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IMPACT ON THE TRAFFIC SAFETY SYSTEM
Analytic Study No. IV

Richard F. Krenek

OMEC, Inc.
115 South Peters
Norman, Oklahoma 73069

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16. Abstract

This study presents an analysis of the impact of the Alcohol Safety Action Project (ASAP) on selected aspects of the traffic safety system in Oklahoma City. Data is presented for the total system from the time of a DUI arrest through the adjudication, probation and rehabilitation phases. Particular emphasis in this report was placed on the selection criteria for pre-sentence investigations and the subsequent effects of a rehabilitation assignment or lack thereof on recidivism rates. Drop-outs from rehabilitation were compared to non-dropouts. Degree of rehabilitation countermeasure structure appeared to be inversely related to drop-out rate. No significant difference in DUI recidivism was found between individuals who received a pre-sentence investigation and were subsequently referred to either a rehabilitation countermeasure or punitive sanction. Problem drinkers had a significantly greater propensity to recidivate than indeterminate or non-problem drinker types. DUI recidivists differ from non-recidivists in that they (recidivists) tend to be older, more likely male, have a disproportionately high share of persons classified as laborers, as well as a disproportionate share of separated or divorced persons. DUI arrest and court processing costs in Oklahoma City average $159.00 per case in 1976. Presentence interview, coordination and monitoring costs for individuals on probation average $118.00 per case in 1976.

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METRIC CONVERSION FACTORS

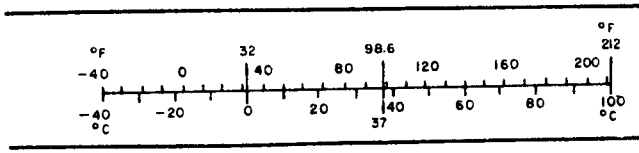
Approximate Conversions to Metric Measures

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

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

Approximate Conversions from Metric Measures

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



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OKLAHOMA CITY ASAP
IMPACT ON THE TRAFFIC SAFETY SYSTEM

by

Richard F. Krenek, Ph.D., P.E.

1. INTRODUCTION. This study is concerned with an analysis of the impact of ASAP on the traffic safety system of Oklahoma City during the ASAP operational years 1972 through 1976. The primary focus of the study is the procedure for disposition of alcohol-related traffic offenses by the Municipal Court and the subsequent effects of these dispositions on traffic safety.

The approach to presenting this study was to develop the necessary background information about the ASAP community and the overall ASAP program and then to consider the judicial system and its relationship to the traffic safety system. Summary data is presented for the total population of those flowing through the judicial system and then more detailed data and analyses are presented for those who were found guilty and who have had a Pre-Sentence Interview prior to court disposition of their DUI offense.

2. SYSTEMS DESCRIPTION

a. Description of ASAP Community. Oklahoma City is the state's largest city in both population and land area. The City encompasses 649 square miles and contains over 3,100 miles of roads. Oklahoma City's boundaries include five counties, six school districts and touch or encompass 17 smaller cities and towns. The population was estimated to be 366,413 within the corporate city limits of Oklahoma City in the 1970 census. This is only 57.2% of the total population (640,889) contained in the Oklahoma City Standard Metropolitan Statistical Area. A current estimate of Oklahoma City population is on the order of 400,000. In recent years the city's economic base has been broadened by a remarkable growth in business and manufacturing. Even with this growth, federal, state and local governments are still the largest employers in the city area. Because of rapid population growth and sprawling suburban developments, Oklahoma City is experiencing major traffic and transportation problems exacerbated by urban redevelopment, growth in the number of registered motor vehicles and a lack of adequate mass transportation to alleviate the high traffic volume.

In this paper, reference will be made, on occasion to the "comparison" city of Tulsa, Oklahoma. Note from Table 1 which follows that Tulsa is more compact than Oklahoma City, has fewer highway miles and does not have a large population outside its corporate limits as does Oklahoma City. Further, Tulsa has had a FARE program in the past and is currently operating with a MINI-ASAP program sponsored with DOT-402 monies.

TABLE 1: Comparison Statistics on the Cities of Oklahoma City and Tulsa

	OKLAHOMA CITY	TULSA
Miles of paved highways and streets (in city limits)	3,600	2,100
Land Area (square miles)	649	172
Population within corporate limits	366,413 (57.2% of SMSA)	331,800 (69.6% of SMSA)
1970 Census within SMSA	640,889	476,945
Population Density (city limits)	576/mi^2	1929/mi^2

Oklahoma City is located in an area of moderate climate. The average temperature is 59.9^o with the hottest month being July, averaging 81.5^o and the coldest January, with an average of 36.8^o. Average yearly rainfall for Oklahoma City is 31.37 inches.

b. Patterns of Alcohol Consumption Within the Population. Unpublished data from the Oklahoma Tax Commission contains the amount of tax monies collected in the fiscal year of 1976 for retail liquor stores.[1] Since liquor, wine and "highpowered" beer (>3.2%) can only be sold in licensed retail stores, the tax collected by these stores represents a fairly accurate estimation of alcohol consumption. The only exception to this estimation is the sale of beer of less than 3.2% alcohol which can be sold by other retail outlets.

Tulsa County reported $509,555.30 in liquor taxes collected for a projected county population estimate in 1976 of 425,000 indicating that $1.20 per person per year was paid in taxes. Oklahoma County reported $666,089.22 collected

[1] Ayers, Henry, Public Information Officer, Oklahoma Tax Commission

for a projected population estimate in 1976 of 561,000 which equates to $1.19 per person per year in liquor taxes paid. This indicates the per capita consumption in Oklahoma City (since it comprises a major portion of Oklahoma County) was about the same as the consumption in Tulsa. It is interesting to note that consumption has increased slightly in both cities considering the reported 1975 levels of approximately $1.12 to $1.15 per person per year in taxes collected.

Roadside interviews of drivers at 18 different locations on Oklahoma City during the 6 PM - 3 AM time period were conducted each year from 1972 - 1976. Several questions were asked during the roadside surveys regarding the alcohol consumption patterns of the person being interviewed. Table 2 presents information regarding whether the person being interviewed ever drinks and, for those who do drink, the type of beverage most often consumed.

TABLE 2: Percentage of the Driving Population in Oklahoma City who Drink Alcoholic Beverages & Beverages Preferred by Those Who Drink
(Source - Roadside Surveys 1972 through 1976)

	PERCENTAGE OF RESPONSES				
QUESTIONS ASKED	1972 N=1600	1973 N=1510	1974 N=1087	1975 N=1051	1976 N=1031
Do you ever drink beer, wine or liquor?					
a. Yes	72.0	71.7	73.7	73.1	72.4
b. No	28.0	28.3	26.3	26.9	27.6
Which beverage do you drink most often?					
a. Beer	71.6	67.9	66.0	66.1	65.8
b. Wine	8.6	10.7	12.0	10.1	10.4
c. Liquor	19.8	21.4	22.0	23.8	23.8

It can be seen from Table 2 that 26-28 % of the driving population claimed they did not drink, while 72-74 % of the drivers interviewed said they drank either beer, wine or liquor at some time. The data are remarkably consistent over the past five years. Of those drivers interviewed who do drink alcoholic beverages, beer was the overwhelming choice as a beverage. Note, however, that beer has tended to decrease in popularity over the five year span while wine and liquor have increased.

For those persons who did consume alcoholic beverages at some time, a subsequent question was asked concerning the number of drinks consumed on any given day of the week. Table 3 presents the data enumerating those persons who drink from one to two drinks per day up to eight or more drinks per day versus the number of days in the week that this amount of alcohol was consumed. Table 3 (1976) indicates that 9.6% of those persons who do drink alcoholic beverages admit to imbibing eight or more drinks on one or more days of the week. These persons, as well as the approximately 12.4% who admit having 5-7 drinks on one or more days of the week, can be considered very likely to have reached a limit where they would be legally intoxicated should they drive their vehicles after having consumed this much alcohol. Table 3 also indicates that the most frequent pattern of drinking was to have one or two drinks on one day of the week for those who do consume alcoholic beverages. Other data collected during roadside interviews indicated that approximately 30% of those who claimed they drank alcoholic beverages could be classified as infrequent social drinkers. This group consumed no alcohol in any form during the week prior to their interview.

TABLE 3: Percentages of Driving Population (Drinkers Only) in Oklahoma City who Drink One or More Drinks on One or More Days of the Week (Not necessarily consumed before driving)

NUMBER OF DRINKS ON ONE OR MORE DAYS OF THE WEEK	PERCENTAGE OF RESPONSES 1972	1973	1974	1975	1976
1. 8 or more drinks per day					
a. 1 day of week	7.5	8.5	8.0	6.9	6.0
b. 2 days of week	3.3	3.2	2.5	2.5	2.4
c. 3 or more days of week	2.4	3.1	4.0	2.0	1.2
2. 5 to 7 drinks per day					
a. 1 day of week	7.8	9.4	9.6	10.8	8.5
b. 2 days of week	2.4	3.1	3.3	2.6	2.0
c. 3 or more days of week	2.3	2.8	2.0	3.4	1.9
3. 3 to 4 drinks per day					
a. 1 day of week	16.2	17.6	15.2	16.2	14.2
b. 2 days of week	5.3	4.1	4.7	4.0	4.3
c. 3 or more days of week	1.6	1.4	0.9	1.2	1.6
4. 1 to 2 drinks per day					
a. 1 day of week	26.7	23.1	22.7	28.6	27.8
b. 2 days of week	8.4	9.8	10.5	10.4	7.4
c. 3 or more days of week	2.5	4.1	3.5	3.0	3.0

c. ASAP Countermeasure Descriptions

(1) Enforcement

The activities funded through the Oklahoma City ASAP are divided into several countermeasure areas. The chief enforcement countermeasure is the Alcohol Traffic safety Unit of the Oklahoma City Police Department. The unit consists of 21 personnel and concentrates its enforcement activities specifically on alcohol-related traffic offenses. The Follow-Up Unit and the Mobile Alcohol Laboratory are operated within the Alcohol Traffic Safety Unit. The men in the enforcement component have received intensive additional training in detecting, apprehending and processing persons suspected of alcohol-related traffic offenses. As a part of the Oklahoma City ASAP, additional training in alcohol-related traffic offenses is also given to police recruit classes and in-service police training classes within the Oklahoma City Police Department.

The ASAP extension produced several changes in the enforcement units in 1975. Prior to 1975, only two units were recognized as distinct, these being the ATSU and the Regular Patrol. These have been expanded into four units to be analyzed and compared, with the addition of the Impact and Special units. The Impact unit consists of ATSU personnel; it is the method of attack that differs. On selected nights the ATSU saturates a particular high intensity area for DUI offenders. Originally, the MALPU, a paddy wagon and an accident investigation team were all used on "Impact night," (Friday night) however, the latter two were discontinued in Q3-75. Consequently, an accurate analysis of the Impact concept during 1975 and 1976 is not possible.

The "Special" or overtime unit consists of volunteer officers who have received four hours of specialized training in accomplishing DUI arrests. Volunteers for this squad and the extra income that accompanies it are chosen taking past arrest records into consideration. Therefore, the overtime squad is "Special" in the sense that it contains a high concentration of officers with high arrest performance.

The Special enforcement unit operates on Saturday and Sunday nights from approximately 8 P.M.-4 A.M. Generally, seven to ten officers are chosen for the unit from the volunteer list for each patrol session. Time and one-half is paid to these volunteers as an incentive.

(2) Judicial- Prosecution

The Oklahoma City ASAP Judicial-Prosecution countermeasure utilized courtrooms and ancillary facilities, probation services consisting of five probation officers

and clerical staff, and other personnel and facilities within the Municipal Court System of Oklahoma City. ASAP funding has made possible the enlargement of the Municipal Court System to expedite adjudication of the additional case load resulting from enforcement activities, as well as providing for two to three prosecutors in the Municipal Counselor's Office.

(3) Rehabilitation

It is recognized that many persons who commit alcohol-related traffic offenses are problem drinkers. Because the traditional punitive sanctions against violation of alcohol-related traffic laws and ordinances have not been effective and because research in the areas of alcohol abuse and alcoholism alleges that punitive sanctions are not effective in dealing with the problem drinking driver, the Oklahoma City ASAP has made available to the Municipal Courts of Oklahoma City a number of rehabilitation countermeasures. It was hoped that the rehabilitation countermeasures would be effective in resolving the individual's drinking problem, but if this could not be achieved, all efforts would be made to condition the individual so that he will not drive an automobile when he is impaired by alcohol. If the individual should continue to drink and drive in spite of attempts at rehabilitation then, of course, the only alternative is fine and imprisonment. The agencies, organizations and fellowships cooperating with ASAP are presented in the following descriptive summaries. A table (Table 4) will follow.

The Intermediate Care Centers of the Oklahoma State Department of Mental Health consist of the Alcohol Treatment Centers (ATC) and the Alcohol Treatment Program (ATP). The ATC conducts group and individual therapy. The Intermediate Care Centers are staffed by psychologists and psychological social workers. Both organizations are available to ASAP clients at no cost.

Central State Griffin Memorial Hospital operates utilizing NIAAA funds. Admission to treatment must be at the request of the individual, and is on an in-patient basis. The basic program consists of 30 days of medical, psychological, occupational, recreational and work therapy, with the latter, in many cases, resulting in referral to vocational rehabilitation services. Treatment is by the hospital staff of psychiatrists, psychologists and physicians.

Alcoholics Anonymous Is a fellowship operated by the members themselves with no outside assistance. In compliance with the AA doctrine of self-help, participation in this countermeasure is voluntary and only upon the

request of the defendant. All AA clubs in the greater Oklahoma City area cooperate with ASAP.

The Adult Behavioral Modification School is a 12 hour, four week program subcontracted to Oklahoma City University. It is coordinated by a social psychologist with expertise in alcohol studies and he, along with another psychologist employed by the University, act as principal instructors. Films, lectures, texts and examinations as well as free discussion are used to educate individuals with regard to the effects and hazards of alcohol and driving while under the influence of alcohol.

The Oklahoma City Community Counseling and Guidance Center is a United Appeal Agency and makes available individual, family or group counseling. The center emphasizes family involvement, although individual counseling is also a facet of the treatment. Charges are made on a sliding scale based on the individual's ability to pay, however, the center will not refuse persons who are unable to stand the expense. Psychiatric and psychological services as well as pastoral counseling are provided by a staff consisting of psychologists, social workers and administrators.

The Community Action Program conducts individual, family or group counseling primarily in the more economically depressed areas of Oklahoma City. The staff consists of skilled alcohol specialists, social psychologists, social workers, nursing and paraprofessional personnel. Films, speakers and literature (where applicable) are utilized in the rehabilitation curriculum. The main emphasis is toward the whole family, not just the problem drinker.

The Veterans' Administration Alcohol Treatment Program is a specialized medical program of mental health services. It provides counseling and psychotherapy groups for eligible veterans and significant persons(s) i.e., a spouse or a very close relative. The staff consists of the physician-director, staff psychiatrist, nurses and nursing assistants, social workers, psychologists, vocational rehabilitation specialist, chaplain and clerical. The admission criteria are unique in that in addition to veteran eligibility, the defendant must have some physical problem other than that associated with alcoholism (i.e., deafness, moderately severe brain syndrome, etc.).

The Community Services Project of Mercy Health Center is directed toward people in the early stages of alcoholism. In-patient or out-patient individual, family or group counseling is available upon referral by a physician. Also available are medical and psychological diagnoses and therapy, as well as

psychological tests, evaluation, referral and follow-up activities. Fees are on a sliding scale: $5 per hour minimum and $25 per hour maximum. Staff consists of two medical doctors, special consultants and a social worker.

The Tinker Social Action Program provides individual, group and family therapy to military personnel and their dependents and civilian employees at Tinker Air Force Base. Counselors are personnel skilled in the alcohol rehabilitation area and assigned to the program. Medical and psychological evaluations are available to military personnel and dependents through base facilities and civilian employees through private referrals or the State Department of Mental Health. The basic staff consists of a director, counselor, Master Sergeant and a social worker.

Parent-Child Development Center is a non-profit agency under the direct control of a board of directors (The Oklahoma Mental Health Council) representative of the communities served. The Center's purpose is to provide low cost mental health services to people who could not otherwise afford them. Its orientation is toward youth and family treatment and it provides individual, group or family therapy. Clients must be 21 years of under or a family member whose drinking problem involves directly or indirectly a child or children in the family. Charges are on a sliding scale with no refusals because of inability to stand the expense. The Center has a professional staff or psychiatrists, psychologists, social workers and therapeutic educators. It also includes partial hospitalization for adolescents.

Narcotics Anonymous. Having a doctrine of self-help analogous to that of Alcoholics Anonymous, membership and consequently, referral to this countermeasure is completely voluntary and only upon the request of the defendant. Members share their experiences, strength and hope in attempting to overcome drug abuse problems.

Special Services provides individual, family or group counseling and assists ASAP Probation by conducting probation intake interviews and one-on-one supervision to those on probation. Special Services has in excess of 100 volunteer counselors on call supplemented by three paid staff members. Psychologists, psychiatrists, social workers, ministers and other skilled individuals from many varied occupations donate time to this service. There are staff members available 8 hours a day, 5 days a week.

TABLE 4: Rehabilitation Countermeasure Summary

MODALITY	RESPONSIBLE AGENCY	TYPE OF REFERRAL	THERAPY AVAILABLE	THERAPY EMPHASIS	THERAPY CHARACTERISTICS	METHOD OF PAYMENT
Intermediate Care Center	State Dept. of Mental Health	Request by defendant, or pre-determined suita suitability.	Individual Group	Group	Out-Patient psychological treatment without disrupting normal life	No charge to client
Central State Hospital	State Dept. of Mental Health	Request by defendant or pre-determined suitability	Individual	Individual	Medical, psychological occupational, recreational & work therapy 30 day in-patient	No charge to client
Alcoholics Anonymous	Alcoholics Anonymous	Request by defendant	Group	Group	Self-help by sharing common problem with others	No charge to client
Adult Behavioral Modification School	Oklahoma City	Request by defendant, or pre-determined suitability	Group	Group	Educational, psychological. By regular classroom sessions	No charge to client
Oklahoma Community Counseling and Guidance Center	Oklahoma Community Counseling and Guidance Center	Request by defendant, or pre-determined suitability.	Individual, family or group	Family	Psychological	Sliding Scale
Community Action Program - Alcohol Treatment Div.	Oklahoma City Community Action Project	Request by defendant, or pre-determined suitbility	Individual, group or family	Family	Psychological, oriented toward low income clients	No charge to client
Veterans' Administration Alcohol Treatment Program	Veterans' Administration	Request by defendant, or pre-determined suitability. Must meet eligibility requirements.	Individual, group	Individual	Counseling and psychotherapy	No charge to client

C O N T I N U E D

Rehabilitation Countermeasure Summary Table (continued)

MODALITY	RESPONSIBLE AGENCY	TYPE OF REFERRAL	THERAPY AVAILABLE	THERAPY EMPHASIS	THERAPY CHARACTERISTICS	METHOD OF PAYMENT
Community Services Project of Mercy Health Center	State Dept. of Mental Health	Request by defendant or pre-determined suitability. Client in early stages of alcohol abuse.	Individual, family or group	Individual	Counseling and psychotherapy	Sliding scale
Tinker Social Action Drug & Alcohol Rehabilitation Program	Tinker Air Force Base ALC/SL	Request by defendant, or pre-determined suitability.	Individual, group	Individual	Counseling and psychotherapy	No charge to client
Parent Child Development Program	Oklahoma Mental Health Council	Request by defendant or pre-determined suitability, youth-involved.	Youth, family	Youth	Counseling; educational & psychological therapy.	Sliding scale
Narcotics Anonymous	Narcotics Anonymous	Request by defendant	Group	Group	Self-help by sharing common problem	No charge to client
Special Services	Municipal Court of Oklahoma City	Request by defendant or pre-determined suitability.	Individual, family, group	Individual	Psychological, educational and spiritual therapy. Volunteer staff	No charge to client

3. ASAP SYSTEM - "PEOPLE FLOW" AND EFFICIENCY.

a. Introduction. The flow of DUI suspects begins with the arrest, continues through the adjudication process and for the purposes of this paper, will be considered to cease when rehabilitation assignments have been made and carried our. Since re-entry into the system is possible through rearrest for DUI, however, recidivism data is also included. Figure 1 gives a simplified but reasonably accurate indication of both pathways and numbers of clients traversing them during 1976. Please note that the time lags present in the client processing system do not permit closure of the data.

This section of the study is meant to provide some insights into activity and performance by the agencies involved in the "People Flow" portion of the ASAP system. Enforcement, Adjudication and Rehabilitation sub-systems will be considered in that order. Since descriptions of these countermeasure areas were presented in Section 2 of this paper, they will not be repeated here.

b. Enforcement. As previously noted, the DUI enforcement activity was reorganized in Q1-75 to provide for several changes that were indicated as a result of the planning accomplished for the continuation of the Oklahoma City ASAP and reflected in the revised Detailed Plan. The units involved in DUI arrest activities during 1976 were as follows:

1. The regular traffic patrol.
2. The Alcohol Traffic Safety Unit.
3. The Impact Squad.
4. The Special Alcohol Enforcement Unit.

The DUI arrest activities of the regular patrol are accomplished as a part of fulfilling other Traffic Division functions and therefore cannot be evaluated on the same basis as the activities of the ATSU, Impact and Special Enforcement units where the entire effort is devoted to the making of DUI arrests. In the evaluation of performance which follows, the ATSU, Impact and Special Enforcement units will be evaluated and comparisons made for the following measures.

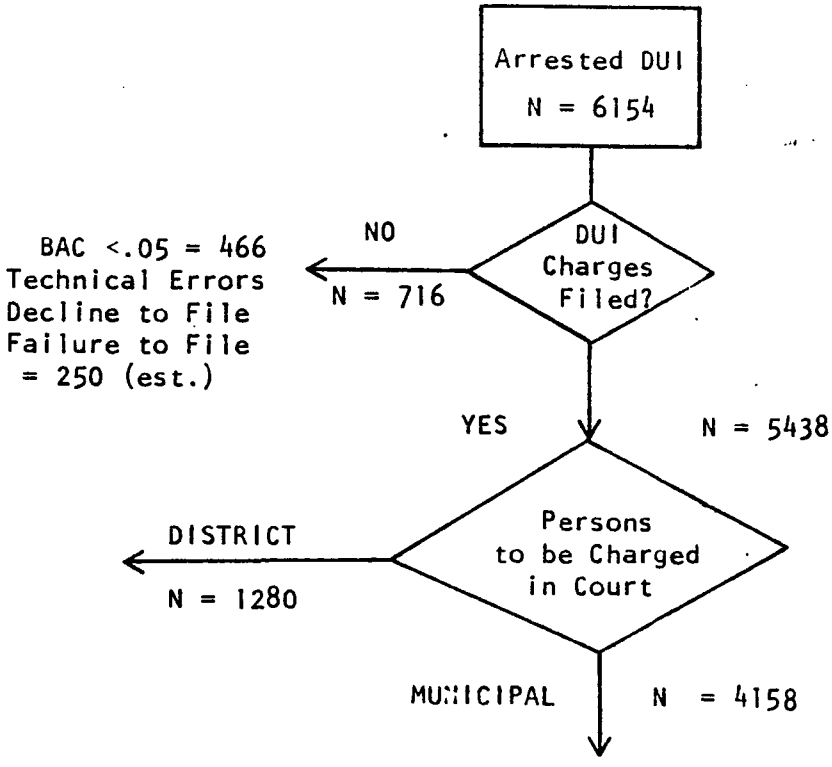
1. Alcohol-related arrests per vehicle-hour

$$\frac{\text{Total alcohol-related arrests by the unit}}{\text{Total number of unit patrol vehicle hours}}$$

2. Alcohol-related arrests per man-hour

$$\frac{\text{Total alcohol-related arrests by the Enforcement Unit}}{\text{Total man-hours for the Enforcement Unit}}$$

A comparable measure of performance is not possible for the regular patrol.



ARRAIGNMENTS	3957
Estimated Bench Warrants Issued	607
Estimated Number of Persons Returned to System on Served Bench Warrants	170
Convicted as Charged	1760
Convicted on Reduced Charge	1400
Dismissed	146
Acquitted	6
Awaiting Final Adjudication (Estimated)	425
PRE-SENTENCE INVESTIGATIONS	1092
SUPERVISED PROBATION	826
UNSUPERVISED PROBATION	113

FIGURE 1: System Accomplishments - People Flow, 1976

The regular patrol and the three special DUI enforcement units can be compared with the regular patrol on the basis of total A/R arrests and time spent per alcohol related arrest, so these measures will also be utilized for evaluation purposes. Data is contained in Tables 5 through 11.

Table 5 indicates that regular patrol (traffic officers - non-ASAP) activity in 1976 was not significantly different than that achieved in the baseline year 1971 (χ^2, $\alpha = 0.05$) although, numerically, 1976 arrests exceeded those of 1971. The regular patrol DUI arrests during 1976 were higher than in any other operational year. The ASAP patrols increased the number of arrests affected significantly (χ^2, $\alpha = 0.05$) in 1973, 1974, 1975 and 1976 over the first operational year (1972) arrest rate. Further, the ASAP Patrol arrests were significantly greater in 1976 than in any of the previous operational years (χ^2, $\alpha = 0.05$). Increases in efficiency and manpower utilization accounted for the significant increase. Projected DUI arrests for 1976 were exceeded by all police units except the Impact Squad. Projected DUI arrests for 1976 were: ATSU (2080), Regular Patrol (1400), Impact (840) and Special Enforcement (830).

Tables 6, 7, 8 and 9 present data concerning the number of DUI arrests by time of day and day of week for 1973, 1974, 1975 and 1976 respectively. A Chi-Square two sample test revealed a significant (χ^2, $\alpha = 0.05$) shift in the time-arrest distribution between 1973 and 1974. The shift consisted of an increase in arrests between 8 P.M.-midnight and a decrease in arrests in both the midnight-4 A.M. and 4 A.M.-8 A.M. time periods. There was no significant difference, however, in the time of arrest distribution between 1974 and 1975 (χ^2, $\alpha = 0.05$).

Another significant change (χ^2, $\alpha = 0.05$) in the time arrest distribution occurred between 1975 and 1976. While the total number of arrests increased by 745, an increase of 654 arrests occurred in the 8 P.M.-midnight period in 1976 compared to 1975. Further, a significant decrease in weekend arrests occurred in 1974 compared to 1973. No significant difference in the weekend-weekday arrest distribution between 1974 and 1975 was detected (χ^2, $\alpha = 0.05$). During 1976 a statistically significant (χ^2, $\alpha = 0.05$) shift in the day of week distribution occurred, however. The shift consisted of a proportionate decrease in arrests on Saturdays and Sundays combined with a proportionate increase in arrests on week-days in 1976 compared to 1975.

Tables 10 and 11 and Figure 2 present some measures of efficiency for the ASAP Patrol: DUI arrests per vehicle hour and DUI arrests per man hour for the ATSU, Impact and Special Enforcement units. Note that arrests per vehicle hour

TABLE 5: DUI Arrests by Quarter for Regular and ASAP Patrols
Oklahoma City 1972 - 1976

CATEGORY	YEAR	QUARTER 1	2	3	4	YEARLY TOTAL
1971 (Regular Patrol)		408	426	384	485	1703
REGULAR PATROL	1972	453	431	377	410	1671
	1973	326	325	315	391	1357
	1974	351	292	314	354	1311
	1975	389	385	385	389	1548
	1976	433	423	424	476	1756
ASAP PATROL	1972	422	331	447	763	1963
	1973	971	861	875	823	3530
	1974	853	800	887	895	3435
	1975					
	ATSU	646	438	574	486	2144
	Impact	218	132	177	135	662
	Special	224	315	261	255	1055
	Total	1088	885	1012	876	3861
	1976					
	ATSU	741	746	667	502	2656
	Impact	168	192	201	186	747
	Special	252	263	257	223	995
	Total	1161	1201	1125	911	4398
TOTAL	1972	875	762	824	1173	3634
	1973	1297	1186	1190	1214	4887
	1974	1204	1092	1201	1249	4746
	1975	1478	1270	1397	1265	5409
	1976	1594	1624	1549	1387	6154

TABLE 6 : Number of DUI Arrests by Time of Day, Day of Week

FOR 1973

DAY	TIME (4 Hour Intervals)							PREVIOUS YEAR
	M-4AM	4AM-8AM	8AM-N	N-4PM	4PM-8PM	8PM-M	TOTAL	
Monday	205	24	5	20	41	164	459	325
Tuesday	226	21	4	21	28	192	492	312
Wednesday	333	41	5	20	40	224	663	378
Thursday	335	47	12	16	40	262	709	451
Friday	421	55	8	17	58	288	847	536
Saturday	487	73	14	33	67	291	965	870
Sunday	423	82	14	19	47	167	752	763
TOTAL	2430	343	59	146	320	1588	4887	---
PREVIOUS YEAR	1571	269	87	172	422	1114	—	3635

TABLE 7: Number of DUI Arrests by Time of Day, Day of Week for 1974

DAY	TIME (4 Hour Intervals)							PREVIOUS YEAR
	M-4AM	4AM-8AM	8AM-N	N-4PM	4PM-8PM	8PM-M	TOTAL	
Monday	191	4	4	12	41	210	462	459
Tuesday	282	5	5	15	38	249	594	492
Wednesday	304	5	3	14	37	211	574	663
Thursday	339	29	5	12	53	292	720	709
Friday	350	8	4	13	65	368	790	847
Saturday	374	11	17	36	82	350	870	965
Sunday	380	23	9	18	57	249	736	752
TOTAL	2210	85	47	120	373	1911	4746	---
PREVIOUS YEAR	2430	343	59	146	320	1588	---	4887

TABLE 8: Number of DUI Arrests by Time of Day, Day of Week for 1975

DAY	TIME (4 Hour Intervals)							PREVIOUS YEAR
	M-4AM	4AM-8AM	8AM-N	N-4PM	4PM-8PM	8PM-M	TOTAL	
Monday	189	3	3	10	66	279	550	462
Tuesday	295	3	5	17	65	306	691	594
Wednesday	318	6	7	12	65	299	707	574
Thursday	345	16	6	18	42	314	741	720
Friday	333	4	11	28	46	389	811	790
Saturday	581	23	19	31	83	390	1127	870
Sunday	383	18	8	14	61	299	783	736
TOTAL	2444	73	59	130	428	2276	5410	---
PREVIOUS YEAR 1974	2210	85	47	120	373	1911	---	4746

TABLE 9: Number of DUI Arrests by Time of Day, Day of Week - 1976

DAY	TIME (4 Hour Intervals)							PREVIOUS YEAR 1975
	M-4AM	4AM-8AM	8AM-N	N-4PM	4PM-8PM	8PM-M	TOTAL	
Monday	202	3	7	14	68	408	702	550
Tuesday	295	7	2	24	64	407	799	691
Wednesday	333	4	9	19	73	426	864	707
Thursday	340	10	8	19	82	446	905	741
Friday	355	13	10	27	63	514	982	811
Saturday	514	20	17	37	84	404	1076	1127
Sunday	379	8	8	29	77	325	826	783
TOTAL	2418	65	61	169	511	2930	6154	---
PREVIOUS YEAR 1975	2444	73	59	130	428	2276	---	5410

TABLE 10: DUI Arrests per Vehicle-Hour
During 1976 for ATSU, Impact and Special Enforcement Units

MONTH/ QUARTER	A/R ARRESTS			PATROL VEHICLE-HOURS			ARRESTS/VEHICLE-HOUR		
	ATSU	Impact	Special	ATSU	Impact	Special	ATSU	Impact	Special
January	206	47	90	1352	440	648	.152	.107	.139
February	234	53	88	1578	320	632	.151	.166	.139
March	296	68	74	1600	360	568	.185	.189	.130
Q1	741	168	252	4520	1120	1848	.164	.150	.136
April	270	74	92	1592	384	552	.170	.193	.167
May	226	65	94	1590	360	752	.142	.181	.125
June	250	53	77	1480	320	520	.168	.166	.148
Q2	746	192	263	4664	1064	1824	.160	.180	.144
July	201	76	76	1368	400	472	.147	.190	.161
August	244	56	85	1632	256	544	.150	.219	.156
September	222	69	96	1384	328	632	.160	.210	.152
Q3	667	201	257	4384	984	1648	.152	.204	.156
October	140	75	89	1096	344	656	.128	.218	.136
November	162	60	64	1120	224	616	.145	.268	.104
December	200	51	70	944	304	506	.212	.168	.138
Q4	502	186	223	3160	872	1778	.159	.213	.125
YEAR TOTAL	2656	747	995	16728	4040	7098	.159	.185	.140

TABLE 11: DUI Arrests per Man-Hour During 1976 for ATSU, Impact and Special Enforcement Units

MONTH/ QUARTER	A/R ARRESTS			PATROL MAN-HOURS			ARRESTS/MAN-HOUR		
	ATSU	Impact	Special	ATSU	Impact	Special	ATSU	Impact	Special
January	206	47	90	1352	440	648	.152	.107	.139
February	239	53	88	1600	320	632	.149	.166	.139
March	296	68	74	1600	360	568	.185	.189	.130
Q1	741	168	252	4552	1120	1848	.163	.150	.136
April	270	74	92	1592	384	552	.170	.193	.167
May	226	65	94	1592	360	752	.142	.181	.125
June	250	53	77	1488	320	520	.168	.166	.148
Q2	746	192	263	4672	1064	1824	.160	.180	.144
July	201	76	76	1368	400	472	.147	.192	.161
August	244	56	85	1624	256	544	.150	.219	.156
September	222	69	96	1384	328	632	.160	.210	.152
Q3	667	201	257	4376	984	1648	.152	.204	.156
October	140	75	89	1096	344	656	.128	.218	.136
November	162	60	64	1120	224	616	.145	.268	.104
December	200	51	70	1208	304	506	.166	.168	.138
Q4	502	186	223	3424	872	1778	.147	.213	.125
YEAR TOTAL	2656	747	995	17024	4040	7098	.156	.185	.140

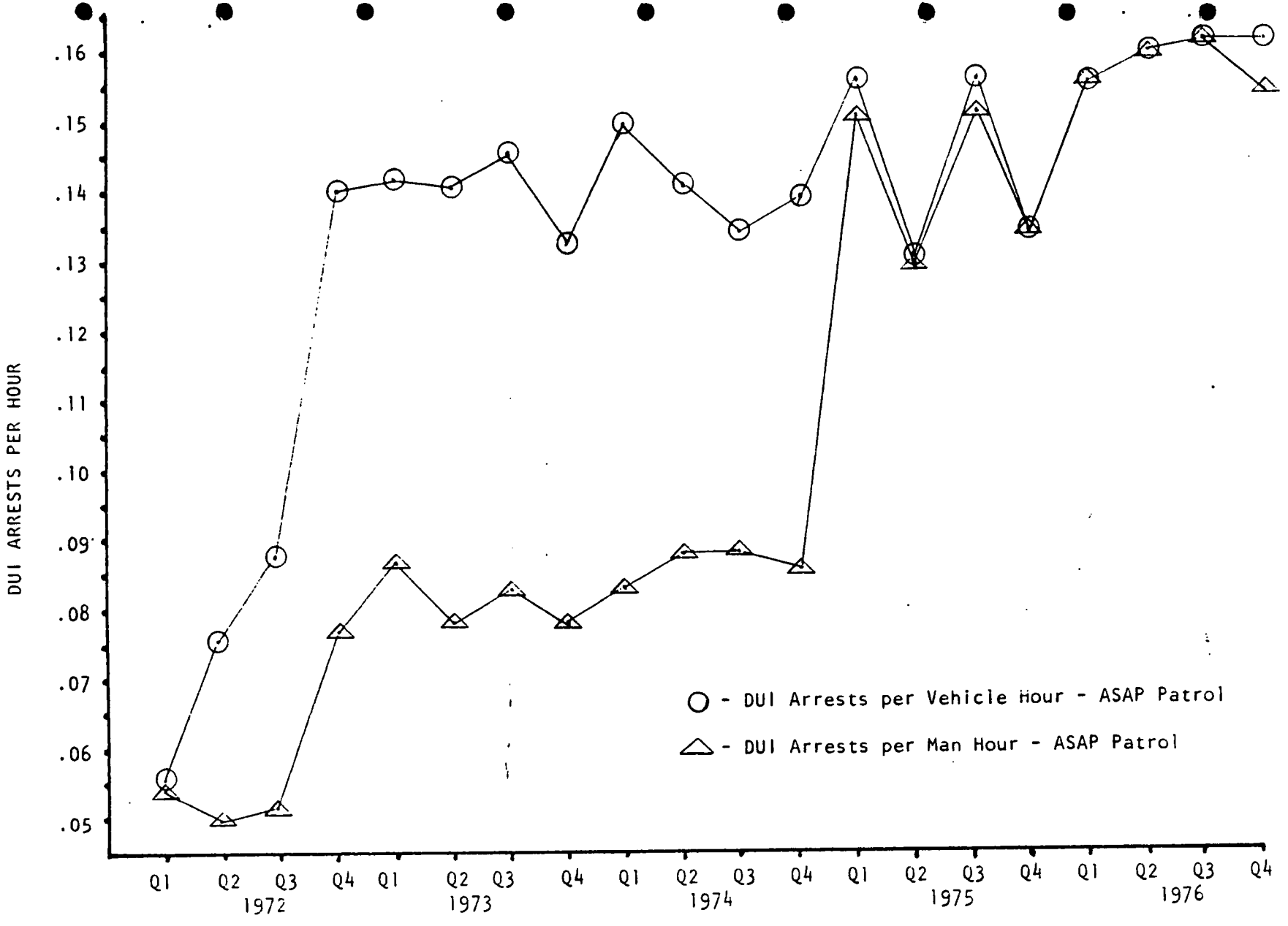


FIGURE 2: DUI Arrests per Man Hour and Vehicle Hour by Quarter 1972-1976

and arrests per man hour are virtually identical in 1976 because of the almost exclusive use of one-man patrols.

Both the Impact Squad, which operates only on Friday nights and the Special Enforcement unit (overtime) which operates on Saturday and Sunday nights were instituted in January 1975. Therefore, 1975 data cannot be compared historically. However, arrests per vehicle hour were significantly higher for the Impact Squad than for ATSU (t, $\alpha = 0.05$).

Arrests per man hour increased dramatically for the ATSU in 1975 compared to 1974. The increase from .081 arrests per man hour in 1974 to .125 arrests per man hour was both statistically significant (t, $\alpha = 0.05$) and of practical importance. A further increase in ATSU efficiency occurred in 1976. ATSU arrests per man hour were .156 in 1976, almost double the 1974 level. Note that the ATSU operated only Monday through Thursday in 1975 and 1976 but seven days a week in 1974. In 1975 and 1976 however, one-man vehicles were utilized while in 1974 two-man vehicles were used. The other ASAP patrols (Impact and Special) also used one-man vehicles. The Impact and Special Enforcement units averaged .185 and .140 arrests per man hour respectively. The difference between ATSU and the other two ASAP patrols' arrests per man hour is not statistically significant. However, the ATSU patrols only during the week while the other units patrol only on weekends. The Impact Unit uses the same highly trained personnel, but always operates on Friday when a higher proportion of drinking drivers is on the highway compared with Monday through Thursday. The Special Enforcement Unit utilized special incentives (overtime pay with staffing selected from volunteers and selection for future overtime assignments based on past arrest performance.) It is surprising, therefore, that the Special Enforcement Unit, operating on Saturdays and Sundays, did not have as high an arrest efficiency as the Impact Squad. In fact, Special Enforcement Unit arrests per man hour were significantly ($t, \alpha = 0.05$) lower than the Impact unit in 1976.

Tables 12 and 13 present data concerning the efficiency of both the ATSU-Impact Group and the Special Enforcement Unit by four hour time periods. Special Enforcement Unit efficiency in the midnight-4 A.M. period decreased precipitously in 1976 compared to 1975 (significant, t, $\alpha = 0.05$). The ATSU-Impact Group Improved their 8 P.M.-midnight efficiency considerably in 1976 compared to 1975 (significant, t, $\alpha = 0.05$), while their midnight-4 A.M. efficiency remained essentially unchanged. Negligible effort was expended by any of the ATSU units during the 4 A.M.-8 A.M. period in 1976.

TABLE 12: Arrests Per Man-Hour Versus Percent of Total Man-Hours and Total Arrests for Three Selected Time Intervals for ATSU 1972 through 1974 and ATSU - Impact for 1975-1976

PERFORMANCE MEASURE	1972				1973				1974				1975				1976			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
8PM-M Arrests per Man-Hour	.046	.036	.033	.045	.077	.056	.070	.060	.065	.070	.070	.089	.114	.099	.136	.112	.155	.174	.174	.174
Percent of Total Arrests	33.4	29.0	26.2	26.7	36.0	29.5	30.7	31.5	40.0	4.14	41.6	43.6	45.5	44.3	.486	50.2	46.9	53.1	53.6	54.2
Percent of Total Hours	39.6	40.0	38.3	35.1	31.7	32.8	35.4	32.0	37.8	49.1	50.0	38.8	49.6	50.0	45.0	50.0	48.3	50.0	50.0	50.0
M-4AM Arrests per Man-Hour	.078	.077	.078	.097	.112	.115	.137	.118	.097	.096	.101	.099	.165	.154	.184	.134	.182	.165	.161	.158
Percent of Total Arrests	56.6	62.5	61.5	57.8	52.4	60.4	60.5	61.7	59.6	57.8	55.9	49.7	49.9	52.2	43.3	45.4	49.6	44.2	43.5	43.3
Percent of Total Hours	39.6	40.0	38.3	35.1	31.7	32.8	35.4	32.0	37.8	49.1	46.4	40.0	38.0	38.0	36.6	37.9	43.8	43.8	43.8	43.8
4AM-8AM Arrests per Man-Hour	.021	.021	.024	.042	.037	.027	.034	.022	N/A*	.022	.052	.008	.227	N/A	.125	N/A	.063	.000	.000	.000
Percent of Total Arrests	7.8	8.5	9.6	11.1	9.9	8.7	8.5	5.8	N/A	0.5	2.3	1.1	0.7	0.2	0.4	0.2	0.7	0.0	0.0	0.0
Percent of Total Hours	19.8	20.0	19.2	15.5	17.9	19.9	20.0	16.0	N/A	1.8**	3.6	11.8	0.4	N/A	0.5	N/A	1.7	0.0	0.0	0.0

* ATSU Patrol Started 1/1/74 on 8PM - 4AM Shift

** ATSU Patrol has small number of officers on duty during 4AM - 8AM period

TABLE 13: Arrests Per Man-Hour Versus Percent of Total Man-Hours and Total Arrests for Three Selected Time Intervals for ATSU 1972 through 1974 and Special Enforcement Unit for 1975 and 1976

PERFORMANCE MEASURE	1972				1973				1974				1975				1976			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
8PM-M Arrests per Man-Hour	.046	.036	.033	.045	.077	.056	.070	.060	.065	.070	.070	.089	.123	.131	.112	.115	.129	.191	.175	.125
Percent of Total Arrests	33.4	29.0	26.2	26.7	36.0	29.5	30.7	31.5	40.0	41.4	41.6	43.6	36.5	38.1	39.7	38.2	47.2	51.7	56.0	49.8
Percent of Total Hours	39.6	40.0	38.3	35.1	31.7	32.8	35.4	32.0	37.8	49.1	50.0	38.8	45.1	50.0	50.0	50.0	50.0	50.0	50.0	50.0
M-4AM Arrests per Man-Hour	.078	.077	.078	.097	.112	.115	.137	.118	.097	.098	.101	.099	.213	.240	.185	.207	.147	.144	.146	.126
Percent of Total Arrests	56.6	62.5	61.5	57.8	52.4	60.4	60.5	61.7	59.6	57.8	55.9	49.7	60.4	59.3	57.5	59.6	50.8	47.1	44.0	47.1
Percent of Total Hours	39.6	40.0	38.3	35.1	31.7	32.8	35.4	32.0	37.8	49.1	46.4	40.0	42.7	42.6	43.7	43.5	46.9	46.9	46.8	46.8
4AM-8AM Arrests per Man-Hour	.021	.021	.024	.042	.037	.027	.034	.022	N/A*	.022	.052	.008	.055	N/A	.000	N/A	.000	.000	.000	.000
Percent of Total Arrests	7.8	8.5	9.6	11.1	9.9	8.7	8.5	5.8	N/A	0.5	2.3	1.1	1.7	0.6	0.0	0.3	0.0	0.0	0.0	0.0
Percent of Total Hours	19.8	20.0	19.2	15.5	17.9	19.9	20.0	16.0	N/A	1.8**	3.6	11.8	4.9	N/A	0.0	N/A	0.0	0.0	0.0	0.0

* ATSU Patrol Started 1/1/74 on 8PM - 4AM Shift

** ATSU Patrol has small number of officers on duty during 4AM - 8AM period

The Regular Patrol can be compared with the DUI enforcement units on the basis of mean time per DUI arrest completed (travel and processing time), even though it cannot be compared on the basis of arrests per man-hour as noted earlier. Table 14 presents data for the mean time per DUI arrest for the Regular Patrol, and also the ATSU, Impact and Special DUI enforcement units during 1976.

A comparison of the mean times per arrest for these four units can be accomplished using a Duncan Multiple Range Test. Applying this test to the data of Table 14 for the year 1976 indicates that the Regular Patrol arrest times are significantly higher than for the other three units ($\alpha = 0.01$).

In summary, the ASAP Patrol units have made tremendous gains in efficiency since 1972, although some problems with the Special Enforcement Unit were noted in 1976. Total ASAP Patrol arrests increased from 3,435 DUI arrests in 1974 to 3,861 in 1975, and 4,398 in 1976, while the hours spent in effecting those arrests decreased from 42,233 in 1974 to 27,844 in 1975 and 28,162 in 1976. This data indicates an overall ATSU efficiency of .081, .139 and .156 arrests per man hour in 1974, 1975 and 1976 respectively. This recent progression of increasing efficiency is extremely favorable when compared with the .063 arrests per man hour computed for 1972.

c. Adjudication. Adjudication activity and performance include the services of both prosecution and judicial personnel. Parameters of activity and performance include number of persons processed through the court system, percent convictions, percent convicted as charged, acquittals, everage time from arrest to disposition, disposition-time distribution and average BAC of those convicted.

Table 15 presents data concerning court dispositions. The data indicate the following:

(a) Total court dispositions were down by 5.2% in 1976 compared to 1975.

(b) Suspects convicted on a reduced charge increased from 25.9% of total dispositions in 1975 to 42.3% of total dispositions in 1976 (significant, χ^2, $\alpha = 0.05$).

(c) Suspects whose charges were either dismissed or who were acquitted were up slightly in 1976 compared to 1975 (not significant, χ^2, $\alpha = 0.05$).

(d) Percent guilty pleas in 1976 were not significantly different in 1976 than in 1975 (t, $\alpha = 0.05$).

The Oklahoma City Attorney's Office instituted a significant policy change early in 1976. Deferred sentencing (i.e., plea of guilty to the charge of DUI with sentence deferred for six months while client was on probation - successful completion of probation resulted in a withdrawal of the guilty plea

TABLE 14: Mean Time per Arrest for ATSU, Regular Patrol, Impact Unit and Special Unit DUI Enforcement Activities During 1976

MONTH/ QUARTER	MEAN TIME PER ARREST - MINUTES			
	ATSU	REGULAR PATROL	IMPACT UNIT	SPECIAL UNIT
January	73.0	86.9	81.9	82.3
February	80.3	86.3	79.2	78.7
March	83.4	91.8	68.1	80.2
Q1 Mean	79.5	88.4	75.5	80.4
April	81.1	94.7	73.3	81.6
May	86.4	96.3	82.7	75.8
June	87.1	106.9	81.0	99.1
Q2 Mean	84.7	99.5	78.6	85.1
July	83.3	103.5	78.4	88.5
August	93.8	135.4	83.0	85.4
September	97.6	122.1	84.9	89.7
Q3 Mean	91.9	120.1	81.9	87.9
October	80.7	118.2	78.9	80.0
November	81.3	109.4	79.6	86.8
December	89.1	120.2	93.6	74.1
Q4 Mean	84.3	116.4	82.6	80.1
1976 MEAN	85.0	106.3	79.7	83.5

TABLE 15: Disposition of Individuals (DUI arrests) Processed Through the Oklahoma City Court - 1972 Through 1976

		1972	1973	1974	1975	1976
Convicted as Charged	N	1202	2963	2423	2467	1760
	%	76.4	83.3	78.4	70.5	53.1
Convicted - Reduced Charge	N	299	302	542	905	1400
	%	19.0	8.5	17.5	25.9	42.3
Dismissed	N	52	220	116	112	146
	%	3.3	6.2	3.8	3.2	4.4
Acquitted	N	20	71	8	13	6
	%	1.3	2.0	0.3	0.4	0.2
Total Court Dispositions	N	1573	3556	3089	3497	3312
	%	100.0	100.0	100.0	100.0	100.0
Guilty Pleas (% of Total Court Dispositions)		93.7	91.8	92.7	96.2	95.3

and dropping of the DUI charge by the prosecution) as a plea bargaining tool was reduced in use significantly and replaced by the continued sentence. A continued sentence is similar to the deferred sentence except that the charge is amended to a non-alcohol related charge (generally reckless operation) and a fine is paid after the probationary period is successfully completed. This is the basic reason for the increase in reduced charges in 1976 compared to 1975. Deferred sentence convictions were and still are counted as "convicted as charged" for statistical purposes.

A revised estimate of the number of in-process DUI cases was effected for this report. Aged cases (over 6 months since arrest) were removed from the

in-process group. The best currently available estimate for in-process DUI cases is 425 ± 100. This represents about two to two and one-half months court dispositions and is consistent with processing time distributions.

The distribution of arraignment to disposition time periods by quarter for 1975 and 1976 is shown in Table 16, while mean arraignment to disposition time by year is given in Table 17 and Figure 3. Approximately 7% of the cases adjudicated in 1975 took more than 100 days from arraignment to disposition. In 1976, however, over 13% required in excess of 100 days. The mode of the quarterly distributions moved from the 40-59 days interval to the 60-79 days interval in Q1-76 and remained there for the first three quarters. In the third quarter a definite platykurtosis occurred followed by a movement of the mode to the 20-39 days interval in Q4-76.

It is believed that these arrest to disposition time distribution changes during 1976 were primarily the result of personnel and policy changes in the ASAP prosecution office. The fourth quarter 1976 mean processing time (arrest to final disposition) was as good or better than any previous operational quarter.

There is little doubt that the operation of the court system has continued to improve during the ASAP operational phase when processing time is used as a criterion.

Table 15 indicates that approximately 95% of those persons tried in 1976 entered a plea of guilty. Of those, about 56% pled guilty to the original DUI charge while 44% pled to a lesser charge. This is a significant increase in reduced charges compared to 1975 and is primarily a result of changes in policy discussed previously in this section.

Figure 4 shows the significant downward trend in mean BAC for those convicted as charged as well as individuals convicted on reduced charges from 1971 through 1975. The mean BAC of persons convicted as charged (DUI) remained essentially unchanged in 1976 at .168 (168 mg.%) compared to .17 (170 mg.%) in 1975. This is significantly lower (t, $\alpha = 0.05$) than the .23 (230 mg.%) average for those convicted as charged in 1971. The mean BAC for individuals convicted of a reduced charge has increased slightly to .127 (127 mg.%) in 1976 compared to .12 (120 mg.%) in 1975. This compared favorably to .16 (160 mg.%) for reduced charge convictions in 1971. This decrease is statistically significant (t, $\alpha = 0.05$)

TABLE 16: Time Required in Days to Process Individuals Through the Courts Each Quarter, 1975 and 1976

PERFORMANCE MEASURE	1975 Q1	1975 Q2	1975 Q3	1975 Q4	1976 Q1	1976 Q2	1976 Q3	1976 Q4
Arrest to Arraignment	19.9	19.1	18.6	18.1	19.7	24.9	27.3	22.4
Arraignment to Disposition	37.5	44.4	37.5	40.6	44.0	44.2	46.8	32.1
Arrest to Disposition	57.4	63.7	56.1	59.3	63.7	69.1	74.3	54.5

TABLE 17: Average Time In Days Required To Process Individuals Through the Courts by Year, 1972-1976

PERFORMANCE MEASURE	BASELINE 1971	AVERAGE 1972	AVERAGE 1973	AVERAGE 1974	AVERAGE 1975	AVERAGE 1976
Arrest to Arraignment	23.3	25.0	22.6	22.3	18.9	23.7
Arraignment to Disposition	115.1	62.7	75.0	48.6	40.4	41.7
Arrest to Disposition	128.3	87.6	97.5	70.8	59.3	65.4

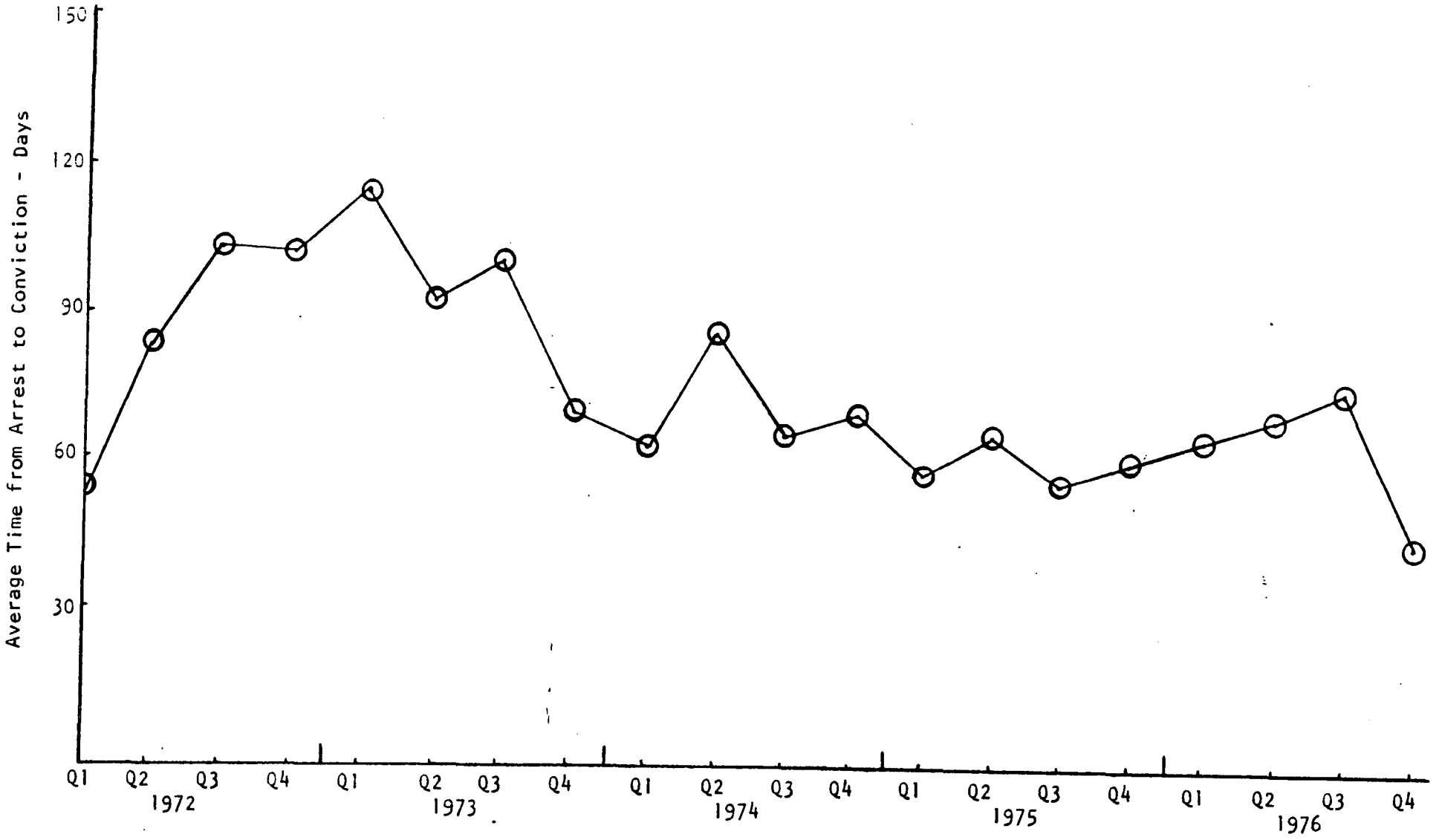


FIGURE 3: Average Time Required to Process Defendants Through the Courts from Arrest to Conviction Per Quarter 1972- 1976

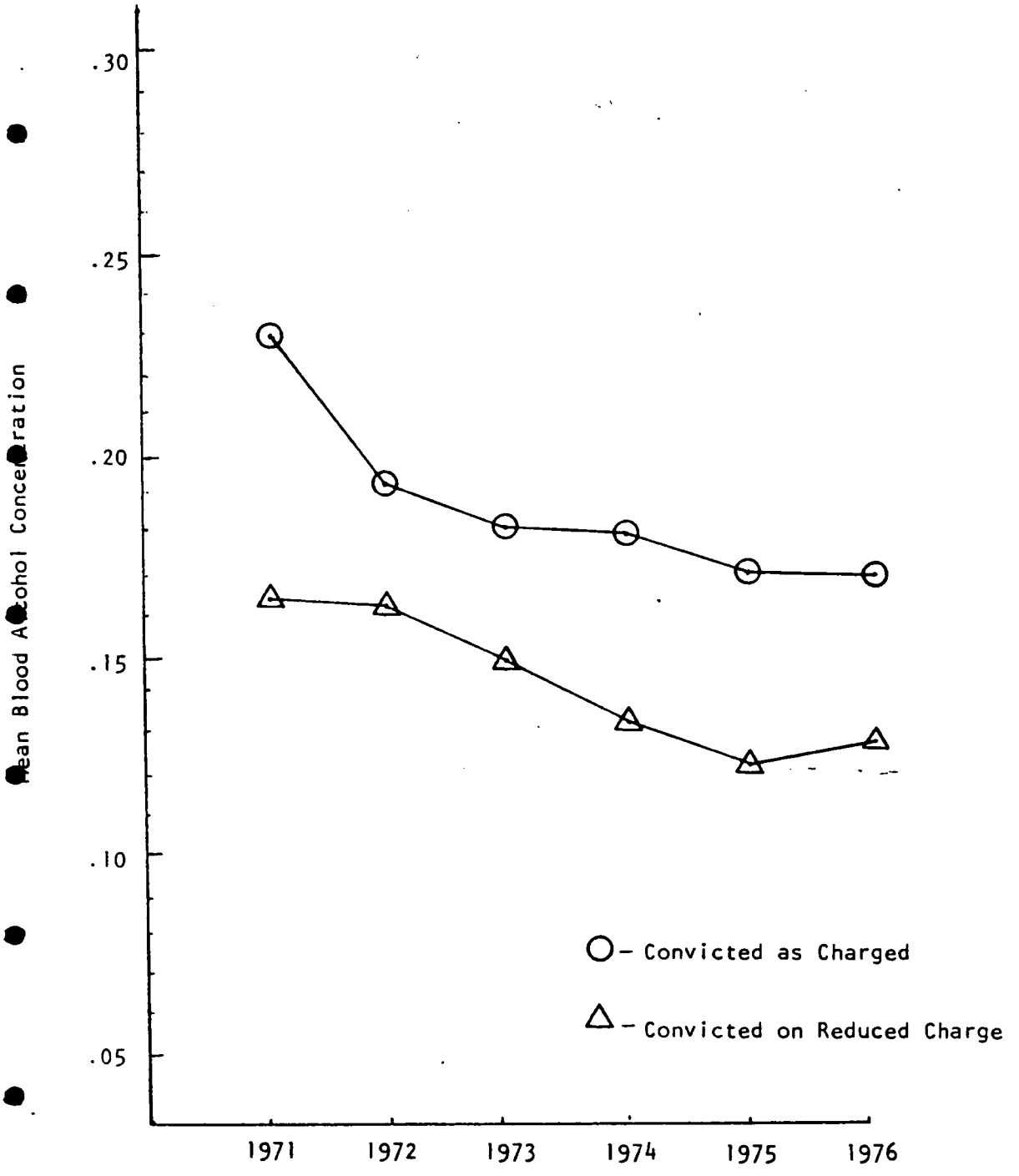


FIGURE 4: Mean BAC for Persons Convicted as Charged and Convicted on Reduced Charge by Year 1971-1976

d. Interface Between Diagnosis and Referral Activities and the Judicial System.

(1) Impact on the Courts. The operation of the Diagnosis and Referral system of the Oklahoma City ASAP has not substantially altered the basic operation of the Municipal Court of Record. Federal (402) funds through the Oklahoma Governor's Highway Safety Office have provided the bulk of support required to maintain and probation staff and office. Since the court procedures have not been substantially altered and since there has not been a financial drain on the court system, diagnosis and referral activities have had little, if any, negative impact on the court. On the other hand, the court has had the benefit of professional guidance in the identification, investigation and placement of persons who could perhaps benefit most from rehabilitation type activities.

(2) Probation "Follow-Up" Activity. The Probation Department in the Oklahoma City ASAP had four basic tasks during 1976. These were:

(a) Diagnosis and referral - including Pre-Sentence Investigation (PSI), diagnostic procedures and recommendations to the court concerning the appropriateness of various rehabilitation countermeasures.

(b) Monitoring individuals on supervised and unsupervised probation.

(c) Providing one-on-one counseling on a regular basis.

(d) Completing intake and follow-up interviews for individuals assigned to the Special Group (Short Term Rehabilitation Study).

Data indicating levels of effort for the probation staff diagnosis and referral activities is given in Tables 18 through 22. Since 1972, almost all individuals assigned to a rehabilitation countermeasure have also been assigned to some form of probation. These assignments are in addition to the relatively small number of individuals assigned to some type of probation as a single countermeasure.

Casual observation of Tables 18 through 22 indicates that probation staff activity was down considerably in all categories in 1976 compared to 1975. This situation was primarily due to a lack of referrals to PSI on the part of the prosecution staff. Referrals to PSI are generally made as the result of plea-bargaining agreements prior to trial. Attempts to increase the numbers of PSI referrals on the part of ASAP management have been only marginally successful.

"Unidentified" category individuals referred to in the tables can actually not be clearly identified as either problem or non-problem drinkers by the probation staff. They are somewhere in between and their tendency is probably toward greater alcohol involvement in the future.

There are currently two types of probation, differentiated by the degree of supervision. Unsupervised probation requires only that an individual keep the probation office informed by telephone on a monthly basis concerning any changes in personal status (i.e., moved, change of job, etc.). Supervised probation is composed of two distinct sub-sets. The general supervised probation requires that the individual report to the probation office for a regularly scheduled appointment. The individual is then counseled by whichever staff member is on duty at that time. One-on-one supervised probation also requires a regularly scheduled reporting time at the probation office. However, the individual is always interviewed and counseled (generally in depth) by the same probation officer. The probation staff's supervised and unsupervised efforts were supplemented beginning in 1973 by volunteers assisting with a one-on-one probation program. There are in excess of 100 volunteer probation counselors aiding the five ASAP probation officers through the Special Services countermeasure of the Oklahoma City Municipal Court. Special Services provides both individual counseling (similar to one-on-one) supervised probation and group therapy sessions. Anyone who does not satisfy the condition of their probation is reported by the probation staff to the courts and a bench warrant is issued.

TABLE 18 : Number of Individuals Interviewed by the Probation Officer 1972 thru 1976

DRINKER CLASSIFICATION	1972	1973	1974	1975	1976
Problem Drinker	416	988	651	1255	870
Non-Problem Drinker	162	201	81	32	33
Category Unidentified	215	398	180	224	189
TOTAL	793	1587	912	1481	1092

TABLE 19: Number of People Assigned to Supervised and Unsupervised Probation 1972 thru 1976

DRINKER CLASSIFICATION	1972	1973	1974	1975	1976
Supervised Probation					
Problem Drinker	184	851	415	866	695
Non-Problem Drinker	42	84	15	5	12
Category Unidentified	80	241	91	144	119
TOTAL SUPERVISED	306	1176	528	1015	826
Unsupervised Probation					
Problem Drinker	11	70	63	217	56
Non-Problem Drinker	14	60	34	21	12
Category Unidentified	19	82	59	81	45
TOTAL UNSUPERVISED	44	212	156	319	113
TOTAL PROBATION	350	1388	684	1334	939

TABLE 20: Background Investigation Activity 1972 through 1976

EVALUATION MEASURE	1972	1973	1974	1975	1976
Background Investigation					
Cases Completed	793	1587	912	1481	1092
Interviews by Probation	793	1587	912	1481	1092
Drivers Record Check	605	853	474	1173	844
Criminal Record Check	44	24	17	15	8
Social/Health Agency	12	8	7	5	1
Family/Employment Check*	792	1587	912	1481	1092
Arrest Report	721	1056	588	1379	1030

* Check made as part of Probation Interview and consists primarily of family/employment history provided by the client.

TABLE 21: Recommendations of Probation Staff by Drinker Classification 1975 and 1976

	1975		1976	
	N	%	N	%
A. Total PSI Population	1481	100	1092	100
B. Recommended for Rehabilitation	1407	95.0% of A	939	86.0% of A
1. Problem Drinker	1182	84.0% of B	751	80.0% of B
2. Non-Problem Drinker	25	1.8% of B	24	2.6% of B
3. Category Unidentified	200	14.2% of B	164	17.4% of B
C. Not Recommended for Rehabilitation	74	5.0% of A	153	14.0% of A
1. Problem Drinker	43	58.1% of C	90	58.8% of C
2. Non-Problem Drinker	7	9.5% of C	17	11.1% of C
3. Category Unidentified	24	32.4% of C	46	30.1% of C
Total Problem Drinkers	1225	82.7% of A	841	77.0% of A
Total Non-Problem Drinkers	32	2.2% of A	41	3.8% of A
Total Unidentified Category Drinkers	224	15.1% of A	210	19.2% of A

TABLE 22: Individual Enrollments in Countermeasures (1975 & 1976) Compared to Enrollment Goals of the 1975 Operational Plan

COUNTERMEASURES	OPERATIONAL PLAN ENROLLMENT GOALS FOR EACH YEAR	1975 ASSIGNMENTS	1975 % DEV.	1976 ASSIGNMENTS	1976 % DEV.
Improved Probation	2000	1329	(34)	939	(53)
Supervised		1009		826	
General		675		550	
One-on-One		334		278	
Unsupervised		320		113	
Adult Behavioral Modification	325	314	(3)	333	2
Alcoholics Anonymous	200	142	(29)	157	(22)
Intermediate Care Centers	200	199	(.5)	138	(31)
Alcohol Treatment Prog.		45		17	
Alcohol Treatment Center		154		121	
Special Services	200	264	32	130	(35)
Community Action Program	50	84	68	55	10
Parent/Child Devel. Center	50	5	(90)	10	(80)
Tinker Social Action Prog.	50	13	(74)	19	(62)
Veterans Administration	50	6	(88)	3	(94)
OKC Community Counseling & Guidance Center	25	8	(68)	0	(100)
Mid-Del Youth & Family Center	20	3	(100)	0	(100)
Narcotics Anonymous	10	3	(100)	0	(100)
Central State Hospital	2	1	(50)	0	(100)
TOTAL	3182	2375	(25)	1784	(44)

NOTE: Numbers in Parentheses are those countermeasures which have not reached their goal.

e. Rehabilitation.

(1) Selection of Individuals for Pre-Sentence Investigation (PSI). Tables 23 through 26 contain the BAC distributions of individuals who were:

(a) Sentenced to some combination of jail and fine where actual jail time was served (No rehabilitation countermeasures - no PSI).

(b) Sentenced to receive a fine only (No jail, no jail suspended, no rehabilitation countermeasures, no PSI).

(c) Sentenced to jail or fine after receiving a PSI. (No rehabilitation countermeasures).

(d) Referred to rehabilitation countermeasures after receiving a PSI.

Individuals given a PSI and subsequently referred to one or more rehabilitation countermeasures are drawn from a significantly (K.S., $\alpha = 0.05$) different BAC distribution than either those who received a fine alone (no jail, jail suspended or rehabilitation), those receiving jail sentences and actually serving some time (no rehabilitation countermeasures) or those who had a PSI and were not referred to a rehabilitation countermeasure. Those individuals in rehabilitation countermeasures tended to have significantly higher BACs than the other three groups. Further, persons receiving fines alone tended to have significantly lower BACs than individuals who spent time in jail (K.S., $\alpha = 0.05$). The BAC distribution of those who received PSIs but were given a punitive sanction was significantly higher than that of those receiving a fine only, but not significantly different than the distribution of those who served some jail time (K.S., $\alpha = 0.05$).

TABLE 23: BAC Readings at Time of Arrest for Individuals Sentenced to Some Combination of Jail and Fine Where Actual Time Was Served in Jail (Does Not Include Individuals Given PSI) 1972 - 1976

BAC	NUMBER	%	CUMULATIVE %
.01-.04	2	0.3	0.3
.05-.09	46	5.7	5.9
.10-.14	185	22.9	28.8
.15-.19	275	34.1	62.9
.20-.24	199	24.7	87.6
>.25	99	12.3	100.0
Refusal	107	N/A	N/A
Other	17	N/A	N/A
TOTAL	930		

TABLE 24: BAC Readings at Time of Arrest for Individuals Sentenced to Fine Only (No Jail, Jail Suspended or PSI) 1972-1976

BAC	NUMBER	%	CUMULATIVE %
.01-.04	13	0.7	0.7
.05-.09	289	15.5	16.2
.10-.14	612	32.7	48.9
.15-.19	561	30.0	78.9
.20-.24	287	15.4	94.3
>.25	107	5.7	100.0
Refusal	276	N/A	N/A
Other	9	N/A	N/A
TOTAL	2154		

TABLE 25: BAC Readings at Time of Arrest for Individuals Given a Pre-Sentence Investigation and Not Referred to Rehabilitation Countermeasure (Jail/Fine) 1972-1976

BAC	NUMBER	%	CUMULATIVE %
.01-.04	0	0	0
.05-.09	17	3.6	3.6
.10-.14	115	24.5	28.1
.15-.19	140	29.8	57.9
.20-.24	113	24.0	81.9
>.25	85	18.1	100.0
Refusal	73	N/A	N/A
Other	1	N/A	N/A
TOTAL	543		

TABLE 26: BAC Readings at Time of Arrest for Individuals Referred to Rehabilitation Countermeasures 1972-1976

BAC	NUMBER	%	CUMULATIVE %
.01-.04	1	0.02	0.02
.05-.09	96	2.4	2.4
.10-.14	636	15.8	18.2
.15-.19	1386	34.4	52.6
.20-.24	1178	29.3	81.9
>.25	726	18.1	100.0
Refusal	398	N/A	N/A
Other	23	N/A	N/A
TOTAL	4444		

It appears, then, that BAC is a variable which is considered (either explicitly or implicitly) during the PSI candidate selection process.

Table 27 indicates that those receiving PSIs generally had a higher proportion of their numbers at or above 150 mg.% than those who had not been given a PSI. Further, the chemical test refusal percentage was lower for those who received a PSI and were assigned to one or more rehabilitation countermeasures than any of the other groups. The implication here is that those ultimately placed in a rehabilitation countermeasure were generally more cooperative at the time of their arrest (on the average) than those individuals who were not placed in a rehabilitation countermeasure.

Other criteria for selection for PSI were impossible to determine from the data base (client file) itself. However, the majority of PSIs are initiated due to a request by either the DUI suspect or his attorney.

TABLE 27: BAC and Chem Test Refusal Information for Selected Punitive and Rehabilitation Assignment Groups 1972-1976

GROUP	% BAC > 150 mg.% (for those with test results)	% CHEM TEST REFUSALS
a. Jail & fine - some jail time served - no PSI - no rehabilitation	71.1	13.3
b. Fine alone - no PSI - no rehabilitation	51.1	13.2
c. Jail & fine - after PSI - no rehabilitation	71.9	13.6
d. Referred to rehabilitation after PSI	81.6	9.5

(2) Compliance and Retention. If the rehabilitation countermeasures are to be effective in changing behavioral patterns, it would seem to be necessary for the individual assigned to a countermeasure to remain in that countermeasure during the entire term. Consequently, one measure of effectiveness of a countermeasure would be the retention rate. Looking at the complement of retention, an index was constructed to measure the drop-out rate. The drop-out index, ϕ, is determined as a percentage as follows:

$$\phi = \frac{\text{Cumulative Number of Individuals Dropping out of a Countermeasure}}{\text{Cumulative Number of Individuals Exposed to that Countermeasure}} \times 100$$

Tabulated values of the Program Drop-Out Index for 1975-1976 for major treatment modalities can be found in Table 28.

TABLE 28: Program Drop-Out Index

COUNTERMEASURE	1975-1976 ASSIGNMENTS	1975-1976 DROPOUTS	PROGRAM DROP-OUT INDEX (ϕ) %
Improved Probation			
Supervised Probation	1841	71	3.86
Unsupervised Probation	432	23	5.32
Intermediate Care Centers	347	15	4.32
Central State Hospital (In-Patient)	1	0	-
Alcoholics Anonymous	300	26	8.66
OKC Community Counseling & Guidance Center	8	1	-
Adult Behavioral Modification	647	24	3.71
Special Services	272	12	4.41
Community Action Program	139	5	3.60
Tinker Social Action Program	28	2	-
Parent Child Development Center	18	1	-
Veteran's Administration	10	1	-
By Drinking Category			
Problem Drinkers	1834	76	4.14
Non-Problem Drinkers	50	2	4.00
Category Unidentified	389	16	4.11

NOTE: Drop-Out indices were not computed in those cases where assignments number less than 50.

No statistically significant (t, $\alpha = 0.05$) difference in drop-out indices was found between supervised and unsupervised probation for 1975-1976.

Note that the 1975-1976 drop-out indices for the Intermediate Care Center: Adult Behavior Modification, Special Services and the Community Action Project are quite similar and indicate that approximately 1 out of every 25 clients "drop out." This is a more than reasonable standard of performance. Generally, the aforementioned countermeasures are fairly well structured both in terms of attendance and material/topics/therapy provided. Alcoholics Anonymous had a 1975-1976 drop-out rate that was approximately double that of the other major

countermeasures. Drinker category had no apparent effect on the drop-out index during the 1975-1976 period.

(3) Program Retention and Recidivism.

(a) Diagnosis and Referral. Earlier in this section it was stated that a statistically significant difference in the BAC distributions existed between those given a PSI who subsequently were referred to one or more rehabilitation countermeasures and those given a PSI and not referred to rehabilitation. The latter group was subjected to punitive countermeasures, a combination of jail and fine. Selection to the latter group was based primarily on the fact that the client could not or would not attend a rehabilitation countermeasure or that all suitable rehabilitation countermeasures were filled or not available at that time. The evidence suggested that those individuals assigned to a rehabilitation countermeasure were drawn from a population with a higher arrest BAC distribution than the PSI-Punitive group. Further, individuals assigned to a rehabilitation countermeasure had a significantly lower chemical test (for BAC) refusal rate than those who were not.

Table 29 contains recidivism information for the PSI-punitive and PSI-rehabilitation groups. The "Recidivism Index" (RI) is computed as the simple ratio of recidivists to exposed population for each of the classified drinker types. Note that since the recidivism measure (RI) is not related to time or man-months of exposure, it is a relative rather than an absolute measure of recidivism. The average man-months exposure (per client) in each of the six drinker type-group designations was assumed to be approximately equal. No statistically significant difference (χ^2, $\alpha = 0.05$) between groups in RI was found for any of the three drinker types.

TABLE 29: Recidivism Index by Drinker Type for PSI-Punitive and PSI-Rehabilitation Combinations

	PROBLEM			UNIDENTIFIED			NON-PROBLEM		
GROUP	POPU-LATION	RECIDI-VISTS	R.I	POPU-LATION	RECIDI-VISTS	R.I.	POPU-LATION	RECIDI-VISTS	R.I.
PSI-Punitive	335	55	.164	112	21	.187	87	12	.138
PSI-Rehabilitation	2971	549	.185	955	136	.142	354	42	.119

Care must be taken in the interpretation of this recidivism data sin assignments to rehabilitation or punitive countermeasures were neither "matched" nor random.

A function of the probation staff is to determine the quantitative as well as qualitative aspects of the rehabilitation assignment task. Probation officers assigned as many as three or as few as one rehabilitation countermeasure based on their overall appraisal of a particular case. A question concerning the effects of numbers of countermeasure assignments (representing "level of activit on subsequent recidivism is both interesting and appropriate. Due to the lack of random assignment, however, the question of "level of activity" as it affects recidivism cannot be answered. There is most probably a tendency to assign the most difficult problem drinkers to a greater number of countermeasures than those perceived as less severe problem drinkers. Table 30 provides population and recidivism data by drinker type for persons assigned to one, two or three countermeasures. The data indicates that the recidivism index is significantly lower (t, $\alpha = 0.05$) for Problem Drinkers who were assigned to two countermeasures than Problem Drinkers assigned to three countermeasures. No significant difference was found in the recidivism indices for any other within drinker type comparison.

TABLE 30: Recidivism by Number of Countermeasures Assigned by Drinker Type

ONE COUNTERMEASURE ASSIGNED:

	NOT CLASSIFIED	DRINKER TYPE P	U	N
Number Assigned	29	734	395	215
Recidivists	5	146	56	22
R.I.		.199	.142	.102

R.I. All Singles = .167

TWO COUNTERMEASURES ASSIGNED:

Number Assigned	24	1857	487	128
Recidivists	4	317	66	19
R.I.		.171	.135	.162

R.I. All Doubles = .163

TABLE 30 (Continued)

THREE COUNTERMEASURES ASSIGNED:

	NOT CLASSIFIED	DRINKER TYPE P	U	N
Number Assigned		380	73	11
Recidivists		86	14	1
R.I.		.226	.192	.091

R.I. All Triples = .218

(4) Characteristics of Dropout and Recidivist Population. Of interest to an analysis of diagnosis and referral efforts is the question of differences in demographic characteristics between dropouts and those who have completed treatment or recidivists and non-recidivists. Tables 31 through 35 provide appropriate age at index arrest, sex, race, occupation and marital status information on a subset of persons assigned to rehabilitation countermeasures for which all five variables were present in the client file and who would have completed their countermeasure assignments on or before December 31, 1976.

With respect to age at first ASAP DUI arrest, dropouts did not differ in age distribution from those who completed the program. On the other hand, recidivists tend to be significantly older on the average than non-recidivists (K.S., $\alpha = 0.05$).

The sex distribution of recidivists was no different for program dropouts than for non-dropouts (Table 32).

Recidivists differed from non-recidivists, however, in that a significantly larger portion of the non-recidivist sex distribution was composed of females compared to the recidivist sex distribution ($t, \alpha = 0.05$).

No statistically significant (χ^2, $\alpha = 0.05$) differences in the racial distributions of dropouts vs. non-dropouts exist (Table 33). It is probable, however, that a greater tendency exists for Mexican-Americans to complete rehabilitation assignments than any other racial group identified. This hypothesis can be supported if all racial groups other than Mexican-Americans are collapsed into one data set and compared to Mexican-Americans. Mexican-Americans show a significantly lower tendency to "dropout" than the other combined racial group (χ^2 $\alpha = 0.05$).

TABLE 31: Age Distribution of Recidivists, Non-Recidivists, Dropouts and Non-Dropouts

	AGE	DROPOUTS N	DROPOUTS %	NON-DROPOUTS N	NON-DROPOUTS %	TOTAL N	TOTAL %
RECIDIVISTS	<20	1	1.5	13	2.8	14	2.7
	20-29	10	15.4	80	17.3	90	17.0
	30-39	19	29.2	135	29.2	154	29.2
	40-49	14	21.5	123	26.6	137	25.9
	50-59	17	26.1	77	16.6	94	17.8
	≥60	4	6.2	35	7.6	39	7.4
		65	100	463	100	528	100
NON-RECIDIVISTS	<20	9	4.1	75	3.4	84	3.5
	20-29	74	33.3	551	24.9	625	25.7
	30-39	54	24.3	572	25.9	626	25.7
	40-49	42	18.9	516	23.3	558	22.9
	50-59	29	13.1	341	15.4	370	15.2
	≥60	14	6.3	156	7.1	170	7.0
		222	100	2211	100	2433	100
TOTAL	<20	10	3.5	88	3.3		
	20-29	84	29.3	631	23.6		
	30-39	73	25.4	707	26.4		
	40-49	56	19.5	639	23.9		
	50-59	46	16.0	418	15.6		
	≥60	18	6.3	191	7.1		
		287	100	2674	100		

TABLE 32: Sex Distribution of Recidivists, Non-Recidivists, Dropouts and Non-Dropouts

	SEX	DROPOUTS N	DROPOUTS %	NON-DROPOUTS N	NON-DROPOUTS %	TOTAL N	TOTAL %
ECIDIVISTS	Male	61	93.8	435	94.0	496	93.9
	Female	4	6.2	28	6.0	32	6.1
		65	100	463	100	528	100
NON-ECIDIVISTS	Male	201	90.5	1942	87.8	2143	88.1
	Female	21	9.5	269	12.2	290	11.9
		222	100	2211	100	2433	100
TOTAL	Male	262	91.3	2377	88.9		
	Female	25	8.7	297	11.1		
		287	100	2674	100		

TABLE 33: Racial Distribution of Recidivists, Non-Recidivists, Dropouts and Non-Dropouts

	RACE	DROPOUTS N	DROPOUTS %	NON-DROPOUTS N	NON-DROPOUTS %	TOTAL N	TOTAL %
RECIDIVISTS	White	56	86.2	375	81.0	431	81.6
	Black	3	4.6	34	7.3	37	7.0
	Indian	6	9.2	39	8.4	45	8.5
	Mexican	0	0	15	3.2	15	2.8
	Oriental	0	0	0	0	0	0
	Other	0	0	0	0	0	0
		65	100	463	100	528	100
NON-RECIDIVISTS	White	187	84.2	1807	81.7	1994	82.0
	Black	23	10.4	222	10.0	245	10.1
	Indian	11	5.0	141	6.4	152	6.2
	Mexican	1	0.4	39	1.8	40	1.6
	Oriental	0	0	0	0	0	0
	Other	0	0	2	0.1	2	0.1
		222	100	2211	100	2433	100
TOTAL	White	243	84.7	2182	81.6		
	Black	26	9.1	256	9.6		
	Indian	17	5.9	180	6.7		
	Mexican	1	0.3	54	2.0		
	Oriental	0	0	0	0		
	Other	0	0	2	0.1		
		287	100	2674	100		

TABLE 34: Occupational Distribution of Recidivists, Non-Recidivists, Dropouts and Non-Dropouts

	DROPOUTS		NON-DROPOUTS		TOTAL	
OCCUPATION	N	%	N	%	N	%
RECIDIVISTS						
Professional/Mgt.	6	9.2	56	12.1	62	11.7
Clerk/White Collar	0	0	34	7.3	34	6.4
Craftsman	12	18.4	102	22.0	114	21.6
Laborer	33	50.8	185	40.0	218	41.3
Housewife	0	0	1	0.2	1	0.2
Student	0	0	4	0.9	4	0.8
Other	4	6.2	12	2.6	16	3.0
Unemployed	7	10.8	62	13.4	69	13.1
Retired	3	4.6	7	1.5	10	1.9
TOTAL:	65	100	463	100	528	100
NON-RECIDIVISTS						
Professional/Mgt.	21	9.5	318	14.4	339	13.9
Clerk/White Collar	16	7.2	255	11.5	271	11.1
Craftsman	46	20.7	537	24.3	583	24.0
Laborer	92	41.4	679	30.7	771	31.7
Housewife	4	1.8	36	1.6	40	1.6
Student	5	2.3	43	1.9	48	2.0
Other	9	4.1	60	2.7	69	2.8
Unemployed	24	10.8	230	10.4	254	10.4
Retired	5	2.3	53	2.4	58	2.4
TOTAL:	222	100	2211	100	2433	100
TOTAL						
Professional/Mgt.	27	9.4	374	14.0		
Clerk/White Collar	16	5.6	289	10.8		
Craftsman	58	20.2	639	23.9		
Laborer	125	43.6	864	32.3		
Housewife	4	1.4	37	1.4		
Student	5	1.7	47	1.8		
Other	13	4.5	72	2.7		
Unemployed	31	10.8	292	10.9		
Retired	8	2.8	60	2.2		
TOTAL:	287	100	2674	100		

TABLE 35: Marital Status Distribution of Recividists, Non-Recidivists, Dropouts and Non-Dropouts

	MARITAL STATUS	DROPOUTS N	DROPOUTS %	NON-DROPOUTS N	NON-DROPOUTS %	TOTAL N	TOTAL %
RECIDIVISTS	Single	4	6.2	62	13.4	66	12.5
	Married	34	52.3	213	46.0	247	46.8
	Separated	5	7.7	47	10.2	52	9.8
	Divorced	19	29.2	129	27.9	148	28.0
	Widowed	2	3.1	8	1.7	10	1.9
	Common Law	1	1.5	4	0.9	5	0.9
		65	100	463	100	528	100
NON-RECIDIVISTS	Single	28	12.6	346	15.6	374	15.4
	Married	100	45.0	1127	51.0	1227	50.4
	Separated	22	9.9	138	6.2	160	6.6
	Divorced	64	28.8	530	24.0	594	24.4
	Widowed	8	3.6	57	2.6	65	2.7
	Common Law	0	0	13	0.6	13	0.5
		222	100	2211	100	2433	100
TOTAL	Single	32	11.1	408	15.3		
	Married	134	46.7	1340	50.1		
	Separated	27	9.4	185	6.9		
	Divorced	83	28.9	659	24.6		
	Widowed	10	3.5	65	2.4		
	Common Law	1	0.3	17	0.6		
		287	100	2674	100		

There also appears to be a trend toward a disproportionately high dropout rate for Whites compared to Blacks, Indians or Mexicans. There was a statistically significant (χ^2, $\alpha = 0.05$) difference in the racial composition of the recidivist vs. non-recidivist distributions. Mexican-Americans and Indians recidivated more often than Whites, while Blacks recidivated less often than Whites.

Laborers are the only occupational group significantly (χ^2, $\alpha = 0.05$) over-represented in the dropout distribution compared to the non-dropout distribution (Table 34). Laborers were also significantly over-represented while housewives and clerk white collar workers were underrepresented in the recidivist-occupation distribution compared to the non-recidivist distribution (χ^2, $\alpha = 0.05$).

Separated, divorced or widowed persons tended to dropout significantly (χ^2, $\alpha = 0.05$) more often than either married or single persons (Table 35). Similarly, separated and divorced persons recidivated proportionately more often than either single or married persons.

One question of interest to an investigation of demographic variables such as those discussed above is the presence and effect of other non-demographic intervening variables. One such variable of interest in this case might be "level of drinking problem." One method of estimating "level of drinking problem" would be to utilize blood alcohol concentration (BAC) determined at the time of the index ASAP-DUI arrest. This data is contained in Table 36. A statistically significant difference (K.S., $\alpha = 0.05$) exists between the BAC distribution of the non-dropout, non-recidivists and the recidivist-dropouts. Recidivist-dropouts tended to have higher index arrest BACs than the non-recidivist, non-dropout group. None of the other BAC distributions (recidivist-nondropout or non-recidivist dropout) were significantly different from the non-recidivist, non-dropout BAC distribution. There was no statistically significant difference (K.S., $\alpha = 0.05$) in the BAC distribution of recidivists vs. non-recidivists, but dropouts had significantly higher BACs than non-dropouts.

The question of variable interaction, while certainly of interest, was not addressed due to a lack of sufficient time to complete that study.

The data appear to indicate that certain demographic factors may be related to both dropout and recidivism rates.

TABLE 36: Blood Alcohol Concentration Distribution of Recidivists, Non-Recidivists Dropouts and Non-Dropouts

	BAC	DROPOUTS N	DROPOUTS %	NON-DROPOUTS N	NON-DROPOUTS %	TOTAL N	TOTAL %
RECIDIVISTS	.01-.04	0	-	0	-	0	-
	.05-.09	3	5.4	7	1.7	10	2.1
	.10-.14	5	8.9	67	16.1	72	15.3
	.15-.19	13	23.2	139	31.3	143	30.3
	.20-.24	23	41.1	128	30.8	151	32.0
	.25+	12	21.4	84	20.2	96	20.3
	TOTAL	56	100.0	416	100.0	472	100.0
	Refused, Other	9		47		56	
NON-RECIDIVISTS	.01-.04	0	-	0	-	0	-
	.05-.09	7	3.5	51	2.5	58	2.6
	.10-.14	34	16.9	347	17.3	381	17.3
	.15-.19	54	26.9	685	34.2	739	33.5
	.20-.24	63	31.3	581	29.0	644	29.2
	.25+	43	21.4	341	17.0	384	17.4
	TOTAL	201	100.0	2005	100.0	2206	100.0
	Refused, Other	21		206		227	
TOTAL	.01-.04	0	-	0	-		
	.05-.09	10	3.9	58	2.4		
	.10-.14	39	15.2	414	17.1		
	.15-.19	67	26.1	815	33.7		
	.20-.24	86	33.5	709	29.3		
	.25+	55	21.4	425	17.6		
	TOTAL	257	100.0	2421	100.0		
	Refused, Other	30		4			

4. ASAP DIRECT COSTS - TRAFFIC SAFETY SYSTEM. Substantial costs are generally incurred in an ASAP due to increased enforcement manpower. This manpower generally results in a relatively large DUI arrest increment above previous levels. This is of course subsequently followed by necessary increases in the prosecution, adjudication and probation functions which represent further additional costs.

One might argue that individuals arrested and convicted of DUI should pay a significant share of their "processing costs." The question of what constitutes a significant share of these costs will not be addressed here. Rather, the costs of the processing function components will be elucidated so that information is available for input into the politico-management decision process to determine what constitutes "significant share."

Table 37 contains direct cost and cost per case information for enforcement, court, prosecution, diagnosis and referral, and coordination and monitoring activities. Direct costs stated in Table 37 are estimates obtained from both actual cost data and detailed plan projections and can be considered to represent actual direct costs of the stated activity within $\pm$ 5%.

Enforcement costs per DUI case assume that the only activity of the Special ASAP Enforcement Patrols was that of making DUI arrests. In fact, several "stops" are made in which no DUI citation is issued for each DUI arrest. These "stops" generally result in revenue producing traffic citations that are subsequently paid. This income to Oklahoma City may represent as much as one third of enforcement costs and would thereby serve to reduce the estimated cost per DUI arrest stated in Table 37 by up to one third.

TABLE 37: Estimated Direct Costs for Countermeasure Areas
Oklahoma City 1976

AREA	DIRECT COST	CASES	COST PER CASE
Enforcement (ASAP - Spec. Patrols)	423,737	4398	96.34
Judicial - Court	93,972	3312	28.37
Prosecution	113,193	3312	34.18
Diagnosis & Referral	50,143	1092	45.92
Coordination & Monitoring During Probation Period	67,294	939	71.66
			276.47

NOTE: Direct costs include all direct costs of operation including salaries, fringe benefits, jury fees, equipment, equipment maintenance, gasoline and oil for police vehicles, rental of office space where required, custodial care and upkeep of rental space where required by lease and training.

It should be noted here that the vast majority of DUI recidivists arrested in Oklahoma City are not processed in the Oklahoma City Court of Record but are filed in the District Court. There were in excess of 1,200 persons filed for DUI in the District Court during 1976. There is no income accruing to the City from those arrests.

An individual who is not referred to the Probation staff for diagnosis and referral activities but who is processed through the Oklahoma City Court of Record after arrest for DUI resulted in arrest and processing costs to the City of approximately $159 during 1976. This is an approximate 10% increase in unit DUI arrest cost above the 1975 level of $144. An individual given a Pre-Sentence Investigation and subsequently referred to a rehabilitation countermeasure along with Probation costs the City approximately $276. This represents an approximate 22% increase in unit costs over the 1975 level. Note that no direct rehabilitation costs are included in the estimates given. Virtually all (except for the Adult Behavior Modification School) of the rehabilitation countermeasures included in the Oklahoma City ASAP utilized donated or private funds and labor or were supported by non-NHTSA federal FUNDS. The value of these goods and services is difficult to ascertain. Unit costs are extremely sensitive to swings in the numbers of individuals processed since the majority of costs in each of the categories listed represent salaries, wages and fringe benefits which to a great degree are insensitive to the numbers processed within the capacity of the system. Management, at all levels, therefore should include among their goals the maintenance of sufficient client flow, especially in the areas of diagnosis, referral and coordination and monitoring.

5. SUMMARY AND CONCLUSIONS. This study presented an analysis of the Impact of ASAP on selected aspects of the traffic safety system in Oklahoma City. Data was presented for the total system from the point of a DUI arrest through the adjudication, probation and rehabilitation phases which follow. The major conclusions of the study are as follows:

a. ASAP patrols made a significantly higher number of DUI arrests in 1976 (4398) than in any previous operational year.

b. A change in ASAP patrol operations from two man vehicles to a one man paired vehicle concept accomplished during 1975 dramatically increased the patrol efficiency as measured by arrests per man hour. Patrol efficiency has increased by a factor of three since 1972.

c. Total DUI court dispositions decreased slightly to 3312 in 1976 compared to 3497 in 1975.

d. Average time in days from arrest to final disposition for DUI cases was 65.4 days in 1976. This is about half of the time required in the pre-ASAP year, 1971, when 128.3 days were required on average.

e. Mean BAC for persons arrested for DUI and convicted as charged remained stable at .168 (168 mg.%) in 1976, while the mean BAC of those convicted essentially of a reduced charge also was relatively stable at .127 (127 mg.%). This relative stability in 1975 and 1976 represents a possible flattening of a downward trend begun in 1972.

f. During 1976, 1092 persons arrested for DUI in Oklahoma City were given Pre-Sentence Interviews. This represented 34.6% of those initially arrested for DUI and found guilty in the Oklahoma City Municipal Court.

g. Of those given a Pre-Sentence Interview 86% were referred to one or more rehabilitation countermeasures.

h. Persons classified as Problem, Indeterminate or Unidentified and Non-Problem comprised 80.0%, 17.5% and 2.5% respectively, of all rehabilitation countermeasure referrals. It is apparent that the probation staff is continuing to concentrate its referral resources on the heavier and chronic alcohol imbibers.

i. Individuals given a Pre-Sentence Interview and subsequently referred to rehabilitation tended to have higher blood alcohol concentrations than those given a punitive sanction. It appears that blood alcohol concentration is a variable which is considered during the Pre-Sentence Interview selection process.

j. One rehabilitation countermeasure was assigned to 31.4% of those individuals receiving rehabilitation referrals while 57.8% and 10.8% received two and three rehabilitation assignments respectively.

k. Degree of countermeasure structure may be related to client dropout rate. Countermeasures that were more structured appeared to have a lower dropout rate than less structured countermeasures.

l. No significant difference in DUI recidivism index was found between individuals who had received a Pre-Sentence Investigation and were subsequently referred to a rehabilitation countermeasure or a punitive sanction. Those who received the punitive sanction, however, had a lower blood alcohol concentration than the rehabilitation countermeasure group.

m. Problem drinkers had a significantly higher recidivism index than either indeterminate or non-problem drinker types.

n. Problem or Indeterminate drinker types assigned to three countermeasures had a significantly higher recidivism index than those assigned to two countermeasures. It is believed that this result primarily is due to the selection process (i.e., Those with the worst problem can use more help).

o. DUI recidivists differ from non-recidivists in that they (recidivists) tend to be older, more likely male, have a disproportionately high share of persons classified as laborers as well as a disproportionate share of separated or divorced persons.

p. An individual who was not referred to the Probation staff for diagnosis and referral activities but who was processed through the Oklahoma City Court of Record after arrest for DUI resulted in arrest and processing costs to the City in 1976 of approximately $159. If the individual was given a Pre-Sentence Interview and subsequently referred to a rehabilitation countermeasure along with probation, an additional $118 cost to the City was incurred.

q. Individual unit costs consist primarily of labor costs and therefore are extremely sensitive to the numbers of individuals processed. Management at all levels should include among their goals the maintenance of subsequent client flow, especially in the areas of diagnosis, referral and coordination and monitoring.