
1.9	.4713	.4719	.4726	.4732	.4738	.4744	.4750	.4756	.4762	.4767
2.0	.4773	.4778	.4783	.4788	.4793	.4798	.4803	.4808	.4812	.4817
2.1	.4821	.4826	.4830	.4834	.4838	.4842	.4846	.4850	.4854	.4857
2.2	.4861	.4865	.4868	.4871	.4875	.4878	.4881	.4884	.4887	.4890
2.3	.4893	.4896	.4898	.4901	.4904	.4906	.4909	.4911	.4913	.4916
2.4	.4918	.4920	.4922	.4925	.4927	.4929	.4931	.4932	.4934	.4936
2.5	.4938	.4940	.4941	.4943	.4945	.4946	.4948	.4949	.4951	.4952
2.6	.4953	.4955	.4956	.4957	.4959	.4960	.4961	.4962	.4963	.4964
2.7	.4965	.4966	.4967	.4968	.4969	.4970	.4971	.4972	.4973	.4974
2.8	.4974	.4975	.4976	.4977	.4977	.4978	.4979	.4980	.4980	.4981
2.9	.4981	.4982	.4983	.4983	.4984	.4984	.4985	.4985	.4986	.4986
3.0	.49865	.4987	.4987	.4988	.4988	.4989	.4989	.4989	.4990	.4990
3.1	.49903	.4991	.4991	.4991	.4992	.4992	.4992	.4992	.4993	.4993
3.2	.49931									
3.3	.49952									
3.4	.49966									
3.5	.49977									
3.6	.49984									
3.7	.49989									
3.8	.49993									
3.9	.49995									
4.0	.49997									

### 3.3 KOLMOGOROV-SMIRNOV TEST FOR GOODNESS OF FIT

In the analysis of the changes in distribution, classical tests may not be appropriate, since the distributions may be skewed significantly from normal. The Kolmogorov-Smirnov test for Goodness of Fit makes no assumptions of normality and is thus appropriate for measuring shifts in distributions.

The Kolmogorov-Smirnov test is based on the sample distribution function  $F_n(X)$ , defined in the preceding section; the statistic used is the maximum absolute deviation of  $F_n(X)$  from  $F_0(X)$ :

$$D_n = \max_{-\infty < x < \infty} |F_n(x) - F_0(x)|.$$

(To be mathematically accurate, the word "sup"--for supremum or least upper bound--should be used in place of "max," but it is not assumed that the reader is aware of this fine point.) The distribution of the random variable  $D_n$ , which is indeed a statistic and varies from sample to sample, has been computed under the assumption that the null hypothesis holds. The results are given in Exhibit 3.3-1 for sample sizes up to  $n = 20$ , for various preselected values of  $\alpha$ , called *significance levels*. It happens that the distribution does not depend on what  $F_0(X)$  is, so the same table can be used in all such problems. For large values of  $n$  there are given asymptotic formulas.

This technique is extremely powerful; however, to obtain this power, some sensitivity is lost. The following example will illustrate both the technique and the sensitivity lost.

In an analysis of income levels of persons convicted of DWI and persons receiving withheld judgments during 1974, the following data was obtained:

EVALUATION MEASURE	Convicted DWI		Withheld		Diff	P
	Number	Cum %	Number	Cum %		
INCOME						
Less than \$4000	26	27.7	14	26.9	0.8	N.S.
4000-5999	26	55.4	7	40.4	15.0	N.S.
6000-7999	22	78.8	11	61.6	17.2	N.S.
8000-9999	10	89.4	9	78.9	10.5	N.S.
10000-11999	3	92.6	4	86.6	6.0	N.S.
12000-13999	2	94.7	3	92.4	2.3	N.S.
14000-15999	2	96.8	3	98.2	1.4	N.S.
16000-17999	1	97.9	1	100.0	1.1	N.S.
18000-19999	0	97.9	0	100.0	1.1	N.S.
20000-UP	2	100.0	0	100.0	0.0	N.S.

The KS value for  $P=.05$  is computed as

$$1.36 \sqrt{\frac{m+n}{mn}}$$

where:

$m$  = number in sample 1  
 $n$  = number in sample 2

### 3.3 KOLMOGOROV-SMIRNOV TEST FOR GOODNESS OF FIT (Continued)

In this case we have

$$1.36 \sqrt{\frac{146}{4888}} = .235,$$

thus a difference of 23.5 percent or more will have to be measured to be significant at  $P \leq .05$ .

Analysis of the percentage of persons with incomes less than \$8000 using a test for the significance of the difference between percentages (described in Section 3.1) shows a significant difference between these samples. Using the formula:

$$\sigma_D \% = \sqrt{PQ \left( \frac{1}{N_1} + \frac{1}{N_2} \right)}$$

where:

$$P = \frac{P_1 N_1 + P_2 N_2}{N_1 + N_2}$$

$$Q = 1 - P$$

We have

$$P = \frac{74 + 32}{146} = .726$$

$$Q = .274$$

$$\sigma_D \% = \sqrt{(.726)(.274)(.019 + .011)} = .077$$

$$CR = \frac{P_1 - P_2 - 0}{\sigma \%}$$

$$CR = \frac{.788 - .616}{.077} = 2.23$$

giving  $P = .0258$

Some sensitivity is regained as sample sizes increase. At a sample size of 400, the KS technique will measure a change of 9.6 percent at  $P=.05$ , while the test for differences in percentages will measure (assuming  $P=.5$ ) 6.9 percent at  $P=.05$ . Thus, the use of the Kolmogorov-Smirnov technique is best made with large sample sizes; however, its ease of use makes it desirable as a preliminary screening method when significant differences are expected. If no significance is found using the KS technique, the researcher can always use other techniques when appropriate.

## EXHIBIT 3.3-1

ACCEPTANCE LIMITS FOR THE KOLMOGOROV-SMIRNOV TEST OF  
GOODNESS OF FIT

Sample size (n)	Significance level				
	.20	.15	.10	.05	.01
1	.900	.925	.950	.975	.995
2	.684	.726	.776	.842	.929
3	.565	.597	.642	.708	.829
4	.494	.525	.564	.624	.734
5	.446	.474	.510	.563	.669
6	.410	.436	.470	.521	.618
7	.381	.405	.438	.486	.577
8	.358	.381	.411	.457	.543
9	.339	.360	.388	.432	.514
10	.322	.342	.368	.409	.486
11	.307	.326	.352	.391	.468
12	.295	.313	.338	.375	.450
13	.284	.302	.325	.361	.433
14	.274	.292	.314	.349	.418
15	.266	.283	.304	.338	.404
16	.258	.274	.295	.328	.391
17	.250	.266	.286	.318	.380
18	.244	.259	.278	.309	.370
19	.237	.252	.272	.301	.361
20	.231	.246	.264	.294	.352
25	.21	.22	.24	.264	.32
30	.19	.20	.22	.242	.29
35	.18	.19	.21	.23	.27
40				.21	.25
50				.19	.23
60				.17	.21
70				.16	.19
80				.15	.18
90				.14	
100				.14	
Asymptotic formula:	$\frac{1.07}{\sqrt{n}}$	$\frac{1.14}{\sqrt{n}}$	$\frac{1.22}{\sqrt{n}}$	$\frac{1.36}{\sqrt{n}}$	$\frac{1.63}{\sqrt{n}}$

Reject the hypothetical distribution  $F(x)$  if  $D_n = \max |F_n(x) - F(x)|$  exceeds the tabulated value.

(For  $\alpha = .01$  and .05, asymptotic formulas give values which are too high—by 1.5 percent for  $n = 80$ )

#### 4.0 SUPPLEMENTAL INFORMATION

Complete profile data for the groups compared are presented in this section for those readers interested in performing additional analyses. Profiles provided are:

- 4.0-1      Fatally Injured Drivers
- 4.0-2      Average Idaho Driver
- 4.0-3      Year 2 Operation DWI Offenders
- 4.0-4      Year 1 Operation DWI Offenders
- 4.0-5      Baseline DWI Offenders
- 4.0-6      AEP DWIS 1974
- 4.0-7      AEP DWIS 1973
- 4.0-8      Regular DWIS 1974
- 4.0-9      Regular DWIS 1973
- 4.0-10     AEP DWI's 1975
- 4.0-11     Regular DWI's 1975
- 4.0-12     Year 3 Operation DWI Offenders

## EXHIBIT 4.0-1

IDAHO ALCOHOL SAFETY ACTION PROJECT  
PROFILE ANALYSIS

## FATALLY INJURED DRIVERS

SAMPLE SIZE :		246	
SEX		N= ( 155)	
	MALES	115	74.1%
	FEMALES	40	25.8%
HEIGHT		N= ( 155)	
	AVERAGE HEIGHT	67.8	
WEIGHT		N= ( 155)	
	AVERAGE WEIGHT	154.8	
AGE		N= ( 157)	
	AVERAGE AGE	36.9	
	AGE 19 OR LESS	26	16.5%
	AGE 20 - 24	31	19.7%
	AGE 25 - 29	16	10.1%
	AGE 30 - 34	14	8.9%
	AGE 35 - 39	12	7.6%
	AGE 40 - 44	12	7.6%
	AGE 45 - 49	7	4.4%
	AGE 50 - 59	15	9.5%
	AGE 60 AND OVER	24	15.2%
RACE		N= ( 8)	
	WHITE	5	62.5%
	BLACK	0	0.0%
	AMERICAN INDIAN	1	12.5%
	MEXICAN	2	25.0%
	ORIENTAL	0	0.0%
	LATIN	0	0.0%
	OTHER RACES	0	0.0%
EMPLOYMENT STATUS		N= ( 8)	
	FULL-TIME	4	50.0%
	PART-TIME	2	25.0%
	NOT EMPLOYED	1	12.5%
	HOUSEWIFE	0	0.0%
	STUDENTS	1	12.5%
	RETIRED	0	0.0%
OCCUPATION TYPE		N= ( 7)	
	UNEMPLOYED	1	14.2%
	PROF / TECH	1	14.2%
	CLERICAL / SALES	0	0.0%
	SERVICES	1	14.2%
	AGRICULTURE	3	42.8%
	PROCESSING	0	0.0%
	MACHINE TRADES	0	0.0%
	FABRICATION / REPAIR	0	0.0%
	STRUCTURAL	0	0.0%
	OTHER	1	14.2%

## EXHIBIT 4.0-1 (Continued)

YEARS IN IDAHO		N= ( 4 )	
AVERAGE YEARS IN IDA		24.0	
1		1	25.0%
2		0	0.0%
3		1	25.0%
4		0	0.0%
5		0	0.0%
6-10		0	0.0%
11-15		0	0.0%
16-20		0	0.0%
21 AND OVER		2	50.0%
REHABILITATION DATA		N= ( 246 )	
ATTENDED DEF. DRIVING		2	0.8%
ATTENDED DICP		3	1.2%
ATTENDED COURT-SCHOOL		3	1.2%
COURT ALCOHOL SCHOOL DATA		N= ( 3 )	
NEGATIVE IMPROVEMENT		0	0.0%
ZERO IMPROVEMENT		0	0.0%
IMPROVEMENT 1-4		2	66.6%
5-9		0	0.0%
10-14		0	0.0%
15-19		0	0.0%
20-UP		1	33.3%
MARITAL STATUS		N= ( 8 )	
MARRIED		4	50.0%
SINGLE		0	0.0%
DIVORCED		4	50.0%
WIDOWED		0	0.0%
SEPERATED		0	0.0%
OTHER		0	0.0%
DEPENDENTS		N= ( 4 )	
0		0	0.0%
1		2	50.0%
2		0	0.0%
3		2	50.0%
4		0	0.0%
5		0	0.0%
6		0	0.0%
7		0	0.0%
8		0	0.0%
9		0	0.0%
10		0	0.0%
11+		0	0.0%
RELIGION		N= ( 3 )	
PROTESTANT		1	33.3%
CATHOLIC		0	0.0%
JEWISH		0	0.0%
MORMON		1	33.3%
OTHER		1	33.3%



# EXHIBIT 4.0-1 (Continued)

YEARS MARRIED	N= ( 3 )	
AVERAGE	14.0	
1	0	0.0%
2	1	33.3%
3	0	0.0%
4	0	0.0%
5-10	1	33.3%
11-15	0	0.0%
16-20	0	0.0%
20+	1	33.3%

EDUCATION	N= ( 8 )	
AVERAGE YEARS	10.6	
1-6	1	15.2%
7-9	1	12.5%
10	1	12.5%
11	0	0.0%
12	4	50.0%
13	1	12.5%
14	0	0.0%
15	0	0.0%
16	0	0.0%
17 AND UP	0	0.0%

INCOME	N= ( 8 )	
LESS THAN \$4000	4	50.0%
4000-5999	1	12.5%
6000-7999	1	12.5%
8000-9999	1	12.5%
10000-11999	0	0.0%
12000-13999	1	12.5%
14000-15999	0	0.0%
16000-17999	0	0.0%
18000-19999	0	0.0%
20000-UP	0	0.0%

BAC DATA	N= ( 262 )	
AVERAGE BAC	.099%	
AVERAGE POSITIVE BAC	.177%	
NEGATIVE	115	43.8%
.01 - .04	12	4.5%
.05 - .09	13	4.9%
.10 - .14	29	11.0%
.15 - .19	33	12.5%
.20 - .24	25	9.5%
.25 +	35	13.3%
AVERAGE ALCOHOL	6.3	
1-11	3	100.0%
12-19	0	0.0%
20-29	0	0.0%
30-39	0	0.0%
40-49	0	0.0%
50-UP	0	0.0%

# EXHIBIT 4.0-1 (Continued)

DRINKER CLASS DATA	N=(	8)	
PROBLEM		4	50.0%
NON-PROBLEM		4	50.0%
UNDEFINED		0	0.0%
EST. PROP. DRINKERS		6	2.4%

VIOLATIONS ON ADR	N=(	246)	
1 DWI		21	8.5%
2 DWI		5	2.0%
3 DWI		1	0.4%
4 DWI		0	0.0%
5+ DWI		0	0.0%
AVERAGE NO DWIS		.13	

1-2 NON A/R VIOLATIONS	51	20.7%
3-4	9	3.6%
5-6	2	0.8%
7-8	0	0.0%
9 ID	0	0.0%
AVERAGE NON A/R VIOL	.43	

1 ACCIDENT	74	30.0%
2 ACCIDENTS	4	1.6%
3 ACCIDENTS	1	0.4%
4 OR MORE	0	0.0%
AVER NO ACCIDENTS	.34	

CRIMINAL INVESTIGATION DATA	N=(	2)	
1-2 MISDEMEANORS	1	50.0%	
3-4 MISDEMEANORS	1	50.0%	
5+ MISDEMEANORS	0	0.0%	
AVG NO. MISDEMEANORS	2.00		
1-2 FELONIES	0	0.0%	
3-4 FELONIES	0	0.0%	
5+ FELONIES	0	0.0%	
AVG NO FELONIES	.00		
1-2 A/R MISDEMEANORS	2	100.0%	
3-4 A/R MISDEMEANORS	0	0.0%	
5+ A/R MISDEMEANORS	0	0.0%	
AVG NO A/R MISDEMEANORS	1.00		
1-2 A/R FELONIES	0	0.0%	
3-4 A/R FELONIES	0	0.0%	
5+ A/R FELONIES	0	0.0%	
AVG NO A/R FELONIES	.00		

AVG DAYS TO TYPE 1 RECID		
1	5	427 DAYS
2	2	63 DAYS

AVG DAYS TO TYPE 2 RECID		
1	2	449 DAYS
2	6	150 DAYS
3	3	70 DAYS

AVG DAYS TO TYPE 3 RECID		
1	2	449 DAYS
2	6	150 DAYS
3	3	70 DAYS

EXHIBIT 4.0-2  
IDAHO ALCOHOL SAFETY ACTION PROJECT  
PROFILE ANALYSIS

AVERAGE IDAHO DRIVERS

	SAMPLE SIZE :	212	
SEX		N=( 207)	
	MALES	144	69.5%
	FEMALES	63	30.4%
HEIGHT		N=( 207)	
	AVERAGE HEIGHT	68.0	
WEIGHT		N=( 206)	
	AVERAGE WEIGHT	157.7	
AGE		N=( 212)	
	AVERAGE AGE	37.1	
	AGE 19 OR LESS	30	14.1%
	AGE 20 - 24	36	16.9%
	AGE 25 - 29	21	9.9%
	AGE 30 - 34	15	7.0%
	AGE 35 - 39	31	14.6%
	AGE 40 - 44	11	5.1%
	AGE 45 - 49	16	7.5%
	AGE 50 - 59	26	12.2%
	AGE 60 AND OVER	26	12.2%
RACE		N=( 10)	
	WHITE	8	80.0%
	BLACK	0	0.0%
	AMERICAN INDIAN	2	20.0%
	MEXICAN	0	0.0%
	ORIENTAL	0	0.0%
	LATIN	0	0.0%
	OTHER RACES	0	0.0%
EMPLOYMENT STATUS		N=( 10)	
	FULL-TIME	9	90.0%
	PART-TIME	0	0.0%
	NOT EMPLOYED	1	10.0%
	HOUSEWIFE	0	0.0%
	STUDENTS	0	0.0%
	RETIRED	0	0.0%
OCCUPATION TYPE		N=( 10)	
	UNEMPLOYED	1	10.0%
	PROF / TECH	1	10.0%
	CLERICAL / SALES	4	40.0%
	SERVICES	0	0.0%
	AGRICULTURE	1	10.0%
	PROCESSING	0	0.0%
	MACHINE TRADES	0	0.0%
	FABRICATION / REPAIR	1	10.0%
	STRUCTURAL	0	0.0%
	OTHER	2	20.0%

## EXHIBIT 4.0-2 (Continued)

YEARS IN IDAHO		N=(	6)
AVERAGE YEARS IN IDA		21.0	
1		0	0.0%
2		1	16.6%
3		0	0.0%
4		0	0.0%
5		0	0.0%
6-10		1	16.6%
11-15		0	0.0%
16-20		0	0.0%
21 AND OVER		4	66.6%
REHABILITATION DATA		N=(	212)
ATTENDED DEF. DRIVING		15	7.0%
ATTENDED DICP		7	3.3%
ATTENDED COURT-SCHOOL		4	1.8%
COURT ALCOHOL SCHOOL DATA		N=(	4)
NEGATIVE IMPROVEMENT		0	0.0%
ZERO IMPROVEMENT		0	0.0%
IMPROVEMENT 1-4		1	25.0%
5-9		2	50.0%
10-14		1	25.0%
15-19		0	0.0%
20-UP		0	0.0%
MARITAL STATUS		N=(	10)
MARRIED		5	50.0%
SINGLE		3	30.0%
DIVORCED		0	0.0%
WIDOWED		0	0.0%
SEPERATED		2	20.0%
CTHER		0	0.0%
DEPENDENTS		N=(	7)
0		3	42.8%
1		1	14.2%
2		1	14.2%
3		0	0.0%
4		1	14.2%
5		0	0.0%
6		0	0.0%
7		0	0.0%
8		0	0.0%
9		1	14.2%
10		0	0.0%
11+		0	0.0%
RELIGION		N=(	5)
PRCTESTANT		1	20.0%
CATHOLIC		2	40.0%
JEWISH		0	0.0%
MORMON		1	20.0%
OTHER		1	20.0%

## EXHIBIT 4.0-2 (Continued)

## YEARS MARRIED

AVERAGE	N= ( 1)	
1	27.0	
2	0	0.0%
3	0	0.0%
4	0	0.0%
5-10	0	0.0%
11-15	0	0.0%
16-20	0	0.0%
20+	1	100.0%

## EDUCATION

AVERAGE YEARS	N= ( 10)	
1-6	11.2	
7-9	1	12.2%
10	0	0.0%
11	2	20.0%
12	3	30.0%
13	1	10.0%
14	2	20.0%
15	0	0.0%
16	0	0.0%
17 AND UP	1	10.0%
	0	0.0%

## INCOME

LESS THAN \$4000	N= ( 10)	
4000-5999	1	10.0%
6000-7999	3	30.0%
8000-9999	1	10.0%
10000-11999	2	20.0%
12000-13999	0	0.0%
14000-15999	1	10.0%
16000-17999	2	20.0%
18000-19999	0	0.0%
20000-UP	0	0.0%

## BAC DATA

## AVERAGE BAC

## AVERAGE POSITIVE BAC

## NEGATIVE

.01 - .04

.05 - .09

.10 - .14

.15 - .19

.20 - .24

.25 +

N= ( 24)

.175%

.182%

1 4.1%

0 0.0%

2 8.3%

8 33.3%

5 20.8%

2 8.3%

6 25.0%

## REFUSED TEST

ONCE

TWICE

3 OR MORE

N= ( 212)

5 2.3%

0 0.0%

0 0.0%

## EXHIBIT 4.0-2 (Continued)

DIAGNOSTIC TEST SCORES	N=(	4)	
AVERAGE ALCADD		12.5	
1-11		3	75.0%
12-19		0	0.0%
20-29		0	0.0%
30-39		1	25.0%
40-49		0	0.0%
50-UP		0	0.0%

DRINKER CLASS DATA	N=(	8)	
PROBLEM		5	62.5%
NON-PROBLEM		2	25.0%
UNDEFINED		1	12.5%
EST. PROB. DRINKERS		8	3.7%

VIOLATIONS ON ADB	N=(	212)	
1 DWI		27	12.7%
2 DWI		10	4.7%
3 DWI		1	0.4%
4 DWI		1	0.4%
5+ DWI		2	0.9%
AVERAGE NO DWIS		.31	
1-2 NON A/R VIOLATIONS		68	32.0%
3-4		18	8.4%
5-6		7	3.3%
7-8		2	0.9%
9 UP		2	0.9%
AVERAGE NON A/R VIOL		1.09	
1 ACCIDENT		20	9.4%
2 ACCIDENTS		6	2.8%
3 ACCIDENTS		0	0.0%
4 OR MORE		0	0.0%
AVER NO ACCIDENTS		.15	

CRIMINAL INVESTIGATION DATA	N=(	7)	
1-2 MISDEMEANORS		4	57.1%
3-4 MISDEMEANORS		0	0.0%
5+ MISDEMEANORS		3	42.8%
AVG NO. MISDEMEANORS		7.14	
1-2 FELONIES		1	14.2%
3-4 FELONIES		0	0.0%
5+ FELONIES		0	0.0%
AVG NO FELONIES		.14	
1-2 A/R MISDEMEANORS		1	14.2%
3-4 A/R MISDEMEANORS		0	0.0%
5+ A/R MISDEMEANORS		2	28.5%
AVG NO A/R MISDEMEANORS		4.14	
1-2 A/R FELONIES		0	0.0%
3-4 A/R FELONIES		0	0.0%
5+ A/R FELONIES		0	0.0%
AVG NO A/R FELONIES		.00	

# EXHIBIT 4.0-2 (Continued)

## AVG DAYS TO TYPE 1 REC'D

1	10	508 DAYS
2	2	86 DAYS
3	3	77 DAYS
4	4	53 DAYS
5	7	23 DAYS

## AVG DAYS TO TYPE 2 REC'D

1	10	508 DAYS
2	2	86 DAYS
3	3	77 DAYS
4	4	53 DAYS
5	7	23 DAYS

## AVG DAYS TO TYPE 3 REC'D

1	10	508 DAYS
2	2	86 DAYS
3	3	77 DAYS
4	4	53 DAYS
5	7	23 DAYS

EXHIBIT 4.0-3  
IDAHO ALCOHOL SAFETY ACTION PROJECT  
PROFILE ANALYSIS

YEAR 2 OPERATIONAL DWIS

	SAMPLE SIZE :	400	
SEX		N=( 289)	
	MALES	268	92.7%
	FEMALES	21	7.2%
HEIGHT		N=( 281)	
	AVERAGE HEIGHT	69.0	
WEIGHT		N=( 281)	
	AVERAGE WEIGHT	165.0	
AGE		N=( 343)	
	AVERAGE AGE	35.0	
	AGE 19 OR LESS	45	13.1%
	AGE 20 - 24	51	14.8%
	AGE 25 - 29	56	16.3%
	AGE 30 - 34	29	8.4%
	AGE 35 - 39	38	11.0%
	AGE 40 - 44	30	8.7%
	AGE 45 - 49	29	8.4%
	AGE 50 - 59	46	13.4%
	AGE 60 AND OVER	19	5.5%
RACE		N=( 170)	
	WHITE	151	88.8%
	BLACK	0	0.0%
	AMERICAN INDIAN	11	6.4%
	MEXICAN	8	4.7%
	ORIENTAL	0	0.0%
	LATIN	0	0.0%
	OTHER RACES	0	0.0%
EMPLOYMENT STATUS		N=( 171)	
	FULL-TIME	121	70.7%
	PART-TIME	12	7.0%
	NOT EMPLOYED	23	13.4%
	HOUSEWIFE	1	0.5%
	STUDENTS	8	4.6%
	RETIRED	6	3.5%
OCCUPATION TYPE		N=( 168)	
	UNEMPLOYED	16	9.5%
	PROF / TECH	7	4.1%
	CLERICAL / SALES	11	6.5%
	SERVICES	21	12.5%
	AGRICULTURE	16	9.5%
	PROCESSING	21	12.5%
	MACHINE TRADES	9	5.3%
	FABRICATION / REPAIR	10	5.9%
	STRUCTURAL	11	6.5%
	OTHER	46	27.3%



# EXHIBIT 4.0-3 (Continued)

YEARS IN IDAHO		N=( 149)	
	AVERAGE YEARS IN IDA	22.3	
	1	9	6.0%
	2	7	4.6%
	3	2	1.3%
	4	4	2.6%
	5	4	2.6%
	6-10	13	8.7%
	11-15	10	6.7%
	16-20	19	12.7%
	21 AND OVER	81	54.3%
REHABILITATION DATA		N=( 400)	
	ATTENDED DEF. DRIVING	34	8.5%
	ATTENDED DICP	31	7.7%
	ATTENDED COURT-SCHOOL	75	18.7%
COURT ALCOHOL SCHOOL DATA		N=( 75)	
	NEGATIVE IMPROVEMENT	2	2.6%
	ZERO IMPROVEMENT	0	0.0%
	IMPROVEMENT 1-4	20	26.6%
	5-9	34	45.3%
	10-14	16	21.3%
	15-19	1	1.3%
	20-UP	2	2.6%
MARITAL STATUS		N=( 170)	
	MARRIED	79	46.4%
	SINGLE	46	27.0%
	DIVORCED	28	16.4%
	WIDOWED	5	2.9%
	SEPERATED	10	5.8%
	CTHER	2	1.1%
DEPENDENTS		N=( 158)	
	0	54	34.1%
	1	28	17.7%
	2	24	15.1%
	3	20	12.6%
	4	16	10.1%
	5	7	4.4%
	6	2	1.2%
	7	2	1.2%
	8	4	2.5%
	9	1	0.6%
	10	0	0.0%
	11+	0	0.0%
RELIGION		N=( 153)	
	PRCTESTANT	55	35.9%
	CATHOLIC	30	19.6%
	JEWISH	0	0.0%
	MORMON	30	19.6%
	CTHER	38	24.8%

## EXHIBIT 4.0-3 (Continued)

## YEARS MARRIED

N= ( 82)

## AVERAGE

1	10.0	
2	14	17.0%
3	11	13.4%
4	4	4.8%
5-10	6	7.3%
11-15	17	20.7%
16-20	8	9.7%
20+	9	10.9%
	13	15.8%

## EDUCATION

N= ( 167)

## AVERAGE YEARS

1-6	11.4	
7-9	3	5.5%
10	31	18.5%
11	16	9.5%
12	15	8.9%
13	63	37.7%
14	10	5.9%
15	16	9.5%
16	5	2.9%
17 AND UP	5	2.9%
	3	1.7%

## INCOME

N= ( 163)

## LESS THAN \$4000

4000-5999	43	26.3%
6000-7999	35	21.4%
8000-9999	29	17.7%
10000-11999	25	15.3%
12000-13999	14	8.5%
14000-15999	7	4.2%
16000-17999	4	2.4%
18000-19999	1	0.6%
20000-UP	1	0.6%
	4	2.4%

## BAC DATA

N= ( 240)

## AVERAGE BAC

.148%

## AVERAGE POSITIVE BAC

.150%

## NEGATIVE

.01 - .04	2	0.8%
.05 - .09	2	0.8%
.10 - .14	34	14.1%
.15 - .19	79	32.9%
.20 - .24	77	32.0%
.25 +	33	13.7%
	13	5.4%

## REFUSED TEST

N= ( 400)

## ONCE

## TWICE

## 3 OR MORE

11	2.7%
0	0.0%
0	0.0%

## EXHIBIT 4.0-3 (Continued)

## DIAGNOSTIC TEST SCORES

N=( 103)

AVERAGE ALCADD	12.0	
1-11	59	57.2%
12-19	28	27.1%
20-29	11	10.6%
30-39	4	3.8%
40-49	1	0.9%
50-UP	0	0.0%

## DRINKER CLASS DATA

N=( 160)

PROBLEM	70	43.7%
NON-PROBLEM	77	48.1%
UNDEFINED	13	8.1%
EST. PROB. DRINKERS	90	22.5%

## VIOLATIONS ON ADB

N=( 400)

1 DWI	283	70.7%
2 DWI	76	19.0%
3 DWI	26	6.5%
4 DWI	10	2.5%
5+ DWI	5	1.2%
AVERAGE NO DWIS	1.45	

1-2 NON A/R VIOLATIONS	109	27.2%
3-4	42	10.5%
5-6	13	3.2%
7-8	6	1.5%
9 UP	3	0.7%
AVERAGE NON A/R VIOL	1.08	

1 ACCIDENT	69	17.2%
2 ACCIDENTS	21	5.2%
3 ACCIDENTS	6	1.5%
4 OR MORE	0	0.0%
AVER NO ACCIDENTS	.32	

## CRIMINAL INVESTIGATION DATA

N=( 46)

1-2 MISDEMEANORS	27	58.6%
3-4 MISDEMEANORS	12	26.0%
5+ MISDEMEANORS	7	15.2%
AVG NO. MISDEMEANORS	3.19	
1-2 FELONIES	1	2.1%
3-4 FELONIES	0	0.0%
5+ FELONIES	0	0.0%
AVG NO FELONIES	.02	
1-2 A/R MISDEMEANORS	19	41.3%
3-4 A/R MISDEMEANORS	4	8.6%
5+ A/R MISDEMEANORS	1	2.1%
AVG NO A/R MISDEMEANORS	1.36	
1-2 A/R FELONIES	0	0.0%
3-4 A/R FELONIES	0	0.0%
5+ A/R FELONIES	0	0.0%
AVG NO A/R FELONIES	.00	

EXHIBIT 4.0-3 (Continued)

AVG DAYS TO TYPE 1 REC'D

1	76	423 DAYS
2	52	275 DAYS
3	30	154 DAYS
4	16	69 DAYS
5	6	41 DAYS

AVG DAYS TO TYPE 2 REC'D

1	67	481 DAYS
2	56	274 DAYS
3	42	110 DAYS
4	20	87 DAYS
5	16	44 DAYS

AVG DAYS TO TYPE 3 REC'D

1	67	481 DAYS
2	56	274 DAYS
3	42	110 DAYS
4	20	87 DAYS
5	16	44 DAYS

EXHIBIT 4.0-4  
IDAHO ALCOHOL SAFETY ACTION PROJECT  
PROFILE ANALYSIS

YEAR 1 OPERATIONAL DWIS

SAMPLE SIZE :		400	
SEX		N= ( 297)	
	MALES	267	89.8%
	FEMALES	30	10.1%
HEIGHT		N= ( 293)	
	AVERAGE HEIGHT	68.7	
WEIGHT		N= ( 293)	
	AVERAGE WEIGHT	165.1	
AGE		N= ( 322)	
	AVERAGE AGE	38.1	
	AGE 19 OR LESS	19	5.9%
	AGE 20 - 24	48	14.9%
	AGE 25 - 29	48	14.9%
	AGE 30 - 34	28	8.6%
	AGE 35 - 39	34	10.5%
	AGE 40 - 44	29	9.0%
	AGE 45 - 49	41	12.7%
	AGE 50 - 59	50	15.5%
	AGE 60 AND OVER	25	7.7%
RACE		N= ( 164)	
	WHITE	135	82.3%
	BLACK	1	0.6%
	AMERICAN INDIAN	13	7.9%
	MEXICAN	13	7.9%
	ORIENTAL	1	0.6%
	LATIN	0	0.0%
	OTHER RACES	1	0.6%
EMPLOYMENT STATUS		N= ( 166)	
	FULL-TIME	121	72.8%
	PART-TIME	8	4.8%
	NOT EMPLOYED	18	10.8%
	HOUSEWIFE	3	1.8%
	STUDENTS	7	4.2%
	RETIRED	9	5.4%
OCCUPATION TYPE		N= ( 165)	
	UNEMPLOYED	20	12.1%
	PROF / TECH	14	8.4%
	CLERICAL / SALES	12	7.2%
	SERVICES	19	11.5%
	AGRICULTURE	14	8.4%
	PROCESSING	21	12.7%
	MACHINE TRADES	7	4.2%
	FABRICATION / REPAIR	9	5.4%
	STRUCTURAL	8	4.8%
	OTHER	41	24.8%

## EXHIBIT 4.0-4 (Continued)

YEARS IN IDAHO		N=(	80)
AVERAGE YEARS IN IDA		23.9	
1	2		2.5%
2	4		5.0%
3	2		2.5%
4	2		2.5%
5	2		2.5%
6-10	10		12.5%
11-15	8		10.0%
16-20	11		13.7%
21 AND OVER	39		48.7%

REHABILITATION DATA		N=(	400)
ATTENDED DEF. DRIVING	39		9.7%
ATTENDED DICP	44		11.0%
ATTENDED COURT-SCHOOL	73		18.2%

COURT ALCOHOL SCHOOL DATA		N=(	73)
NEGATIVE IMPROVEMENT	3		4.1%
ZERO IMPROVEMENT	0		0.0%
IMPROVEMENT 1-4	19		26.0%
5-9	31		42.4%
10-14	14		19.1%
15-19	3		4.1%
20-UP	3		4.1%

MARITAL STATUS		N=(	165)
MARRIED	73		44.2%
SINGLE	43		26.0%
DIVORCED	27		16.3%
WIDOWED	10		6.0%
SEPERATED	11		6.6%
OTHER	1		0.6%

DEPENDENTS		N=(	90)
0	30		33.3%
1	22		24.4%
2	11		12.2%
3	10		11.1%
4	6		6.6%
5	5		5.5%
6	5		5.5%
7	1		1.1%
8	0		0.0%
9	0		0.0%
10	0		0.0%
11+	0		0.0%

RELIGION		N=(	81)
PROTESTANT	26		32.0%
CATHOLIC	15		18.5%
JEWISH	0		0.0%
MORMON	14		17.2%
OTHER	26		32.0%

## EXHIBIT 4.0-4 (Continued)

YEARS MARRIED		N=(	51)
AVERAGE		13.1	
1		6	11.7%
2		6	11.7%
3		3	5.8%
4		3	5.8%
5-10		10	19.6%
11-15		2	3.9%
16-20		5	9.8%
20+		16	31.3%
EDUCATION		N=(	164)
AVERAGE YEARS		11.1	
1-6		9	7.7%
7-9		27	16.4%
10		23	14.0%
11		13	7.9%
12		58	35.3%
13		13	7.9%
14		10	6.0%
15		1	0.6%
16		7	4.2%
17 AND UP		3	1.8%
INCOME		N=(	163)
LESS THAN \$4000		54	33.1%
4000-5999		38	23.3%
6000-7999		26	15.9%
8000-9999		21	12.8%
10000-11999		10	6.1%
12000-13999		5	3.0%
14000-15999		2	1.2%
16000-17999		2	1.2%
18000-19999		0	0.0%
20000-UP		5	3.0%
BAC DATA		N=(	224)
AVERAGE BAC		.158%	
AVERAGE POSITIVE BAC		.161%	
NEGATIVE		3	1.3%
.01 - .04		3	1.3%
.05 - .09		23	10.2%
.10 - .14		65	29.0%
.15 - .19		73	32.5%
.20 - .24		41	18.3%
.25 +		16	7.1%
REFUSED TEST		N=(	400)
ONCE		22	5.5%
TWICE		1	0.2%
3 OR MORE		0	0.0%

## EXHIBIT 4.0-4 (Continued)

## DIAGNOSTIC TEST SCORES

N=( 57)

AVERAGE ALCADD	11.5	
1-11	36	63.1%
12-19	11	19.2%
20-29	7	12.2%
30-39	2	3.5%
40-49	1	1.7%
50-UP	0	0.0%

## DRINKER CLASS DATA

N=( 135)

PROBLEM	42	31.1%
NON-PROBLEM	78	57.7%
UNDEFINED	15	11.1%
EST. PROB. DRINKERS	90	22.5%

## VIOLATIONS ON ADB

N=( 400)

1 DWI	267	66.7%
2 DWI	99	24.7%
3 DWI	21	5.2%
4 DWI	11	2.7%
5+ DWI	2	0.5%
AVERAGE NO DWIS	1.46	

1-2 NON A/R VIOLATIONS	137	34.2%
3-4	25	6.2%
5-6	14	3.5%
7-8	3	0.7%
9 UP	1	0.2%
AVERAGE NON A/R VIOL	.95	

1 ACCIDENT	75	18.7%
2 ACCIDENTS	19	4.7%
3 ACCIDENTS	12	3.0%
4 OR MORE	1	0.2%
AVER NO ACCIDENTS	.38	

## CRIMINAL INVESTIGATION DATA

N=( 66)

1-2 MISDEMEANORS	29	43.9%
3-4 MISDEMEANORS	13	19.6%
5+ MISDEMEANORS	24	36.3%
AVG NO. MISDEMEANORS	1.52	
1-2 FELONIES	0	0.0%
3-4 FELONIES	0	0.0%
5+ FELONIES	2	3.0%
AVG NO FELONIES	.15	
1-2 A/R MISDEMEANORS	18	27.2%
3-4 A/R MISDEMEANORS	3	4.5%
5+ A/R MISDEMEANORS	6	9.0%
AVG NO A/R MISDEMEANORS	1.43	
1-2 A/R FELONIES	1	1.5%
3-4 A/R FELONIES	0	0.0%
5+ A/R FELONIES	0	0.0%
AVG NO A/R FELONIES	.01	



EXHIBIT 4.0-4 (Continued)

AVG DAYS TO TYPE 1 REC'D

1	99	322 DAYS
2	42	177 DAYS
3	33	96 DAYS

AVG DAYS TO TYPE 2 REC'D

1	87	368 DAYS
2	58	141 DAYS
3	42	97 DAYS
4	4	81 DAYS
5	10	54 DAYS

AVG DAYS TO TYPE 3 REC'D

1	87	368 DAYS
2	58	141 DAYS
3	42	97 DAYS
4	4	81 DAYS
5	10	54 DAYS

EXHIBIT 4.0-5  
IDAHO ALCOHOL SAFETY ACTION PROJECT  
PROFILE ANALYSIS

BASELINE DWIS

SAMPLE SIZE :		400	
SEX		N= ( 253)	
	MALES	229	90.5%
	FEMALES	24	9.4%
HEIGHT		N= ( 232)	
	AVERAGE HEIGHT	69.0	
WEIGHT		N= ( 232)	
	AVERAGE WEIGHT	165.9	
AGE		N= ( 390)	
	AVERAGE AGE	39.4	
	AGE 19 OR LESS	4	1.0%
	AGE 20 - 24	46	11.7%
	AGE 25 - 29	70	17.9%
	AGE 30 - 34	53	13.5%
	AGE 35 - 39	42	10.7%
	AGE 40 - 44	32	8.2%
	AGE 45 - 49	43	11.0%
	AGE 50 - 59	66	16.9%
	AGE 60 AND OVER	34	8.7%
RACE		N= ( 1)	
	WHITE	0	0.0%
	BLACK	0	0.0%
	AMERICAN INDIAN	1	100.0%
	MEXICAN	0	0.0%
	ORIENTAL	0	0.0%
	LATIN	0	0.0%
	OTHER RACES	0	0.0%
EMPLOYMENT STATUS		N= ( 1)	
	FULL-TIME	0	0.0%
	PART-TIME	0	0.0%
	NOT EMPLOYED	1	100.0%
	HOUSEWIFE	0	0.0%
	STUDENTS	0	0.0%
	RETIRED	0	0.0%
OCCUPATION TYPE		N= ( 1)	
	UNEMPLOYED	1	100.0%
	PROF / TECH	0	0.0%
	CLERICAL / SALES	0	0.0%
	SERVICES	0	0.0%
	AGRICULTURE	0	0.0%
	PROCESSING	0	0.0%
	MACHINE TRADES	0	0.0%
	FABRICATION / REPAIR	0	0.0%
	STRUCTURAL	0	0.0%
	OTHER	0	0.0%

EXHIBIT 4.0-5 (Continued)

REHABILITATION DATA			N= ( 400)	
	ATTENDED DEF. DRIVING	12		3.0%
	ATTENDED DICP	7		1.7%
MARITAL STATUS			N= ( 1)	
	MARRIED	1		100.0%
	SINGLE	0		0.0%
	DIVORCED	0		0.0%
	WIDOWED	0		0.0%
	SEPERATED	0		0.0%
	OTHER	0		0.0%
EDUCATION			N= ( 1)	
	AVERAGE YEARS	11.0		
	1-6	0		8.7%
	7-9	0		0.0%
	10	0		0.0%
	11	1		100.0%
	12	0		0.0%
	13	0		0.0%
	14	0		0.0%
	15	0		0.0%
	16	0		0.0%
	17 AND UP	0		0.0%
INCOME			N= ( 1)	
	LESS THAN \$4000	0		0.0%
	4000-5999	1		100.0%
	6000-7999	0		0.0%
	8000-9999	0		0.0%
	10000-11999	0		0.0%
	12000-13999	0		0.0%
	14000-15999	0		0.0%
	16000-17999	0		0.0%
	18000-19999	0		0.0%
	20000-UP	0		0.0%
BAC DATA			N= ( 68)	
	AVERAGE BAC	.197%		
	AVERAGE POSITIVE BAC	.197%		
	NEGATIVE	0		0.0%
	.01 - .04	1		1.4%
	.05 - .09	3		4.4%
	.10 - .14	12		17.6%
	.15 - .19	23		33.8%
	.20 - .24	13		19.1%
	.25 +	16		23.5%
REFUSED TEST			N= ( 400)	
	ONCE	10		2.5%
	TWICE	0		0.0%
	3 OR MORE	0		0.0%

## EXHIBIT 4.0-5 (Continued)

## DIAGNOSTIC TEST SCORES

N=( 0)

PROBLEM	0	0.0%
NON-PROBLEM	1	100.0%
UNDEFINED	0	0.0%
EST. PROB. DRINKERS	20	5.0%

## VIOLATIONS ON ADB

N=( 400)

1 DWI	327	81.7%
2 DWI	67	16.7%
3 DWI	5	1.2%
4 DWI	0	0.0%
5+ DWI	1	0.2%
AVERAGE NO DWIS	1.20	

1-2 NON A/R VIOLATIONS	84	21.0%
3-4	21	5.2%
5-6	1	0.2%
7-8	0	0.0%
9 UP	0	0.0%
AVERAGE NON A/R VIOL	.45	

1 ACCIDENT	14	3.5%
2 ACCIDENTS	0	0.0%
3 ACCIDENTS	0	0.0%
4 OR MORE	0	0.0%
AVER NO ACCIDENTS	.03	

## AVG DAYS TO TYPE 1 RECID

1	67	266 DAYS
2	10	148 DAYS

## AVG DAYS TO TYPE 2 RECID

1	67	266 DAYS
2	10	148 DAYS

## AVG DAYS TO TYPE 3 RECID

1	67	266 DAYS
2	10	148 DAYS

EXHIBIT 4.0-6  
IDAHO ALCOHOL SAFETY ACTION PROJECT  
PROFILE ANALYSIS

AEP DWIS 1974

	SAMPLE SIZE :	400	
SEX		N=( 258)	
	MALES	226	87.5%
	FEMALES	32	12.4%
HEIGHT		N=( 249)	
	AVERAGE HEIGHT	68.9	
WEIGHT		N=( 249)	
	AVERAGE WEIGHT	161.3	
AGE		N=( 288)	
	AVERAGE AGE	35.7	
	AGE 19 OR LESS	26	9.0%
	AGE 20 - 24	53	18.4%
	AGE 25 - 29	42	14.5%
	AGE 30 - 34	30	10.4%
	AGE 35 - 39	27	9.3%
	AGE 40 - 44	28	9.7%
	AGE 45 - 49	37	12.8%
	AGE 50 - 59	25	8.6%
	AGE 60 AND OVER	20	6.9%
RACE		N=( 141)	
	WHITE	129	91.4%
	BLACK	1	0.7%
	AMERICAN INDIAN	4	2.8%
	MEXICAN	5	3.5%
	ORIENTAL	0	0.0%
	LATIN	0	0.0%
	OTHER RACES	2	1.4%
EMPLOYMENT STATUS		N=( 143)	
	FULL-TIME	104	72.7%
	PART-TIME	9	6.2%
	NOT EMPLOYED	18	12.5%
	HOUSEWIFE	4	2.7%
	STUDENTS	2	1.3%
	RETIRED	6	4.1%
OCCUPATION TYPE		N=( 140)	
	UNEMPLOYED	18	12.8%
	PROF / TECH	14	10.0%
	CLERICAL / SALES	6	4.2%
	SERVICES	12	8.5%
	AGRICULTURE	5	3.5%
	PROCESSING	17	12.1%
	MACHINE TRADES	5	3.5%
	FABRICATION / REPAIR	10	7.1%
	STRUCTURAL	10	7.1%
	OTHER	43	30.7%

## EXHIBIT 4.0-6 (Continued)

YEARS IN IDAHO		N=( 119)	
AVERAGE YEARS IN IDA		22.6	
1	5	4.2%	
2	5	4.2%	
3	2	1.6%	
4	5	4.2%	
5	4	3.3%	
6-10	12	10.0%	
11-15	13	10.9%	
16-20	8	6.7%	
21 AND OVER	65	54.6%	
REHABILITATION DATA		N=( 400)	
ATTENDED DEF. DRIVING	33	8.2%	
ATTENDED DICP	53	13.2%	
ATTENDED COURT-SCHOOL	83	20.7%	
COURT ALCOHOL SCHOOL DATA		N=( 83)	
NEGATIVE IMPROVEMENT	1	1.2%	
ZERO IMPROVEMENT	0	0.0%	
IMPROVEMENT 1-4	31	37.3%	
5-9	36	43.3%	
10-14	10	12.0%	
15-19	2	2.4%	
20-UP	3	3.6%	
MARITAL STATUS		N=( 144)	
MARRIED	74	51.3%	
SINGLE	30	20.8%	
DIVORCED	32	22.2%	
WIDOWED	2	1.3%	
SEPERATED	6	4.1%	
OTHER	0	0.0%	
DEPENDENTS		N=( 131)	
0	39	29.7%	
1	23	17.5%	
2	20	15.2%	
3	13	9.9%	
4	23	17.5%	
5	9	6.8%	
6	2	1.5%	
7	1	0.7%	
8	0	0.0%	
9	0	0.0%	
10	1	0.7%	
11+	0	0.0%	
RELIGION		N=( 122)	
PROTESTANT	57	46.7%	
CATHOLIC	23	18.8%	
JEWISH	0	0.0%	
MORMON	20	16.3%	
OTHER	22	18.0%	

## EXHIBIT 4.0-6 (Continued)

## YEARS MARRIED

N= ( 73)

## AVERAGE

13.2

1	6	8.2%
2	5	6.8%
3	4	5.4%
4	5	6.8%
5-10	13	17.8%
11-15	14	19.1%
16-20	10	13.6%
20+	16	21.9%

## EDUCATION

N= ( 141)

## AVERAGE YEARS

11.0

1-6	5	6.9%
7-9	25	17.7%
10	12	8.5%
11	20	14.1%
12	59	41.8%
13	6	4.2%
14	9	6.3%
15	1	0.7%
16	4	2.8%
17 AND UP	0	0.0%

## INCOME

N= ( 133)

## LESS THAN \$4000

40

30.0%

4000-5999

22

16.5%

6000-7999

26

19.5%

8000-9999

20

15.0%

10000-11999

10

7.5%

12000-13999

1

0.7%

14000-15999

7

5.2%

16000-17999

0

0.0%

18000-19999

2

1.5%

20000-UP

5

3.7%

## BAC DATA

N= ( 291)

## AVERAGE BAC

.142%

## AVERAGE POSITIVE BAC

.143%

## NEGATIVE

3

1.0%

.01 - .04

10

3.4%

.05 - .09

41

14.0%

.10 - .14

93

31.9%

.15 - .19

97

33.3%

.20 - .24

40

13.7%

.25 +

7

2.4%

## REFUSED TEST

N= ( 400)

## ONCE

19

4.7%

## TWICE

0

0.0%

## 3 OR MORE

0

0.0%

## EXHIBIT 4.0-6 (Continued)

## DIAGNOSTIC TEST SCORES

N=( 97)

AVERAGE ALCADD	11.9	
1-11	52	53.6%
12-19	33	34.0%
20-29	9	9.2%
30-39	3	3.0%
40-49	0	0.0%
50-UP	0	0.0%

## DRINKER CLASS DATA

N=( 133)

PROBLEM	51	38.3%
NON-PROBLEM	71	53.3%
UNDEFINED	11	8.2%
EST. PROB. DRINKERS	92	23.0%

## VIOLATIONS CN ADB

N=( 400)

1 DWI	285	71.2%
2 DWI	73	18.2%
3 DWI	29	7.2%
4 DWI	10	2.5%
5+ DWI	3	0.7%
AVERAGE NO DWIS	1.43	

1-2 NON A/R VIOLATIONS	97	24.2%
3-4	29	7.2%
5-6	10	2.5%
7-8	4	1.0%
9 UP	2	0.5%
AVERAGE NON A/R VIOL	.83	

1 ACCIDENT	53	13.2%
2 ACCIDENTS	16	4.0%
3 ACCIDENTS	2	0.5%
4 OR MORE	1	0.2%
AVER NO ACCIDENTS	.24	

## CRIMINAL INVESTIGATION DATA

N=( 39)

1-2 MISDEMEANORS	15	38.4%
3-4 MISDEMEANORS	14	35.8%
5+ MISDEMEANORS	10	25.6%
AVG NO. MISDEMEANORS	3.76	
1-2 FELONIES	1	2.5%
3-4 FELONIES	1	2.5%
5+ FELONIES	0	0.0%
AVG NO FELONIES	.10	
1-2 A/R MISDEMEANORS	20	51.2%
3-4 A/R MISDEMEANORS	4	10.2%
5+ A/R MISDEMEANORS	1	2.5%
AVG NO A/R MISDEMEANORS	1.25	
1-2 A/R FELONIES	0	0.0%
3-4 A/R FELONIES	0	0.0%
5+ A/R FELONIES	0	0.0%
AVG NO A/R FELONIES	.00	



## EXHIBIT 4.0-6 (Continued)

## AVG DAYS TO TYPE 1 RECID

1	73	442 DAYS
2	58	225 DAYS
3	30	122 DAYS
4	8	90 DAYS
5	5	72 DAYS

## AVG DAYS TO TYPE 2 RECID

1	66	495 DAYS
2	52	237 DAYS
3	57	107 DAYS
4	12	71 DAYS
5	5	72 DAYS

## AVG DAYS TO TYPE 3 RECID

1	66	495 DAYS
2	52	237 DAYS
3	57	107 DAYS
4	12	71 DAYS
5	5	72 DAYS

EXHIBIT 4.0-7  
IDAHO ALCOHOL SAFETY ACTION PROJECT  
PROFILE ANALYSIS

AEP DWIS 1973

SAMPLE SIZE :		400	
SEX		N= ( 261)	
	MALES	247	94.6%
	FEMALES	14	5.3%
HEIGHT		N= ( 255)	
	AVERAGE HEIGHT	69.5	
WEIGHT		N= ( 255)	
	AVERAGE WEIGHT	166.6	
AGE		N= ( 285)	
	AVERAGE AGE	38.6	
	AGE 19 OR LESS	12	4.2%
	AGE 20 - 24	34	11.9%
	AGE 25 - 29	44	15.4%
	AGE 30 - 34	42	14.7%
	AGE 35 - 39	29	10.1%
	AGE 40 - 44	24	8.4%
	AGE 45 - 49	34	11.9%
	AGE 50 - 59	46	16.1%
	AGE 60 AND OVER	20	7.0%
RACE		N= ( 157)	
	WHITE	145	92.3%
	BLACK	0	0.0%
	AMERICAN INDIAN	6	3.8%
	MEXICAN	6	3.8%
	ORIENTAL	0	0.0%
	LATIN	0	0.0%
	OTHER RACES	0	0.0%
EMPLOYMENT STATUS		N= ( 159)	
	FULL-TIME	130	81.7%
	PART-TIME	5	3.1%
	NOT EMPLOYED	18	11.3%
	HOUSEWIFE	1	0.6%
	STUDENTS	2	1.2%
	RETIRED	3	1.8%
OCCUPATION TYPE		N= ( 156)	
	UNEMPLOYED	13	8.3%
	PROF / TECH	12	7.6%
	CLERICAL / SALES	15	9.6%
	SERVICES	23	14.7%
	AGRICULTURE	11	7.0%
	PROCESSING	16	10.2%
	MACHINE TRADES	6	3.8%
	FABRICATION / REPAIR	12	7.6%
	STRUCTURAL	12	7.6%
	OTHER	36	23.0%

# EXHIBIT 4.0-7 (Continued)

YEARS IN IDAHO	N= ( 97)	
AVERAGE YEARS IN IDA	25.3	
1	3	3.0%
2	0	0.0%
3	6	6.1%
4	2	2.0%
5	1	1.0%
6-10	8	8.2%
11-15	5	5.1%
16-20	11	11.3%
21 AND OVER	61	62.8%

REHABILITATION DATA	N= ( 400)	
ATTENDED DEF. DRIVING	29	7.2%
ATTENDED DCP	31	7.7%
ATTENDED COURT-SCHOOL	63	15.7%

COURT ALCOHOL SCHOOL DATA	N= ( 63)	
NEGATIVE IMPROVEMENT	2	3.1%
ZERO IMPROVEMENT	0	0.0%
IMPROVEMENT 1-4	18	28.5%
5-9	27	42.8%
10-14	8	12.6%
15-19	4	6.3%
20-UP	4	6.3%

MARITAL STATUS	N= ( 160)	
MARRIED	80	50.0%
SINGLE	36	22.5%
DIVORCED	32	20.0%
WIDOWED	4	2.5%
SEPERATED	7	4.3%
OTHER	1	0.6%

DEPENDENTS	N= ( 110)	
0	31	28.1%
1	22	20.0%
2	21	19.0%
3	13	11.8%
4	9	8.1%
5	4	3.6%
6	4	3.6%
7	2	1.8%
8	1	0.9%
9	2	1.8%
10	1	0.9%
11+	0	0.0%

RELIGION	N= ( 105)	
PROTESTANT	33	31.4%
CATHOLIC	16	15.2%
JEWISH	0	0.0%
MORMON	21	20.0%
OTHER	35	33.3%

## EXHIBIT 4.0-7 (Continued)

## YEARS MARRIED

N=( 65)

AVERAGE		
1	3	4.6%
2	5	7.6%
3	5	7.6%
4	5	7.6%
5-10	15	23.0%
11-15	10	15.3%
16-20	7	10.7%
20+	15	23.0%

## EDUCATION

N=( 157)

AVERAGE YEARS		
1-6	6	7.0%
7-9	37	23.5%
10	12	7.6%
11	14	8.9%
12	58	36.9%
13	9	5.7%
14	11	7.0%
15	5	3.1%
16	4	2.5%
17 AND UP	1	0.6%

## INCOME

N=( 155)

LESS THAN \$4000		
4000-5999	20	12.9%
6000-7999	42	27.0%
8000-9999	29	18.7%
10000-11999	20	12.9%
12000-13999	8	5.1%
14000-15999	3	1.9%
16000-17999	0	0.0%
18000-19999	2	1.2%
20000-UP	1	0.6%

## BAC DATA

N=( 261)

## AVERAGE BAC

.161%

## AVERAGE POSITIVE BAC

.163%

NEGATIVE		
.01 - .04	2	0.7%
.05 - .09	27	10.3%
.10 - .14	73	27.9%
.15 - .19	89	34.0%
.20 - .24	42	16.0%
.25 +	24	9.1%

## REFUSED TEST

N=( 400)

ONCE		
TWICE	0	0.0%
3 OR MORE	0	0.0%

EXHIBIT 4.0-7 (Continued)  
DIAGNOSTIC TEST SCORES N=( 76)

AVERAGE ALCADD	13.8	
1-11	37	48.6%
12-19	23	30.2%
20-29	10	13.1%
30-39	3	3.9%
40-49	3	3.9%
50-UP	0	0.0%

DRINKER CLASS DATA N=( 153)

PROBLEM	64	41.8%
NON-PROBLEM	74	48.3%
UNDEFINED	15	9.8%
EST. PROB. DRINKERS	82	20.5%

VIOLATIONS ON ADB N=( 400)

1 DWI	302	75.5%
2 DWI	60	15.0%
3 DWI	25	6.2%
4 DWI	11	2.7%
5+ DWI	2	0.5%
AVERAGE NO DWIS	1.38	
1-2 NON A/R VIOLATIONS	95	23.7%
3-4	28	7.0%
5-6	9	2.2%
7-8	3	0.7%
9 UP	0	0.0%
AVERAGE NON A/R VIOL	.71	
1 ACCIDENT	55	13.7%
2 ACCIDENTS	12	3.0%
3 ACCIDENTS	0	0.0%
4 OR MORE	4	1.0%
AVER NO ACCIDENTS	.24	

CRIMINAL INVESTIGATION DATA N=( 68)

1-2 MISDEMEANORS	37	54.4%
3-4 MISDEMEANORS	11	16.1%
5+ MISDEMEANORS	20	29.4%
AVG NO. MISDEMEANORS	4.00	
1-2 FELONIES	5	7.3%
3-4 FELONIES	0	0.0%
5+ FELONIES	1	1.4%
AVG NO FELONIES	.19	
1-2 A/R MISDEMEANORS	32	47.0%
3-4 A/R MISDEMEANORS	8	11.7%
5+ A/R MISDEMEANORS	2	2.9%
AVG NO A/R MISDEMEANORS	1.25	
1-2 A/R FELONIES	4	5.8%
3-4 A/R FELONIES	0	0.0%
5+ A/R FELONIES	0	0.0%
AVG NO A/R FELONIES	.07	

EXHIBIT 4.0-7 (Continued)

AVG DAYS TO TYPE 1 REC'D

1	60	515 DAYS
2	50	166 DAYS
3	33	116 DAYS
4	4	32 DAYS
5	5	61 DAYS

AVG DAYS TC TYPE 2 REC'D

1	54	515 DAYS
2	58	158 DAYS
3	27	122 DAYS
4	20	49 DAYS
5	5	61 DAYS

AVG DAYS TC TYPE 3 REC'D

1	54	515 DAYS
2	58	158 DAYS
3	27	122 DAYS
4	20	49 DAYS
5	5	61 DAYS

EXHIBIT 4.0-8  
IDAHO ALCOHOL SAFETY ACTION PROJECT  
PROFILE ANALYSIS

REG DWIS 1974

SAMPLE SIZE :		400	
SEX		N= ( 339)	
	MALES	304	89.6%
	FEMALES	35	10.3%
HEIGHT		N= ( 339)	
	AVERAGE HEIGHT	69.2	
WEIGHT		N= ( 339)	
	AVERAGE WEIGHT	161.2	
AGE		N= ( 352)	
	AVERAGE AGE	35.3	
	AGE 19 OR LESS	42	11.9%
	AGE 20 - 24	67	19.0%
	AGE 25 - 29	55	15.6%
	AGE 30 - 34	27	7.6%
	AGE 35 - 39	26	7.3%
	AGE 40 - 44	31	8.8%
	AGE 45 - 49	31	8.8%
	AGE 50 - 59	53	15.0%
	AGE 60 AND OVER	20	5.6%
RACE		N= ( 205)	
	WHITE	185	90.2%
	BLACK	0	0.0%
	AMERICAN INDIAN	11	5.3%
	MEXICAN	6	2.9%
	ORIENTAL	2	0.9%
	LATIN	0	0.0%
	OTHER RACES	1	0.4%
EMPLOYMENT STATUS		N= ( 203)	
	FULL-TIME	138	67.9%
	PART-TIME	10	4.9%
	NOT EMPLOYED	34	16.7%
	HOUSEWIFE	2	0.9%
	STUDENTS	10	4.9%
	RETIRED	9	4.4%
OCCUPATION TYPE		N= ( 202)	
	UNEMPLOYED	31	15.3%
	PROF / TECH	20	9.9%
	CLERICAL / SALES	10	4.9%
	SERVICES	21	10.3%
	AGRICULTURE	11	5.4%
	PROCESSING	17	8.4%
	MACHINE TRADES	4	1.9%
	FABRICATION / REPAIR	10	4.9%
	STRUCTURAL	9	4.4%
	OTHER	69	34.1%

## EXHIBIT 4.0-8 (Continued)

YEARS IN IDAHO		N=( 181)	
AVERAGE YEARS IN IDA		22.3	
1		14	7.7%
2		11	6.0%
3		3	1.6%
4		4	2.2%
5		3	1.6%
6-10		13	7.1%
11-15		7	3.8%
16-20		35	19.3%
21 AND OVER		91	50.2%

REHABILITATION DATA		N=( 400)	
ATTENDED DEF. DRIVING		35	8.7%
ATTENDED DICP		36	9.0%
ATTENDED COURT-SCHOOL		74	18.5%

COURT ALCOHOL SCHOOL DATA		N=( 74)	
NEGATIVE IMPROVEMENT		2	2.7%
ZERO IMPROVEMENT		0	0.0%
IMPROVEMENT 1-4		33	44.5%
5-9		29	39.1%
10-14		6	8.1%
15-19		2	2.7%
20-UP		2	2.7%

MARITAL STATUS		N=( 208)	
MARRIED		97	46.6%
SINGLE		58	27.8%
DIVORCED		40	19.2%
WIDOWED		3	1.4%
SEPERATED		10	4.8%
OTHER		0	0.0%

DEPENDENTS		N=( 196)	
0		62	31.6%
1		45	22.9%
2		30	15.3%
3		20	10.2%
4		25	12.7%
5		9	4.5%
6		3	1.5%
7		1	0.5%
8		1	0.5%
9		0	0.0%
10		0	0.0%
11+		0	0.0%

RELIGION		N=( 183)	
PROTESTANT		69	37.7%
CATHOLIC		39	21.3%
JEWISH		0	0.0%
MORMON		32	17.4%
OTHER		43	23.4%



EXHIBIT 4.0-8 (Continued)

YEARS MARRIED

AVERAGE

N= ( 100)

1	13	13.0%
2	8	8.0%
3	5	5.0%
4	2	2.0%
5-10	23	23.0%
11-15	11	11.0%
16-20	6	6.0%
20+	32	32.0%

EDUCATION

AVERAGE YEARS

N= ( 204)

1-6	3	5.6%
7-9	39	19.1%
10	24	11.7%
11	19	9.3%
12	77	37.7%
13	11	5.3%
14	13	6.3%
15	7	3.4%
16	9	4.4%
17 AND UP	2	0.9%

INCOME

LESS THAN \$4000

N= ( 193)

4000-5999	58	30.0%
6000-7999	36	18.6%
8000-9999	35	18.1%
10000-11999	27	13.9%
12000-13999	12	6.2%
14000-15999	9	4.6%
16000-17999	3	1.5%
18000-19999	1	0.5%
20000-UP	5	2.5%
	7	3.6%

BAC DATA

AVERAGE BAC

N= ( 276)

AVERAGE POSITIVE BAC

NEGATIVE

.01 - .04	7	2.5%
.05 - .09	7	2.5%
.10 - .14	20	7.2%
.15 - .19	93	33.6%
.20 - .24	89	32.2%
.25 +	40	14.4%
	20	7.2%

REFUSED TEST

ONCE

N= ( 400)

TWICE

3 OR MORE

21	5.2%
0	0.0%
0	0.0%

EXHIBIT 4.0-8 (Continued)  
DIAGNOSTIC TEST SCORES N=( 150)

AVERAGE ALCADD	11.6	
1-11	90	60.0%
12-19	38	25.3%
20-29	15	10.0%
30-39	5	3.3%
40-49	2	1.3%
50-UP	0	0.0%

DRINKER CLASS DATA N=( 194)

PROBLEM	77	39.6%
NON-PROBLEM	102	52.5%
UNDEFINED	15	7.7%
EST. PROB. DRINKERS	108	27.0%

VIOLATIONS ON ADB N=( 400)

1 DWI	287	71.7%
2 DWI	77	19.2%
3 DWI	29	7.2%
4 DWI	3	0.7%
5+ DWI	4	1.0%
AVERAGE NO DWIS	1.41	

1-2 NON A/R VIOLATIONS	125	31.2%
3-4	41	10.2%
5-6	13	3.2%
7-8	9	2.2%
9 UP	1	0.2%
AVERAGE NON A/R VIOL	1.11	

1 ACCIDENT	62	15.5%
2 ACCIDENTS	21	5.2%
3 ACCIDENTS	6	1.5%
4 OR MORE	1	0.2%
AVER NO ACCIDENTS	.31	

CRIMINAL INVESTIGATION DATA N=( 45)

1-2 MISDEMEANORS	26	57.7%
3-4 MISDEMEANORS	7	15.5%
5+ MISDEMEANORS	12	26.6%
AVG NO. MISDEMEANORS	3.00	
1-2 FELONIES	1	2.2%
3-4 FELONIES	0	0.0%
5+ FELONIES	0	0.0%
AVG NO FELONIES	.02	
1-2 A/R MISDEMEANORS	23	51.1%
3-4 A/R MISDEMEANORS	4	8.8%
5+ A/R MISDEMEANORS	1	2.2%
AVG NO A/R MISDEMEANORS	1.06	
1-2 A/R FELONIES	1	2.2%
3-4 A/R FELONIES	0	0.0%
5+ A/R FELONIES	0	0.0%
AVG NO A/R FELONIES	.02	

# EXHIBIT 4.0-8 (Continued)

AVG DAYS TO TYPE 1 REC'D		
1	77	422 DAYS
2	58	179 DAYS
3	9	81 DAYS
4	4	81 DAYS
5	18	57 DAYS
AVG DAYS TO TYPE 2 REC'D		
1	72	448 DAYS
2	62	204 DAYS
3	18	80 DAYS
AVG DAYS TO TYPE 3 REC'D		
1	72	448 DAYS
2	62	204 DAYS
3	18	80 DAYS

EXHIBIT 4.0-9  
IDAHO ALCOHOL SAFETY ACTION PROJECT  
PROFILE ANALYSIS

REG DWIS 1973

	SAMPLE SIZE :	400	
SEX		N=( 283)	
	MALES	249	87.9%
	FEMALES	34	12.0%
HEIGHT		N=( 256)	
	AVERAGE HEIGHT	68.9	
WEIGHT		N=( 255)	
	AVERAGE WEIGHT	162.9	
AGE		N=( 350)	
	AVERAGE AGE	36.6	
	AGE 19 OR LESS	23	6.5%
	AGE 20 - 24	53	15.1%
	AGE 25 - 29	61	17.4%
	AGE 30 - 34	38	10.8%
	AGE 35 - 39	42	12.0%
	AGE 40 - 44	30	8.5%
	AGE 45 - 49	32	9.1%
	AGE 50 - 59	52	14.8%
	AGE 60 AND OVER	19	5.4%
RACE		N=( 131)	
	WHITE	112	85.4%
	BLACK	2	1.5%
	AMERICAN INDIAN	7	5.3%
	MEXICAN	8	6.1%
	ORIENTAL	0	0.0%
	LATIN	1	0.7%
	OTHER RACES	1	0.7%
EMPLOYMENT STATUS		N=( 135)	
	FULL-TIME	95	70.3%
	PART-TIME	9	6.6%
	NOT EMPLOYED	26	19.2%
	HOUSEWIFE	1	0.7%
	STUDENTS	2	1.4%
	RETIRED	2	1.4%
OCCUPATION TYPE		N=( 133)	
	UNEMPLOYED	20	15.0%
	PROF / TECH	11	8.2%
	CLERICAL / SALES	7	5.2%
	SERVICES	15	11.2%
	AGRICULTURE	17	12.7%
	PROCESSING	15	11.2%
	MACHINE TRADES	6	4.5%
	FABRICATION / REPAIR	4	3.0%
	STRUCTURAL	12	9.0%
	OTHER	26	19.5%

# EXHIBIT 4.0-9 (Continued)

YEARS IN IDAHO		N=(	53)
AVERAGE YEARS IN IDA		20.8	
1	5	9.4%	
2	1	1.8%	
3	6	11.3%	
4	4	7.5%	
5	0	0.0%	
6-10	4	7.5%	
11-15	0	0.0%	
16-20	5	9.4%	
21 AND OVER	28	52.8%	
REHABILITATION DATA		N=(	400)
ATTENDED DEF. DRIVING		27	6.7%
ATTENDED DICP		36	9.0%
ATTENDED COURT-SCHOOL		64	16.0%
COURT ALCOHOL SCHOOL DATA		N=(	64)
NEGATIVE IMPROVEMENT		1	1.5%
ZERO IMPROVEMENT		0	0.0%
IMPROVEMENT 1-4		17	26.5%
5-9		31	48.4%
10-14		10	15.6%
15-19		1	1.5%
20-UP		4	6.2%
MARITAL STATUS		N=(	135)
MARRIED		72	53.3%
SINGLE		30	22.2%
DIVORCED		23	17.0%
WIDOWED		4	2.9%
SEPERATED		5	3.7%
OTHER		1	0.7%
DEPENDENTS		N=(	64)
0		23	35.9%
1		12	18.7%
2		7	10.9%
3		8	12.5%
4		7	10.9%
5		1	1.5%
6		1	1.5%
7		4	6.2%
8		0	0.0%
9		1	1.5%
10		0	0.0%
11+		0	0.0%
RELIGION		N=(	60)
PROTESTANT		22	36.6%
CATHOLIC		12	20.0%
JEWISH		0	0.0%
MORMON		12	20.0%
OTHER		14	23.3%

## EXHIBIT 4.0-9 (Continued)

## YEARS MARRIED

## AVERAGE

N= ( 31)

1	2	6.4%
2	3	9.6%
3	3	9.6%
4	1	3.2%
5-10	8	25.8%
11-15	3	9.6%
16-20	5	16.1%
20+	6	19.3%

## EDUCATION

## AVERAGE YEARS

N= ( 134)

1-6	7	5.4%
7-9	34	25.3%
10	7	5.2%
11	13	9.7%
12	46	34.3%
13	8	5.9%
14	8	5.9%
15	5	3.7%
16	6	4.4%
17 AND UP	0	0.0%

## INCOME

## LESS THAN \$4000

N= ( 132)

4000-5999	19	14.3%
6000-7999	25	18.9%
8000-9999	21	15.9%
10000-11999	17	12.8%
12000-13999	4	3.0%
14000-15999	2	1.5%
16000-17999	2	1.5%
18000-19999	0	0.0%
20000-UP	3	2.2%

## BAC DATA

## AVERAGE BAC

N= ( 205)

## AVERAGE POSITIVE BAC

## NEGATIVE

.01 - .04	2	0.9%
.05 - .09	18	8.7%
.10 - .14	60	29.2%
.15 - .19	67	32.6%
.20 - .24	37	18.0%
.25 +	17	8.2%

## REFUSED TEST

ONCE  
TWICE  
3 OR MORE

N= ( 400)

ONCE	18	4.5%
TWICE	0	0.0%
3 OR MORE	0	0.0%

EXHIBIT 4.0-9 (Continued)  
DIAGNOSTIC TEST SCORES

	N=(	52)	
AVERAGE ALCADD	13.7		
1-11	26		50.0%
12-19	14		26.9%
20-29	9		17.3%
30-39	2		3.8%
40-49	1		1.9%
50-UP	0		0.0%

DRINKER CLASS DATA	N=(	111)	
PROBLEM	38		34.2%
NON-PROBLEM	62		55.8%
UNDEFINED	11		9.9%
EST. PROB. DRINKERS	72		18.0%

VIOLATIONS ON ADB	N=(	400)	
1 DWI	309		77.2%
2 DWI	65		16.2%
3 DWI	17		4.2%
4 DWI	8		2.0%
5+ DWI	1		0.2%
AVERAGE NO DWIS	1.32		

1-2 NON A/R VIOLATIONS	111		27.7%
3-4	17		4.2%
5-6	3		0.7%
7-8	3		0.7%
9 UP	0		0.0%
AVERAGE NON A/R VIOL	.60		

1 ACCIDENT	75		18.7%
2 ACCIDENTS	14		3.5%
3 ACCIDENTS	1		0.2%
4 OR MORE	1		0.2%
AVER NO ACCIDENTS	.27		

CRIMINAL INVESTIGATION DATA	N=(	71)	
1-2 MISDEMEANORS	29		40.8%
3-4 MISDEMEANORS	15		21.1%
5+ MISDEMEANORS	27		38.0%
AVG NO. MISDEMEANORS	5.32		
1-2 FELONIES	1		1.4%
3-4 FELONIES	1		1.4%
5+ FELONIES	1		1.4%
AVG NO FELONIES	.12		
1-2 A/R MISDEMEANORS	24		33.8%
3-4 A/R MISDEMEANORS	7		9.8%
5+ A/R MISDEMEANORS	5		7.0%
AVG NO A/R MISDEMEANORS	2.36		
1-2 A/R FELONIES	0		0.0%
3-4 A/R FELONIES	0		0.0%
5+ A/R FELONIES	0		0.0%
AVG NO A/R FELONIES	.00		

## EXHIBIT 4.0-9 (Continued)

## AVG DAYS TO TYPE 1 REC'D

1	65	432 DAYS
2	34	259 DAYS
3	24	129 DAYS

## AVG DAYS TO TYPE 2 REC'D

1	58	453 DAYS
2	42	229 DAYS
3	33	105 DAYS

## AVG DAYS TO TYPE 3 REC'D

1	58	453 DAYS
2	42	229 DAYS
3	33	105 DAYS



Exhibit 4.0-10  
IDAHO ALCOHOL SAFETY ACTION PROJECT  
PROFILE ANALYSIS

AEP DWIS 1975

SAMPLE SIZE :		400	
SEX	N=( 264)		
MALES	233	88.2%	
FEMALES	31	11.7%	
HEIGHT	N=( 258)		
AVERAGE HEIGHT	69.0		
WEIGHT	N=( 258)		
AVERAGE WEIGHT	162.8		
AGE	N=( 292)		
AVERAGE AGE	35.8		
AGE 19 OR LESS	26	8.9%	
AGE 20 - 24	51	17.4%	
AGE 25 - 29	46	15.7%	
AGE 30 - 34	29	9.9%	
AGE 35 - 39	32	10.9%	
AGE 40 - 44	28	9.5%	
AGE 45 - 49	30	10.2%	
AGE 50 - 59	27	9.2%	
AGE 60 AND OVER	23	7.8%	
RACE	N=( 150)		
WHITE	136	90.6%	
BLACK	1	0.6%	
AMERICAN INDIAN	5	3.3%	
MEXICAN	6	4.0%	
ORIENTAL	0	0.0%	
LATIN	0	0.0%	
OTHER RACES	2	1.3%	
EMPLOYMENT STATUS	N=( 150)		
FULL-TIME	113	75.3%	
PART-TIME	8	5.3%	
NOT EMPLOYED	15	10.0%	
HOUSEWIFE	5	3.3%	
STUDENTS	2	1.3%	
RETIRED	7	4.6%	
OCCUPATION TYPE	N=( 146)		
UNEMPLOYED	17	11.6%	
PROF / TECH	13	8.9%	
CLERICAL / SALES	8	5.4%	
SERVICES	14	9.5%	
AGRICULTURE	5	3.4%	
PROCESSING	15	10.2%	
MACHINE TRADES	5	3.4%	
FABRICATION / REPAIR	10	6.8%	
STRUCTURAL	10	6.8%	
OTHER	49	33.5%	

Exhibit 4.0-10 (Continued)

YEARS IN IDAHO	N=( 121)	
AVERAGE YEARS IN IDA	22.6	
1	7	5.7%
2	4	3.3%
3	3	2.4%
4	4	3.3%
5	4	3.3%
6-10	12	9.9%
11-15	13	10.7%
16-20	10	8.2%
21 AND OVER	64	52.8%

REHABILITATION DATA	N=( 400)	
ATTENDED DEF. DRIVING	28	7.0%
ATTENDED DICP	48	12.0%
ATTENDED COURT-SCHOOL	92	23.0%

COURT ALCOHOL SCHOOL DATA	N=( 92)	
NEGATIVE IMPROVEMENT	1	1.0%
ZERO IMPROVEMENT	0	0.0%
IMPROVEMENT 1-4	32	34.7%
5-9	43	46.7%
10-14	12	13.0%
15-19	1	1.0%
20-UP	3	3.2%

MARITAL STATUS	N=( 151)	
MARRIED	81	53.6%
SINGLE	29	19.2%
DIVORCED	30	19.8%
WIDOWED	3	1.9%
SEPERATED	8	5.2%
OTHER	0	0.0%

DEPENDENTS	N=( 136)	
0	40	29.4%
1	21	15.4%
2	25	18.3%
3	16	11.7%
4	22	16.1%
5	7	5.1%
6	2	1.4%
7	1	0.7%
8	1	0.7%
9	0	0.0%
10	1	0.7%
11+	0	0.0%

RELIGION	N=( 126)	
PROTESTANT	56	44.4%
CATHOLIC	27	21.4%
JEWISH	0	0.0%
MORMON	22	17.4%
OTHER	21	16.6%

Exhibit 4.0-10 (Continued)

YEARS MARRIED

AVERAGE

N=( 78)

1	4	5.1%
2	5	6.4%
3	5	6.4%
4	3	3.8%
5-10	18	23.0%
11-15	14	17.9%
16-20	9	11.5%
20+	20	25.6%

EDUCATION

AVERAGE YEARS

N=( 148)

1-6	5	7.8%
7-9	27	18.2%
10	11	7.4%
11	18	12.1%
12	62	41.8%
13	9	6.0%
14	10	6.7%
15	1	0.6%
16	4	2.7%
17 AND UP	1	0.6%

INCOME

LESS THAN \$4000

N=( 141)

4000-5999	40	28.3%
6000-7999	23	16.3%
8000-9999	25	17.7%
10000-11999	23	16.3%
12000-13999	11	7.8%
14000-15999	3	2.1%
16000-17999	8	5.6%
18000-19999	0	0.0%
20000-UP	2	1.4%
	6	4.2%

BAC DATA

AVERAGE BAC

N=( 292)

AVERAGE POSITIVE BAC

NEGATIVE

.01 - .04	3	1.0%
.05 - .09	10	3.4%
.10 - .14	36	12.3%
.15 - .19	97	33.2%
.20 - .24	99	33.9%
.25 +	39	13.3%
	8	2.7%

REFUSED TEST

ONCE

N=( 400)

TWICE

3 OR MORE

19	4.7%
1	0.2%
0	0.0%

Exhibit 4.0-10 (Continued)

DIAGNOSTIC TEST SCORES

AVERAGE ALCADD

N=( 96)

1-11	55	57.2%
12-19	31	32.2%
20-29	8	8.3%
30-39	2	2.0%
40-49	0	0.0%
50-UP	0	0.0%

DRINKER CLASS DATA

N=( 142)

PROBLEM	55	38.7%
NON-PROBLEM	75	52.8%
UNDEFINED	12	8.4%
EST. PROB. DRINKERS	93	23.2%

VIOLATIONS ON ADR

N=( 400)

1 DWI	286	71.5%
2 DWI	75	18.7%
3 DWI	28	7.0%
4 DWI	8	2.0%
5+ DWI	3	0.7%
AVERAGE NO DWIS	1.41	

1-2 NON A/R VIOLATIONS	104	26.0%
3-4	34	8.5%
5-6	7	1.7%
7-8	4	1.0%
9 UP	2	0.5%
AVERAGE NON A/R VIOL	.85	

1 ACCIDENT	48	12.0%
2 ACCIDENTS	14	3.5%
3 ACCIDENTS	3	0.7%
4 OR MORE	1	0.2%
AVER NO ACCIDENTS	.22	

CRIMINAL INVESTIGATION DATA

N=( 38)

1-2 MISDEMEANORS	17	44.7%
3-4 MISDEMEANORS	12	31.5%
5+ MISDEMEANORS	9	23.6%
AVG NO. MISDEMEANORS	3.42	
1-2 FELONIES	1	2.6%
3-4 FELONIES	1	2.6%
5+ FELONIES	0	0.0%
AVG NO FELONIES	.10	
1-2 A/R MISDEMEANORS	10	50.0%
3-4 A/R MISDEMEANORS	4	10.5%
5+ A/R MISDEMEANORS	1	2.6%
AVG NO A/R MISDEMEANORS	1.23	
1-2 A/R FELONIES	0	0.0%
3-4 A/R FELONIES	0	0.0%
5+ A/R FELONIES	0	0.0%
AVG NO A/R FELONIES	.00	

Exhibit 4.0-10 (Continued)

AVG DAYS TO TYPE 1 REC'D

1	75	436 DAYS
2	56	233 DAYS
3	24	119 DAYS
4	12	96 DAYS

AVG DAYS TO TYPE 2 REC'D

1	71	460 DAYS
2	48	224 DAYS
3	45	113 DAYS
4	16	80 DAYS

AVG DAYS TO TYPE 3 REC'D

1	71	460 DAYS
2	48	224 DAYS
3	45	113 DAYS
4	16	80 DAYS

## Exhibit 4.0-11

IDAHO ALCOHOL SAFETY ACTION PROJECT  
PROFILE ANALYSIS

REG DWIS 1975

	SAMPLE SIZE :	400	
SEX		N=( 342)	
	MALES	297	86.8%
	FEMALES	45	13.1%
HEIGHT		N=( 335)	
	AVERAGE HEIGHT	68.8	
WEIGHT		N=( 335)	
	AVERAGE WEIGHT	160.4	
AGE		N=( 348)	
	AVERAGE AGE	34.5	
	AGE 19 OR LESS	45	12.9%
	AGE 20 - 24	65	18.6%
	AGE 25 - 29	56	16.0%
	AGE 30 - 34	33	9.4%
	AGE 35 - 39	24	6.8%
	AGE 40 - 44	25	7.1%
	AGE 45 - 49	36	10.3%
	AGE 50 - 59	46	13.2%
	AGE 60 AND OVER	18	5.1%
RACE		N=( 181)	
	WHITE	160	88.3%
	BLACK	3	1.6%
	AMERICAN INDIAN	12	6.6%
	MEXICAN	5	2.7%
	ORIENTAL	1	0.5%
	LATIN	0	0.0%
	OTHER RACES	0	0.0%
EMPLOYMENT STATUS		N=( 182)	
	FULL-TIME	123	67.5%
	PART-TIME	9	4.9%
	NOT EMPLOYED	29	15.9%
	HOUSEWIFE	3	1.6%
	STUDENTS	8	4.3%
	RETIRED	10	5.4%
OCCUPATION TYPE		N=( 180)	
	UNEMPLOYED	28	15.5%
	PROF / TECH	11	6.1%
	CLERICAL / SALES	10	5.5%
	SERVICES	18	10.0%
	AGRICULTURE	9	5.0%
	PROCESSING	19	10.5%
	MACHINE TRADES	5	2.7%
	FABRICATION / REPAIR	9	5.0%
	STRUCTURAL	10	5.5%
	OTHER	61	33.8%

Exhibit 4.0-11 (Continued)

YEARS IN IDAHO		N=( 163)	
AVERAGE YEARS IN IDA		21.5	
1		9	5.5%
2		10	6.1%
3		4	2.4%
4		4	2.4%
5		4	2.4%
6-10		9	5.5%
11-15		13	7.9%
16-20		35	21.4%
21 AND OVER		75	46.0%

REHABILITATION DATA		N=( 400)	
ATTENDED DEF. DRIVING		36	9.0%
ATTENDED DICP		38	9.5%
ATTENDED COURT-SCHOOL		72	18.0%

COURT ALCOHOL SCHOOL DATA		N=( 72)	
NEGATIVE IMPROVEMENT		3	4.1%
ZERO IMPROVEMENT		0	0.0%
IMPROVEMENT 1-4		29	40.2%
5-9		29	40.2%
10-14		8	11.1%
15-19		3	4.1%
20-UP		0	0.0%

MARITAL STATUS		N=( 185)	
MARRIED		72	38.9%
SINGLE		54	29.1%
DIVORCED		44	23.7%
WIDOWED		5	2.7%
SEPERATED		10	5.4%
OTHER		0	0.0%

DEPENDENTS		N=( 174)	
0		55	31.6%
1		44	25.2%
2		27	15.5%
3		16	9.1%
4		15	8.6%
5		10	5.7%
6		4	2.2%
7		0	0.0%
8		2	1.1%
9		0	0.0%
10		1	0.5%
11+		0	0.0%

RELIGION		N=( 165)	
PROTESTANT		60	36.3%
CATHOLIC		37	22.4%
JEWISH		0	0.0%
MORMON		28	16.9%
OTHER		40	24.2%

Exhibit 4.0-11 (Continued)

YEARS MARRIED

AVERAGE

N=( 81)

	13.8	
1	7	8.6%
2	5	6.1%
3	3	3.7%
4	5	6.1%
5-10	22	27.1%
11-15	12	14.8%
16-20	6	7.4%
20+	21	25.9%

EDUCATION

AVERAGE YEARS

N=( 178)

	11.1	
1-6	4	5.1%
7-9	35	19.6%
10	18	10.1%
11	21	11.7%
12	70	39.3%
13	8	4.4%
14	10	5.6%
15	4	2.2%
16	6	3.3%
17 AND UP	2	1.1%

INCOME

LESS THAN \$4000

N=( 172)

4000-5999	51	29.6%
6000-7999	35	20.3%
8000-9999	27	15.6%
10000-11999	29	16.8%
12000-13999	11	6.3%
14000-15999	8	4.6%
16000-17999	5	2.9%
18000-19999	1	0.5%
20000-UP	3	1.7%
	2	1.1%

BAC DATA

AVERAGE BAC

N=( 266)

AVERAGE POSITIVE BAC

.153%

.160%

NEGATIVE

.01 - .04	11	4.1%
.05 - .09	4	1.5%
.10 - .14	26	9.7%
.15 - .19	83	31.2%
.20 - .24	85	31.9%
.25 +	31	11.6%
	26	9.7%

REFUSED TEST

ONCE

N=( 400)

TWICE

3 OR MORE

18	4.5%
0	0.0%
0	0.0%



Exhibit 4.0-11 (Continued)

DIAGNOSTIC TEST SCORES

N=( 132)

AVERAGE ALCADD	14.5	
1-11	75	56.8%
12-19	26	19.6%
20-29	14	10.6%
30-39	14	10.6%
40-49	2	1.5%
50-UP	1	0.7%

DRINKER CLASS DATA

N=( 175)

PROBLEM	75	42.8%
NON-PROBLEM	81	46.2%
UNDEFINED	19	10.8%
EST. PROB. DRINKERS	106	26.5%

VIOLATIONS ON ADR

N=( 400)

1 DWI	279	69.7%
2 DWI	75	18.7%
3 DWI	35	8.7%
4 DWI	5	1.2%
5+ DWI	6	1.5%
AVERAGE NO DWIS	1.48	

1-2 NON A/R VIOLATIONS	126	31.5%
3-4	41	10.2%
5-6	10	2.5%
7-8	9	2.2%
9 UP	2	0.5%
AVERAGE NON A/R VIOL	1.15	

1 ACCIDENT	79	19.7%
2 ACCIDENTS	16	4.0%
3 ACCIDENTS	4	1.0%
4 OR MORE	1	0.2%
AVER NO ACCIDENTS	.31	

CRIMINAL INVESTIGATION DATA

N=( 30)

1-2 MISDEMEANORS	13	43.3%
3-4 MISDEMEANORS	6	20.0%
5+ MISDEMEANORS	11	36.6%
AVG NO. MISDEMEANORS	3.66	
1-2 FELONIES	2	6.6%
3-4 FELONIES	0	0.0%
5+ FELONIES	0	0.0%
AVG NO FELONIES	.06	
1-2 A/R MISDEMEANORS	18	60.0%
3-4 A/R MISDEMEANORS	4	13.3%
5+ A/R MISDEMEANORS	1	3.3%
AVG NO A/R MISDEMEANORS	1.40	
1-2 A/R FELONIES	1	3.3%
3-4 A/R FELONIES	0	0.0%
5+ A/R FELONIES	0	0.0%
AVG NO A/R FELONIES	.03	

Exhibit 4.0-11 (Continued)

AVG DAYS TO TYPE 1 REC ID

1	75	414 DAYS
2	70	240 DAYS
3	15	106 DAYS
4	8	93 DAYS
5	24	53 DAYS

AVG DAYS TO TYPE 2 REC ID

1	71	454 DAYS
2	66	214 DAYS
3	33	126 DAYS

AVG DAYS TO TYPE 3 REC ID

1	71	454 DAYS
2	66	214 DAYS
3	33	126 DAYS

Exhibit 4.0-12  
IDAHO ALCOHOL SAFETY ACTION PROJECT  
PROFILE ANALYSIS

YEAR 3 OPERATIONAL DWI's

SAMPLE SIZE :		500	
SEX		N=( 300)	
	MALES	268	89.3%
	FEMALES	32	10.6%
HEIGHT		N=( 291)	
	AVERAGE HEIGHT	69.0	
WEIGHT		N=( 291)	
	AVERAGE WEIGHT	160.3	
AGE		N=( 415)	
	AVERAGE AGE	33.0	
	AGE 19 OR LESS	71	17.1%
	AGE 20 - 24	76	18.3%
	AGE 25 - 29	65	15.6%
	AGE 30 - 34	42	10.1%
	AGE 35 - 39	28	6.7%
	AGE 40 - 44	37	8.9%
	AGE 45 - 49	32	7.7%
	AGE 50 - 59	47	11.3%
	AGE 60 AND OVER	17	4.0%
RACE		N=( 126)	
	WHITE	105	83.3%
	BLACK	0	0.0%
	AMERICAN INDIAN	12	9.5%
	MEXICAN	8	6.3%
	ORIENTAL	0	0.0%
	LATIN	0	0.0%
	OTHER RACES	1	0.7%
EMPLOYMENT STATUS		N=( 125)	
	FULL-TIME	87	69.6%
	PART-TIME	6	4.8%
	NOT EMPLOYED	24	19.2%
	HOUSEWIFE	2	1.6%
	STUDENTS	3	2.4%
	RETIRED	3	2.4%
OCCUPATION TYPE		N=( 122)	
	UNEMPLOYED	19	15.5%
	PROF / TECH	11	9.0%
	CLERICAL / SALES	2	1.6%
	SERVICES	22	18.0%
	AGRICULTURE	13	10.6%
	PROCESSING	10	8.1%
	MACHINE TRADES	8	6.5%
	FABRICATION / REPAIR	11	9.0%
	STRUCTURAL	4	3.2%
	OTHER	22	18.0%

Exhibit 4.0-12 (Continued)

YEARS IN IDAHO		N=( 105)	
AVERAGE YEARS IN IDA		21.1	
1		8	7.6%
2		5	4.7%
3		3	2.8%
4		5	4.7%
5		1	0.9%
6-10		16	15.2%
11-15		10	9.5%
16-20		11	10.4%
21 AND OVER		46	43.8%

REHABILITATION DATA		N=( 500)	
ATTENDED DEF. DRIVING		30	6.0%
ATTENDED DICP		49	9.8%
ATTENDED COURT-SCHOOL		65	13.0%

COURT ALCOHOL SCHOOL DATA		N=( 65)	
NEGATIVE IMPROVEMENT		1	1.5%
ZERO IMPROVEMENT		0	0.0%
IMPROVEMENT 1-4		27	41.5%
5-9		26	40.0%
10-14		9	13.8%
15-19		0	0.0%
20-UP		2	3.0%

MARITAL STATUS		N=( 126)	
MARRIED		62	49.2%
SINGLE		38	30.1%
DIVORCED		14	11.1%
WIDOWED		3	2.3%
SEPERATED		9	7.1%
OTHER		0	0.0%

DEPENDENTS		N=( 113)	
0		33	29.2%
1		29	25.6%
2		12	10.6%
3		12	10.6%
4		14	12.3%
5		5	4.4%
6		2	1.7%
7		2	1.7%
8		3	2.6%
9		0	0.0%
10		0	0.0%
11+		1	0.8%

RELIGION		N=( 106)	
PROTESTANT		34	32.0%
CATHOLIC		30	28.3%
JEWISH		0	0.0%
MORMON		20	18.8%
OTHER		22	20.7%

## Exhibit 4.0-12 (Continued)

YEARS MARRIED		N=( 57)	
AVERAGE	12.5		
1	7		12.2%
2	4		7.0%
3	5		8.7%
4	3		5.2%
5-10	13		22.8%
11-15	7		12.2%
16-20	4		7.0%
20+	14		24.5%
EDUCATION		N=( 126)	
AVERAGE YEARS	11.0		
1-6	6		4.0%
7-9	28		22.2%
10	6		4.7%
11	16		12.6%
12	51		40.4%
13	4		3.1%
14	4		3.1%
15	3		2.3%
16	7		5.5%
17 AND UP	1		0.7%
INCOME		N=( 125)	
LESS THAN \$4000	40		32.0%
4000-5999	24		19.2%
6000-7999	18		14.4%
8000-9999	17		13.6%
10000-11999	9		7.2%
12000-13999	4		3.2%
14000-15999	4		3.2%
16000-17999	2		1.6%
18000-19999	3		2.4%
20000-UP	4		3.2%
BAC DATA		N=( 298)	
AVERAGE BAC	.152%		
AVERAGE POSITIVE BAC	.153%		
NEGATIVE	3		1.0%
.01 - .04	4		1.3%
.05 - .09	37		12.4%
.10 - .14	97		32.5%
.15 - .19	87		29.1%
.20 - .24	51		17.1%
.25 +	19		6.3%
REFUSED TEST		N=( 500)	
ONCE	22		4.4%
TWICE	3		0.6%
3 OR MORE	0		0.0%

Exhibit 4.0-12 (Continued)

DIAGNOSTIC TEST SCORES		N=( 104)	
AVERAGE ALCAD	12.0		
1-11	61		58.6%
12-19	29		27.8%
20-29	12		11.5%
30-39	1		0.9%
40-49	1		0.9%
50-UP	0		0.0%

DRINKER CLASS DATA		N=( 123)	
PROBLEM	65		52.8%
NON-PROBLEM	45		36.5%
UNDEFINED	13		10.5%
EST. PROB. DRINKERS	100		20.0%

VIOLATIONS ON ADP		N=( 500)	
1 DWI	359		71.8%
2 DWI	90		18.0%
3 DWI	27		5.4%
4 DWI	6		1.2%
5+ DWI	17		3.4%
AVERAGE NO DWIS	1.47		
1-2 NON A/R VIOLATIONS	110		22.0%
3-4	35		7.0%
5-6	20		4.0%
7-8	14		2.8%
9 UP	2		0.4%
AVERAGE NON A/R VIOL	.97		
1 ACCIDENT	76		15.2%
2 ACCIDENTS	25		5.0%
3 ACCIDENTS	4		0.8%
4 OR MORE	1		0.2%
AVER NO ACCIDENTS	.28		

CRIMINAL INVESTIGATION DATA		N=( 22)	
1-2 MISDEMEANORS	8		36.3%
3-4 MISDEMEANORS	6		27.2%
5+ MISDEMEANORS	8		36.3%
AVG NO. MISDEMEANORS	7.00		
1-2 FELONIES	1		4.5%
3-4 FELONIES	1		4.5%
5+ FELONIES	2		9.0%
AVG NO FELONIES	1.77		
1-2 A/R MISDEMEANORS	6		27.2%
3-4 A/R MISDEMEANORS	3		13.6%
5+ A/R MISDEMEANORS	4		18.1%
AVG NO A/R MISDEMEANORS	3.13		
1-2 A/R FELONIES	0		0.0%
3-4 A/R FELONIES	0		0.0%
5+ A/R FELONIES	0		0.0%
AVG NO A/R FELONIES	.00		

Exhibit 4.0-12 (Continued)

AVG DAYS TC TYPE 1 REC ID

1	90	351 DAYS
2	54	274 DAYS
3	18	138 DAYS
4	48	126 DAYS
5	27	79 DAYS

AVG DAYS TC TYPE 2 REC ID

1	83	376 DAYS
2	56	248 DAYS
3	36	141 DAYS
4	44	130 DAYS
5	32	75 DAYS

AVG DAYS TC TYPE 3 REC ID

1	83	376 DAYS
2	56	248 DAYS
3	36	141 DAYS
4	44	130 DAYS
5	32	75 DAYS

