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KANSAS CITY ASAP
SECTION I

Analytic Study 4
Impact on the Traffic Safety System

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16. Abstract

This study deals with prosecution, adjudication, and punitive sentencing activities pertaining to alleged violations of drinking/driving laws in Kansas City, Missouri. The initiation of ASAP more than doubled the arrest rate, but the system accomodated to this demand in about one year. It was more difficult for the system to adapt to a new, tougher law in late 1975. Overall, the system worked because of liberal use of plea bargaining, institution of a unique record search and screening process, and teamwork among the parties involved. The system became self supporting in that by the fifth year the fines would not only pay for all of the traffic safety system, but nearly all of the Kansas City ASAP.

This report is one of a series of analytic studies. The others are: (1) An Analysis of Project Impact on Ultimate Performance Measures; (3) An Analysis of ASAP Patrol Activity; (6) An Analysis of Diagnosis, Referral, Rehabilitation and Probation; and (7) Impact on Public Knowledge and Attitudes.

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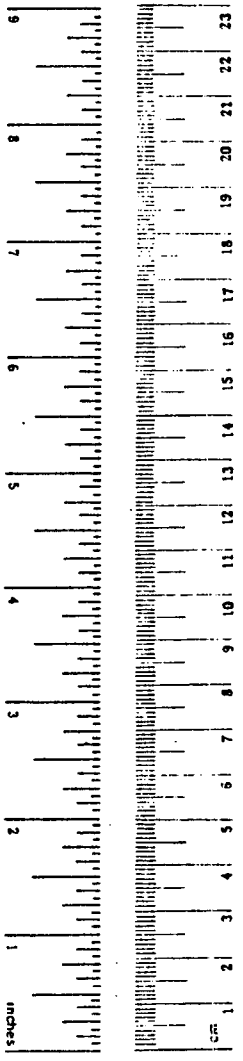
METRIC CONVERSION FACTORS

Approximate Conversions to Metric Measures

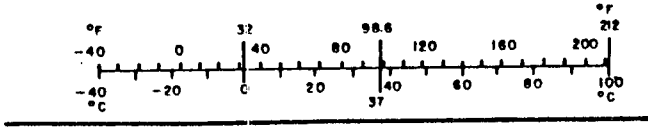
Symbol	When You Know	Multiply by	To Find	Symbol
		LENGTH		
in	inches	*2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
		AREA		
in^2	square inches	6.5	square centimeters	cm^2
ft^2	square feet	0.09	square meters	m^2
yd^2	square yards	0.8	square meters	m^2
mi^2	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 detailed 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



PREFACE

This Analytic Study is a part of the final evaluation of the Kansas City Alcohol Safety Action Project. The series of studies evaluates the major aspects of the Kansas City ASAP over its 5-year existence, with emphasis on the most recent year, 1976. This is Part 4 of the report, and focuses on the prosecution, adjudication, and sentencing functions of the project.

This evaluation would not have been possible without the continuing supply of data, information, ideas and insights from a great many individuals. It is a pleasure to acknowledge those persons who have provided extended assistance of this type.

Mr. Gerald F. Mellon, who served as ASAP Project Director during most of the 5-year period, not only was an information source and critical reviewer of activities, but was the facilitator of numerous fruitful exchanges with other persons. His able assistant, Ms. Susan Grower, proved invaluable in assuring that certain elusive data were tracked down.

For the prosecution, three people were instrumental in giving assistance:

Mr. Aaron A. Wilson, City Attorney
Mr. Louis W. Benecke, City Prosecutor
Mr. Walter O'Toole, then Special Prosecutor

The Court en banc and the individual judges of the Municipal Court during these 5 years were all very helpful:

Judge George C. Denney
Judge Elmo M. Hargrave
Judge James F. Karl
Judge Salvatore S. Nigro
Judge Thomas E. Sims
Judge Ralph H. Smith
Judge Clifford M. Spottsville

The Court Records Unit personnel met with us on numerous occasions and were of great assistance. We especially thank:

Mr. Edwin T. S. Miller, Clerk of Municipal Court, and
Mr. Vernon E. Davis, Administrative Officer.

Finally, the data and much of the programming were provided through the Kansas City, Missouri, Police Department Data System. Special note is made of the contributions of the following:

Mr. Mel Bockelman, Computer Systems Manager
Mr. Benny Midgley, then Supervisor, Criminal Justice Unit
Mr. Billy Rickert, Programmer
Mr. John Fellinger, Programmer

The author also is pleased to acknowledge those on his staff, past and present, who made substantial contributions to this effort. They include Mr. Michael C. Sharp (statistical analysis), Mr. Barry Sanders (statistics and programming), Mr. Duncan Sommerville (programming), and Ms. Rosemary Moran (analysis and data reduction).

Approved for:

MIDWEST RESEARCH INSTITUTE

Bruce W. Macy, Director
Economics and Management
Science Division

June 6, 1977

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CHAPTER I

INTRODUCTION AND OBJECTIVES

The traffic safety system is defined as that portion of the criminal justice system which deals with persons from the time they are arrested for driving under the influence (DUI) until court disposition and, provided the disposition involves guilt, through the imposition of punitive sanctions. This same system also deals with persons on probation who have allegedly violated one or more of the conditions of probation. Operationally, the traffic safety system consists of prosecution, adjudication, and sentencing. These activities involved the following project countermeasures: ASAP Special Prosecution, ASAP Court Records, and the Municipal Court of Kansas City, Missouri. Also involved peripherally were the ASAP Probation Control and Investigation Section, as well as the Circuit Courts.

The effective and efficient operation of the traffic safety system is crucial to the success of the ASAP. Although the project depends on the enforcement countermeasures to provide a basic caseload, without effective prosecution and adjudication, the persons arrested could not be referred into the various rehabilitation programs. Furthermore, it has been shown historically that without effective prosecution and adjudication, enforcement measures will not meet their full potential.

The objective of the traffic safety system, as stated in the Kansas City ASAP Detailed Project Plan[1/] is:

> "Increased prosecution of DUI offenders, and appropriate sentencing of PDDs (problem drinking drivers)."

This Analytic Study addresses the attainment of that objective, together with a number of subsidiary objectives and questions. These subsidiary questions deal with the means of achieving the stated objective and specific matters of importance to prosecution, adjudication, and sentencing activities in general as well as how they relate to the overall ASAP system. The following illustrate the types of subsidiary questions considered in this study:

- How well has the traffic safety system adapted to the increased caseload brought about by ASAP?
- What special problems or changes in procedures were necessitated by the caseload?

- What other special problems have arisen as a result of ASAP, and what were their impacts on the traffic safety system?

- What types of case dispositions have resulted, and how has the distribution of the dispositions changed during the ASAP?

- How have the average processing time and the court backlog been affected by the ASAP?

- How have the types and magnitudes of the punitive sanctions varied over the period of the ASAP?

- What relationships, if any, exist between profile characteristics of individuals arrested for DUI and the ultimate case dispositions?

- What were the cost implications of the traffic safety system, what was the cost-effectiveness, and how was this balanced by increased fine assessments.

Chapter II of this study describes the organization of the traffic safety system under the Kansas City ASAP. This description includes a review of the laws pertaining to drunk driving, the arrest procedure as related to adjudication, the record search process utilized as an aid in sentencing, the prosecution process together with the generally applied prosecution policies, the structure of the Municipal Court, and the structure and functions of the ASAP Court Records Unit. Chapter III briefly presents the major methodological considerations used in this Analytic Study. The results of the study are detailed in Chapter IV. These results are summarized and discussed in Chapter V, and conclusions are drawn. Recommendations are made in Chapter VI. Two appendices contain tabulated data on recent profile characteristic studies.

CHAPTER II

BACKGROUND

A. Overview

1. Prior to September 28, 1975: Driving under the influence (DUI) was the only alcohol-related traffic offense in Kansas City. The municipal ordinance nearly duplicated the state law concerning Driving While Intoxicated (DWI). Both carried the same BAC presumptive limit (0.10%),* and Missouri's implied consent law applied to both charges. The only differences between the laws was the resultant driver license point assessment (12 points for DWI versus 6 points for DUI, with an accumulation of 8 points in 18 months leading to suspension and 12 points to revocation) and in the court processing.

The charge of DUI as well as other Kansas City traffic violations and other city ordinance violations is tried within the Municipal Court System. The trial is before one of the municipal judges, with no provision for a jury trial. Upon appeal, however, the defendant is provided a new trial (with or without jury) in the Circuit Court of the county of jurisdiction.** The appeal results in a trial de novo*** as the Municipal Court is not a court of record.

2. Subsequent to September 28, 1975: A new state law became effective that had two major provisions affecting the Kansas City ASAP. First, it equalized the driver license point assessment, so that both municipal convictions on DUI and state convictions on DWI resulted in automatic 12-point assessments, hence, revocations. Secondly, a new offense was introduced. This provision, commonly referred to as per se, made it illegal to operate a motor vehicle when ones blood alcohol content (BAC) was 0.10% or more. As no evidence of driving impairment is required for a conviction, this offense is treated as a lesser offense than DUI (or DWI) and carries only a 6-point driver license point assessment, both at the municipal and state levels.****

In Kansas City a driver was seldom charged with per se. Instead, it is the prerogative of the prosecutor to reduce a DUI charge to per se if dictated by the evidence or for purposes of plea bargaining.

---

* The limit was reduced from 0.15% in late 1972, with little noticeable impact because over one-fourth of the arrests prior to there were at BAC's under 0.15%.

** Kansas City, Missouri, includes portions of three counties--Jackson, Platte, and Clay.

*** A new trial, without reference to the proceedings of the first trial.

**** Twelve points for second and subsequent convictions.

B. Arrest, as Related to Adjudication

A police officer will stop a motorist upon observing a traffic law violation such as speeding, running a red light, or careless driving. He will then make the usual license checks and, if intoxication is suspected, administer field sobriety tests (walking a line, finger to nose, etc.). Still suspecting alcohol involvement, the officer will place the driver under formal arrest, call a tow truck to impound the car (unless a sober passenger can drive it), and take the driver to a nearby district station.

Normally, two charges will be filed, DUI and the violation that first attracted the officer's attention (running red light, speeding, careless driving, etc.). At the station, the police officer will accumulate evidence. He will explain the driver's rights, perhaps including a Miranda warning, even though this is not required for traffic offenses. He will allow the driver to contact a lawyer, and may even provide assistance if asked. The officer will then attempt to obtain a breath test (Breathalyzer). If the subject refuses, the officer will explain that under the implied consent law he may lose his license and the officer will give the person another opportunity to take the breath test. This warning may be given several times before a refusal is accepted. He will complete an Alcohol Influence Report, based on his observations and the driver's performance on the sobriety tests in the field or (re)administered at the station. All of these functions may be videotaped, a procedure used frequently during the first year or so of the project, but only rarely in 1976.

The driver will be required to make bond to assure his appearance at the trial. At the time of arrest, the court appearance will be scheduled by the police officer, who is assigned a weekly court date, place, and time. (All arrests made by the officer will be heard at the same court session.) A particular arrest will be scheduled on the officer's court date that will be at least 15 days, and not more than 45 days, from the arrest date. Should the driver fail to make bond he will be detained and brought before a judge at 8:30 the following morning (Sundays excepted). Generally, the driver will either be given additional time to make bond or the case will be disposed of at that time.

C. Records Search

After the arrest has been completed, appropriate data are entered into the Kansas City, Missouri, Police Department computer. Within a day or so a report called the DUI Alert is prepared, listing recent DUI arrests and relevant data. This report is submitted to the City Prosecutor, the ASAP Court Records Unit, and the ASAP Probation Office.

The subsequent records searching was manually triggered until October 1976, when a new, highly automated system was made operational. Both approaches yielded the same types of information and comparable computer reports. Each is described in detail in the following paragraphs.

1. Manual Search System (Prior to October 1976): The Court Records Unit initiated a driver license history search. Initially this was done only through the State of Missouri, Department of Revenue. Later in the project it became possible to inquire also of the State of Kansas concerning drivers licensed or living in that state. Occasionally, mail inquiries to other states were made. The Unit then reviewed the data and summarized them for recording in the computerized case file.

The Probation Office used the DUI Alert if the subject was currently on probation. In such cases, a probation hearing is scheduled with the municipal court judge who tried the earlier arrest, to determine if the probation should be revoked.

A few days prior to the scheduled court date, additional computer reports were prepared. One is the court docket, listing all cases to be heard in each court session. The second was a Pretrial Screening Report (PTSR) for each DUI case. This report served a variety of functions and has undergone numerous changes and improvements since it became operational in the first quarter of 1972. An illustrative example of its format in 1975 is shown in Figure 1.

The report begins with information about the current DUI arrest (ticket number; court date, place and time; and defendant identifiers). The driver license data are given next, followed by a summary including traffic, ordinance, misdemeanor, and felony convictions. Then the results of the probation record check are stated. Below this is a detailed listing of recent, local convictions. In the example, the defendant had one conviction, by plea, of DUI, for which he was sentenced to a $100 fine and 3 months in jail, but placed on probation for 2 years (700 days). This defendant also had aliases on file.

Next on the PTSR is a section concerning the "investigation" of the defendant. A listing of indicators of drinking problems is given, based on the National Highway Traffic Safety Administration (NHTSA) diagnostic guideline for problem drinking drivers (PDD's). This individual, through prior arrests, showed strong indications of being a PDD, including a high score on the Mortimer-Filkins diagnostic test, administered after his previous conviction. He also had a high BAC with the present arrest. Thus, the available data indicate he is a PDD. (Alternatives for other defendants would be Social Drinking Drivers (SDD) or Unknown, with an in-depth investigation suggested in the latter case.)

ALCOHOL SAFETY ACTION PROGRAM DUI PRE-TRIAL SCREENING REPORT

J0101L1 RESTRICTED INFORMATION-FOR OFFICIAL USE ONLY

CURRENT DUI TICKET=1623432 02/22/74 COURT DATE: 03/17/74 DIVISION: H TIME: 1:30 PM

LAST NAME	FIRST NAME	M I	RACE	SEX	DATE OF BIRTH	DRIVERS LICENSE INFO NUMBER	ST	YR	ARREST SUMMARY-LOCAL TC	OC	MC	FC	ASAP PROB RECORDS PREV ASAP PROB	CURR PROB
DOE	JOHN	X	W	M	110229	D1234567890	MO	77	001	008	001	000	0	1

TTN- 1234567 04/07/73 116 FCH-SAME PLEA-G GUILTY AS CHARGED 08/05/73 DA-90 $100 PROB-700

ADDITIONAL NAMES ON FILE

INDICATORS OF ALCOHOL PROBLEMS

AT LEAST 2 PRIOR ALCOHOL-RELATED CONVICTIONS

HIGH SCORE ON PSYCHOLOGICAL ALCOHOL TEST

KNOWN TO PROBATION OFFICE BECAUSE OF DRINKING PROBLEMS

BAC OF .15 OR MORE

*****AVAILABLE DATA INDICATES PDD

NOTE -- CURRENTLY ON ASAP PROBATION

IF FOUND TO BE A SOCIAL DRINKER - ASSIGNMENT TO SASL IS RECOMMENDED

IF FOUND TO BE A PROBLEM DRINKER - ASSIGNMENT TO CAP IS RECOMMENDED

MISSOURI DOR DUI: 05 OTH: 08 SUS: 2 REV: 2 PTS: 020

KANSAS DOR DUI: 00 OTH: 00 SUS: 0 REV: 0 PTS:

* * * * * REFERRAL INFORMATION * * * * *

REFERRAL DATE	REFERRED BY	REFERRED TO	REASON REFERRED	REFERRAL STATUS
08/17/73	COURT	SASS	ALCOHOLISM COUNSELING	NO CHANGE, COOPERATIVE
08/05/73	COURT	ASAP PROBATION	ALCOHOLISM COUNSELING	NEW REFERRAL

Figure 1 - PTSR Example

Next is a computer-generated, "randomized" assignment for judicial consideration. Assignment recommendations are given for both SDD's and PDD's, because additional information forthcoming in the court room may modify the screening report conclusion. (It is unlikely that new information would affect this particular example.) The random assignments are suited, in type, to the depth of the defendant's drinking problem, and include a control group as well as rehabilitative modalities, but punitive aspects of sentences are the prerogative of the Court.

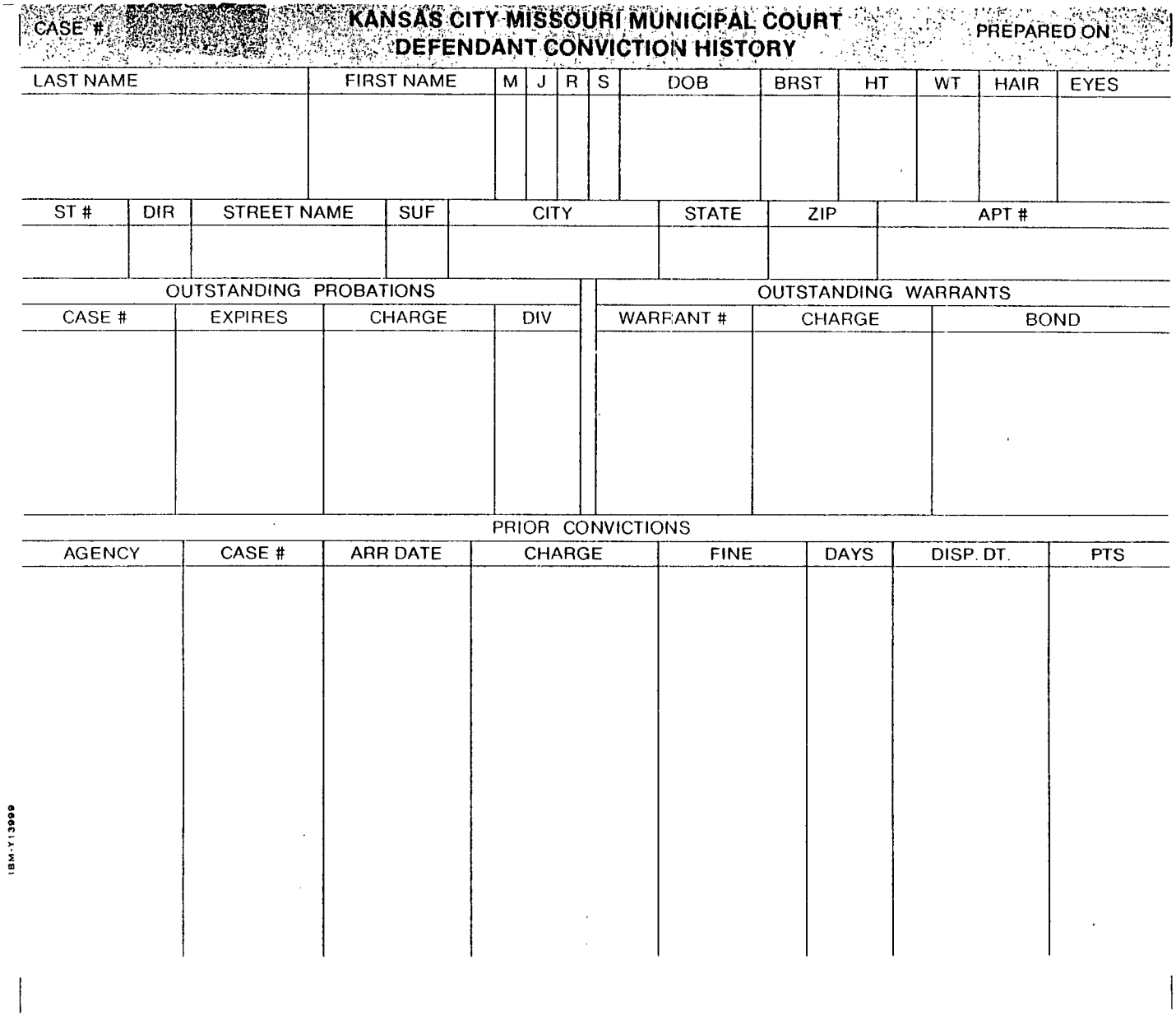
Following this are further details, including summaries of state licensing agency conviction records and actions, and previous ASAP referral actions and statuses.

The PTSR is provided to the prosecutor trying the case and to the Municipal Court for the judge's review after adjudication and before sentencing.

2. Automated Search Systems (Implemented in October 1976): Because of the court's overwhelming acceptance of the ASAP PTSR concept, the court records personnel greatly expanded it in conjunction with police and state agency cooperation. The PTSR was made a standard court report on all Municipal Court cases--not just DUI but all traffic cases and all general ordinance violations. Secondly, the automated, computerized court docketing procedure (long in operation in Kansas City) was expanded to trigger automated records searches, and to prepare and produce the reports.

A sample of the new report format is shown in Figure 2. A report is prepared for each defendant, for use by the judge after adjudication but before sentencing. Additional pages are produced for defendants with long records, if necessary. Moreover, for DUI defendants an additional page is prepared that includes BAC at time of arrest; treatment referral records; alcohol problem indications; drinker status; and referral recommendation. (Because of the imminent completion of formal ASAP operations, the "random" control group concept was discontinued at this time.)

The records search and summarization was completely automated. The local records were scanned by the police computer, and state driver license records were searched via a computer-to-computer linkage.



CASE #

KANSAS CITY MISSOURI MUNICIPAL COURT
DEFENDANT CONVICTION HISTORY

PREPARED ON

LAST NAME	FIRST NAME	M	J	R	S	DOB	BRST	HT	WT	HAIR	EYES

ST #	DIR	STREET NAME	SUF	CITY	STATE	ZIP	APT #

OUTSTANDING PROBATIONS

CASE #	EXPIRES	CHARGE	DIV

OUTSTANDING WARRANTS

WARRANT #	CHARGE	BOND

PRIOR CONVICTIONS

AGENCY	CASE #	ARR DATE	CHARGE	FINE	DAYS	DISP. DT.	PTS

IBM-Y13999

Figure 2 - Generalized PTSR Example.

D. Prosecution

There is no arraignment process. Once the arrest has been made the charge, subject to review for proper wording, etc., is accepted for prosecution. (It may later be nolle prossed.)

The Kansas City Law Department is responsible for, among other things, prosecuting violations of city ordinances. To accomplish this the City maintains a staff of about 10 assistant prosecutors (part-time) who report to a full-time City Prosecutor. The prosecutors do not specialize, but handle regular court dockets and appeals on a rotation basis.

A prosecutor usually learns of his upcoming cases no more than a day or two in advance of the scheduled trial. He will receive a listing of his cases (the court docket). Also made available to him for each DUI case is the PreTrial Screening Report. He rarely will be able to "prepare" for the case by, for example, conferring with the arresting officer or reviewing the facts of the arrest. His preparation is usually limited to a perusal of the PTSR.

A defense attorney may contact the Prosecutor's office prior to the scheduled court appearance for purposes of "plea bargaining." As two charges are usually pending, the prosecutor may be willing to nolle pros one charge in return for a guilty plea to the other and acceptance of the prosecutor's sentencing recommendation (normally a fine, jail with probation, and referral to an appropriate ASAP treatment modality).

Frequently, the case will not be heard on the scheduled court date, but will be continued for about 30 days at the request of the defendant. Plea bargaining may take place during this interim. Occasionally, plea bargaining will occur in the courtroom, but such practice has been discouraged by the judges.

Upon adjudication, if there is a plea or conviction on at least one charge, the judge will entertain a recommendation of sentence from the prosecutor. The recommendation usually follows current policy, as discussed subsequently.

If a convicted defendant appeals the case to Circuit Court, it is again tried by a member of the City Prosecutor's staff, but not necessarily by the prosecutor who tried it originally.

E. Municipal Court

The Kansas City Municipal Court System is comprised of seven elected judges plus supportive personnel (bailiffs, clerks, stenographers, records personnel, etc.). The Court is organized into seven Divisions, only five of which normally hear cases.

One of the seven judges is elected Presiding Judge by the Court en Banc. This position is normally rotated at 6-month to 1-year intervals. Of the remaining six, five are assigned to active Divisions and the other is the "swing" judge who is available when needed.

Each Division has four court dockets daily containing predominantly traffic cases. A fifth docket of general ordinance violations is also heard. This represents an increase of one docket per day over pre-ASAP days. Much of the increased court load is attributed, by the Court and City Prosecutor, to the doubling of DUI arrests as a result of ASAP. (Although DUI cases are numerically a minority of all traffic cases, their adjudication requires a substantial portion of the court time.) The dockets also include hearings regarding probation violations. The number of these hearings has also increased substantially over pre-ASAP days.

After accepting a guilty plea, or upon a finding of guilt, the judge will normally ask the prosecutor for sentencing and referral recommendations. If they seem reasonable, the judge will usually accept the prosecutor's recommendations and sentence the defendant. Usually, the sentence will include a fine and a term of 30 to 90 days to be served at the Municipal Correctional Institution, but with probation offered in lieu of serving that time. The probation usually includes standard provisions (payment of fine, don't drink and drive, don't associate with known felons, etc.), and referral to and participation in an ASAP treatment modality is usually required. The defendant is then told how to pay, or make arrangements for paying, his fine and is directed to the City Probation and Parole Office.

If the Probation Office becomes aware of a probation violation, various actions can result depending on the violation and the conditions pertaining thereto. Serious violations (e.g., rearrest for DUI, repeated failure to attend treatment, etc.) usually result in the scheduling of a court hearing. The hearing is before a Municipal Court Judge, at which time the Probation Officer and the probationer appear. The hearing can result in a renewal or a revocation of probation, with time to be served. Should the probationer not appear, a revocation in absentia is normal.

F. Description of ASAP Judicial Countermeasures

The following describes the status of the ASAP-funded positions in 1976, and briefly notes the actions leading to that status.

1. City Prosecutor: The City Prosecutor supervises a large staff of assistant prosecutors, most of whom work part-time. He establishes policies and procedures to be followed by these prosecutors. Prior to 1975, ASAP paid his salary to reimburse the Prosecutor's office for the extra work load imposed by the increase in DUI cases effected by ASAP, but more importantly to be assured of uniform prosecution dedicated to the goals of ASAP. The City Prosecutor does not, however, devote full time to ASAP. The city resumed paying his salary in 1975.

2. City Counselor I: Initially, a Special Prosecutor handled all arrests by the ASAP patrol. Then, beginning in September 1973, one of the assistant prosecutors (a City Counselor I) was funded by ASAP to help handle the total case load. His duties were similar to all other assistant prosecutors in that he was in the normal "rotation." However, he was also required to keep certain ASAP records and to confer with and assist the project director on prosecution and other legal matters. In June 1974, the Special Prosecutor's position was terminated and another City Counselor I replaced him, with duties similar to the first one.

3. Court Administrative Officer: This ASAP-funded individual served as Chief of the ASAP Court Records Division. He supervised two other employees, served as the interface between ASAP and the Court, and performed special assignments upon request by the Project Director. He also represented the Court on the Data Systems committee, was instrumental in numerous records improvements through automation, and assisted in providing advice to the project staff on matters concerning ASAP. The city took over payment of his salary in 1975.

4. EDP Clerk/Clerk Typist: Two people in this position performed numerous functions and to some extent overlapped in specific duties. They did do or have at times done the following:

- Initiate driver license searches upon receipt of DUI Alert (alternately, Court Dockets containing "continued" cases).

- Summarize license records and enter into computer. (The Court has a bank of terminals tied to the police computer.)

- Schedule probation hearings.

- Schedule Court assignments to the School for Alcohol Safety (large and small groups).

- Maintain certain needed records.

- Assist regular Court personnel in filing and other processing functions relative to DUI tickets (or equivalent).

- Provide timely data to the Court, if requested, concerning DUI cases.

- Perform other tasks as directed by the Administrative Officer.

G. General Policies of ASAP Prosecution

The policy orientation of ASAP prosecution is to obtain an appropriate rehabilitative sentence for defendants who plead or are found guilty. The prosecutor is therefore more interested in getting the defendant into the ASAP system than in just obtaining a conviction on the DUI charge.

A DUI conviction was a 6-point offense prior to September 28, 1975, and 12-point offense thereafter; usually the related charge is a 2-point offense. An accumulation of 12 points in 1 year results in the automatic revocation of a driver's license. (Eight points in 18 months is sufficient to require a 30- to 90-day suspension.) Even with only a 6-point assessment the defendant stands to lose his license in the event that he has prior convictions on his record. Many persons believe that loss of license is too harsh a penalty for a first DUI offense. This belief in itself may provide reasonable justification to accept a guilty plea to a lesser charge.

The ASAP prosecution believes that when a case is disposed of by a guilty plea to a lesser charge and a sentence is obtained which is of comparable severity as would be imposed on a DUI conviction (except for the mandatory points and possible subsequent licensing action) then all the objectives of a DUI conviction have been achieved. The ASAP Data System tracks persons by DUI arrests and convictions on DUI or the related charge; should the defendant become rearrested he is treated as a DUI, second offender.

For the above reasons, plea bargaining is a routine procedure of the Kansas City ASAP. The policies regarding plea bargaining are outlined below.

1. January 1972 to November 1973: During the first 2 years of ASAP, the criteria under which ASAP prosecution accepted a plea bargain were usually:

a. The arrest is the defendant's first DUI arrest.

b. The case is "clear cut."

c. The defendant has a defense attorney.

d. The defendant accepts a recommended fine, a 60-day sentence, with stay of execution under a 2-year probation term and attendance at the School of Alcohol Safety.

2. November 1973 to October 1975: In November 1973, when the random assignment process using the PTSR began, the first condition was relaxed and the fourth modified to require other rehabilitative modalities (or control group "per PTSR"). The third condition became less of a factor in late 1974 because the Court began to more frequently insist on DUI defendant representation by an attorney (often court appointed).

Through usage of the PTSR and years of DUI trial experience, the "rule-of-thumb" policies boiled down to the following:

a. First-time offenders: Accept plea bargain for a recommended sentence of $125, 30 days, and 6-month probation with referral per PTSR (usually the large-group School for Alcohol Safety).

b. Second-time offenders: Accept plea bargain for a recommended sentence of $150, 90 days, and 2-year probation with referral per PTSR (usually a modality involving numerous counseling sessions over a 6-month period). In addition, chemotherapy (Antabuse) was often recommended.

c. Third-time offenders: The preference was to seek (through the Probation Office) a probation revocation in lieu of trying the defendant on the new charge.*

3. October 1975 on : New guidelines for plea bargaining were adopted as a result of the passage of the per se ordinance.

a. First offender with BAC under 0.15: Dismiss DUI for plea to careless (or similar 2-point violation); recommend $150, 90 days, 6 months probation and large-group School for Alcohol Safety (unless PTSR recommends control group).

b. First offender, BAC above 0.15: Dismiss careless and amend DUI to 34.119 (per se); recommend $150, 90 days and, depending on Mortimer-Filkens test results, 2 years probation and CAP if problem drinker, 6 months probation and School for Alcohol Safety if social drinker (unless "control" in either case).

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* In fact, this does not always happen. Available (soft) data tend to indicate that such cases were often tried similarly to second-time offenders.

c. When a first offender refuses to take the breath test, amend to 6-point 34.119 (per se) violation but recommend the "test and refer" so that, if a social drinker, he will only go to the School for Alcohol Safety.

d. Second offender (within 5 years) who has not had CAP: dismiss careless and amend DUI to 34.119 (per se) and recommend $250, 120 days, 2 years probation and CAP (unless control).

CHAPTER III

METHODOLOGY

Data were acquired throughout the ASAP on arrests, dispositions, sentences, profile characteristics, and other activities. Most of these data became part of the ASAP Data System, a computerized data base housed in, and part of, the Kansas City, Missouri, Police Department. From this data base various reports, special files, and analyses were generated.

One source of basic data used here, and generated from this data base, are the "Appendix H" tables.[2/] These tables of ASAP statistics were specified by NHTSA, and provided to them on a regular basis, usually in separately bound volumes. Most of the analyses and results reported here required far more detail than that in the Appendix H tables, however, and demanded special data file manipulation and computer programming.

Most of the Analytic Study examines time trends from before ASAP initiation through 1976. Because most activities examined changed drastically over this period, it was usually not necessary to apply statistical techniques to identify changes or to document their significance. Occasionally, chi-square analysis, Kolgomorov-Smirnov tests, or simple regression analysis was applied for elucidation. Also, the Spearman rank correlation coefficient was utilized in an analysis of disposition times, and analysis of variance techniques were used in examining fines and probations over the last 15 months of the project.

The profile analyses used more involved calculations. For the earlier studies that are reviewed here, a total of 3,706 cases were included in a partitioned chi-square analysis. These cases were distributed among 256 cells (4 BAC's, 2 crash-involvement levels, 4 dispositions, 2 races and 4 age groups), yielding an average of 14.5 cases per cell. This table of cells was partitioned into all possible combinations of variables taken two at a time, three at a time, four at a time, and altogether. The chi-square value was calculated for each partition. For the two-way interactions, the chi-square values were examined directly for significance, and the calculated chi-square for the three-way interactions was reduced by the contributions of the two-way interactions. After these calculations, the Pearson contingency coefficients were calculated.* This coefficient is a quantitative measure of association which lies between the value 0, implying absolutely no association, and a positive number (less than 1) whose maximum value implies complete association.

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* Pearson's contingency coefficient = $\sqrt{\chi/(N+\chi^2)}$

These analyses were followed by an examination of partial associations. The calculations involve the determination of chi-square values between two variables, while holding another variable(s) constant. For example, one could calculate the association between race and disposition at each tabulated level of BAC.* The use of partial associations is an approach to answering questions of the type, "Would race have been related to disposition if the BAC distribution for the two races had been identical?"

* This process is analogous to taking partial derivatives. In effect, it is an approximation because only discrete levels of BAC are examined.

CHAPTER IV

RESULTS

A. Caseload

The traffic safety system caseload is generated by the arrests of the police department. The historical trend in the arrests is portrayed in Table 1. In 1971, before ASAP became operational, there were approximately 600 DUI arrests per calendar quarter. With the initiation of ASAP operations, the arrest rate grew rapidly and more than doubled. It reached a peak during the fourth quarter of 1972, at nearly 2-1/2 times the pre-ASAP level. The arrest rate stabilized at close to 1,400 arrests per quarter throughout 1973 and the first half of 1974. It then declined substantially until the last quarter of 1975, when it rose again to the 1973 level.

TABLE 1

DUI ARRESTS (Caseload)

	Year					
Quarter	1971	1972	1973	1974	1975	1976
1	615	1,085	1,452	1,396	1,183	1,484
2	558	1,104	1,395	1,356	1,133	1,367
3	557	1,286	1,360	1,199	1,134	1,212
4	733	1,579	1,340	1,193	1,329	1,485
Total	2,463	5,054	5,547	5,144	4,779	5,548

One measure of the court and prosecution work load is the number of cases disposed. This measure is shown in Figure 3. The disposition rate more than doubled during 1972 and early 1973, and then gradually declined to about 1,000 cases per quarter in late 1975. Then, in response to the increased arrest rate, the rate rose again and averaged 1,300 to 1,400 cases per quarter in 1976.

The difference between the number of arrests and the number of dispositions, on a cumulative basis, represents the backlog of court cases. The historical trend in court backlog is shown in Figure 4. This backlog increased rapidly during 1972, to a peak of about 1,500 cases at the end of that year. This increase was caused by the system's inability to immediately respond to the jump in arrest rate upon initiation of ASAP operations. However, as the arrest rate stabilized and the ASAP traffic safety system became better able to process its caseload, the backlog began to dissipate. It declined steadly through mid-1975, at which time the court backlog was below the pre ASAP level.

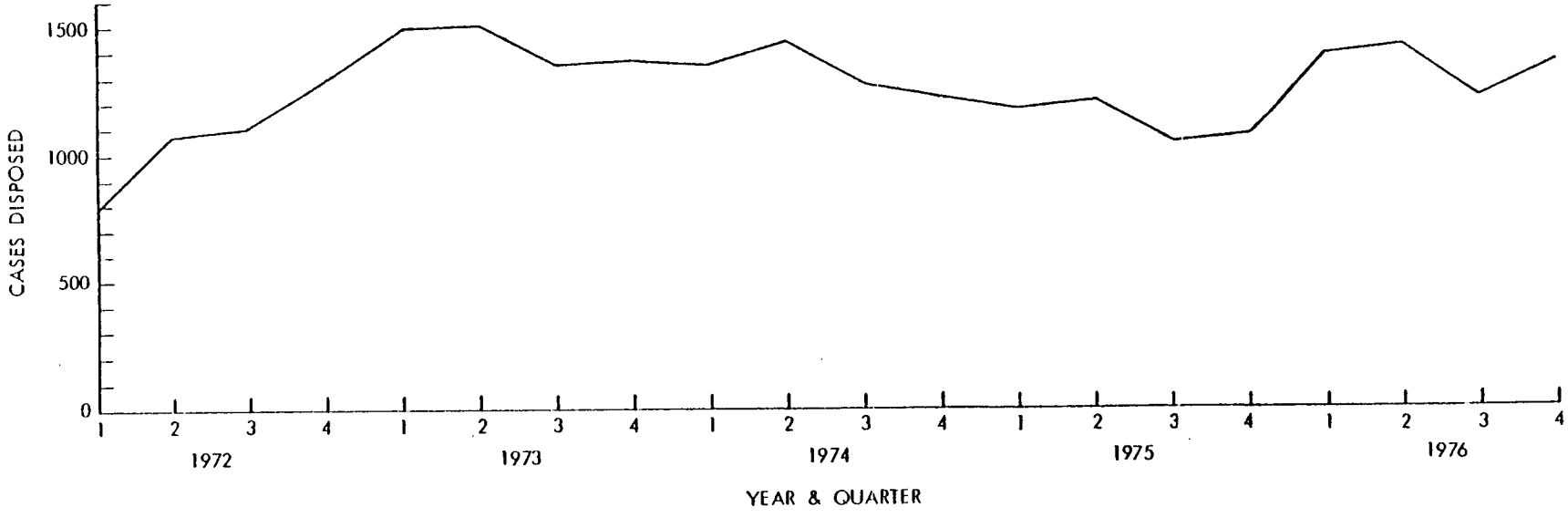

Figure 3 - Number of Cases Disposed

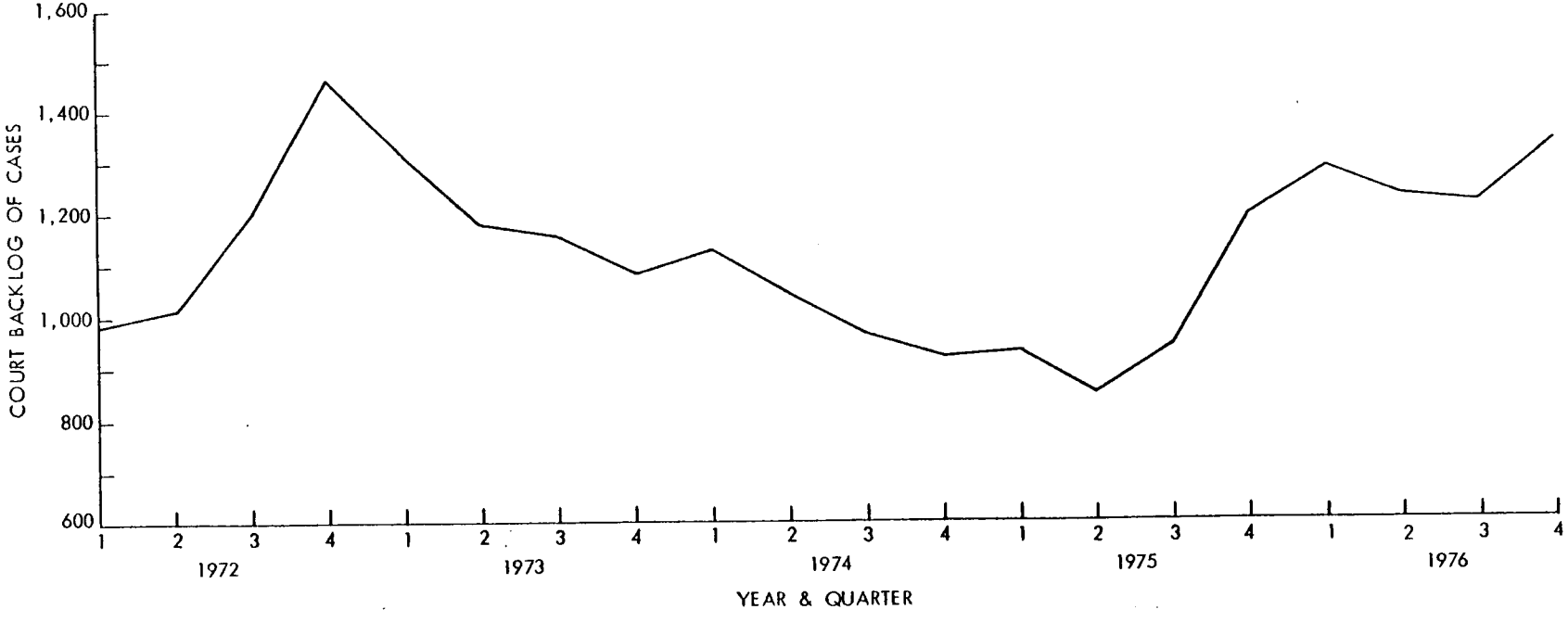

Figure 4 - Court Backlog

In late 1975, however, several things happened that caused the court backlog to increase. First, the fourth quarter arrest rate was substantially above that of previous quarters (see Table 1). Second, there was not a corresponding increase in the number of cases disposed (see Figure 3). Moreover, it was at this time that the new per se law became effective, resulting in an increase in the number of continuances, as discussed subsequently. Thus, the court backlog climbed during the last quarter of 1975 and rose even higher throughout 1976, as shown in Figure 4.

Another factor that can effect the court backlog is the time from arrest to disposition, which can vary greatly. At one extreme, persons failing to meet bonding requirements may have their cases heard and disposed at 8:30 the morning following arrest. At the other extreme are cases receiving numerous continuances, requiring up to a year or more for final disposition.

The disposition times for the first 3 years of the project were discussed in the 1974 Annual Report.[2] In that report it was indicated that the time to disposition in 1972 was about 6 days shorter than in 1973 or 1974, a highly significant statistical difference. On the other hand, 1973 and 1974 were not statistically distinguishable. In the 1975 Annual Report[3] it was shown that the 1975 data, with the exception of the last quarter, were indistinguishable from those of 1974 regarding time to disposition. The disposition times in the last quarter of 1975 were highly distinguishable, however ($p < 0.001$ based on a Kolgomorov-Smirnov test). It was that quarter that the new per se law was first in effect.

A number of analyses have now been completed on disposition data from all 20 quarters. Figure 5 shows the mean time to disposition by calendar quarter, together with the calculated regression line. The slope of the regression line is 1.7 days per quarter with a standard error of only 0.27 days per quarter, indicating a high level of significance. The slope of 1.7 days per quarter implies that, on the average, the time between arrest and court disposition increased about 1 week per year for each of the 5 years of the project. Stated differently, at the beginning of the project the mean time to disposition was less than 2 months, but it had grown to nearly 3 months by 1976, for a 65% increase. Because most court continuances are for 30 days, the increase implies that the average case received one more continuance at the end of 1976 than the average case of 1972.

The linear regression line in Figure 5 represents the best straight-line fit to the data. Careful scrutiny of the data points, however, shows that they follow the pattern suggested in the earlier reports.[2,3] That is, there was a substantial increase from 1972 to 1973, but then the time to disposition stayed relatively constant until the last quarter of 1975. The disposition time has sinced increased drastically throughout 1976.

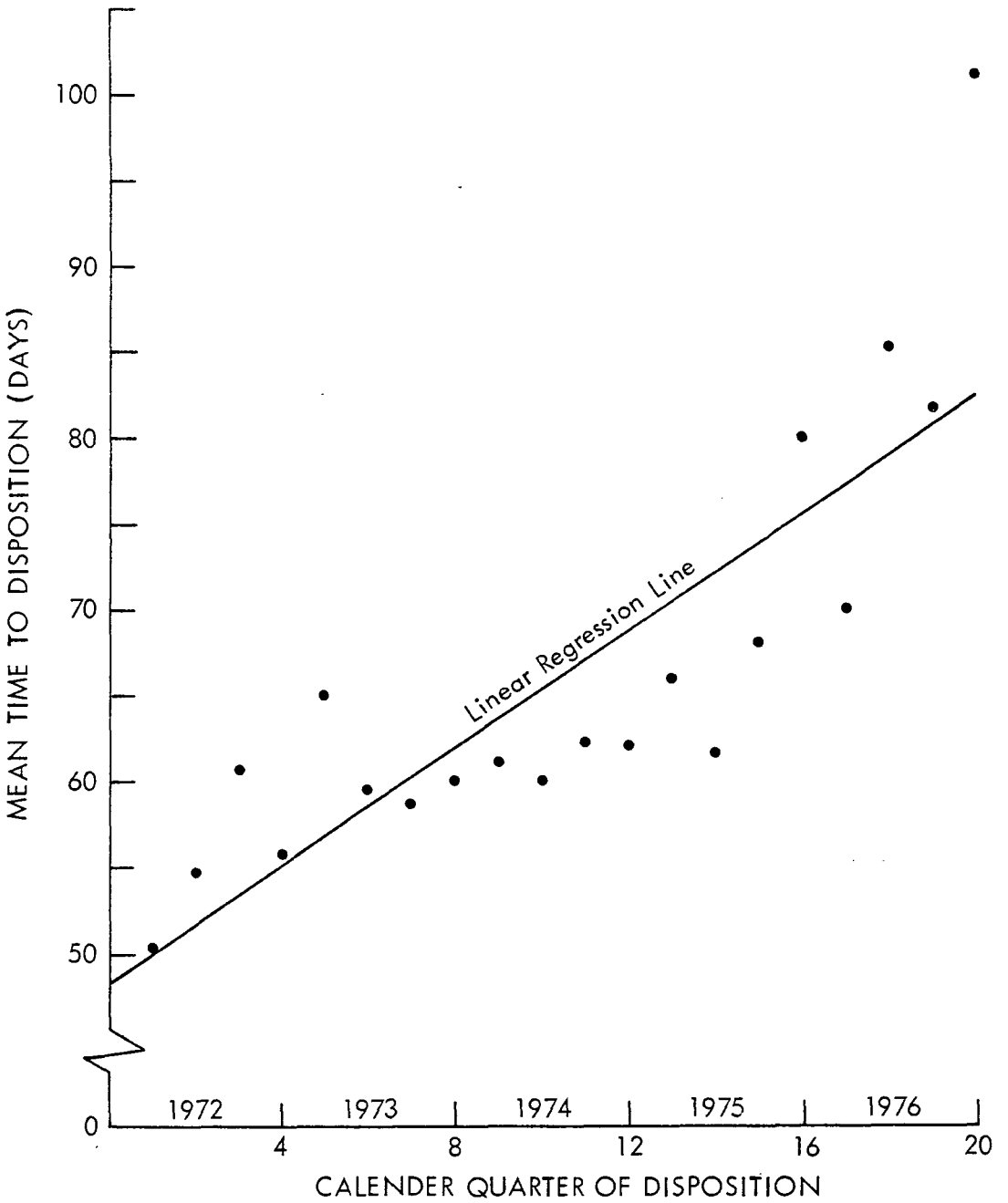

Figure 5 - Trend in Disposition Time

A more detailed analysis was conducted for the last 3 years of the project. It showed that the mean time to disposition for those 3 years (12 quarters) had a significant quarter-to-quarter increase (using the Spearman rank correlation coefficient, $r_s = -0.930$, $p < 0.01$). The cases disposed in each quarter were arrayed by 30-day time intervals, and the cumulative distributions at the end of each interval were compared between quarters. Again, the Spearman rank correlation coefficients were used; all except that for the first interval indicated a highly significant time trend ($p < 0.01$). The first interval included the percentage of cases disposed within 15 days, and there was no significant quarterly time trend. Since such dispositions usually are the result of nonbondable cases or persons arrested from out of town, the lack of a significant trend is not too surprising. The next time interval (15 to 45 days) showed the most dramatic trend of any time interval ($r_s = 0.930$). At the beginning of 1974, about 55% of all cases required 45 or more days for disposition. Since all cases are scheduled for a court appearance within 45 days of the date of arrest, this means that slightly over half of all defendants asked for and received at least one continuance. By the end of 1976, two-thirds of all defendants received at least one continuance. The same general pattern was reflected at all subsequent time periods. For example, only about one-fourth of all persons received two or more continuances in 1974, compared with approximately 40% at the end of 1976.

A final problem area that could be aggrevated by the per se law is the number of cases appealed to the State Circuit Court. Unfortunately, data were not kept on this phenomena routinely over the 5 years, so that convincing arguments cannot be made. However, manual records of the officers on the Special Alcohol Safety Patrol were reviewed. These officers received overtime pay for their Circuit Court appearances. The results are shown in Figure 6. (Data are missing for June, October, and December of 1976 because: (a) a change in the accounting procedures occurred during this year, from a monthly to a biweekly system; and (b) the extended illness of the officer charged with maintaining and providing special information to ASAP resulted in some data becoming unavailable.) The data available clearly suggest that appeals did become more prevelent in 1976. Beginning with March 1976, there were more Circuit Court appearances for appeals in every one of the 7 months for which data are available than in any month prior to that time, with the lone exception that there were 13 appeals in August 1975, one more than the 12 recorded in November 1976.

B. Dispositions

As stated earlier, most persons arrested for DUI also are ticketed for a related charge such as speeding, careless driving, etc. Normally, however, the defendant is convicted on only one of these charges with the other dismissed or nolle prossed. Since September 28, 1975, many defendants were convicted on the per se law, a reduced charge from the DUI charge.

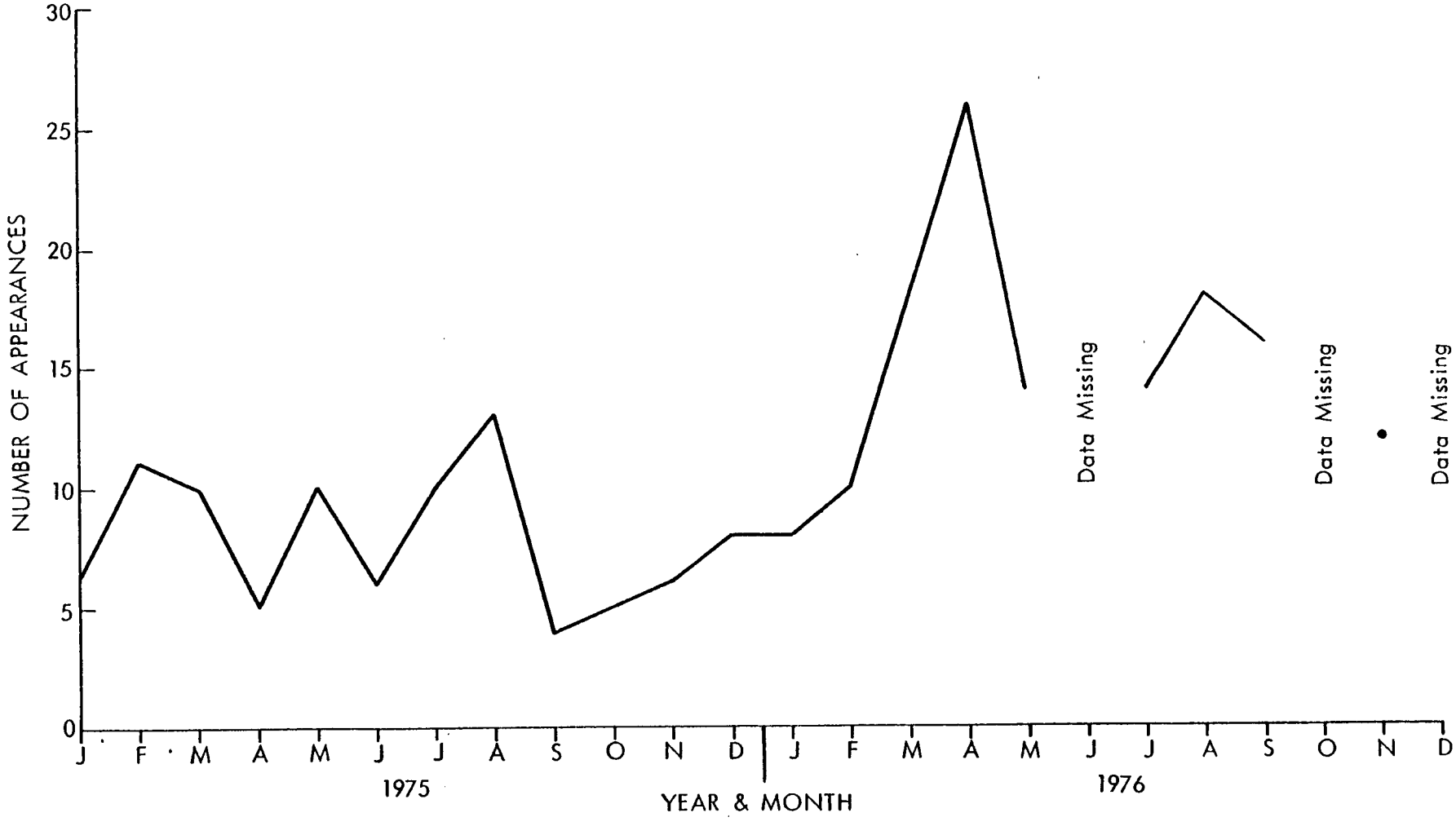

Figure 6 - Circuit Court Appearances by ASAP Officers

The convictions have changed character drastically since the inception of the ASAP in 1972 (see Figure 7). The percentage of dispositions resulting in a DUI conviction decreased from an initial 67% to just over 25% in mid-1975, while the conviction rate on the related charge grew from 23% to almost 70%. Then, during the last quarter of 1975 another great change began. Convictions on the reduced charge (per se) grew to about 40% where they remained throughout 1976. This new type of conviction took the place of a conviction on lesser, related charges, which represented almost 70% of all dispositions in mid-1975 but dropped to a rather stable 28% throughout 1976. Convictions on the original charge (DUI) dropped only slightly during this period, from 25% to 20%.

More detailed disposition data are shown in Figure 8. Six different dispositions are illustrated: convicted, by plea or trial, on a lesser charge (speeding, careless driving, etc.); convicted, by plea or trial on the reduced, per se charge; convicted by plea or trial, on the original DUI charge; acquitted of all charges; all charges dismissed; and other (case transferred to another jurisdiction, defendant deceased, etc.). This figure differs from that published earlier,[5] which contained an error. Beginning in March 1976, cases appealed to the Circuit Court were recorded under the category "Other," rather than by the Municipal Court disposition. Computer programming was, by necessitity, revised to account for this change; the data shown in Figure 8 are the correct Municipal Court dispositions.

It is clear from Figure 8 that the intent of the new per se law was fulfilled. That is, per se was treated as a lesser offense, but different from other offenses in that it retained the implication of alcohol involvement. Furthermore, it carried with it a much stiffer driver license action than a lesser, nonalcohol-related charge--six points versus two points.

A measure of the effectiveness of the prosecution, as well as of the quality of evidence obtained by the police officers, is the overall conviction rate. Figure 9 shows the trends in cases in which there was no conviction--that is, cases in which the defendant was acquitted or had all charges dismissed. The linear regression line has a slope of -0.06% per quarter (about 1/4% per year) with a standard error of 0.0198%. Thus, the downward trend is highly significant ($p < 0.005$). The "nonconviction" rate has declined from about 9-1/4% in 1971 to about 7-3/4% in 1976.

C. Punitive Sanctions

In addition to referral to a rehabilitation modality, the Municipal Court can (and usually does) impose punitive sanctions. These sanctions may include a fine and/or a sentence for incarceration. The latter sentence can be waived, and usually is, and the person placed instead on probation. Thus, in practice, the punitive sanctions usually consist of a fine, a probationary term, or both.

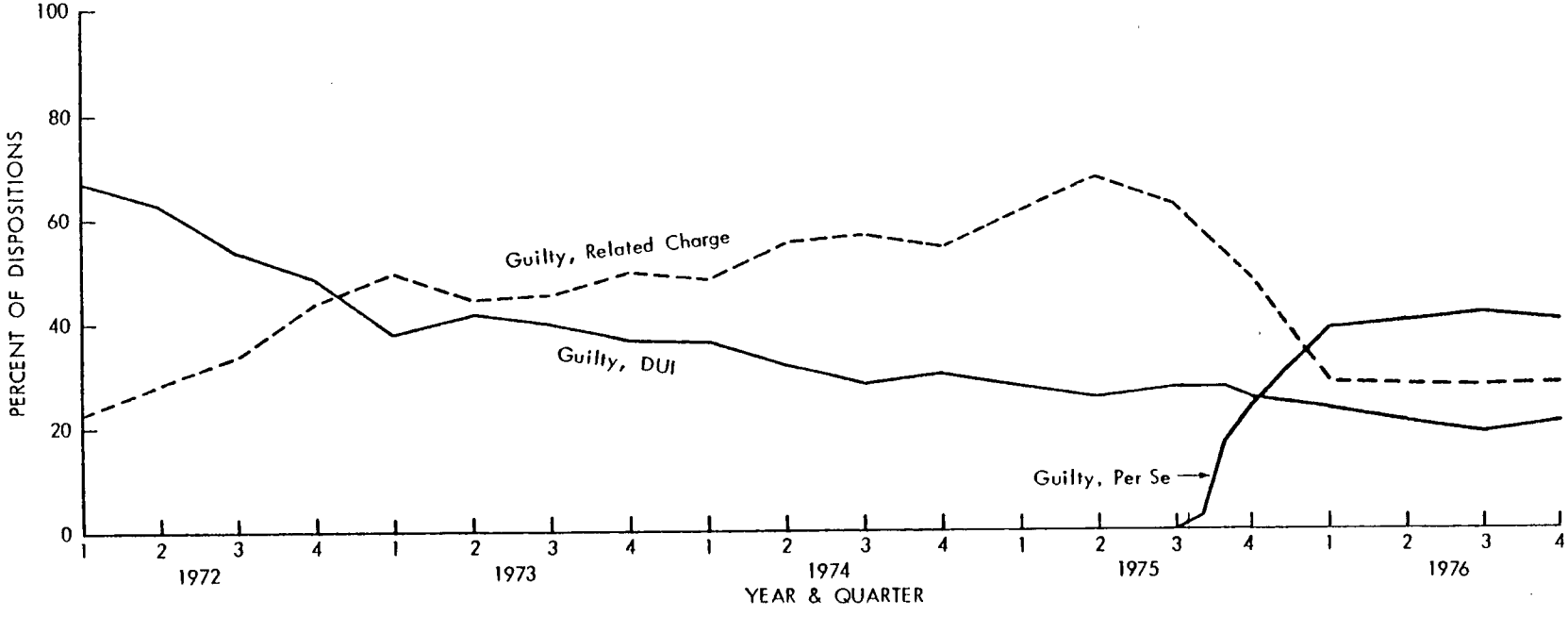

Figure 7 - Ultimate Disposition

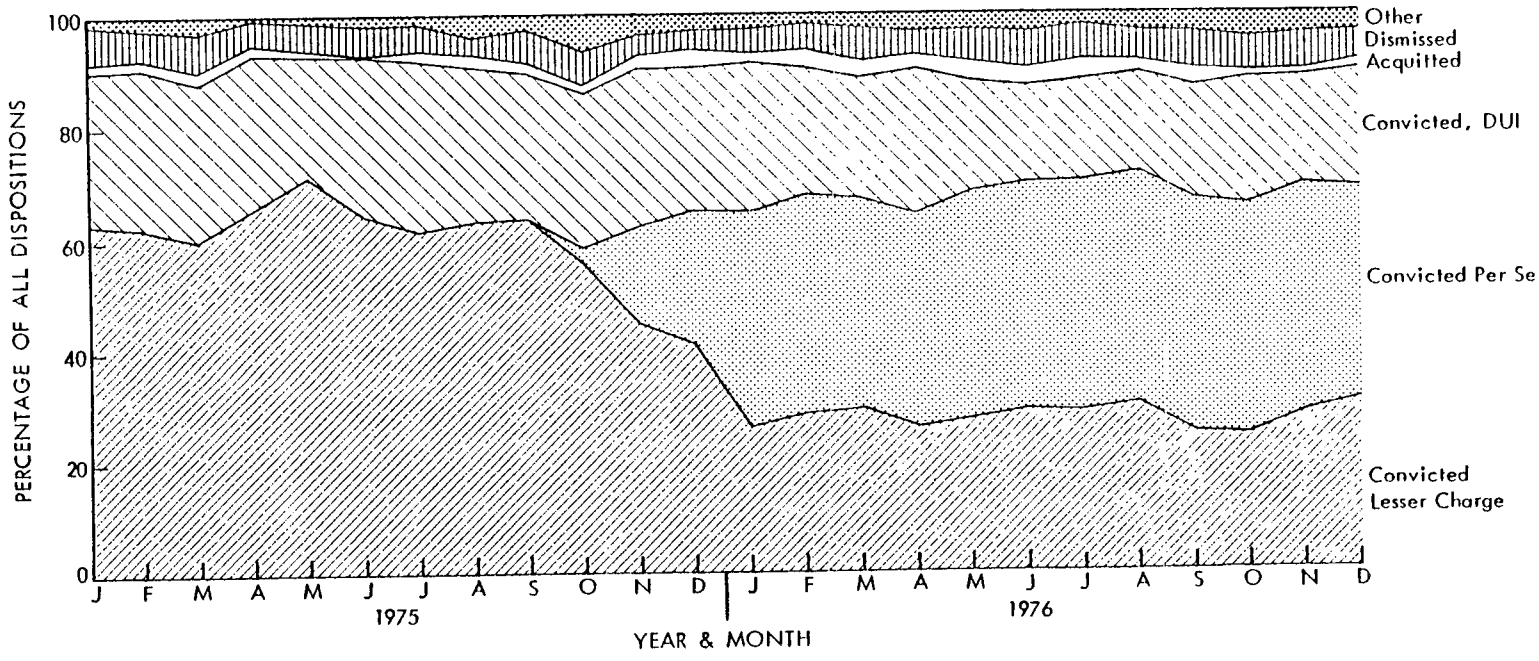

Figure 8 - Disposition Trends

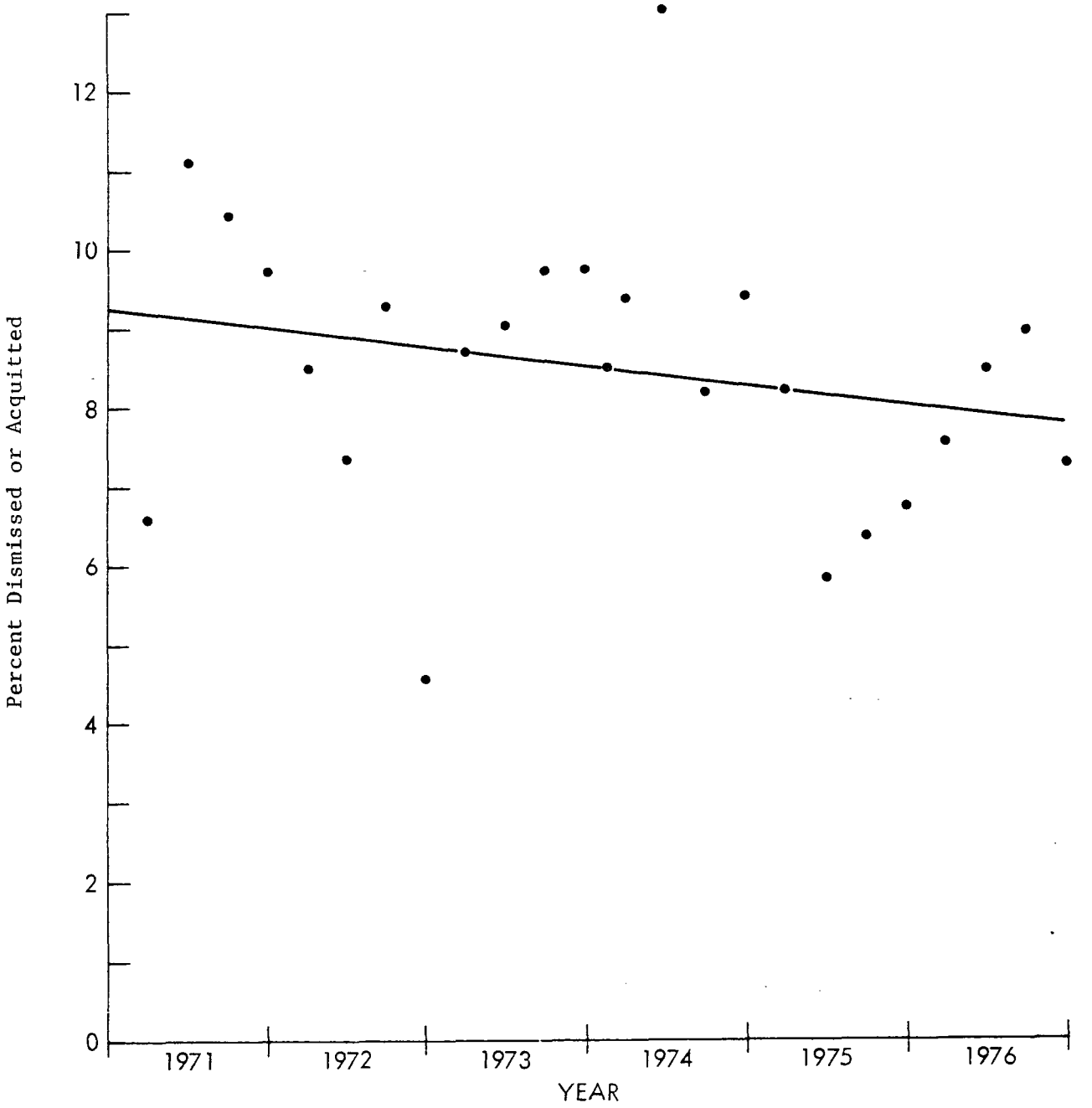

Figure 9 - Trend in Lack of Convictions

Figure 10 shows the trends in the imposition of these punitive sanctions for each of the five dispositions for which such sanctions could be opposed. In Figure 10a, which pertains to persons pleading guilty to DUI, it is seen that throughout 1974 and 1975 approximately 10% received a fine only. In 1974, about half the remainder received only a probationary term and the others received both probation and a fine. A trend began in 1975, and was continued in 1976, which resulted in an increasing emphasis on both a fine and a probationary term. Also, in 1976, there was a greater tendency than in previous years to impose only a fine and a lesser tendency to place the person on probation without a fine. For the entire year of 1976, over 85% of all persons pleading guilty to DUI received a fine, with or without probation. This contrasts with only 55% in 1974.

Persons pleading guilty to per se almost always received a fine as well as a probationary period (see Figure 10b). Only rarely (less than 3 or 4% of the time) did such persons receive only a fine or only a probation term. The punitive sanctions imposed on persons pleading guilty to a lesser alcohol-related charge were similar, with about 90% receiving both a fine and a probation (Figure 10c).

The trends in punitive sanctions imposed on persons convicted of DUI or a lesser charge are less clear because of the smaller number involved. Generally, however, the trend for persons convicted of DUI parallels that of persons pleading guilty to DUI--namely, the judges were more disposed to imposing both a fine and probation in 1976, compared with earlier years, and less inclined to impose probation without fine (Figure 10d). Persons convicted on a lesser charge were more likely to receive only a fine than persons with any other disposition (see Figure 10e).

The amounts of the fines and probation terms are displayed in Table 2. This table covers 1976 and the last two quarters of 1975. Data for earlier quarters have been published previously.[2,3] The major implications of these data are shown in Figures 11 and 12.

Figure 11, shows the average fines for the three most common dispositions. Two major differences are obvious. First, it is clear that the average amount of fine has increased over the last few years. The pre-ASAP fine was slightly under $100. By late 1975, this average had increased gradually to slightly over $130. Then, in 1976, the average fine jumped markedly, and depended on the type of disposition (and the prior record, per prosecution policy--see Chapter 2, part 6.) The second major finding is that the average fine was dependent upon the disposition. Earlier in the project, when most cases resulted in a plea either to DUI or to a lesser charge, the fine on the lesser charge was greater. In 1976, the fines associated with these two charges were essentially the same, but both were substantially below those levied against persons convicted of the new, per se law.

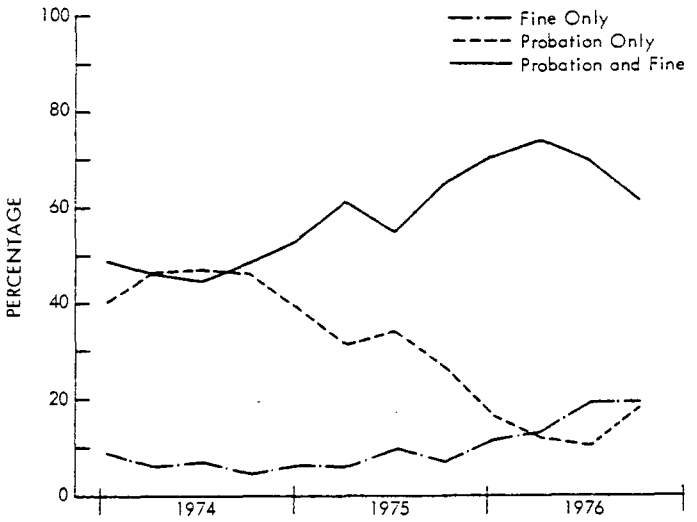

Figure 10a - DUI Plea

Figure 10b - Guilty per se

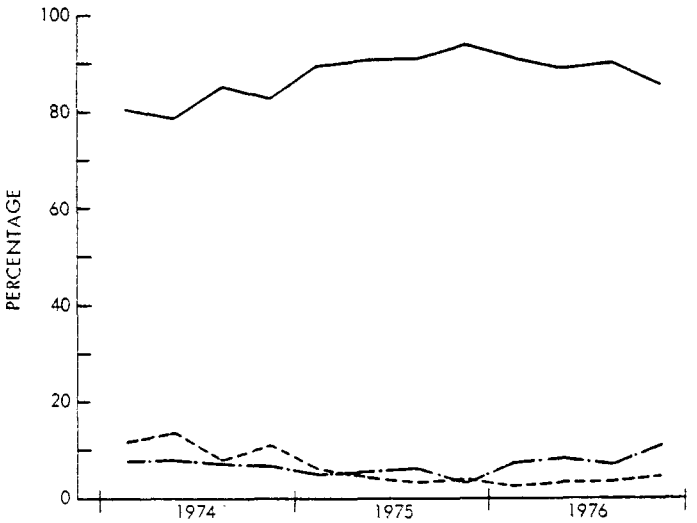

Figure 10c - A/R Plea

Figure 10 - Punitive Sanctions Imposed

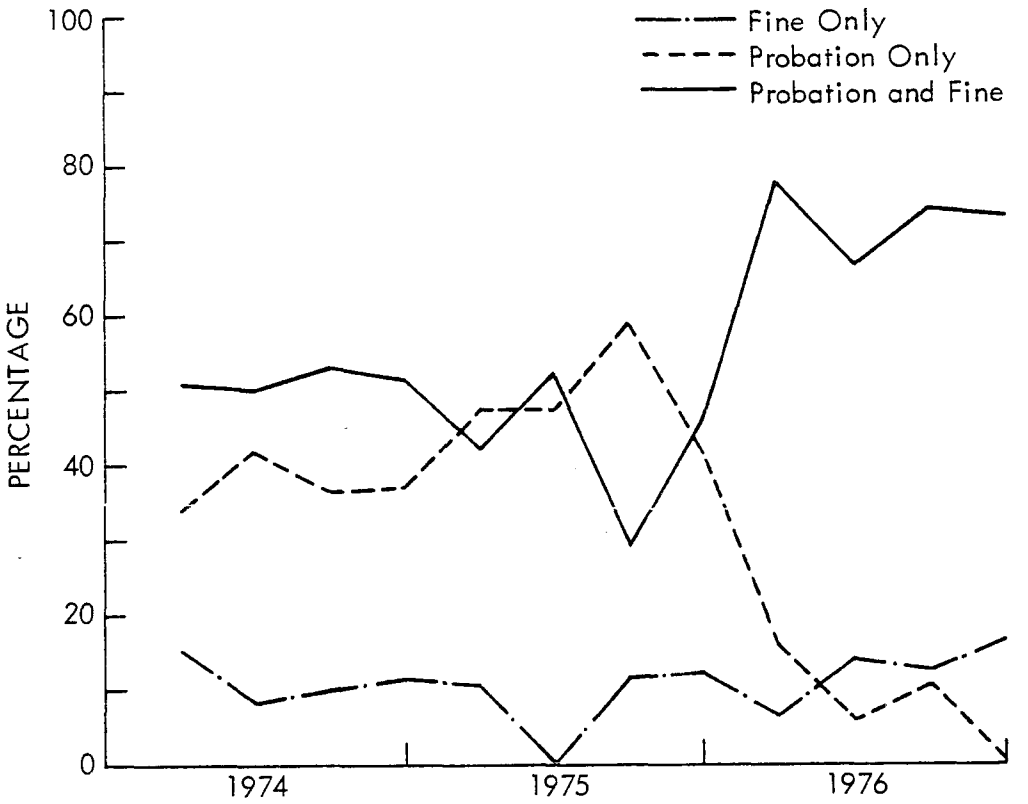

Figure 10d - DUI Conviction

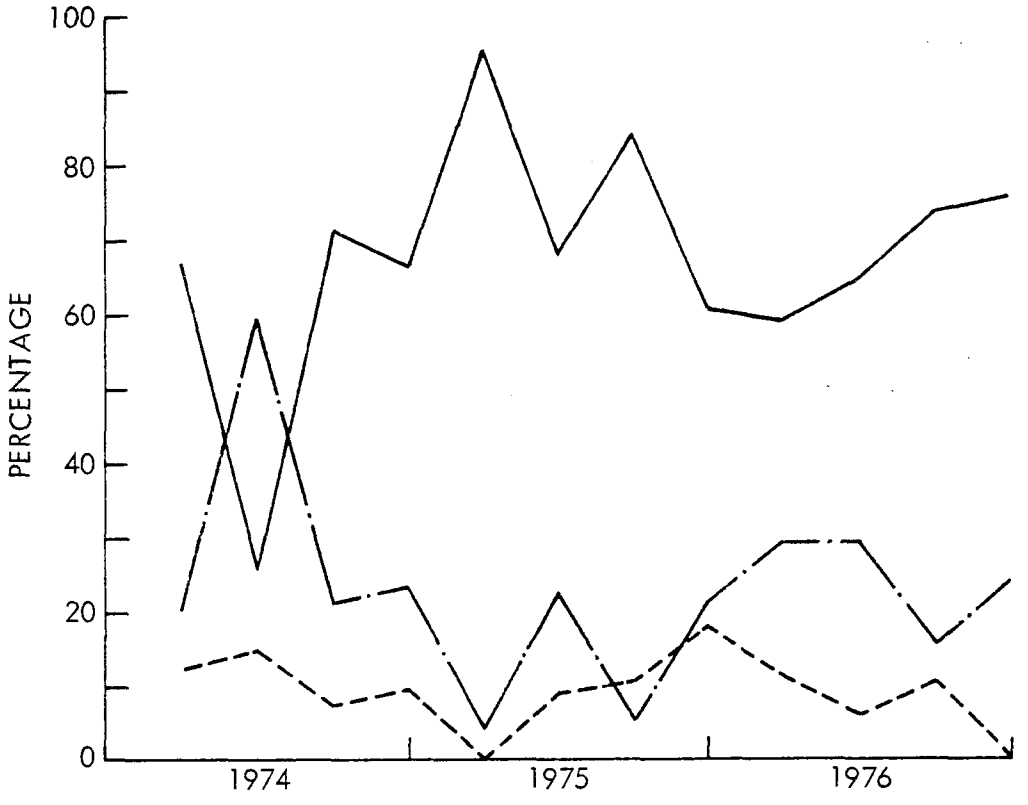

Figure 10e - A/R Conviction

Figure 10 - Punitive Sanctions Imposed (concluded)

TABLE 2

AVERAGE FINES AND PROBATION TERMS

Disposition	Quarter of Conviction	Fines (Dollars & Number)			Probation Terms (Days & Number)	
		Fine Only	Probation & Fine	Jail & Fine	Probation Only	Probation & Fine
DUI Plea	15, 1975	123.60 (25)	128.81 (134)	156.25 (8)	511.69 (84)	455.30 (134)
	16, 1975	121.94 (17)	130.18 (149)	160.00 (4)	551.51 (63)	479.58 (149)
	17, 1976	144.81 (27)	157.25 (158)	116.25 (4)	504.47 (38)	481.95 (158)
	18, 1976	98.20 (25)	166.50 (137)	108.33 (3)	507.39 (23)	459.82 (137)
	19, 1976	116.25 (24)	167.30 (86)	146.11 (9)	486.54 (13)	482.97 (86)
	20, 1976	150.79 (19)	140.22 (60)	95.00 (3)	551.67 (18)	416.00 (60)
A/R Plea	15, 1975	166.05 (38)	129.95 (562)	79.86 (14)	492.25 (20)	359.61 (562)
	16, 1975	187.50 (14)	136.88 (458)	128.00 (10)	456.39 (18)	347.31 (458)
	17, 1976	183.21 (28)	150.71 (347)	50.00 (5)	410.00 (8)	325.75 (347)
	18, 1976	191.83 (30)	151.93 (323)	108.50 (10)	386.36 (11)	287.49 (323)
	19, 1976	183.70 (23)	151.99 (304)	67.73 (11)	462.73 (11)	295.44 (304)
	20, 1976	160.58 (26)	150.65 (209)	130.00 (6)	345.00 (10)	307.89 (209)
DUI Conviction	15, 1975	100.00 (2)	172.00 (5)	101.67 (3)	498.00 (10)	601.00 (5)
	16, 1975	125.00 (3)	140.00 (11)	100.00 (1)	483.00 (10)	524.64 (11)
	17, 1976	171.67 (3)	164.54 (35)	295.00 (5)	597.14 (7)	477.57 (35)
	18, 1976	100.00 (3)	126.79 (14)	0.00 (0)	517.50 (4)	441.21 (14)
	19, 1976	106.25 (4)	152.39 (23)	32.50 (2)	563.75 (4)	515.87 (23)
	20, 1976	105.00 (5)	144.64 (22)	250.00 (1)	429.00 (3)	410.68 (22)
A/R Conviction	15, 1975	75.00 (1)	149.69 (16)	35.00 (1)	545.00 (2)	430.63 (16)
	16, 1975	82.50 (6)	130.88 (17)	125.00 (1)	470.00 (5)	318.12 (17)
	17, 1976	95.00 (8)	127.19 (16)	26.88 (8)	606.67 (3)	390.31 (16)
	18, 1976	85.00 (5)	135.00 (11)	100.00 (1)	720.00 (1)	275.00 (11)
	19, 1976	46.67 (3)	135.71 (14)	0.00 (0)	452.50 (2)	338.21 (14)
	20, 1976	267.50 (8)	146.60 (25)	39.00 (5)	0.00 (0)	357.40 (25)
Guilty Per Se	15, 1975	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)	0.00 (0)
	16, 1975	0.00 (0)	156.04 (125)	175.00 (1)	613.00 (5)	533.84 (125)
	17, 1976	329.38 (8)	169.39 (450)	187.50 (4)	591.25 (20)	507.77 (450)
	18, 1976	328.82 (17)	166.89 (479)	200.00 (2)	534.58 (12)	440.97 (479)
	19, 1976	267.50 (16)	171.62 (397)	200.00 (2)	512.73 (22)	467.64 (397)
	20, 1976	315.00 (8)	172.05 (348)	137.50 (4)	587.78 (9)	451.64 (348)

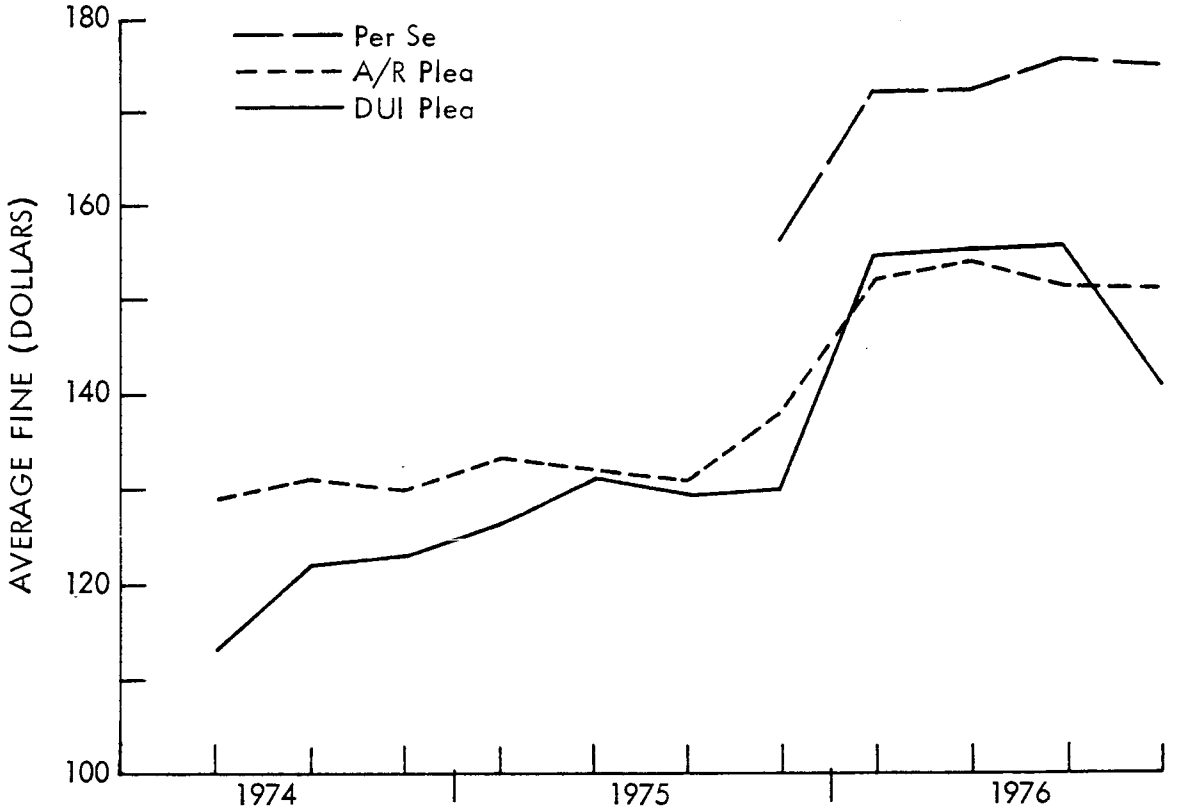

Figure 11 - Average Fines, by Quarter, of Persons Receiving a Fine

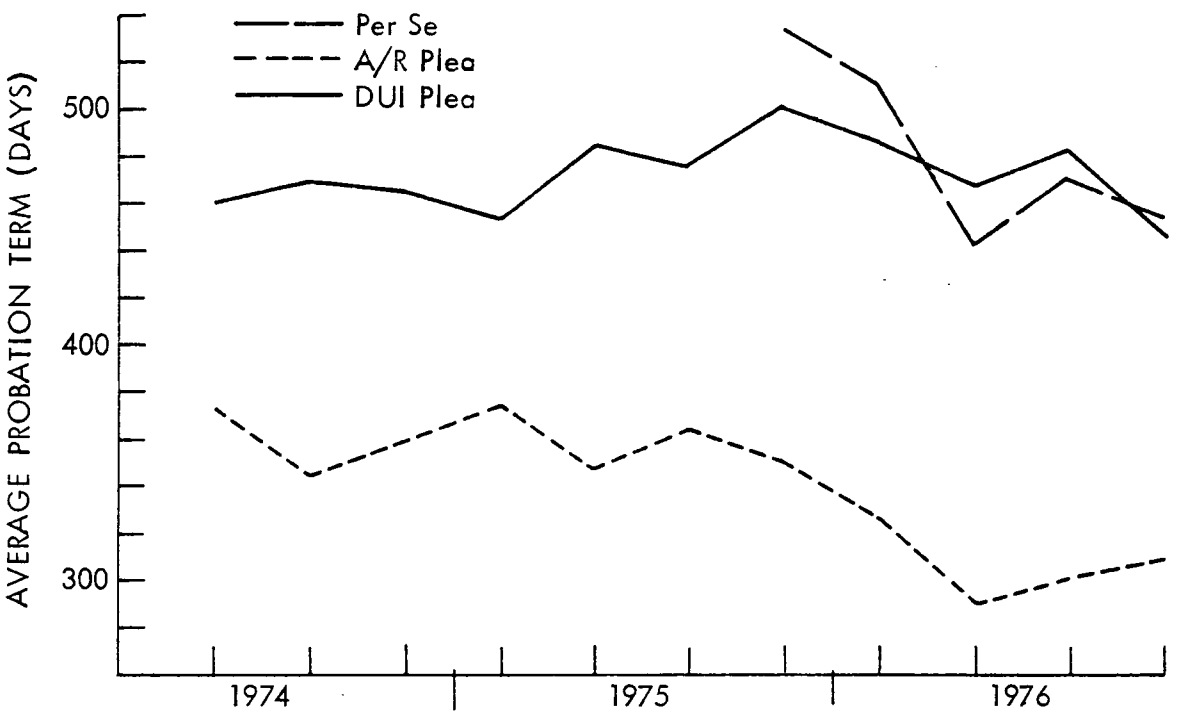

Figure 12 - Average Probation Terms, by Quarter, of Persons Placed on Probation

In a similar fashion, Figure 12 shows the average probation terms for the three major dispositions. It is evident from this figure that persons pleading guilty to a lesser charge received lesser probation terms, typically about 4 months less. The average probation term for such persons was about 1 year throughout 1974 and 1975, but dropped to about 10 months toward the end of 1976. On the other hand, persons pleading guilty to DUI received a probation term averaging 15 to 16 months, with relatively little major change over the 3-year period. Those persons pleading guilty to the new per se law during the first few months it was in effect received probation terms averaging about 17 months. In the last three quarters of 1976, however, persons pleading guilty to per se tended to receive the same probation terms as those pleading to DUI.

A more complete analysis was performed of the data describing fines and probations terms during the last five calendar quarters of the project, when the per se law was in effect. The statistical analyses of the amount of the fines and the length of the probation terms were performed using an analysis of variance. The statistical model employed was:

$$X_{ijkl} = M + S_i + D_j + SD_{ij} + Q_k + SQ_{ik} + DQ_{jk} + SDQ_{ijk} + e(_{ijk})1,$$

where,

X_{ijkl} = the response, either an amount of fine or length of probation

S_i = i^{th} sentence type
- S_1 = fine only
- S_2 = probation and fine } for fine analysis
- S_1 = probation only
- S_2 = probation and fine } for probation analysis

D_j = j^{th} disposition (j = 1, ..., 5)
- D1 = DUI plea
- D2 = A/R plea
- D3 = DUI conviction
- D4 = A/R conviction
- D5 = Guilty per se

Q_k = k^{th} quarter (k = 1, ..., 5 covering all of 1976 and the last quarter of 1975).

The results of the analyses are given in Tables 3 and 4. For the five quarters considered, there was no overall significant time trend in either the fines or probations. However, the analyses show that both fines and probations depended upon the type of disposition. Furthermore, there were statistical differences dependent upon the type of sentence. For example, persons receiving only a fine tended to receive a heavier fine than persons receiving fines plus probations. Similarly, persons whose only sentence was a probationary term tended to receive longer probations than persons whose sentences included both probationary terms and fines. Finally, there were statistical interactions between the type of sentence and the type of disposition, which primarly involved those persons who were convicted by trial of either DUI or a lesser charge. The sense of the interactions can be ascertained by reference to Table 2.

D. Profile Studies

Because the court dispositions differ from case to case, it is of interest to analyze these differences relative to the characteristics of the defendants. Profile studies have been performed over the last few years. In 1974[3] dispositions were analyzed and many significant relationships were found. The analyses were extended in 1975[4] to clarify the many findings. They are reviewed briefly below, followed by a description of new 1976 profile findings.

1. 1974 Studies: An analysis of variance was performed on data from nearly 4,000 dispositions, to ascertain the relationships, if any, between the ultimate disposition of the case and the following independent variables: BAC at time of arrest, crash involvement, race, and age. It was found that the disposition was significantly correlated to each of these variables. Moreover, each of these variables was significantly correlated to all of the others. Therefore it was not clear, for example, whether crash-involved drivers were more likely to receive different dispositions than others because they were crash-involved, or because they were more likely to have other characteristics such as refusing the breath test, lower average BAC's, not to be white, or to be either young or over 50 years of age.* It was recommended that further study be undertaken to clarify the relationships between ultimate disposition and characteristics of the arrested drivers.

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* Other factors, such as use or nonuse of an attorney, the quality of the evidence, etc., could also be related to crash involvement and, hence, to disposition. Obviously, all conceivable factors could not be included in the analysis.

TABLE 3

ANALYSIS OF VARIANCE FOR FINES

Source	df	ss	ms	F
Q	4	5,343	1,336	1.54
D	4	83,185	20,796	23.90**
S	1	5,367	5,367	6.17*
QD	16	17,978	1,124	1.29
SD	4	50,585	12,646	14.54**
SQ	4	5,128	1,282	1.47
QSD	15	13,049	870	--

* Significant, $p < 0.05$.
** Significant, $p < 0.01$.

TABLE 4

ANALYSIS OF VARIANCE FOR PROBATIONS

Source	df	ss	ms	F
Q	4	12,788	3,197	1.14
D	4	159,588	39,897	14.27**
S	1	134,785	134,785	48.22**
QD	16	49,394	3,087	1.10
SD	4	56,541	14,135	5.06*
SQ	4	10,220	2,555	< 1
QSD	15	41,932	2,795	--

* Significant, $p < 0.05$.
** Significant, $p < 0.01$.

2. 1975 Studies: As before, the cases disposed during the last three quarters of 1974 were the subject of the analysis. During these three quarters disposition policies were relatively constant and served as a stable data base. However, whereas the earlier statistical analysis used an analysis of variance, these studies utilized, first, a partitioned chi-square analysis, followed by an analysis of partial associations, again using chi-square statistics. The first analysis was intended to identify the important two- and three-way interactions among the variables, and the second analysis was intended to aid in the identification of the reasons or explanations for the more complicated relationships.

The results of the partitioned chi-square analysis of court dispositions are shown in Table 5. The results are relatively well-behaved in a statistical sense, in that almost all the pairwise associations are significant but few of the more complex associations appear to exist. In general, the contingency coefficients are quite modest but, of course, complete association is not to be expected here.

The results of primary interest are the interactions with disposition, i.e., in what manner do BAC, age, and race influence the type of disposition. Crash-involvement is not strongly related to disposition, although it is associated with other variables.

The BAC vs. disposition results are shown in Table 6. There were 54 convictions in the BAC-refused column, whereas only 29 would be expected if disposition were independent of BAC. Refusers were also more likely to have all charges dismissed or to be acquitted. Therefore, the single best description of the effect of refusing the breath test is that refusers had a lesser likelihood of plea bargaining to an alcohol-related charge--some other outcome had a higher-than-average probability. The influence of a measurable BAC is as expected; persons with low BAC's were disproportionately more likely to escape conviction, and those with high BAC's to plead guilty to DUI.

Table 7 illustrates that white people were much more likely to plea bargain than nonwhites, and nonwhite people were more likely to plead guilty to DUI. Roughly equal numbers of nonwhites plead guilty to DUI as plea-bargained, whereas among white people almost 2-1/2 times as many plea-bargained as plead guilty to DUI. The fraction with all charges dismissed or acquitted, however, was virtually identical for both races.

TABLE 5

PARTITIONED CHI-SQUARE ANALYSIS OF COURT DISPOSITIONS

Source[a/]	df	χ^2	Significance	C[b/]
AB	3	45.153	$\alpha < 0.0001$	0.110
AC	9	88.677	$\alpha < 0.0001$	0.153
AD	3	90.106	$\alpha < 0.0001$	0.154
AE	9	187.751	$\alpha < 0.0001$	0.220
BC	3	4.740	NO	
BD	1	92.274	$\alpha < 0.0001$	0.156
BE	3	12.736	$\alpha < 0.01$	0.059
CD	3	84.352	$\alpha < 0.0001$	0.149
CE	9	14.720	$\alpha < 0.10$	0.063
DE	3	87.078	$\alpha < 0.0001$	0.152
ABC	9	10.705	NO	
ABD	3	9.164	$\alpha < 0.05$	0.050
ABE	9	12.330	NO	
ACD	9	18.272	$\alpha < 0.05$	0.070
ACE	27	23.915	NO	
ADE	9	10.929	NO	
BCD	3	4.300	NO	
BCE	9	10.171	NO	
BDE	3	12.408	$\alpha < 0.01$	0.058
CDE	9	12.906	NO	
ABCD	9	9.762	NO	
ABCE	27	20.328	NO	
ABDE	9	6.243	NO	
ACDE	27	32.136	NO	
BCDE	9	10.525	NO	
ABCDE	27	36.870	NO	
Total	244	948.551		

a/ A = BAC
B = Crash-involvement
C = Disposition
D = Race
E = Age range

b/ Pearson's contingency coefficient = $\sqrt{\chi/(N + \chi^2)}$

Table 6

BAC VS. DISPOSITION [a/]

Disposition	BAC				
	Refusal	≤ 0.14	0.15-0.19	0.20+	Total
DUI Plea	156 (146)	219 (269)	314 (324)	364 (314)	1,053
A/R Plea	236 (294)	590 (539)	696 (651)	591 (629)	2,113
Conv. by Trial	54 (29)	39 (54)	56 (65)	63 (64)	212
Acquitted or dismissed	69 (46)	98 (84)	75 (101)	86 (97)	328
Total	515	946	1,141	1,104	3,706

a/ Entries are the observed number of cases in each category and, in parentheses, the number to be expected if there was no relationship between the variables.

TABLE 7

RACE VS. DISPOSITION [a/]

Disposition	Race		Total
	White	Nonwhite	
DUI Plea	686 (782)	367 (271)	1,053
A/R Plea	1,685 (1,570)	428 (543)	2,113
Conv. by Trial	142 (157)	70 (55)	212
Acquitted or dismissed	240 (244)	88 (84)	328
Total	2,753	953	3,706

a/ Entries are the observed number of cases in each category and, in parentheses, the number to be expected if there was no relationship between the variables.

Age and disposition were only marginally related. There was no substantial association between age and plea entered, but there was some association among those people tried, as indicated in Table 8. The conviction rate of those tried was highest for people in their 30's and lowest for younger people.

TABLE 8

AGE VS. DISPOSITION[a/]

	Age				
Disposition	0-29	30-39	40-49	50+	Total
DUI Plea	292 (294)	266 (268)	261 (257)	234 (234)	1,053
A/R Plea	611 (590)	529 (538)	498 (515)	475 (470)	2,113
Conv. by Trial	43 (59)	70 (54)	50 (52)	49 (47)	212
Acquitted or dismissed	88 (91)	78 (83)	95 (80)	67 (74)	328
Total	1,034	943	904	825	3,706

a/ Entries are the observed number of cases in each category and, in parentheses, the number to be expected if there was no relationship between the variables.

The disposition was not significantly related to whether the driver was involved in a crash, although crash-involved drivers were somewhat more likely than others to be acquitted or have all charges dismissed (see Table 9).

TABLE 9

CRASH INVOLVEMENT VS. DISPOSITION[a/]

Disposition	Crash-Involved	Not Crash-Involved	Total
DUI Plea	226 (226)	827 (827)	1,053
A/R Plea	422 (454)	1,671 (1,659)	2,113
Conv. by Trial	43 (46)	169 (166)	212
Acquitted or dismissed	85 (70)	243 (258)	328
Total	796	2,910	3,706

a/ Entries are the observed number of cases in each category and, in parentheses, the number to be expected if there was no relationship between the variables.

The partitioned chi-square analysis (Table 5) shows that the variables were not only related to disposition but to each other, as was noted in the 1974 report. Persons arrested as the result of a crash were more likely to refuse the breath test than were other arrested drivers; but among those who took the test, the crash-involved drivers were less likely to have mid-range (0.15 to 0.19) BAC's than the others. Nonwhite drivers were more likely than white drivers to refuse the breath test or to have a very high (0.20 or greater) BAC. The age-BAC comparison, which yielded the largest contingency coefficient of all, illustrated the strong tendency for young drivers to have lower BAC's than older drivers. For example, less than 17% of the drivers under the age of 30 had a BAC of 0.20 or more as compared with 39% of the drivers in their 40's and 33% of those over 50. Crash-involved drivers were more likely to be nonwhite than were other arrested drivers (39% versus 22%). They were also less likely to be in the 30 to 39 year age range; rather, they tended to be younger or older than drivers arrested for reasons other than a crash. Finally, nonwhite drivers were generally older than the white drivers; 58% of the nonwhites were 40 or older, compared with 43% of the white drivers.

Because of the highly interrelated nature of the variables, it is important to determine whether the apparent relationships between them and the case dispositions are real or simply a manifestation of one of these other interrelationships. For example, whereas the previous discussion implies that the case disposition was related to the race of the defendant, one should question whether this apparent relationship is, perhaps, more a result of the differences in BAC's among arrested whites and nonwhites. To answer questions of this type, a series of partial associations were calculated.

The results of these calculations, and others, are shown in Table 10. At the BAC level 0.15 to 0.19, for example, the relationship between race and disposition is highly significant. Moreover, the relationship between race and disposition is significant for each BAC level examined. This says that even though race and BAC have been shown to be correlated, that correlation does not explain the observed correlation between race and disposition. Even among whites and nonwhites at the same BAC levels, the dispositions were significantly different. Nonwhites were more likely to plead guilty to DUI and less likely to plea bargain regardless of the BAC.

The contingency coefficients also aid in the interpretation of these relationships. Again referring to Table 10, the overall contingency coefficient of 0.149 refers to the degree of association without regard to the differences in makeup of the white and nonwhite samples. The fact that the weighted average contingency coefficient for BAC's was of about the same

magnitude (in this case, it happened to also be 0.149) implies that partialling on BAC did not appreciably change the original relationship. If BAC had been the important descriptor, then the relationship between race and disposition at each individual BAC level would have been insignificant and the resulting contingency coefficient would have been very small (approaching 0).

With this background, then, the rest of Table 10 can be quickly summarized. The age-race relationship had little bearing on the ultimate disposition because the race-disposition association was strong for each age category. Crash involvement had at best only a small role because, although the strong relationship between race and disposition was reduced to only a marginal relationship for crash-involved drivers, these drivers comprise less than one-fourth of the total.

TABLE 10

PARTIAL ASSOCIATIONS, RACE VERSUS DISPOSITION

Variable	N	df	Chi-Square	Significance	Contingency Coefficient
BAC					0.149
Refused	515	3	10.782	0.025	0.143
0 - 0.14	946	3	11.038	0.025	0.107
0.15 - 0.19	1,141	3	43.892	0.0001	0.192
0.20 +	1,104	3	22.684	0.0001	0.142
Crash Involvement					0.154
Involved	796	3	6.504	0.10	0.090
Not Involved	2,910	3	87.440	0.0001	0.171
Age					0.155
0 - 29	1,034	3	16.965	0.001	0.127
30 - 39	943	3	19.437	0.0005	0.142
40 - 49	904	3	35.710	0.0001	0.195
50 +	825	3	22.483	0.0001	0.163
Overall	3,706	3	84.352	0.0001	0.149

In summary, the disposition dependency on race is apparently real, and not simply the result of the different BAC, age and crash-involvement characteristics of white and nonwhite drivers.

Table 11 examines the partial associations of BAC and disposition. This relationship was also real and not simply a happenstance arising from the differences in crash-involvement, race and age which were themselves associated with BAC. Again giving some specific examples, the disposition was strongly influenced by BAC for both whites and nonwhites, and for crash-involved drivers as well as for drivers not in crashes. The one exception to the general statement relates to drivers under 30. For such drivers, the disposition was not significantly dependent on BAC at time of arrest.

TABLE 11

PARTIAL ASSOCIATIONS, BAC VERSUS DISPOSITION

Variable	N	df	Chi-Square	Significance	Contingency Coefficient
Crash Involvement					0.171
Involved	796	9	27.190	0.005	0.182
Not Involved	2,910	9	84.462	0.0001	0.168
Race					0.150
White	2,753	9	46.695	0.0001	0.129
Non-white	953	9	44.119	0.0001	0.210
Age					0.167
0 - 29	1,034	9	14.076	NS	0.116
30 - 39	943	9	45.718	0.0001	0.215
40 - 49	904	9	27.325	0.005	0.171
50 +	825	9	25.322	0.005	0.173
Overall	3,706	9	88.677	0.0001	0.153

It was shown earlier (Table 5), that age and disposition were only marginally related. Table 12 shows the partial associations bearing on this relationship. For persons with mid-range BAC's there was a marginally significant relationship between age and disposition, as there was for nonwhite drivers--all other partial associations were not significant.

TABLE 12

PARTIAL ASSOCIATIONS, AGE VERSUS DISPOSITION

Variable	N	df	Chi-Square	Significance	Contingency Coefficient
BAC					0.101
Refused	515	9	8.914	NS	0.130
0 - 0.14	946	9	8.729	NS	0.096
0.15 - 0.19	1,141	9	15.891	0.10	0.117
0.20 +	1,104	9	6.479	NS	0.076
Crash Involvement					0.074
Involved	796	9	11.103	NS	0.117
Not Involved	2,910	9	11.408	NS	0.062
Race					0.070
White	2,753	9	6.618	NS	0.049
Non-white	953	9	16.704	0.10	0.131
Overall	3,706	9	14.720	0.10	0.063

3. 1976 Studies: In 1976 there was an additional type of disposition--guilty of per se. It would be possible to repeat the previous analyses, using new data and including the additional disposition. However, because the prior analyses, using only a limited set of profile characteristics, yielded such generally overwhelming relationships, it appeared unlikely that additional knowledge would accrue by repeating them. Instead, a different approach was taken. Chi-square analyses were performed on 4,920 dispositions in 1976 using an expanded set of profile characteristics.

The first of the new analyses examined the three common dispositions--guilty plea to DUI, guilty (usually by plea) to per se, and guilty plea to a lesser charge. Profile characteristics included arrest BAC, age, sex, race, income, diagnostic test score (Mortimer-Filkins, or M-F, questionnaire), drinker classification, and number of prior alcohol-related arrests. The findings are described below, and the data are presented in Appendix A.

The dispositions were overwhelmingly related to arrest BAC ($\chi^2(8) = 1141.45$, $p < 0.001$). This arises primarily because lower BAC's (0.10 - 0.14) were tremendously over-represented (by about 2:1) in the plea-to-lesser-charge disposition. In general, people who plead guilty to DUI had higher BAC's than those who plead to a lesser charge, and the persons guilty of per se had higher BAC's yet. (However, it was also found that 197 persons who refused the breath test plead guilty to per se!)

The age association was quite significant ($\chi^2(12) = 103.27$, $p < 0.001$). People who plead to a lesser charge were younger (under 25) and people found guilty of per se were older than those who plead guilty to DUI.

Females were relatively unlikely to plead guilty to DUI, with the result that sex and disposition were significantly associated ($\chi^2(2) = 18.50$, $p < 0.001$).

Race and disposition were related ($\chi^2(2) = 85.83$, $p < 0.001$). Nonwhites were less likely to plead guilty to a lesser charge, and more likely to plead guilty to DUI.

Income was inversely related to disposition severity ($\chi^2(4) = 59.41$, $p < 0.001$). Persons with incomes over $11,000 were most apt to plead to a lesser charge; persons with incomes between $8,000 and $11,000 tended to plead guilty to per se, and the lowest income group (under $8,000) were more apt than others to plead guilty to DUI.

The M-F score and disposition were significantly associated ($\chi^2(8) = 10.92$, $p < 0.001$). In particular, far too few people with M-F scores of 25+ plead guilty to a lesser charge.

Drinker type and disposition severity were very positively related ($\chi^2(4) = 517.88$, $p < 0.001$). Persons classified as social drinkers were far more likely to plead guilty to a lesser charge, while problem drinkers tended to plead to either of the other two charges (per se or DUI). Persons not clearly classified did not have any unusual disposition tendancies.

People with multiple prior arrests were overly likely to plead to DUI, and people who plead guilty to a lesser charge tended to have no prior arrests ($\chi^2(4) = 341.23$, $p < 0.001$).

The second new set of analyses examined characteristics of persons convicted of something (regardless of what, or whether by plea or trial), with characteristics of people "set free." The latter includes persons whose cases were either dismissed by the prosecutor or acquitted of all charges. However, no distinction is possible in cases where the dismissals resulted

from a plea or conviction on another, unrelated charge. The record system does not facilitate identification of such events, in which the person is not really "set free." The findings are described below. The data are in Appendix B.

The people who refused the breath test were under-represented in the guilty category; i.e., their likelihood of a dismissed/acquitted disposition was increased ($\chi^2(4) = 17.39$, $p < 0.01$). Of those for whom a BAC was available, no differences were related to the BAC level.

There is some evidence that nonwhite people received a dismissed/acquitted disposition more frequently than whites ($\chi^2(1) = 4.35$, $p < 0.05$).

Persons dismissed or acquitted were overly likely not to be classified either as a problem or social drinker (but such persons generally would not take the M-F test, so would be more difficult to classify). Further, problem drinkers had a better chance to be dismissed or acquitted than social drinkers. Similarly, persons with multiple prior alcohol-related arrests were the most likely to have all charges dismissed or acquitted.

Middle income people were over-represented in the dismissed/acquitted disposition, whereas both low and high income people were under-represented ($\chi^2(2) = 7.09$, $p < 0.05$).

The factors age, sex, and M-F score are apparently not related to disposition.

E. Probation Hearings

Another activity that occupies the traffic safety system is probation hearings. These hearings are usually requested by a probation officer because of some type of probation violation (usually, multiple violations) and can result in reaffirmation of the probation conditions, changes in probation conditions, or revocation of probation (meaning that the subject is ordered to serve time).

Revocation hearings and revocations were relatively rare early in the project, and detailed records of a statistical nature were not compiled. For example, for the entire year of 1973, in which there were over 5,500 DUI arrests, only about 53 revocations were recorded. As shown in Table 13, a tougher attitude was adopted in 1974, when there were 327 revocations. Moreover, the probation office expanded their efforts in 1975 with the 2-year extension of the original ASAP and recorded 694 revocations that year. Even more (792) occurred in 1976, although the pace slackened during the last half of the year.

TABLE 13

PROBATION HEARING DATA

Year	Quarter	Probation Hearings	Revocations	Revocations In Absentia (Percent)
1974	1	N/A	36	N/A
	2	N/A	72	N/A
	3	N/A	129	N/A
	4	N/A	90	N/A
1975	1	N/A	104	N/A
	2	601	197	89.3
	3	431	171	91.2
	4	685	222	90.1
1976	1	744	241	90.5
	2	738	211	81.0
	3	605	178	79.8
	4	629	162	86.4

The high number of revocations is reflected by the number of probation hearings, which approached 250 per month. (Again, early records are spotty but such hearings probably averaged only a dozen a month during the first 2 years of the project.) Because they became so frequent, scheduling became a problem, so in 1975 the computerized court docketing program for scheduling arrest cases was modified to also include probation hearings, to equalize the court dockets.

Most revocations are in absentia (see Table 13). That is, the probationer who was presumably in violation of one or more conditions of probation also usually failed to appear for the hearing as ordered by the court. In such cases, the court normally issues a warrant for the arrest

of the individual, and a record of the warrant is entered into the subject's computer record. That record will be made immediately available to any police officer making an inquiry should the individual be stopped for questioning.

F. Court Records

The ASAP Court Records Unit performed support services related to DUI cases for the municipal court. The two major functions were to obtain, summarize, and input driver license records, and to assign persons so sentenced to the School for Alcohol Safety.

The activity levels are shown in Table 14. In 1975, the license check workload was down just slightly from that of 1974, a result of the reduced number of arrests. The reduction in Kansas record checks was somewhat greater than that for the Missouri record checks. In 1974, 17.5% of all license checks were with the State of Kansas; the percentage dropped to 16.6% in 1975, and 15.3% in 1976. The change from 1974 to 1975 was only marginally significant ($\chi^2(1) = 3.01$, $p < 0.10$), but the relative decrease in Kansas checks in 1976 was significant ($\chi^2(1) = 7.17$, $p < 0.01$).

TABLE 14

COURT RECORDS ACTIVITIES

	Driver License Checks		School
	Missouri	Kansas	Assignments
1973	16,319	1,461	3,859
1974	9,875	2,089	3,167
1975	9,595	1,911	2,030
1976	10,650[a/]	1,930[a/]	1,993

a/ Numbers estimated for last 3 months, because process became automated, not requiring clerical intervention.

The court records work load in making school assignments declined greatly in 1975, especially in the last 5 months of that year. In 1976 that work load was essentially unchanged from 1975.

G. Cost-Effectiveness

Table 15 contains the ASAP cost data for the judicial countermeasures discussed in this report. The costs have fluctuated from year to year as the number of personnel has changed, in accordance with Detailed Plan modifications.

TABLE 15

ASAP COST DATA (DOLLARS)

	1972	1973	1974	1975	1976	Total
Prosecution	61,345	48,294	57,622	17,738	14,133	199,132
Court Records	24,660	37,440	34,605	15,513	14,606	126,824

Beginning in 1975 the City of Kansas City absorbed certain prosecution and court records costs that previously had been funded by ASAP. The City Prosecutor, whose salary had been paid by ASAP, appeared on the City payroll in 1975 and 1976. This cost, including benefits, was estimated at $30,232 for 1975. Adding this to the ASAP funding would yield a prosecution cost of $47,970 for 1975. In 1976, the same services were provided by the City, so the City's costs were about the same (or slightly higher due to inflation). This yields a 5-year total of ASAP plus City funding of DUI prosecution efforts of approximately $263,000. Likewise, the City took over partial funding of the Court Records Unit in 1975, and continued the same activities in 1976. Thus, the total ASAP plus City Court Records costs for the 5 years was approximately $166,000.

The cost-effectiveness is difficult to estimate because of a number of factors. As stated earlier, there are about 10 assistant prosecutors but only one or two were funded by ASAP, yet all shared the case load. Moreover, the City Prosecutor, funded by ASAP in 1974, but by the City since then, usually does not try cases. Also, there was a case load of about 2,400 DUI's per year prior to ASAP.

A reasonable cost-effectiveness ratio may be constructed by assuming the ASAP prosecution costs represent the need for increased effort brought about by ASAP. Therefore, the prosecution cost in Table 15, plus the City contributions, is compared to the increase in the number of annual dispositions over a baseline disposition value of 2,400. Furthermore, the 1972 budget included $12,000 for the Special Appeals Prosecutor who handled only appealed cases, was found not to be cost-effective and was not continued beyond that year. Thus, for purposes of comparison, that $12,000

is not included. The results are shown in Table 16. Overall, the cost for additional court dispositions brought about by prosecution efforts was slightly under $20/case. The cost per disposition was highest in 1972 (when there were fewer dispositions and when one additional position was ASAP-funded) and second highest in 1975 (when the case load declined).

TABLE 16

COST PER DISPOSITION

1972	1973	1974	1975	1976	Average
$26.46	$14.54	$19.80	$22.78	$15.99	$19.06

H. City Revenue

As a result of case disposition, the City has realized income from fines assessed. The assessed values are shown in Table 17. The pre-ASAP income for the City from such fines is estimated at about $100,000 annually. Over the 5 years of ASAP, this level would have produced $500,000 in income had there been no changes. The difference between that amount and the actual assessed value ($1,566,000) represents an annual gain to the City of over $300,000--an amount nearly sufficient to support the operational elements of ASAP.

There are three factors contributing to the increased assessments. First, the arrest rate more than doubled with the activation of ASAP. Secondly, fines were more frequently assessed upon disposition, from about 68% of all cases in 1971 (before ASAP) to about 92% in 1976.* Thirdly, the amount of the average fine rose from less than $100 in 1971 to over $161 in 1976. Without ASAP it is doubtful that the arrest rate would have changed, or that the "fine, probation and referral" type of sentence would have become so dominant, although the fine amounts might have escalated with inflation anyway, to about $135 assuming an annual inflation rate of 6%. Thus, ASAP is clearly responsible in a direct way for most of the annual increase in fines levied and collected.

* This higher frequency may be the result of prosecution recommendations associated with the increase in plea bargaining.

TABLE 17

COURT-ASSESSED FINES

Quarter	Fines[a/]		Yearly Subtotals
1	$ 34,623		
2	52,283		
3	43,122		
4	67,617		
			$ 197,645
5	79,091		
6	82,345		
7	77,344		
8	90,954		
			329,734
9	97,843		
10	108,361		
11	106,258		
12	99,849		
			412,311
13	119,220		
14	126,890		
15	107,039		
16	107,603		
			460,752
17	177,269		
18	171,518		
19	148,516		
20	167,856	(est.)	
			665,159
Total			$2,065,601

a/ Actual income was somewhat less because not all assessed fines were paid.

CHAPTER V

DISCUSSION AND CONCLUSIONS

Two major events impacted the traffic safety system in Kansas City during the previous 5 years. The first of these events was the award to the City of an ASAP contract, which became operational in January 1972. The second event was the enactment of a new State law concerning drinking and driving.

The new law, commonly called the per se law, became effective on September 28, 1975. It was framed by the ASAP Advisory Council Legislative Committee, with the intent of providing a lesser offense to the municipal offense of DUI, or the state offense of DWI, while retaining for recordkeeping purposes the alcohol implication that other lesser offenses do not carry. The State law, as finally passed and implemented, did just that concerning State offenses, but it also upgraded municipal offenses to carry the same administrative licensing actions as comparable State offenses. As a result, at the municipal level the so-called lesser offense of per se effectively replaced the previous DUI offense, and DUI was made a more serious offense that carried with it upon conviction an automatic license suspension.

The impact of these two events--ASAP, and the ASAP-initiated per se law--on the traffic safety system were many. As ASAP became operational the arrest rate more than doubled, imposing a severe load on the traffic safety system. It required about 1 year for the system to accommodate to this load, to process the cases at a rate matching the arrest rate. This was accomplished without adding extra judges, by implementing procedural changes. The major changes were: (1) the routine use of plea bargaining as a mechanism for obtaining a court disposition, while retaining the defendant as a potential client for ASAP rehabilitation efforts; and (2) the development of a computerized, automated, highly accepted pre-trial screening report that provided the prosecutor and (at time of sentencing) the judge with appropriate background information on the defendant.* The accommodation of the traffic safety system to the tremendously increased caseload resulted in an increase in the average time from arrest to disposition of only about 1 week.

The accommodation of the traffic safety system to the per se law was more difficult. After five quarters of operation under this law, the court backlog of cases continues to grow. The mean time between arrest and disposition has increased an additional 3 weeks, and at the end of 1976 was approaching a total of 3 months, on the average. This increase

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* The other function of this innovative PTSR process, relating to investigation and referral, is analyzed in another study.[5]

is equivalent to one additional continuation on each court case. There is also scattered evidence (hard data are not available) of an increase in appeals to the Circuit Courts.

The plea bargaining strategy changed with the enactment of the per se law, and that new strategy has largely been followed. Most plea bargaining now results in a plea to per se, rather than to a plea on a lesser charge as was common earlier. As a result, the majority of persons arrested for DUI now receive a tougher disposition, one that carries more serious implications of driver licensing action.

The conviction rate following an arrest for DUI was in excess of 91% prior to ASAP. With the increased arrest rate and the law changes, the conviction rate has not suffered, but, in fact, has increased. Over the past 5 years the average rate of increase in convictions was about 1/4% per year. This increase was apparently rather continuous over this period, as no identifiable jumps in the conviction rate could be ascertained.

Punitive sanctions imposed by the court have changed noticably over the past 5 years. The major change has been the more universal imposition of both a monetary fine and a probationary term (in lieu of a jail sentence). Previously, defendants were more likely to receive one or the other of these punitive sanctions. The average amount of the monetary fine has increased markedly over the last 5 years. Before ASAP, the average fine assessed was less than $100. This average increased and stabilized at about $130 after 2 years of operations. Then, in accordance with stated prosecution policy regarding plea bargaining, the average fine again increased with the enactment of the per se law to about $175 for persons pleading guilty to per se, and to about $155 for others. (Interestingly, the stated policy sought a plea to per se--under which it is illegal to be operating a motor vehicle with a blood alcohol content of 0.10 or more--for persons who refused to take the breath test for a blood alcohol concentration determination. In 1976 there were at least 197 cases with this outcome!)

Although fines increased in response to ASAP, the per se law, and prosecution policy changes, the average probationary term remained relatively stable over the 5 year period, averaging between 12 and 15 months in duration.

Profile studies over the last 3 years have consistently shown marked differences in the characteristics of the persons receiving different court dispositions. The earlier studies examined the characteristics of age, race, arrest BAC, and whether or not the arrest stemmed from a crash. These studies showed that all four factors were not only strongly correlated with the type of disposition, but also with each other. Further analyses separated these interrelationships so that the factors could be examined independently.

It was found that the ultimate disposition of the case was significantly related to the race of the defendant, regardless of his arrest BAC, age, or crash involvement; nonwhites were more likely to plea to DUI, whereas whites were more likely to engage in plea bargaining. It was also found that the arrest BAC was significantly related to disposition independently of other factors; the persons who refused to take the breath test were less likely to plea bargain than others, and were more likely to either be convicted by trial or to be acquitted of all charges. Furthermore, persons with lower BACs (0.10 to 0.14) were more likely to be dismissed or acquitted of all charges than persons with moderate BACs (0.15 to 0.19) or high BACs (0.20 or greater). Persons in the latter category were more likely than others to plead guilty to DUI. All of these BAC relationships were not affected by race, crash involvement, or age of the defendant. Finally, the case disposition bore little relationship to the defendant's age in and of itself, but only to other factors (notably, BAC) significantly related to age.

Further profile studies were conducted in 1976, when a conviction on per se was a common disposition. The findings regarding race, BAC, and age were compatible with the earlier results. The new analyses also included the characteristics of sex, income, Mortimer-Filkins questionnaire score, drinker type, and previous alcohol-related arrests. Generally speaking, persons who sucessfully plea bargained to a lesser charge (less than per se), when compared with persons receiving other dispositions, tended to have lower BACs, to be young, to be white, to have higher than average income, to have received a moderate or low score on a Mortimer-Filkins test, and to be classified as social drinking drivers. Persons found guilty (or pleading guilty) to per se tended to have higher arrest BACs, to be older, to be white, to have average incomes, and to be classified as problem drinking drivers. Persons pleading guilty to DUI were more likely to have high BACs, to be male, to have lower than average income, to be classified as problem drinking drivers and to have had multiple prior alcohol-related arrests. Finally, persons who were acquitted or had all charges dismissed were more likely than others to have refused the breath test, to be nonwhite, to have average income, to be classified as problem drinking drivers, and to have had multiple prior alcohol-related arrests. The findings regarding acquittals and dismissals are probably influenced somewhat by persons who had multiple unrelated charges pending, who received dismissals by the prosecutor on some charges in return for pleas of guilty to other charges, or as the result of a probation revocation (details in this regard are not retrievable).

Another element of traffic safety system caseload is probation hearings. This caseload was not apparent during the first few years of the project, probably because these hearings are normally initiated through the probation department, which had its own case load problems and underwent several changes in direction early in the project. During the last 2 or 3 years of ASAP, however, probation hearings became very common, averaging over 200 per month, with actual revocations at about one-third that level.

The traffic safety system was strongly supported by many other activities, foremost among which was the ASAP Court Records Unit. This unit provided a number of clerical and support functions to the court and to the usefulness of the Pretrial Screening Report. It is doubtful that the traffic safety system could have functioned as well as it did without this support. The functions of the unit, being largely clerical, were continually improved over the 5 year period and made more efficient. By the end of the 5 years, essentially all of these functions had become computerized, and they can be carried on in the future with minimal effort.

The cost of prosecuting cases under ASAP were largely borne by the Federal contract. During the last 2 years, however, the City took over partial funding of this activity. Over the 5 years, the costs to ASAP and the City combined averaged less than $20 per case to handle the increased work load resulting from the ASAP contract.

In response to the increased work load, the amount of the fines assessed by the court increased greatly. In 1976 alone, the assessed fines exceeded those of the year prior to ASAP by over $560,000. This amount of funds would match and slightly exceed the total Federal expenditures for ASAP in 1976 (except for evaluation, but including administration, and public information and education), as well as the City contributions to enforcement, prosecution, and to the Court Records Unit. This clearly indicates that such a project can become fully self supporting.

Conclusions

- The traffic safety system accommodated rather rapidly and efficiently to the large case load placed upon it by ASAP.
- The new per se law, and particularly its more stringent licensing action implications, presented the traffic safety system with a difficult challenge, to which its response was less rapid and less efficient than it was to the initiation of ASAP.
- The accomodation of the traffic safety system to ASAP and the per se law were possible largely through plea bargaining and the use of an automated, computerized Pretrial Screening Report.
- The traffic safety system accommodated to the extra work load and yet managed to increase the overall conviction rate.

- Processing delays in the traffic safety system increased the time from arrest to disposition from about 2 months to about 3 months, with most of this increase brought about by the *per se* law.

- Some of the profile characteristics of persons arrested, such as BAC, prior arrest history, drinker status, and psychological test score, are related to ultimate disposition in the manner most persons might expect--people with less symptoms of a severe drinking problem tended to receive lesser court dispositions.

- Plea bargaining was apparently more prevelant among white persons, persons with higher incomes, and females, because these groups were more apt to plead guilty to a lesser charge.

- The traffic safety system increased the frequency of the imposition of fines and of the dollar amount of fines, resulting in a large financial gain for the City.

- The traffic safety system was cost efficient (less than $20 per case) yet resulted in enough assessed fines to essentially cover the cost of the entire ASAP.

CHAPTER VI

RECOMMENDATIONS

Because the Kansas City ASAP experience in the Traffic Safety System (prosecution, adjudication, sentencing) was so successful, the major recommendation is that other communities should be aware of that system and adopt it as they see fit. More specifically:

- Prosecution should have clear-cut policies, known to all elements of and related to such a system, including the court, probation office, enforcement, and defense attorneys.

- Plea bargaining is a viable and efficient process provided proper records are kept of the initial alcohol involvement, and provided it is administered in an unbiased manner.

- A community should recognize that the fines assessed for drunk driving can finance the entire traffic safety and enforcement systems.

REFERENCES

1. Boos, Robert F., "Detailed Project Plan of an Alcohol Safety Action Project for Kansas City, Missouri," February 14, 1972. (As amended several times, most recently on September 15, 1976, by Gerald Mellon.)

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TERMS AND ABBREVIATIONS

ASAP: Alcohol Safety Action Project

SASP: Special Alcohol Safety Patrol

KCMOPD: Kansas City, Missouri Police Department

NHTSA: National Highway Traffic Safety Administration

DUI: Driving Under the Influence of Intoxicating Liquor

per se: A lesser offense, compared to DUI, under which it is illegal for a person to drive or be in actual physical control of a motor vehicle when the person has ten-hundredths of one percent or more by weight of alcohol in the blood. ("Impairment" or "influence" need not be proved.)

BAC: Blood Alcohol Content, percent weight by volume (grams of alcohol per 100 ml of blood).

APPENDIX A

PROFILE DATA FOR PERSONS PLEADING GUILTY

Note: Each entry includes the observed frequency, and in parenthesis, the expected frequency if there were no disposition relationship.

	BAC									
	Refused		10-14		15-19		20-24		25+	
Plea DUI	116	(79)	154	(195)	204	(234)	147	(130)	82	(65)
Plea A/R	124	(147)	780	(363)	278	(436)	88	(241)	37	(120)
Guilty Per Se	197	(210)	141	(517)	809	(621)	479	(343)	237	(171)

	Age													
	16-19		20-24		25-29		30-39		40-49		50-59		60+	
Plea DUI	37	(35)	119	(111)	117	(120)	164	(176)	171	(167)	106	(112)	48	(41)
Plea A/R	101	(69)	274	(219)	253	(235)	364	(346)	276	(329)	172	(220)	59	(80)
Guilty Per Se	57	(90)	221	(284)	291	(306)	445	(450)	476	(427)	340	(286)	119	(150)

	Sex			
	Male		Female	
Plea DUI	731	(704)	32	(59)
Plea A/R	1,361	(1,384)	138	(115)
Guilty Per Se	1,796	(1,800)	154	(150)

	Race			
	White		Non-White	
Plea DUI	522	(572)	241	(191)
Plea A/R	1,247	(1,124)	252	(375)
Guilty Per Se	1,389	(1,462)	561	(488)

	Income		
	0-7,999	8,000-10,999	11,000+
Plea DUI	180 (140)	192 (196)	88 (123)
Plea A/R	190 (236)	309 (331)	276 (208)
Guilty Per Se	342 (335)	495 (469)	262 (295)

	M-F Score				
	0-9	10-14	15-19	20-24	25+
Plea DUI	63 (78)	68 (84)	56 (60)	52 (47)	119 (89)
Plea A/R	240 (211)	277 (228)	201 (164)	113 (128)	143 (243)
Guilty Per Se	283 (297)	286 (320)	197 (230)	189 (179)	413 (342)

	Type Drinker		
	SDD	UNK	PDD
Plea DUI	277 (390)	100 (96)	386 (277)
Plea A/R	1,109 (767)	151 (188)	239 (544)
Guilty Per Se	768 (997)	278 (245)	904 (708)

	Prior Alcohol-Related Arrests		
	None	1	2+
Plea DUI	397 (515)	136 (140)	230 (108)
Plea A/R	1,222 (1,001)	174 (276)	103 (212)
Guilty Per Se	1,222 (1,315)	465 (359)	263 (276)

APPENDIX B

PROFILE DATA FOR PERSONS FOUND GUILTY
AND THOSE DISMISSED OR ACQUITTED OF ALL CHARGES

Note: Each entry includes the observed frequency, and in parenthesis, the expected frequency if there were no disposition relationship.

	BAC									
	Refused		10-14		15-19		20-24		25+	
Dismissed/ Acquitted	69	(45)	87	(101)	109	(119)	69	(66)	30	(33)
Guilty	486	(510)	1,161	(1,147)	1,353	(1,343)	747	(750)	373	(370)

	Age													
	16-19		20-24		25-29		30-39		40-49		50-59		60+	
Dismissed/ Acquitted	13	(19)	49	(60)	75	(68)	108	(100)	98	(94)	66	(63)	18	(22)
Guilty	207	(201)	642	(631)	707	(714)	1,047	(1,055)	983	(987)	664	(667)	240	(236)

	Sex			
	Male		Female	
Dismissed/Acquitted	390	(396)	38	(32)
Guilty	4,157	(4,151)	335	(341)

	Race			
	White		Non-white	
Dismissed/Acquitted	300	(318)	128	(110)
Guilty	3,360	(3,342)	1,132	(1,150)

	Income		
	0-7,999	8,000-10,999	11,000+
Dismissed/Acquitted	65 (73)	124 (104)	51 (63)
Guilty	769 (761)	1,064 (1,084)	666 (654)

	M-F Score				
	0-9	10-14	15-19	20-24	25+
Dismissed/ Acquitted	6 (5)	7 (5)	2 (4)	0 (3)	6 (5)
Guilty	607 (608)	655 (657)	474 (472)	368 (365)	701 (702)

	Type Drinker		
	SDD	UNK	PDD
Dismissed/Acquitted	135 (210)	123 (61)	170 (156)
Guilty	2,282 (2,207)	583 (645)	1,627 (1,641)

	Prior Arrests		
	None	1	2+
Dismissed/ Acquitted	245 (284)	86 (78)	97 (66)
Guilty	3,018 (2,979)	816 (824)	658 (689)