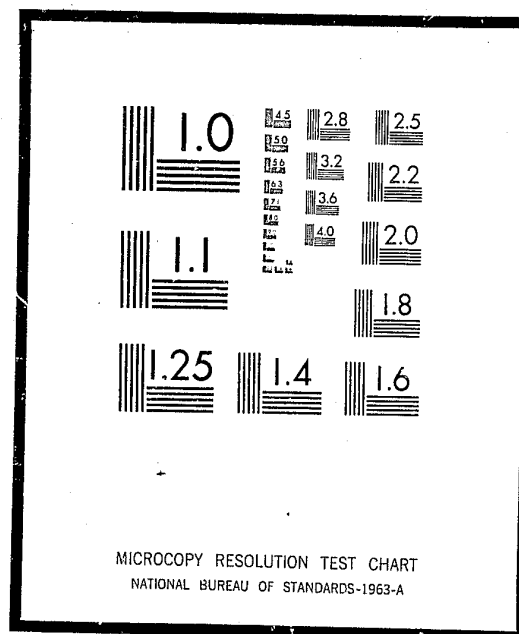


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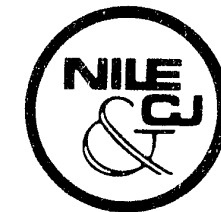
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WASHINGTON OPERATIONS

COMMERCIAL ROBBERY IN A
MEDIUM-SIZED CITY:
COLUMBUS, GEORGIA

NOVEMBER 1973

Equipment Systems Improvement Program Report
prepared for



U.S. DEPARTMENT OF JUSTICE
LAW ENFORCEMENT ASSISTANCE ADMINISTRATION
NATIONAL INSTITUTE OF LAW ENFORCEMENT
AND CRIMINAL JUSTICE

MITRE

WERTRE

THE EQUIPMENT SYSTEMS IMPROVEMENT PROGRAM

Following a Congressional mandate* to develop new and improved techniques and equipment to strengthen law enforcement and criminal justice, the National Institute of Law Enforcement and Criminal Justice under the Law Enforcement Assistance Administration of the Department of Justice established the Equipment Systems Improvement Program. The objectives of the Program are to determine the priority needs of the criminal justice community to help in its fight against crime, and to mobilize industry to satisfy these needs. A close working relationship is maintained with operating agencies of the criminal justice community by assigning systems analysts to work directly within the operational departments of police, courts and corrections to conduct studies related to their operational objectives.

This document is a research report from this analytical effort. It is a product of studies performed by systems analysts of the MITRE Corporation, a not-for-profit Federal Contract Research Center retained by the National Institute to assist in the definition of equipment priorities. It is one of a continuing series of reports to support the program decisions of the Institute relative to equipment development, equipment standardization and application guidelines. Comments and recommendations for revision are invited. Suggestions should be addressed to the Director, Advanced Technology Division, National Institute of Law Enforcement and Criminal Justice, Law Enforcement Assistance Administration, U. S. Department of Justice, Washington, D. C. 20530.

Gerald M. Caplan, Director
National Institute of Law
Enforcement and Criminal Justice

* Section 402(b) of the Omnibus Crime Control and Safe Streets Act of 1968, as amended.

MITRE Technical Report

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THE
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Page 1 of 98 Pages

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ABSTRACT

This report presents information on the problem of commercial robbery in a medium-sized city, Columbus, Georgia. Specifically, the problems associated with commercial robbery within the context of the chain of events and the major participants in this offense are examined from an operational aspect. Several problems are highlighted with possible solutions.

ACKNOWLEDGEMENTS

The author gratefully acknowledges the assistance of Mr. Joseph Kochanski and Mr. George Shollenberger of the Law Enforcement Assistance Administration in making this report possible.

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TABLE OF CONTENTS

	<u>Page</u>
GLOSSARY	viii
EXECUTIVE SUMMARY	x
LIST OF ILLUSTRATIONS	vii
LIST OF TABLES	vii
SECTION I INTRODUCTION	1
PURPOSE	1
REPORT ORGANIZATION	1
COMMENTS ON THE DATA AND THE ANALYSIS	1
SECTION II BACKGROUND	3
GENERAL ENVIRONMENT	3
LAW ENFORCEMENT ENVIRONMENT	3
SECTION III COMMERCIAL ROBBERY QUANTIFIED	7
LOCAL DEFINITION OF ROBBERY	7
COMMERCIAL ROBBERY DEFINED	7
ROBBERY TRENDS	7
GENERAL CHARACTERISTICS OF COMMERCIAL ROBBERY	8
Commercial Robbery as a Proportion of	
all Robbery	8
The Commercial Robbery Offender	8
Target Population	12
Location of Commercial Robbery	12
Time of Commercial Robbery	12
Violence in Commercial Robbery	12
Loss of Property in Commercial Robbery	17
Impact on the Public	17
Impact on the Police	18
FINDINGS	19
SECTION IV MOTIVATIONS OF COMMERCIAL ROBBERY PARTICIPANTS	20
OFFENDER MOTIVATION	20
TARGET POPULATION MOTIVATIONS	21
POLICE MOTIVATIONS	22
Patrolman	22
Detective	22
Police Administrators	22
FINDINGS	23
SECTION V TARGET SELECTION AND ROBBERY PLANNING	24
TARGET SELECTION FACTORS	24
Time for Robbery	24
Location and Physical Environment of the Robbery	25

TABLE OF CONTENTS (cont'd)

	<u>Page</u>
Number of Potential Witnesses	25
Intelligence from Employees	25
Proceeds of the Robbery	26
ROBBERY PLANNING	26
FINDINGS	27
SECTION VI PREVENTION OF COMMERCIAL ROBBERY	28
TARGET POPULATION	28
Cash Limit Policy	28
Reporting of Robbery Losses	28
Employee Screening	29
Security Equipment	29
POLICE	31
FINDINGS	31
SECTION VII EXECUTION OF COMMERCIAL ROBBERY	33
GENERAL	33
BEFORE ROBBERY	33
DURING ROBBERY	34
AFTER ROBBERY	34
FINDINGS	34
SECTION VIII VICTIM, EMPLOYEE(S), AND POLICE RESPONSE TO COMMERCIAL ROBBERY	36
VICTIM/EMPLOYEE(S)	36
POLICE	36
PATROL	37
Detectives	38
Identification Technician	38
Robbery Stakeout	39
FINDINGS	39
SECTION IX PROCESSING OF SUSPECTS	40
GENERAL	40
POLICE CLEARANCE	40
Naming the Suspect	40
Identification of Suspect	42
JUVENILE COURT	42
PRELIMINARY HEARING	42
INDICTMENT	45
SUPERIOR COURT	45
FINDINGS	46

TABLE OF CONTENTS (cont'd)

		<u>Page</u>
APPENDIX I	PROBLEM STATEMENTS AND SUGGESTED SOLUTIONS	47
APPENDIX II	SOURCES OF INFORMATION AND SURVEY DETAILS	77
	METHODOLOGY	79
	Interviews	79
	Observations	80
	Surveys	81
	Reports and Records	81
APPENDIX III	BEAT DESCRIPTIONS	83

LIST OF ILLUSTRATIONS

<u>Figure Number</u>		<u>Page</u>
2-1	Organization and Manning of the Columbus, Georgia Police Department	4
2-2	Base Map of Columbus Showing Beat Lines	5
3-1	Commercial Robbery Trend Since 1969	9
3-2	Age Distribution of Commercial Robbery Suspects (1972)	10
3-3	Cumulative Record of 35 Armed Robbery Suspects (1972)	11
3-4	Distribution of Commercial Robbery by Type of Business (1971 & 1972)	13
3-5	Location of 1972 & First Quarter 1973 Commercial Robberies	14
3-6	Commercial Robbery Rate by Hour (1972)	15
3-7	Commercial Robbery Rate by Day and Month (1972)	16
9-1	Processing and Disposition of 1972 Commercial Robbery Suspects	41

LIST OF TABLES

<u>Table Number</u>		<u>Page</u>
I	Methods of Naming of Suspects and Frequency of Occurrence for 1972	43
II	Methods and Frequency of Witness/Victim Identification of Suspects (Commercial Robbery 1972)	44

GLOSSARY

- CARES - Columbus Armed Robbery Enforcement Section - A project being implemented in Columbus, Georgia. The goal is to reduce armed robbery offenses by more than 25%.
- CASH LIMIT POLICY - An administrative technique to limit store losses by imposing an upper threshold on the amount of money kept in the cash register.
- CLEARANCE - A term used to describe the settlement of an offense case; primarily by the investigative division of a police department. An offense may be cleared by arrest or by exception.
- COMMERCIAL ROBBERY - All robbery and armed robbery in which a commercial business establishment is the victim - bank robbery is excluded.
- ESIP - Equipment Systems Improvement Program - This program is to contribute to the solution of Criminal Justice and crime problems through the development, demonstration and evaluation of new or improved procedures and equipment systems in conjunction with local law enforcement and criminal justice agencies.
- EXCEPTIONAL CLEARANCE - An offense can be exceptionally cleared when it falls into one of the following categories:
1. Suicide of the offender.
 2. Double murder.
 3. Death bed confession.
 4. Offender killed by police.
 5. Confession by offender already in custody.
 6. Extradition is denied.
 7. The victim refused to cooperate in the prosecution.
 8. An offender is prosecuted for a less serious charge than that for which the arrest was made.
 9. The handling of a juvenile offender either orally or by written notice to parents in instances involving minor offenses.
- NO BILL - This phrase, when endorsed by a grand jury on an indictment, is equivalent to "not found," "not a true bill," or "ignoramus."
- NOLLE PROSEQUI - A formal entry upon the record by the prosecuting attorney by which he declares that he "will not further prosecute" the case, either as to some of the counts, or some of the defendants, or altogether.

PLEA BARGAINING - A process whereby the prosecutor negotiates with the accused to plead guilty to a lesser charge in return for dropping the more serious charge.

TRUE BILL - The endorsement made by a grand jury upon a bill of indictment, when they find it sustained by the evidence laid before them, and are satisfied of the truth of the accusation.

EXECUTIVE SUMMARY

This report describes and analyzes commercial robbery as it occurs in a medium-sized city, Columbus, Georgia. The population of Columbus, Georgia is estimated to be 170,000 (approximately 30% minority) making it the 87th largest city in the United States. "Commercial Robbery" includes all robbery and armed robbery in which a business establishment is the victim. Bank robbery is specifically excluded.

The purpose of the report is to define law enforcement problems associated with commercial robbery within the context of the chain of events and the major participants in this offense. In addition, the purpose extends to development of sufficient experience to allow intelligent comment on the operational aspects of potential or suggested solutions to these identified problems. Finally, this report is expected to provide substantial input for use in an ongoing commercial robbery enforcement program, Project CARES (Columbus Armed Robbery Enforcement System).

Many findings are reported under general characteristics, motivation of participants, target selection and robbery planning, robbery prevention, robbery execution, participant responses to robbery, and the processing of suspects. These findings are listed at the end of each section.

The conclusions of this report are in the form of problem statements written to be consistent with continued action by the ESIP. Each contains a problem statement, discussion, and suggested solutions. The report highlights problems in the areas of:

- . Prediction of Commercial Robbery Targets
- . Commercial Robbery Target Population Training
- . Lineup Equipment
- . Efficiency In Police Processing of Victims and Witnesses
- . Disguise of Unmarked Police Automobiles
- . Systematic Search for Fleeing Offenders
- . Fingerprint Surfaces Evaluating Instrument
- . Robbery Alarm Equipment
- . Increasing Potential Witnesses to Commercial Robbery

- . Reduction of Commercial Robbery Property Losses
- . Application of Bait Money Concepts to Other Objects
- . Verification of Informer Provided Information
- . Evidence Collection Devices
- . Testimony Review Equipment
- . Physical Simulation of Testimony
- . Protection of Crime Scene
- . Physical Evidence from Abandoned Vehicles
- . Positive Reinforcement for Preventative Patrol Efforts
- . Improvement of Conventional Stakeouts
- . Physical Environment for Witness/Victim Interviews
- . Officer, Bystander, Victim Safety During Robbery Stakeout Operations.

SECTION I

INTRODUCTION

PURPOSE

The overall purpose of this report is to define law enforcement problems associated with commercial robbery within the context of the chain of events and the major participants in this offense. In addition, the purpose of this report extends to development of sufficient experience to allow intelligent comment on the operational aspects of potential or suggested solutions to these identified problems. Finally, this report is expected to provide substantial input for use in an on-going commercial robbery enforcement program called Project CARES (Columbus Armed Robbery Enforcement System). This project is described in M73-225, Project CARES.

REPORT ORGANIZATION

The report which follows is organized about the basic theme of the actions and reactions of the various participants in commercial robbery through the time-phased events of the offense. The major participants are the offender, the target population of businesses, and the police. The events include the robber's perception of opportunity for commercial robbery, planning of the offense, and execution of the offense. The police and target populations countermeasures to these events and the processing of apprehended suspects are also included.

Specifically, Sections II, III, IV and V provide background on information sources and research, environment, qualification of commercial robbery, and motivations of the major participants, respectively. Sections VI through IX contain discussions of the actions and reactions of the participants in the phases of the offense. Each of these sections includes a summary of findings.

Finally, Appendix I is a series of brief problem statements which are based on the findings of this report. Appendices II and III contain sources of information, survey detail, and beat descriptions.

COMMENTS ON THE DATA AND THE ANALYSIS

There are several serious limitations of this report which should be clearly pointed out. First, because of time constraints, necessary

assumptions, somewhat arbitrary sample-size selections, and the constant confrontation of questions of cause and effect, this report is not presented as a scientific study of the problem of commercial robbery; rather, it represents an attempt at quantification of some of the associated sub-problems. In response to this limitation, this report has been structured as a continuing effort which could be refined, given additional time and data.

Second, most of the arguments used to qualify the use of criminal justice statistics probably apply. Inaccurate reporting, records retrieval problems, lack of data on offenders who escape, etc., have probably affected the results of this study. In addition, there are several events which cast serious doubt on the accuracy of statistics prior to 1 January 1971. Annexation of Muscogee County in 1970, and consolidation of city and county government functions in 1971 drastically increased the geographical area of the city and consolidated county and city law enforcement agencies. In addition, on 1 January 1971 the new Chief of Police announced new reporting procedures. At the same time, he predicted a 50% increase in serious crime would be reflected as a result of the new procedures. Therefore, in most cases, the use of department statistics has been restricted to those compiled subsequent to 1 January 1971 and those prepared specifically for this report.

Finally, it is not at all clear that what occurs in Columbus, Georgia, is typical or representative of what occurs in other medium sized U.S. cities. Therefore, the potential effectiveness of suggested solutions to the armed robbery problems of Columbus, while likely to be of value in Columbus, may be less effective or even counter-productive in some other environments. Additional study would be required to determine the suitability of any of these ideas in other cities.

SECTION II

BACKGROUND

GENERAL ENVIRONMENT

Based on population, Columbus, Georgia, is the 87th largest city in the United States. Its population is currently estimated at approximately 170,000 (approximately 30% minority) and its area is 140 square miles. A Consolidated Government (Mayor-Council-Manager, w/Public Safety Director) was formed 1 January 1971. The city is bounded on the west by the Chattahoochee River and Phenix City, Alabama, to the south and east by Fort Benning Military Reservation, and to the north and northeast by several rural counties. The next nearest population centers are Atlanta, Macon, and Albany, Georgia, and Montgomery and Dothan, Alabama. All of these are approximately 100 miles from Columbus.

Approximately two years ago, the City of Columbus had a racial crisis, complete with fire-bombing, riots, and attacks on citizens and tourists. This crisis originated within the police department. As a result, the Mayor of Columbus requested that the Law Enforcement Assistance Administration (LEAA) send a survey team of noted law enforcement analysts to survey the department and make recommendations for improvement. The survey team made more than 100 recommendations, most of which have been implemented.

LAW ENFORCEMENT ENVIRONMENT

The Columbus Police Department is the principal law enforcement agency in Columbus. The force consists of approximately 300 sworn personnel and 25 civilians. The organization and manning of the force is shown in Figure 2-1.

For law enforcement, the city has been divided into five sections and 22 beats. Beat lines are established on the basis of total calls for service. Figure 2-2 shows the beat lines which were in effect during the time most of the commercial robbery events studied occurred.

The variation of socio-economic factors among the beats is extreme -- from high crime, low income, ghetto areas, to almost immune rural areas. (Appendix III gives specifics.)

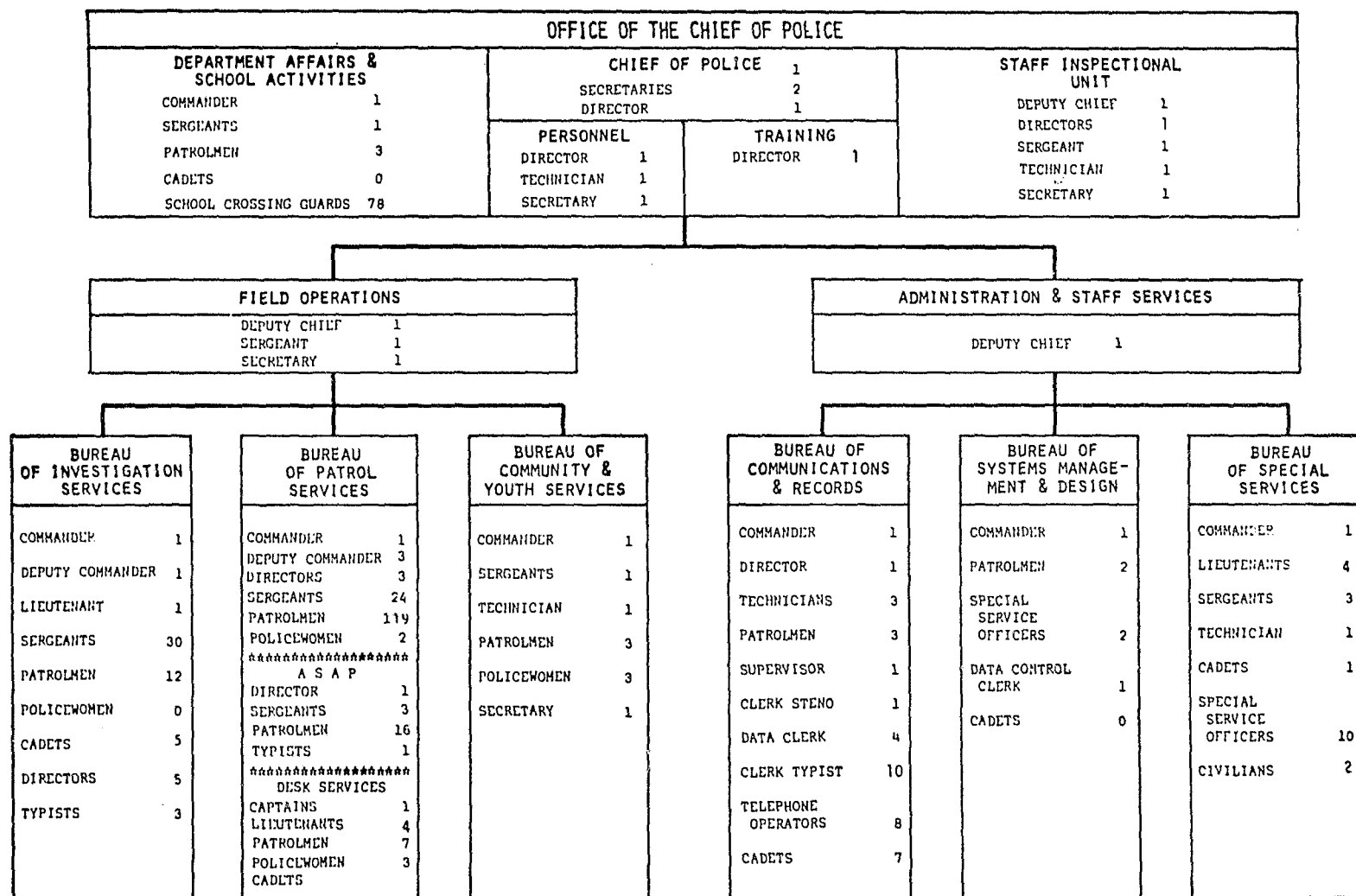


FIGURE 2-1
ORGANIZATION AND MANNING OF THE COLUMBUS, GEORGIA POLICE DEPARTMENT

5

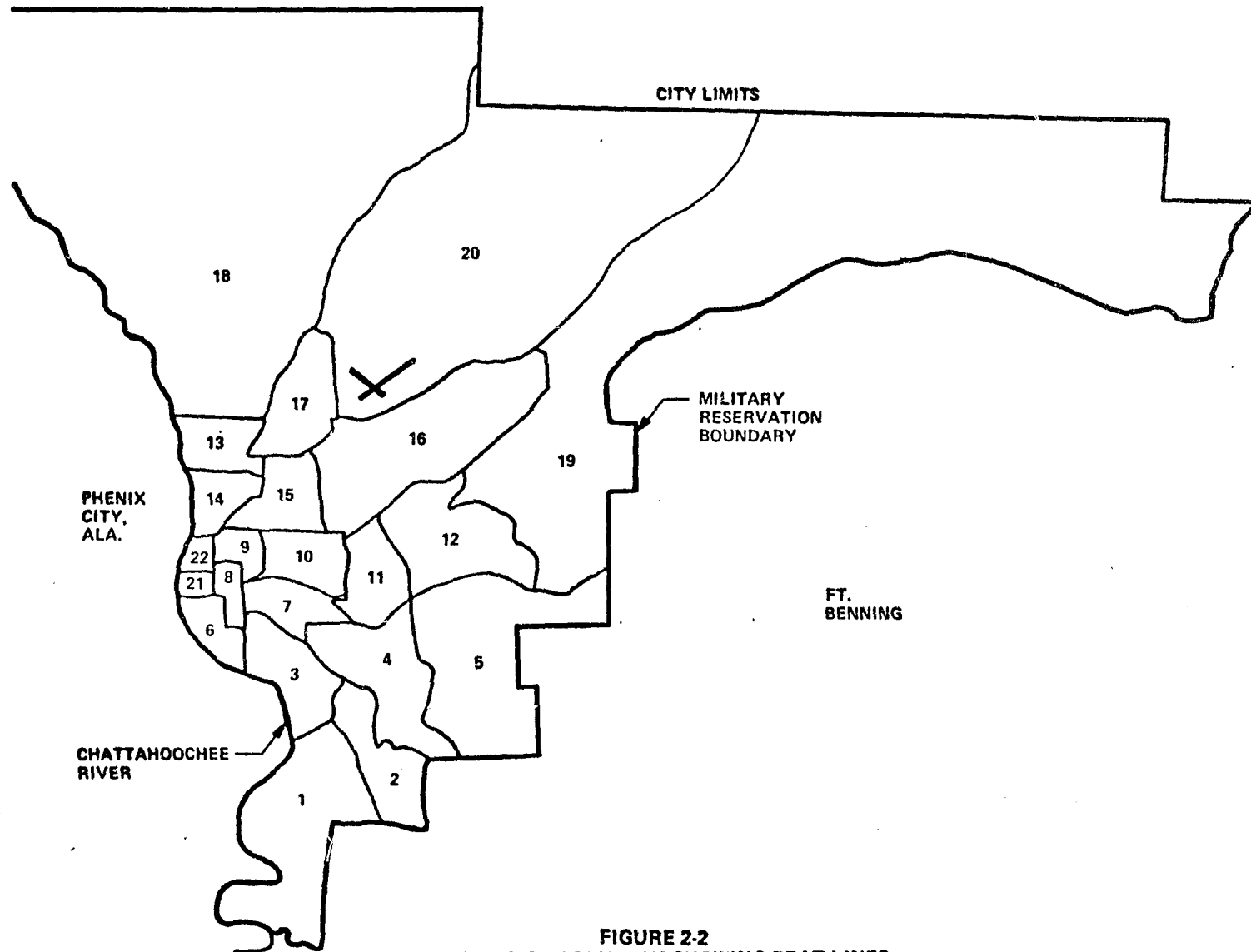


FIGURE 2-2
BASE MAP OF COLUMBUS SHOWING BEAT LINES

Each beat is manned 24 hours a day by a one-man patrol vehicle. Section Sergeants are responsible for 5-6 beats. Investigative and Identification personnel are provided to patrol services on an as-called and as-available basis.

The primary operational constraints on the department include shortage of manpower, budget limitations, and some severe problems in the areas of communications and dispatching which are currently being corrected.

SECTION III

COMMERCIAL ROBBERY QUANTIFIED

LOCAL DEFINITION OF ROBBERY

Without distinguishing between robbery of a person or business, the Criminal Code of Georgia, Title 26, Chapter 26-19, defines robbery and armed robbery as follows:

"Robbery -- A person commits robbery when, with intent to commit theft, he takes property of another from the person or the immediate presence of another (a) by use of force; or (b) by intimidation, by the use of threat or coercion, or by placing such person in fear of immediate serious bodily injury to himself or to another; or (c) by sudden snatching. A person convicted of robbery shall be punished by imprisonment for not less than one nor more than 20 years. (Acts 1968, pp. 1249, 1298.)

26-1902. Armed Robbery -- A person commits armed robbery when, with intent to commit a theft, he takes property of another from the person or the immediate presence of another by use of an offensive weapon. The offense robbery by intimidation shall be a lesser included offense in the offense of armed robbery. A person convicted of armed robbery shall be punished by death or imprisonment for life, or by imprisonment for not less than one year, nor more than 20 years".

COMMERCIAL ROBBERY DEFINED

Since legally there is no such offense, a definition of commercial robbery is required for this report. The definition used is all robbery and armed robbery in which a commercial business establishment is the victim. Further, commercial robbery excludes bank robbery, which tends to be a special case.

ROBBERY TRENDS

For reasons cited above, statistics regarding the occurrence of robbery and armed robbery offenses prior to 1 January 1971 are believed unreliable. Consequently, little can be said regarding the increase in robbery. In 1971, there were 164 reported robbery

and armed robbery offenses; in 1972, there were 215. As of 1 July 1973, 175 had been reported. These figures reflect annual increases of between 30-40%/year.

GENERAL CHARACTERISTICS OF COMMERCIAL ROBBERY

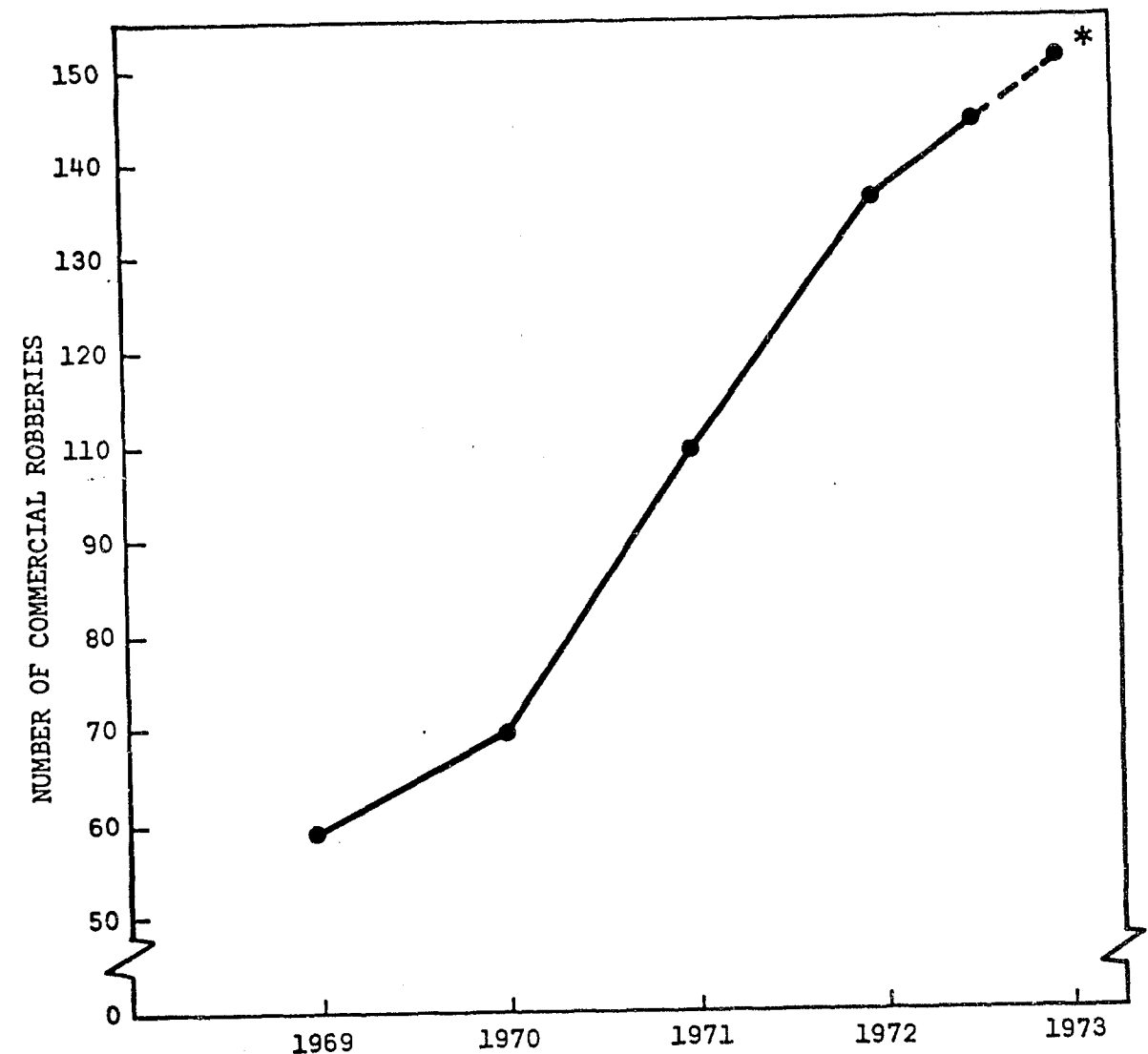
Commercial Robbery as a Proportion of all Robbery

Commercial robbery accounts for about 60% of all reported robbery. In 1971, there were 109 commercial robberies; in 1972, there were 137. Unfortunately, statistics prior to annexation and consolidation are not consistent with present reporting practices; however, the fact that commercial robbery is normally reported to police and that most commercial robbery occurs within what was the city limits prior to annexation, justifies the attempt to establish a trend. The trend is shown in Figure 3-1.

The Commercial Robbery Offender

In 1972, 47 suspects were arrested for commercial robbery. The following information is known about this group:

- Twelve were juveniles and 35 were adults (17 and over). Figure 3-2 shows the distribution of their ages.
- Criminal records of the 35 adult suspects were found. Cumulatively, they had been previously charged with 99 felonies, 57 misdemeanors, and 52 traffic offenses. Figure 3-3 shows the distribution of these charges for each specific offense.
- All suspects were males and 80% were black.
- Only five out of the group were charged with multiple robberies. This group accounted for a total of 21 commercial robberies during 1972 and previous years.
- At the time of arrest, the employment status of the 35 adult suspects was known: 18 were employed, 13 unemployed, and four were students. Four of the employed were soldiers.



* PROJECTED FROM FIRST HALF 1973 COMMERCIAL ROBBERIES

FIGURE 3-1
COMMERCIAL ROBBERY TREND SINCE 1969

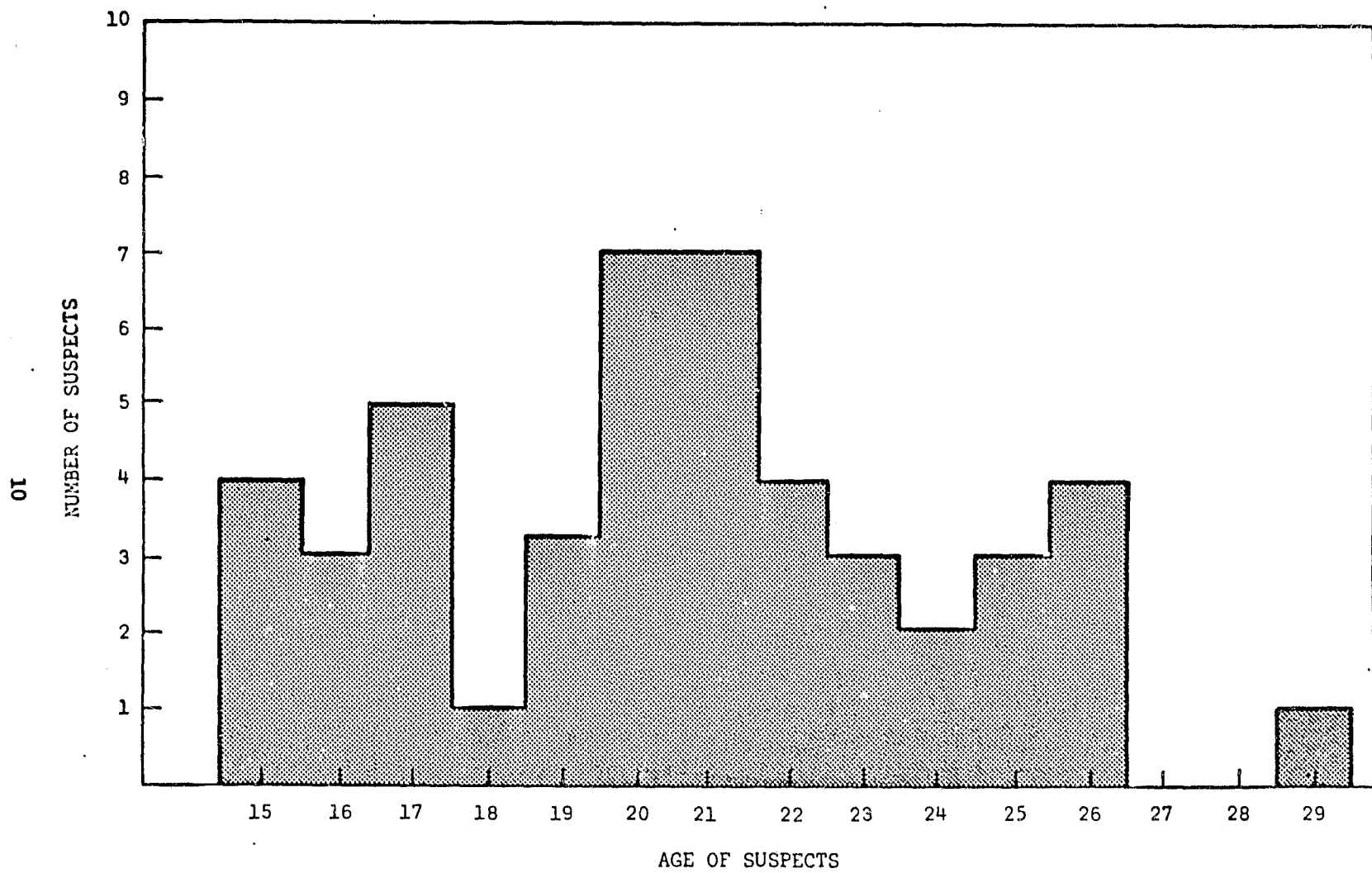


FIGURE 3-2
AGE DISTRIBUTION OF COMMERCIAL ROBBERY SUSPECTS (1972)

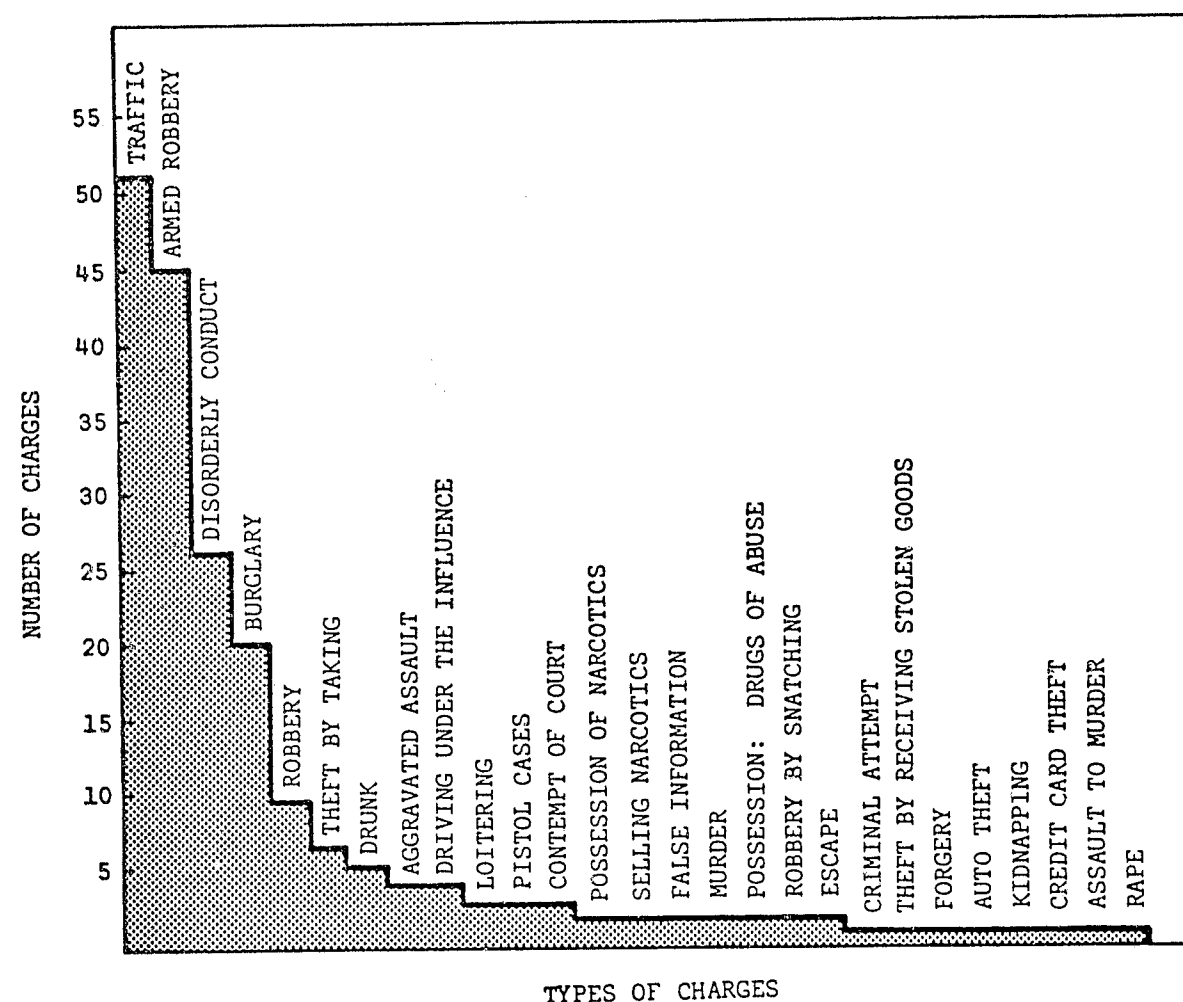


FIGURE 3-3
CUMULATIVE RECORD OF 35 ARMED ROBBERY SUSPECTS (1972)

Target Population

There are approximately 6,500 businesses in the City of Columbus and, theoretically, all are potential commercial robbery targets. However, the most popular targets for commercial robbery have been convenience food stores, service stations, and package liquor stores whose operating hours extend into prime hours for commercial robbery. These three types of business establishments comprise less than 5% of the total population, yet in 1971 and 1972 absorbed more than 72% of the commercial robbery offenses. Figure 3-4 shows the distribution of 1971 and 1972 commercial robbery offenses over various types of businesses. During 1972, 13 target businesses were robbed more than once. All of these businesses were convenience stores, package liquor stores, and service stations.

Location of Commercial Robbery

Figure 3-5 shows the geographical location of commercial robbery offenses for 1972 and first quarter of 1973. Obviously, commercial robbery is not homogeneously distributed among the beats. Commercial robbery appears to concentrate in the central business district, older portions of the city, and lower income residential/commercial sections of the city. One-third of the beats accounted for more than 2/3 of the business robbery offenses in 1972. As previously pointed out, beat lines are established on the basis of number of calls for service, the primary goal being equalized workloads for beat officers.

Time of Commercial Robbery

Several charts have been prepared from 1972 data which show the distribution of commercial robbery by time of day, day of the week, and month of the year. These are Figures 3-6 and 3-7.

Violence in Commercial Robbery

As compared with murder, forcible rape, street robbery, and aggravated assault, commercial robbery represents 31% of violent crime in Columbus.

During the 113 commercial robberies in 1972 for which offense reports were available, there were 19 injuries to business employees, robbery offenders, and a police officer. One robber was fatally injured by a shotgun blast fired by the owner of a package store he had just robbed; a police officer was shot in the face while apprehending a group of robbers attempting to escape by automobile. Two employees were shot with MACE and the remaining 15 received

TYPES OF BUSINESSES

CONVENIENCE STORE
 SERVICE STATION
 LIQUOR STORE
 SUPERMARKET
 RESTAURANT
 MOTEL
 CLEANER
 DRUG STORE
 SNACK BAR
 OTHER BUSINESS
 GARAGE
 OFFICES
 MOVIE THEATERS
 GENERAL STORES
 FLOWER SHOPS
 FINANCE COMPANIES

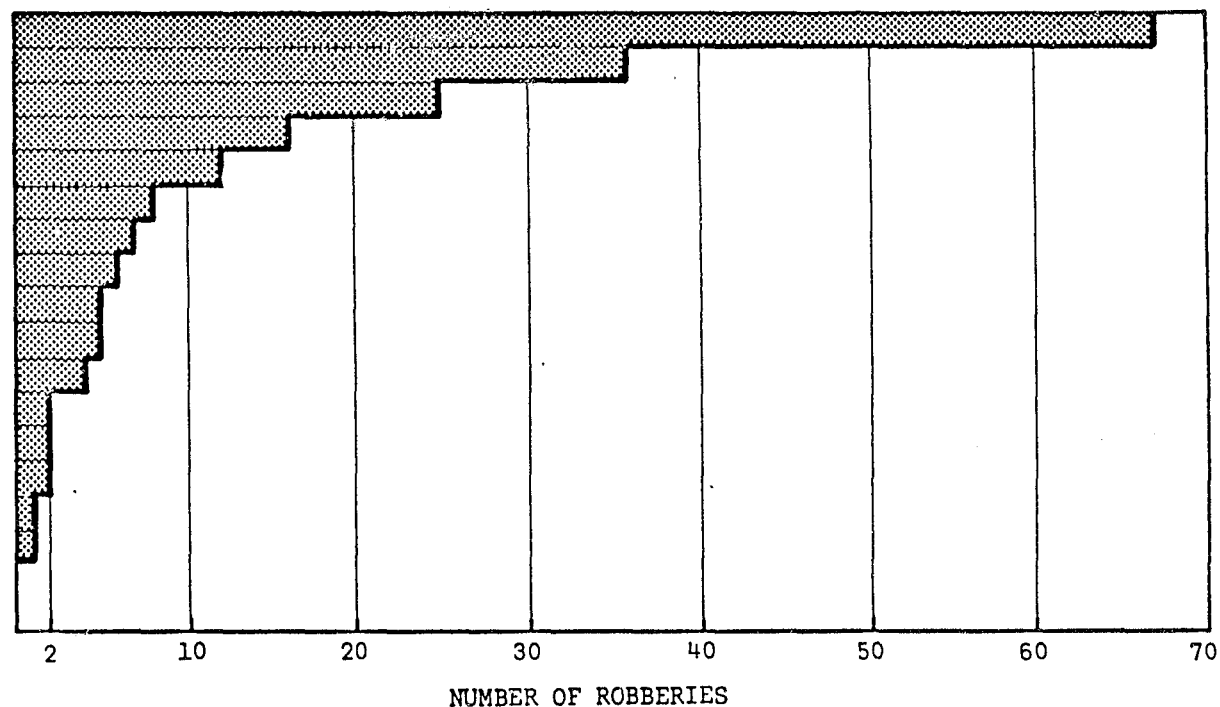


FIGURE 3-4
DISTRIBUTION OF COMMERCIAL ROBBERY BY TYPE OF BUSINESS
 (1971 & 1972)

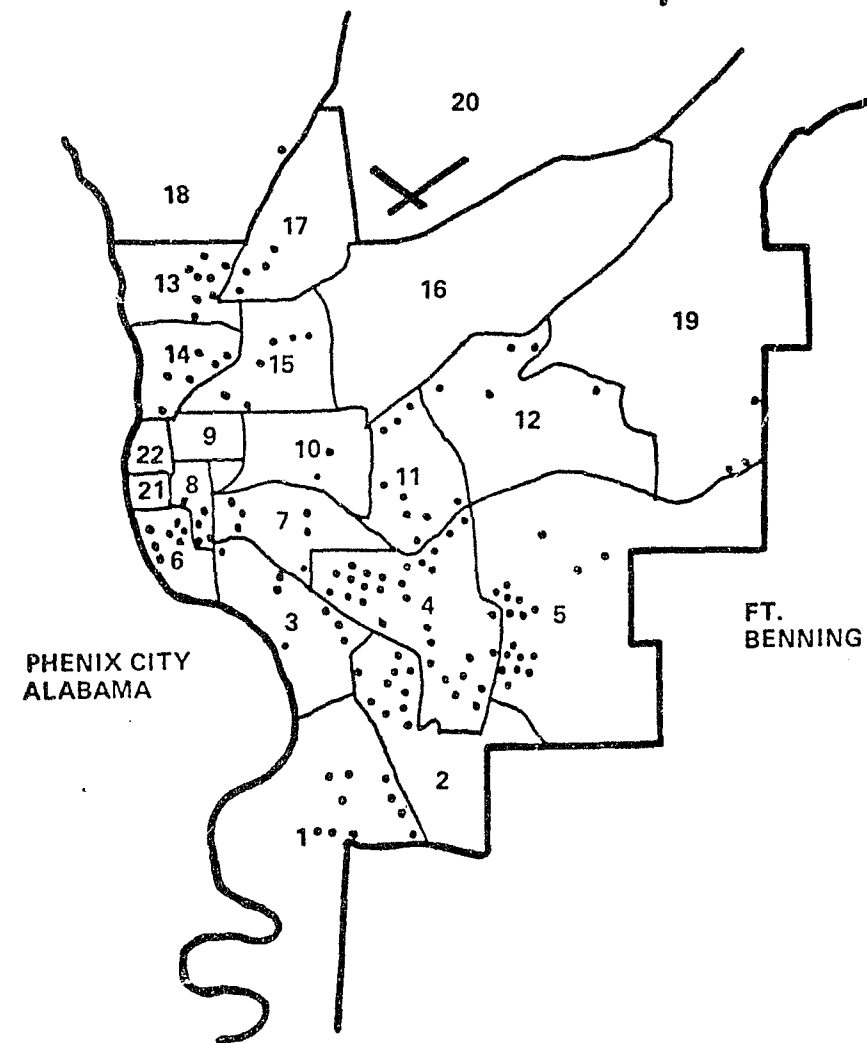
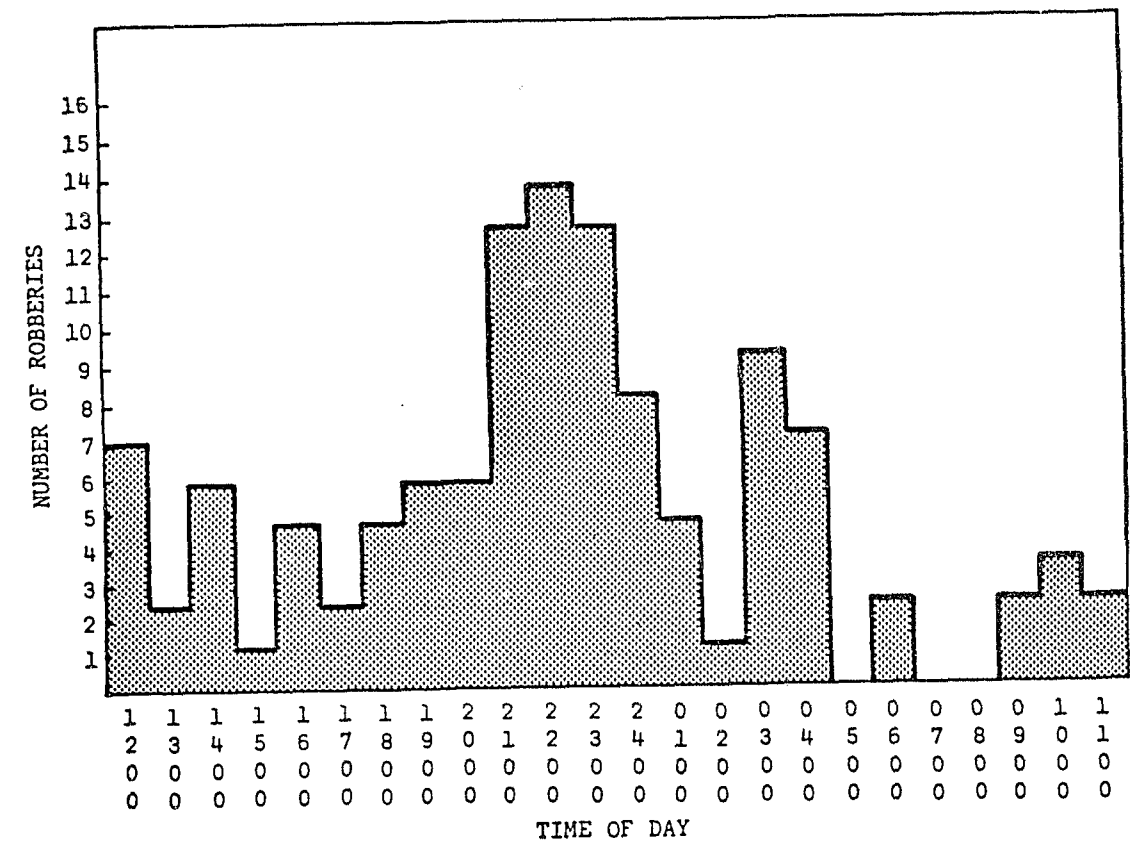
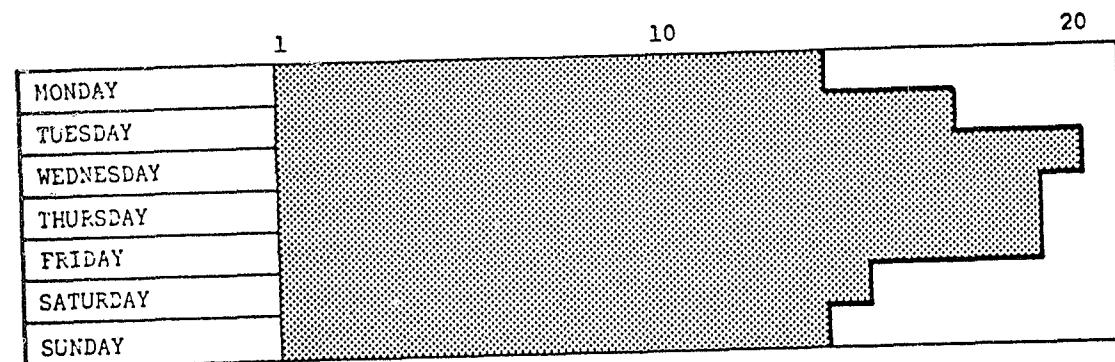


FIGURE 3-5
LOCATION OF 1972 & FIRST QUARTER 1973 COMMERCIAL ROBBERIES

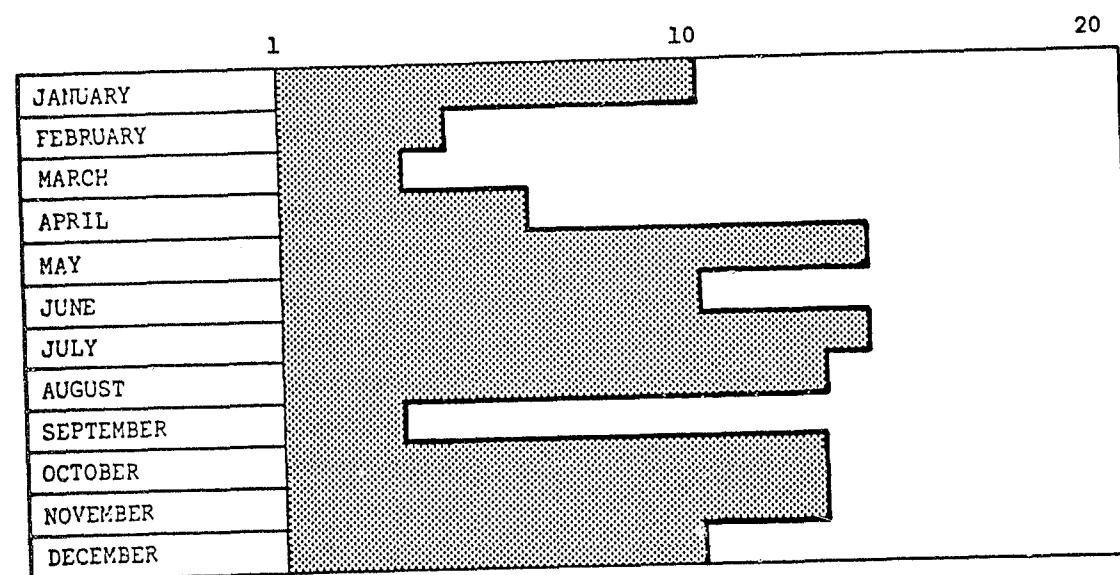


BASED ON 113 COMMERCIAL ROBBERIES CY 1972

FIGURE 3-6
COMMERCIAL ROBBERY RATE BY HOUR (1972)



NUMBER OF ROBBERIES



BASED ON 113 COMMERCIAL ROBBERIES CY 1972

FIGURE 3-7
COMMERCIAL ROBBERY RATE BY DAY AND MONTH (1972)

miscellaneous cuts and abrasions, most of which can be classified as head injuries. Most of these attacks were reported as unprovoked. Further, all 113 involved the use of weapons and, therefore, are classified as armed robbery. The distribution of different types of weapons used is as follows:

Pistol	79%
Shotgun	11%
Knife	5%
Rifle	3%

Loss of Property in Commercial Robbery

Commercial robbery accounts for only 1.7% of the value of property stolen in 1972. Considering the fact that only a portion of this property is permanently lost, commercial robbery accounts for 2.2% of permanently lost property. By way of contrast, residential burglary and non-residential burglary account for 24.4% and 11.3% of unrecovered property respectively.

In offense and supplemental reports of the 113 commercial robbery offenses in 1972, 86 contained estimates of the amount lost. The average amount lost in these robberies was \$268 (See Section VI, Page 27). Although robbers sometimes take property in addition to money, a discussion of this aspect of commercial robbery appears more appropriate to the paragraphs which discuss modus operandi in Section VII.

Impact on the Public

Review of offense reports establishes the fact that commercial robbery is almost always a stranger-to-stranger offense which involves a deadly weapon. Commercial robbery combines the characteristics of crimes with potential or actual violence with those of crimes against property. Further, it occurs in businesses which are frequented by a large proportion of the adult population. Commercial robberies are considered important by the press. Nearly all are reported in the newspapers and most are given film coverage on local television news programs. Finally, it is the most frequent of all stranger-to-stranger violent crimes. All of these factors combine to give commercial robbery an impact on the public which is probably surpassed only by occasional homicides and sporadic series of forcible rapes.

Impact on the Police

On 15 July 1973, the Columbus Enquirer, in an article on increase in crime in Columbus, reported:

"Police Chief Curtis E. McClung said he was concerned more with the increase in armed robberies than anything else."

Since commercial robbery, as compared with all serious crimes, rates high in terms of public impact, various groups through various means attempt to apply pressure on the Police Department. This usually occurs after a number of commercial robberies in a relatively short period of time. Consequently, the Chief of Police may find it necessary at his own initiative or desirable because of pressure, to periodically attempt short-term prevention and apprehension measures. Traditionally, the police have responded with a robbery stakeout. No records are available to show how frequently this has occurred, but present administrators estimate once every six months. Each stakeout lasts approximately two weeks and consumes about 480 man-hours of investigative services. The effectiveness of stakeout activities is discussed later in this report in Section VIII.

An interesting situation exists with regard to press coverage of FBI quarterly statistics. Apparently, local newspapers automatically receive quarterly Uniform Crime Reports approximately 90 days after the quarter has expired. For example, the 15 July 1973 newspaper article quoted above resulted from the paper receiving first quarter statistics. Consequently, a police response evoked by the press is likely to be somewhat artificial because of the time lapse between occurrences of the problem and public airing of the problem.

Under normal steady state conditions, the Field Services Division estimates an expenditure of 37,000 man-hours of investigative, patrol, and identification services per year for apprehension in commercial robbery. Assuming two stakeouts per year, 38,000 man-hours may be expended attempting to apprehend commercial robbers. This figure represents about 14% of the Field Services Division manpower resources. In sum, approximately 14% of the department's field services are expended on a crime which accounts for about 2% of the property stolen and 30% of violent crime in Columbus.

FINDINGS

- Commercial robbery can almost always be classified as stranger-to-stranger armed robbery.
- Commercial robbery is probably one of the most consistently reported crimes against property and violent crimes; it accounts for about 60% of reported robbery offenses, 30% of violent crimes, and only 22% of unrecovered property. The average loss in 1972 commercial robberies was \$268.
- The typical commercial robbery offender is male, black, and has a police record.
- About 1/2 of arrested offenders in 1972 were employed.
- An extremely small portion (5%) of the businesses in Columbus account for 72% of the commercial robberies; this portion consists of convenience stores, package liquor stores, and service stations.
- Two-thirds of the robberies occur on one-third of the beats.
- Peak activity times for commercial robbery are between 1800 and 0400 hours, Tuesday through Saturday.
- About 15% of the commercial robberies result in injury to the victim, police, or robber.
- Commercial robbery probably has an impact on the public which is exceeded only on occasion by murder and forcible rape; and
- Police expend approximately 14% of their field services resources on apprehension of commercial robbery suspects.

SECTION IV

MOTIVATIONS OF COMMERCIAL ROBBERY PARTICIPANTS

The following paragraphs discuss the motivations of commercial robbery offenders, target population and police. This information is not based on firm data in most cases, but represents the author's perception in interviews and in direct observations of the events of commercial robbery.

OFFENDER MOTIVATION

The commercial robber is apparently motivated by a dire need for cash. His choice of robbery as opposed to theft by taking, burglary, or legitimate employment is probably based on several factors. First, he may be motivated by a temporary requirement to support a drug habit to the extent that there is no hope of providing for his habit through legitimate employment. Second, the difficulties encountered in converting the fruits of burglary or theft to cash are not compatible with his needs or desires. Third, there is some evidence that there is an element of hero worship in the criminal community whereby an offender can, or thinks he can, gain status by performing criminal acts which involve substantial risk.

With regard to the first factor, some data were collected. The Narcotics Squad of the Columbus Police Department was asked to review a list of 1972 offenders and to identify from their records those offenders who could have been motivated to rob to support their drug habits. This exercise indicated that about 20% of the 1972 offenders fall into this category. However, in mid-March 1973, one of the largest drug and narcotics actions ever conducted in the Southeastern United States was begun in Columbus. Comparisons of the occurrences of all types of robbery for two periods of equal length in 1973 shows relatively little decline. From 1 January through 15 March 1973 there were 74 robberies; from 16 March through 30 May 1973 there were 61. Further, Figure 3-3 presented in Section III shows relatively few arrests for drug offenses accumulated by the group of 1972 suspects. Specifically, the group of 35 adult suspects cumulatively account for only six drug cases. The final data point could well be the most authoritative. In an interview with a defense attorney who specializes in narcotics and drug cases, he stated that in his judgment, 9 out of 10 armed robbery offenders are motivated by the need for cash to purchase drugs.

In sum, no firm conclusions can be drawn from these rather sparse and subjective data on the drug relatedness of the crime; however, most police adamantly adhere to the view that typically the robber is a drug offender. On the basis of findings reached in Section III regarding the amounts of cash taken in 1972 robberies, it can be stated that commercial robbery should be viewed as a supplemental source of income for the offender.

Specifically, if all commercial robbery offenders divided equally the total amount of cash stolen, each robber would have obtained \$.55 per day or \$200 in 1972. Even the most active multiple offender who, according to reports, accomplished at least six 1972 commercial robberies netted only about \$2,000.

TARGET POPULATION MOTIVATIONS

For most target businesses the principal policy related to robberies is to prevent violence which may occur during commercial robberies. In most businesses, the measures of prevention are strictly defensive, however, in owner-operated businesses where the property subject to loss belongs to the potential victim, occasional offensive events occur. These various measures are discussed in more detail in Section VIII.

The target population's motivation for robbery prevention can be explained in economic terms. The principal consideration is the increased risk to employees because of an offensive policy, and the employer would either have to pay higher wages or reduce his standards for applicants, a practice which increases property losses due to theft. The property loss in commercial robberies, as previously mentioned, is economically insignificant as compared with prospects of substantially increased payrolls. The convenience store is a good example. In the five major convenience store chains surveyed, employee wages account for about 80% of overhead. Employees of these stores are paid between \$1.60/hour (minimum wages) and \$1.80 per hour. Property losses during 1972 for all five of these chains totaled less than \$5,000. A \$.10/hour raise in wages for all 150 employees would surpass this figure in about 8 weeks.

Some owner/operators are motivated to protect their earnings during a robbery rather than minimizing the risk of violence. The expense and/or non-availability of crime coverage insurance may also contribute to this offensive motivation.

POLICE MOTIVATIONS

Several distinct motivations within the police are evident.* These result from a variety of sources including traditions, political pressures, measures of effectiveness used for different functional areas, evaluation and promotion policies, and attitudes of supervisors and administrators.

Patrolman

The patrolman is an important element in the commercial robbery picture. During his visible patrol activities, opportunities occur for robbery prevention and occasionally for apprehension of offenders. However, the existing systems and measures of performance do not consistently provide for sufficient individual recognition for prevention of crime. In addition, a patrolman, working in this traditional environment, does not receive feedback which reinforces successful preventative or repressive actions. Consequently, the majority of patrolmen appear to be oriented toward apprehension of commercial robbers.

Detective

Measures of effectiveness of the Bureau of Investigative Services has traditionally revolved around clearance of offenses. An offense may be cleared by arrest or by exception. An exceptional clearance usually results from a bargaining process whereby an arrested suspect is encouraged to admit previous offenses on the agreement that he will not be prosecuted for these previous offenses. In other cases, exceptional clearance may be taken when the victim is reluctant to participate in prosecution of the offender. Since his evaluation may depend on it, a detective is primarily concerned with clearance. Consequently, he may be less concerned with the preparation of sound cases required for the prosecution of an offender.

Police Administrators

Police administrators are motivated to prevent commercial robbery, to apprehend offenders, and to prepare sound cases for prosecutors. Pressure groups including businessmen's associations and fraternal groups continually vie for the attention of chief administrators. Public officials may exert pressure for prevention

*This discussion is based on the author's observations and interviews with police officers, a defense attorney, and former assistant U.S. Attorney now practicing law in Columbus.

of commercial robbery, especially as elections approach. The traditional attitude toward prevention sometimes prevails; that is, to prevent by apprehension, high clearance rates, sound case preparation, and, ultimately, temporary removal of the offender from society.

FINDINGS

- About 20% of the offenders may be motivated to rob to support their drug habits, according to a review of offender records by the Narcotics Squad. The general feeling by officers is that drug motivation is considerably higher than this.
- Commercial robbery appears to be a supplemental source of income for an offender.
- The primary motivation of most target businesses during robberies is the prevention of violence.
- Patrolmen appear to be motivated toward apprehension of commercial robbers rather than the prevention of robberies.
- A detective's motivation centers around clearance of cases. He may be less concerned with case preparation required for sound prosecution.
- Police administrators are motivated to prevent commercial robbery, to apprehend offenders, and to prepare sound cases for prosecutors; however, the traditional attitude toward prevention sometimes prevails (i.e., to prevent by apprehension, high clearance rates, sound case preparation, and temporary removal from society).

SECTION V

TARGET SELECTION AND ROBBERY PLANNING

Since, basically, convenience stores have been the most attractive target for robbery, a rigorous attempt to define the factors underlying a robber's target selection was attempted through a survey of five convenience store chains. The sample consisted of three chains of 27 stores which had experienced a relatively low robbery rate in 1972 (six offenses), and two comprising 20 stores with a relatively high robbery rate in 1972 (19 offenses). The second group averaged nearly one robbery per store in 1972. The data collected included information on store operating policy, hiring, wages, security measures, insurance, and physical facilities. Portions of this data are used in the paragraphs which follow and the remainder is used in Section XVI which discusses commercial robbery prevention measures.

TARGET SELECTION FACTORS

The factors which are apparently important to an offender in target selection are closely interrelated. It appears that the most common offender attempts to minimize his short-term risk through target selections which minimize the number of potential witnesses to the offense. The potential proceeds of the robbery are apparently relatively unimportant. The location and physical environment of the target may play an important role in the offender's selection process; however, this factor requires further study. The idea that employees provide information as to the best time and location for the offense was investigated, but will require further study. Each of the factors mentioned are discussed in more detail below.

Time for Robbery

The data suggest that one of the robbers' primary considerations is the time for commission. Historically, the convenience store, which operates either 24 hours a day or 7 a.m. to 11 p.m. (nominal) has been a prime target. Most of the 1972 commercial robberies occurred during hours of darkness which indicates the offender estimates greater chance of successful escape after dark. Although this argument may seem odd, it also appears that about half of the offenders may be busy during the day with legitimate employment.

Location and Physical Environment of the Robbery

Although there is little quantitative data, experienced officers contend that the commercial robber is not only a resident of Columbus, but is likely to reside in the immediate vicinity of his chosen target. More specifically, in the 35% of the robberies cleared by arrest, 70% of the offenders had a local address at the time of their arrest and most of these were within a 4-mile radius of the target. As previously mentioned, 1/3 of the beats accounted for 2/3 of the 1972 commercial robberies. These were beats 1,2,4,6,7,11 and 13; these beats are described in terms of the percentage of commercial vs. residential structures and the percentage of white vs. black residents in Appendix II. For the most part, commercial robberies have occurred in portions of the city which can be characterized as having a complex street system and rather confused zoning restrictions. Targets often have adjacent vacant property which is mostly wooded. However, these characteristics of target locations could be applied to several other portions of the city where commercial robbery has infrequently occurred. Further study of the physical environment and locations of popular targets will be required to fully understand these factors.

Number of Potential Witnesses

The sample of convenience stores accounted for 25 of the 1972 commercial robbery offenses. Only three robberies occurred in stores when two employees were present, even though 35% of the targets represented in the sample operate with two employees during the shift which corresponds to peak commercial robbery activity. The opinion expressed by numerous officers that the 24-hour store is a more attractive target is not borne out by the data. The proportions of 24-hour stores to 7 a.m. to 11 p.m. stores in the sample is 29% to 71%, whereas the corresponding proportions of robberies in 1972 was 21% to 79%. Several of the district managers who were interviewed felt that store volume was an important factor because high volume produces potential robbery witnesses. In addition, a store with low volume is likely to have only one employee. Further, the decision to remain open 24 hours a day is normally applied to locations with reasonably high volume, a condition which would also normally require two employees.

Intelligence From Employees

During an interview with an incarcerated offender, it was pointed out that a robber often solicits or receives information from an employee regarding target selection, best time for robbery, places where money is kept, weapons, etc. The offender cited several specific

incidents of this sort which were later confirmed by the police. In an attempt to shed some light on this conjecture, the names of employees of a sample of convenience stores were obtained from the district managers. This resulted in a sample of 151 employees. Upon checking these names against Recorder's Court records, it was shown that 77% had no record; the remaining 23% cumulatively had been convicted of 81 traffic violations, 16 city ordinances, and 5 felonies. This cumulative record for 36 employees appears significant; however, no unbiased baseline sample could be generated for comparison and no connection between employee police records and the historical robbery records for specific store chains is evident.

Employee turnover rates for the two chains, which averaged almost one robbery per store in 1972, were phenomenal. During the second quarter of 1973, employee turnover for these two chains averaged 70%. The district managers of the three chains which had experienced significantly lower robbery rates stated their employee rolls were relatively stable.

Another indication of employees providing information could be activities of the robber during the robbery. For example, the theft of unusual items (drugs or weapons) or taking money from hiding places could indicate employee involvement. However, the data collected to this point are not sufficient to draw conclusions regarding employee involvement. In sum, there are indications that employees may provide information to an offender but the data are insufficient to estimate how frequently this may occur. A paragraph on employee screening in Section VI provides additional insight/confusion regarding this factor.

Proceeds of the Robbery

As previously mentioned, the proceeds of 1972 robberies averaged \$268. This relatively low figure suggests that the magnitude of the proceeds of the robbery may be of lesser importance to the offender than other factors cited here.

ROBBERY PLANNING

Little information could be obtained regarding the activities of an offender during the planning of commercial robberies. It is suspected that the offender normally cases a target at some time prior to the execution of the robbery. Officers interviewed cite numerous incidents in which they suspect casing activities. Normally,

this activity is described as visual reconnaissance by a group of offenders in an automobile. The casing profile is recognized by multiple passes in front of businesses and possible entry to businesses by one or more of the group. Presumably, these activities are used to develop information regarding the expected number of potential witnesses, the presence of hold-up alarms and other physical security measures, and to look in the cash register drawer during a legitimate purchase.

There is also evidence that offenders sometimes look for police by cruising the immediate vicinity of the target. The stakeout teams for project CARES have experienced several incidents of this activity. Typically, the stakeout personnel locate themselves between two potential targets and attempt to place their vehicle in an inconspicuous location. On several occasions, they have been physically located by what appear to be deliberate reconnaissance actions.

FINDINGS

- The factors involved in an offender's target selection and robbery planning efforts are interrelated and complex, but appear to revolve about minimizing the number of potential witnesses to the actual robbery.
- Offenders apparently seek to minimize their risk on a piecemeal basis and give little consideration to the fact that proceeds of the robbery may be small.
- It is expected that physical environment and location of robbery targets is important to the offender.
- There is no conclusive evidence that offenders may receive information from employees of the target population.

SECTION VI

PREVENTION OF COMMERCIAL ROBBERY

Both the police and the target population itself are concerned with robbery prevention. The following paragraphs discuss the techniques and equipment which are used to counter the offender's perception of opportunity for commercial robbery.

TARGET POPULATION

The target population reacts to the commercial robbery situation in a variety of ways. In an attempt to quantify some of the more common reactions and countermeasures, surveys of convenience stores and immune targets (see Methodology, Appendix 1) were conducted.

Cash Limit Policy

An administrative technique to limit store losses or an offender's profits by imposing an upper threshold on the amount of money kept in the cash register is in wide use in the convenience store chains; all of the convenience store chains surveyed have such a cash policy. This policy is enforced by the district managers through inspections and by holding store managers responsible for amounts lost in robberies which exceed the established thresholds. Thresholds for the five convenience stores range from \$50 to \$100; two chains lower their thresholds by \$25 during evening hours. None of the convenience stores surveyed had a policy of withdrawing large amounts of cash for cashing payroll checks.

Reporting of Robbery Losses

As mentioned earlier, the average reported loss in 1972 commercial robberies was \$268. This figure could be misleading; during interviews with district managers of convenience stores, several pointed out that the amount of money lost in a robbery is consistently withheld from police records. The reasoning behind this policy is that since the press has access to police reports, newspaper accounts of substantial losses in robberies may encourage future robberies of similar businesses. Further, since the chains using this policy are self-insured (each store contributes \$25 - \$50 per month to an insurance fund) there is no insured-based requirement for police documentation of the amount lost.

Employee Screening

Typically, new employees of convenience stores are given pre-employment polygraph examinations. During these examinations employees are queried about police records, previous employment, and references. The stated purpose of these examinations is to identify persons who provide false information on employment applications; however, this technique is judged valuable in identifying and rejecting prospective employees who might provide robbery planning information to the criminal community or who might carry out a theft of store funds and attempt to disguise the theft through reporting a robbery which never occurred. Polygraph examinations cost \$25 - \$30. Some convenience store chains have their own security departments which provide this service; others contract for polygraph services, in some cases from a competing chain's security department.

Security Equipment

The most common type of security equipment used by convenience stores is the floor safe. This device is normally set in concrete in the general vicinity of the cash register(s). The floor safe is used to deposit all checks, money orders, and cash which exceeds the cash policy thresholds mentioned above. While practically all of the convenience stores surveyed had floor safes, only about half had the type with a slot for depositing funds without opening the safe. Thus, in about half of the stores, employees, out of necessity, are provided with means of opening the floor safe. Only one chain of eight stores has company policy against having the safe key in the store at times other than receipt collections times. Property losses were substantially lower in this chain, presumably because the employee/victim did not have access to the floor safe. Ironically, this chain had the highest robbery rate in 1972 as compared with the other chains. However, this chain is also the only one which consistently operates its stores with one employee.

Holdup or robbery alarms are not common in Columbus. Sixty percent of the convenience stores have local burglar alarms while only two of the 45 stores surveyed had any type of robbery alarm system. These two stores are operated by a particular chain of convenience stores which normally collocate stores with gasoline service stations owned by the same company. The robbery alarm device consists of a telephone buzzer device such as those commonly employed between a secretary's desk and her boss's desk. Thus, should a robbery occur, the service station attendant could be notified of the robbery and attempt to gain descriptive information of the robber(s) and/or vehicle used in the robbery. It is interesting to note that the police records show only one robbery of these stores in the past fourteen years.

Holdup alarms which operate in conjunction with silent burglar alarms are also infrequently used in Columbus. This is surprising, because of the nominal cost of additional holdup capability once a business is equipped with a silent burglar alarm. The owner of the alarm company which has installed most of the holdup alarms in Columbus stated that a one-time fee of \$15 is charged for adding holdup equipment to an existing silent burglar alarm system. By comparison, the basic silent burglar alarm system costs about \$35 for installation plus \$5 per 1/4 mile per month for leased telephone lines, plus a \$10 per month service charge. However, only 32 out of about 400 businesses (excepting banks) which have silent burglar alarm capability have added this \$15 holdup capability.

In an attempt to develop some quantification of the effectiveness of these holdup alarms, the robbery records of these 32 businesses were compared with those of businesses selected on criteria of the same type of business, similar geographic location, and approximately the same customer volume. (See Methodology, Appendix I.) The number of robberies and attempts for those businesses with holdup alarms is nearly equal to the number which occurred in the group of comparables. It appears that the holdup alarms presently in use are not effective in robbery prevention or apprehension. (See Section VIII.)

The survey of "immune" targets revealed sporadic use of armed guards, guard dogs, and drive-in window installation which allow night employees to serve customers from behind protective glass. These techniques are employed most often in package liquor stores which are owner-operated. However, one gasoline service station chain uses guard dogs at two locations. Since the targets selected for this survey have been essentially immune to robbery, these techniques are apparently effective.

Most businesses attempt to limit losses due to shoplifting by discouraging loitering. Some of the convenience stores pursue an active policy in this regard by actually posting signs which limit the number of youths in the store at one time. Several of the larger package liquor stores employ closed circuit television and one-way mirrors for surveillance. The larger department stores employ store detectives (often off-duty policemen) and in some cases advanced alarm systems which employ the principles of tagging merchandise in such a manner so that, if the tags are not removed, exit sensors will be activated.

POLICE

During the period when offenders perceive opportunities for robberies, the primary influence from the police is visible patrol. The frequent presence or passing of a patrol vehicle theoretically would influence negatively a robber's selection of that target. Convenience stores, package liquor stores, and service stations are frequently checked by beat patrolmen from their vehicles. The patrolman looks for clues which either satisfy him that everything is in order or arouse suspicion. The principal visual cue appears to be whether or not the store operator is in his normal position. If not, the patrolman normally makes a more thorough check either by hesitating momentarily until the operator appears, or by making a physical check of the business. Other cues useful in identifying robberies in progress are discussed in Section XIII, Execution of Commercial Robbery.

Occasionally, the police receive information regarding planned future robberies from informers. In addition, some information is received from undercover law enforcement officers working on other criminal activities. In one recent incident, the Columbus Police received information from an informer regarding a planned robbery of the Columbus Airport. Approximately five man-months of police service were expended as a result of this information--the robbery did not occur.

FINDINGS

- Cash limit policies and "unbreakable" floor safes are in wide use and are the principal robbery prevention measures of the target population. These measures have reduced the amount of property loss, but they do not appear to have reduced the number of robberies.
- Actual robbery losses may be withheld from the police in order to avoid publicity of large cash losses.
- Holdup alarms are not in wide use in Columbus; those which exist have not been effective as robbery prevention measures.
- Sixty percent of the convenience stores surveyed had local burglar alarms.
- Physical security measures such as armed guards and guard dogs are not widespread but are apparently effective for the few owner-operated businesses which employ them.

- Employee screening using polygraph examinations is common among convenience stores.
- Visible patrol is the primary tool used by police for robbery prevention.
- On occasion information regarding a planned robbery is received by police.

SECTION VII

EXECUTION OF COMMERCIAL ROBBERY

GENERAL

Most commercial robberies (91%) were carried out by either one or two offenders. The average was 1.7, the mode 2, and the range 1-4. In about half of the cases, it is known that the offender(s) arrived at and escaped from the scene in an automobile.

Several data points regarding the actions of offenders immediately before, during, and after the robbery were collected from 1972 and first half of 1973 robbery records. The following paragraphs represent the profile of commercial robbery execution.

BEFORE ROBBERY

- In half of the robberies an offender purchased some item before the robbery. Common items were soft drinks, cigarettes, and alcoholic beverages.
- In about 60% of the robberies, the offender(s) loitered before the robbery. There appears to be a period of indecisiveness in these cases. Many times one of the robbers enters the business, exits, returns several minutes later and executes the robbery, either alone or with another who was waiting outside. Quite frequently the robber will manufacture an excuse to go outside and return e.g., after asking the price of a bottle of liquor he announces his intentions to return to his car because he doesn't have enough money, returns, probably after having looked outside for police and arriving customers and executes the robbery. This type of modus operandi is common in package liquor store robberies.
- In 21% of the 1972 business robberies the robber(s) "disposed" of the employee/victim(s) by direct action before the robbery. In 43% of these cases the employee/victim(s) was made to lie down on the floor; 33% of the time he was taken to another room and ordered to stay there (sometimes the robber specifies how long he is to stay there); and 10% of the time the victim is taken to another room and tied up. In

the remainder of robberies miscellaneous means of detaining the victim were used, e.g., locking in walk-in freezers and refrigerators.

DURING ROBBERY

- . Forty percent of the robberies were executed immediately and did not involve a purchase or loitering. In these cases the victim/employee was most often left as he was or made to lie down on the floor. Only two robbers in this category took the time to detain the victim/employee physically by tying or locking him up.
- . Items other than money, checks, and money orders taken during robberies were quite numerous. This action was taken in about 30% of the 1972 commercial robberies. The most popular items were pistols and wallets. Other items frequently taken include watches, portable radios, cigarettes, and food stamps.
- . Except for the 21% of robberies where the victim/employee was "disposed" of before the robbery, employee/victims were ordered by the robber to supply a paper bag and to put the money in the bag.

AFTER ROBBERY

- . Surprisingly, more robbers took the time to "dispose" of employee/victims after obtaining the money (25%) than before (21%).
- . Little other data are available on the actions of robbers after the robbery. As mentioned above, at least half of the robbers escaped in vehicles. Some of these vehicles are stolen and abandoned shortly after the robbery along with disguises and items such as checks, large amounts of small change, and containers used to carry the money.

FINDINGS

- . Before the robbery there are some common modi operandi of commercial robbery offenders:
 - 50% purchased
 - 60% loitered
 - some returned to car for money
 - specific locations for "disposal" of victims and witnesses.

- . About 40% of the robberies were executed immediately without loitering; usually the victim was either made to lie down on the floor or left as he was.
- . Small valuable items were taken in 30% of the commercial robberies.
- . 79% of the time, the employee/victim was ordered to supply a container (usually a paper bag) and to put the money in this container.
- . In 25% of the robberies, the offender(s) "disposed" of victim/employee(s) after the robbery, using specific techniques.
- . At least 50% of the robberies involved the use of an automobile.

SECTION VIII

VICTIM, EMPLOYEE(S), AND POLICE RESPONSE TO COMMERCIAL ROBBERY

VICTIM/EMPLOYEE(S)

As mentioned in Section V, most of the target population instruct their employees to cooperate fully with offenders during a robbery, in order to avoid violence. Of the 16 attacks on employees, all but three were reported as unprovoked attacks by the victims. The remaining three were provoked by owner-operators of the businesses robbed.

In almost all cases of commercial robbery which were examined, the first report to the police was received by telephone after the robber(s) had left the business. As stated above, the victim/employee may be physically detained in some manner or hesitant because of threats made by the robber. Although data are not available to quantify the time taken to report commercial robbery, it is estimated to average 5-6 minutes.

Witnesses and victim/employees, having been subjected to violence or threats, are typically confused, and in a state of shock

The subject of holdup or robbery alarms was mentioned in Section VI. Ideally, employee/victim actions during the robbery of businesses equipped with such devices would include actuation of the holdup alarms. However, in the 13 robberies which have occurred since the 32 holdup alarms were installed, 10 times the alarm was not actuated at all! The other three robberies accounted for one actuation during the robbery, one after, and one malfunction. In an interview with the owner of the alarm company which had installed these alarms, it was found that the sensors consist primarily of a panic button located under a counter or on the floor. In a few cases a last bill cash register sensor is used. In the two cases where the alarm was actuated, it was subjectively determined that the alarm had not contributed to the apprehension of the robber(s).

POLICE

Activities of the police in Columbus immediately before, during, and after the execution of commercial robbery are discussed in the following paragraphs. Both conventional and specialized procedures have been used and are being developed by the Columbus Police Department. Therefore, the police response discussed below is limited to present practices and techniques.

PATROL

The patrol beatman is usually first at the scene of an armed robbery. The beatman's sergeant normally automatically responds to a robbery call. Historically, response time has been more than adequate for the robbers to escape from the immediate vicinity of the robbery. In 1972 total response time (time from actual occurrence to arrival of first officer at the scene) averaged slightly less than 10 minutes. The police contribution to total response time is estimated at 3-4 minutes, the remainder being consumed by the victim/employee(s). This police contribution can be further broken down into the times consumed by the telephone operator and dispatcher, and the patrol car's travel time to the business. Telephone operator and dispatcher procedures are currently being revised and standardized. During the time most of the data were collected on commercial robbery, individuals occupying these positions have exercised considerable individual initiative. This situation has resulted in various anomalies in the handling of armed robbery calls. One anomaly which has frequently occurred involves attempts to obtain initial non-essential information prior to dispatching the patrol unit. In the near future, standard procedures will provide for:

- When a robbery call is received, the telephone operator will determine if the call is in fact a robbery and if so will connect the dispatcher by telephone.
- The dispatcher will determine prior to dispatching a patrol unit:
 - (1) The exact location of the robbery,
 - (2) Status, i.e., in progress, concluded,
 - (3) Whether robbers are armed, and
 - (4) How many offenders.
- Dispatcher will dispatch the primary and back-up units.
- Keeping the line open, the dispatcher will obtain additional information for supplemental broadcast.

Travel time of the primary patrol unit is a function of the physical environment and beat structure. Roadways of the city where most commercial robberies have occurred consist of two lane streets of complex design.

Upon arriving at the scene, the following actions are taken:

- . Render first aid and call for ambulance or rescue squad if necessary;
- . Obtain descriptions of offender(s) and vehicle (if any) for broadcast;
- . Call for detective and identification technician and protect the scene.

After broadcast of the descriptions, patrol units from adjacent beats participate in the search. Visual clues include descriptive information received in the broadcast in addition to flagrant traffic violations which may be committed by robbers fleeing the scene. In addition, the department's helicopter normally responds to the scene and conducts an aerial search using a spiral flight pattern centered around the robbery scene. Patrol units including the helicopter look for an automobile which may have been abandoned on a side street near the scene. Depending on the circumstances, this search may continue for as long as an hour before patrol units from adjacent beats return to preventative patrol duties on their respective beats. During this time, however, emergency calls may be assigned to searching patrol units.

Should a suspect or group of suspects be apprehended within a "short" period of time, they will be returned to the scene for identification by the victim(s). In Columbus, a "short" period has meant within an hour of the actual robbery, although local court precedents for this rule are not available. If suspects are apprehended more than one hour after the robbery, identification of suspects is carried out either by a line-up or photographic line-up.

Detectives

The detective sergeant assigned the robbery call is normally in charge of the investigation. As such, he coordinates the activities of the patrolman and identification technicians, interviews in depth the victims and any witnesses, and compiles the robbery offense report. Standard investigative techniques are used.

Identification Technician

Depending on the circumstances, the identification technician may photograph the scene and collect any physical evidence which may lead to identifying or eliminating suspects. Standard identification techniques are used.

Robbery Stakeout

The conventional robbery stakeout has been used on the average of twice a year by the Detective Division. Likely targets are selected on the basis of informer information or recent historical data. The robbery stakeout, usually two detectives in an unmarked but obvious police car, will watch one or two robbery targets during peak robbery hours. Robber profile cues such as loitering, automobiles parked in unusual ways and left running, multiple entries to and exits from the business, etc., are used to determine the actual occurrence of a robbery. Usually the employee or proprietor is asked to flash the interior lights of the business immediately after a robbery. This stakeout technique has not met with success. A conventional robbery stakeout was operated for a two week period in February, 1973. During this period, no commercial robberies were reported in Columbus. On the first evening after the stakeout was removed, there were three commercial robberies of convenience stores.

FINDINGS

- . Unprovoked violence occurred in about 15% of the commercial robberies in 1972.
- . Robbery calls to the police are usually received by telephone after the robbery has occurred. Significant reporting delays are apparent because of threats by the offenders or physical "disposal" of victim/employee(s).
- . Holdup alarms as presently installed in Columbus are rarely actuated and have not had an impact on total response time to commercial robberies.
- . The beatman is normally first on the scene. His priority tasks are (1) render first aid if required (2) broadcast description(s), and protect the scene.
- . The conventional robbery stakeout appears to temporarily prevent commercial robberies but has not resulted in any apprehensions.

SECTION IX

PROCESSING OF SUSPECTS

GENERAL

The following paragraphs discuss activities of the police in commercial robbery clearance, the prosecution of suspects, and the sentencing of offenders. Figure 9-1 summarizes the processing and disposition of 1972 commercial robbery suspects.

POLICE CLEARANCE

As mentioned in Section V, clearance of offenses is the primary motivation of the Bureau of Investigative Services. For the past several years, Columbus Police Department clearance rates for all robbery have been significantly higher than the national average. It is not known whether the same statement can be made with regard to commercial robbery. Clearance of commercial robberies may be either exceptional or by arrest. In 1972, 40 of 113 or about 33% of the commercial robberies were cleared. Only three exceptional clearances were taken in 1972. In two of these cases, the witness could or would not identify the suspect; in the third case, the witness had moved from Columbus and could not be located. The remaining 37 were cleared by arrest and either resulted in prosecution or dismissal.

There appear to be two important steps which must be accomplished in clearance of commercial robbery: (1) the naming of the suspect, and (2) identification of the suspect.

Naming the Suspect

The primary method by which a suspect or suspects were named in the cleared 1972 commercial robberies is shown in Table I. Several points should be made about this chart. First, methods shown in the table are not mutually exclusive and, therefore, a combination of these methods could have been used for naming an offender or group of offenders. The table records the frequency of the primary method which ultimately led to the naming of a suspect. Second, the method "arrested after robbery for another offense" is of interest since it was the most common. Most of these cases have resulted from attempts to associate a suspect in custody with

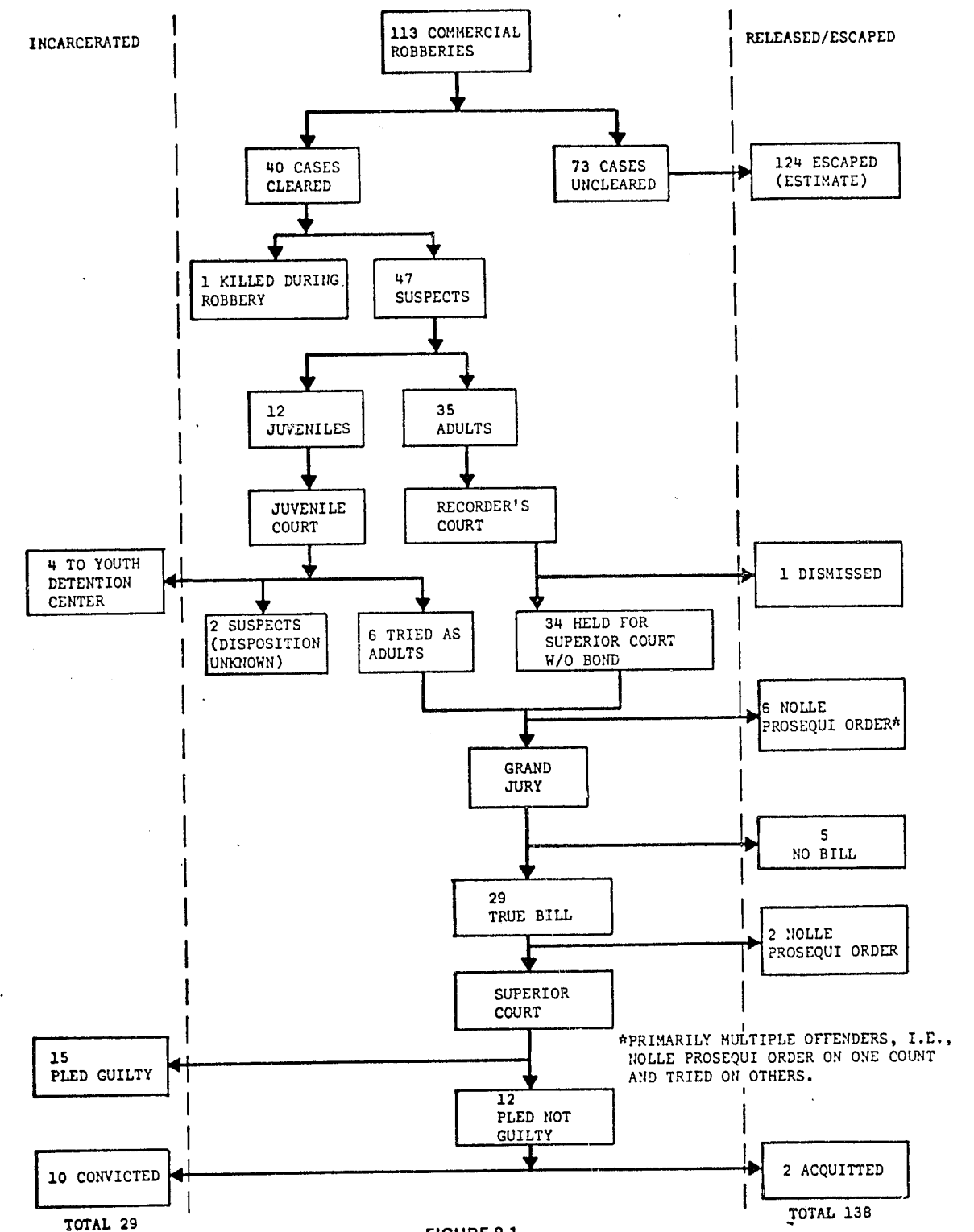


FIGURE 9-1
PROCESSING AND DISPOSITION OF 1972
COMMERCIAL ROBBERY SUSPECTS

previous robberies. Third, it is interesting to note that there were no cases in which the police apprehended the suspect on the scene. Further, fingerprints did not contribute to the naming of any 1972 commercial robbery suspects.

Identification of Suspect

Table II shows the primary methods used by police for witness/victim identification of 1972 suspects. The fact that in only two cases suspects were returned to the scene of the robbery for identification appears to contradict some of the figures in Table I regarding near scene arrests and arrests resulting from past robbery searches. However, the procedure of returning suspects to the scene within a "reasonable" amount of time after the offense was not fully implemented until mid-1972.

The use of physical evidence to confirm identification is rare. Although the number of times all types of physical evidence was obtained and used in 1972 offenses is not known. It is known that fingerprints were used in only two cases.

JUVENILE COURT

Twelve juveniles suspected of armed robbery of businesses were apprehended by police and turned over to juvenile case workers. The Juvenile Court Judge decides on the basis of previous records of the juvenile and on the case worker's recommendation whether the suspect is to be tried as an adult in Superior Court. Of the twelve suspects processed by juvenile authorities, six were referred to adult authorities, four were incarcerated by Juvenile Court, and records of the remaining two could not be found.

PRELIMINARY HEARING

After the naming, apprehension, arrest, and booking of suspects, a preliminary hearing is held in Recorder's Court, usually the day following arrest. In the case of the 1972 suspects almost all suspects (34) were held for Superior Court without bond. The case against one suspect was dismissed because the offender had worn a nylon stocking over his head and victim identification was not positive in the opinion of the Judge.

TABLE I

METHODS OF NAMING OF SUSPECTS AND FREQUENCY OF OCCURRENCE FOR 1972
COMMERCIAL ROBBERIES CLEARED BY ARREST

METHOD	FREQUENCY
Arrested after Robbery for Another Offense	17
Patrol Search After Robbery	5
Informer Named Suspect	5
Near Scene Arrest by Patrol (within 1-2 Blocks) . .	4
Routine Patrol/Field Interview Evoked by Suspicious Actions	3
Recognized by Employee/Victim at Another Time and Place	2
Picked from Mug Shot Book by Victim or Witness . .	2
Gave Himself Up	1
Offensive Action of Proprietor (Robber Fatal). . .	1

TABLE II

METHODS AND FREQUENCY OF WITNESS/VICTIM IDENTIFICATION OF SUSPECTS
(COMMERCIAL ROBBERY 1972)

METHOD	FREQUENCY
Lineup	23
Photograph	7
Returned to Scene.	3
* Unknown	4

* Reports do not reflect method of identification by witness.

INDICTMENT

The average time from preliminary hearing until indictment of commercial robbery suspects was 59 days in 1972.

The Grand Jury gave no bill indictments on eleven suspects and true bill indictments on 29 suspects. The no bill indictments are of particular interest to this study. The District Attorney's recommendation to try or not try a particular suspect is normally followed during Grand Jury proceedings. The decision to recommend no bill in almost all eleven of these cases revolved around the question of absolute identification of the suspect by the victim or witness. The specific reasons for no bill recommendations include faulty line-up procedures, and witness identification was not absolute. Unfortunately, specific causes for each of the eleven no bills were not determined because the various prosecutors were not available at the time interviews were requested. However, it is known that most of the no bills revolved about the problem of absolute identification of the suspects. Further, the District Attorney's office maintains that most resulted from line-up procedures which were subject to question.

SUPERIOR COURT

The average time from indictment to trial of commercial robbery offenders was 28 days in 1972.

In Superior Court 15 defendants pled guilty and 12 pled not guilty. In all cases where a guilty plea was entered, the defendant was convicted of the original charge - "armed robbery." These offenders received sentences which ranged from three years to 20 years and averaged 10.3 years. The ten defendants who pled not guilty and were convicted also were consistently convicted of the original charge of armed robbery and received sentences which ranged from three years to 20 years and averaged 6.9 years. The extent of plea bargaining appears to be limited to multiple offenders. Bargains for guilty pleas in return for concurrent sentences for multiple armed robbery offenses is the most common. Five of the 15 defendants who pled guilty were multiple offenders. Cumulatively, this group was convicted of 21 counts of armed robbery. In the cases of multiple offenders, concurrent sentences ranging from 12 to 20 years for each count were applied.

FINDINGS

- . Most frequently, the process of naming a commercial robbery suspect occurs through the suspect's arrest for another offense; other common methods include patrol search and near scene arrests and informer naming of suspects. (See Table I).
- . The most common method of witness/victim identification of suspects is the line-up. Other methods include the photographic line-up, and returning a suspect to the scene. (See Table II).
- . Commercial robbery cases cleared in 1972 amounted to about 33% of the total offenses.
- . No bill indictments were given by the Grand Jury in eleven of the 34 cases bound to Superior Court. The primary reason for this action, as stated by the District Attorney's office, was faulty line-up procedures.
- . Fifteen of the 29 defendants tried pled guilty and received sentences which ranged from three to 20 years and averaged 10.3 years.
- . Twelve defendants pled not guilty, two were acquitted, and ten convicted with sentences ranging from three to 20 years and averaging 6.9 years.
- . Plea bargaining processes are most common in cases involving multiple armed robbery offenses. Apparently concurrent sentences are traded for guilty pleas.

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LGG:nm

APPENDIX I

PROBLEM STATEMENTS AND SUGGESTED SOLUTIONS

This appendix presents some equipment-related problems, which were formulated in the course of the author's research. The problems are presented first in an abstract, and then individually in the form of brief problem statements with suggested solutions.

No priority is implied by the order in which the problems appear.

ABSTRACT

PROBLEM

SOLUTION

CLEA 002

Predictions of likely targets of armed robberies are lacking because of shortage of crime analysis personnel.

CLEA 002

(a) automated crime analysis
(b) use of aerial photography would aid analysis.

CLEA 003

Victims of commercial robberies not prepared to deal with the situation.

CLEA 003

A continuous training program on how to deal best with robbery for new employees of robbery-prone businesses.

CLEA 004

Inability of police to find people who meet the description of a suspect so that they can be compared with him in a lineup makes the lineup subject to attack by the defense during a trial.

CLEA 004

(a) Keep on hand materials which will alter the appearance of volunteers for lineups, or overlays which will alter the appearance of mugshots.
(b) Keep a video tape recordings file to substitute for lineup.

CLEA 005

Time required for the transcription of witness testimony contributes to the problem of uncooperative witnesses.

CLEA 005

Allowing the witness to tape-record his testimony and swear at the end to its authenticity on tape would eliminate some waiting time.

CLEA 006

Unmarked police cars are recognized despite attempts to disguise them.

CLEA 006

(a) applique kits
(b) soluble paints
(c) reduced fees from rental dealers.

CLEA 007

Patrol search for commercial robbers after they have left the scene is not systematic.

CLEA 007

Search should be directed by a trained dispatcher using search theory.

CLEA 008

Myths about the utility of fingerprints in identifying offenders make juries suspicious of a case which does not include any fingerprint evidence.

CLEA 008

A device which would determine whether any latent prints exist on a given surface so that juries can be reassured where no prints at all exist.

CLEA 009

Means of reporting commercial robberies while in progress or immediately after their occurrence is expensive, unreliable, rarely used.

CLEA 009

(a) Wireless sensors
(b) A system of screening out false alarms
(c) Sensors which can be inconspicuously activated
(d) Sensor monitors which can pinpoint which sensor is sending an alarm
(e) Develop an alarm which can carry a dual message; i.e., robbery or burglary.

CLEA 010

Witnesses to commercial robbery are few.

CLEA 010

(a) A neighborhood alarm system to alert nearby shopkeepers and patrons to notice offenders and their vehicles.
(b) Encourage patronage in shops by offering bargains and removing bars to loitering.

CLEA 011

Reduce incentive for robbery by making cash unavailable.

CLEA 011

An automatic change-making cash register, which cannot be opened.

CLEA 012

Difficult to identify suspects if they have left scene of crime.

CLEA 012

Hamper or mark offender with tagging device or tear gas attached to small valuable item available near cash register.

CLEA 013

False information from an informer results in waste of police resources.

CLEA 013

Voice stress analysis test for informers.

CLEA 014

Recitation of events by the victim at the trial does not convey the brutality of the experience.

CLEA 014

A sensitive and inexpensive videotaping machine activated simultaneously with the alarm.

CLEA 015

Trials take place 60-90 days after crime event. Testimony taken nearer the time of the event is likely to be more accurate than remembrance.

CLEA 015

Videotaping equipment for recording and reviewing witness statements immediately after crime.

CLEA 016

Officers are called upon to provide impromptu testimony on events which may have occurred months before.

CLEA 017

Officer's many duties prevent him from protecting physical evidence at crime scene.

CLEA 018

Vehicles of the same description as ones used in a robbery are sometimes confiscated in error.

CLEA 019

Officers place more emphasis on apprehension than on prevention.

CLEA 020

Stakeouts produce few results and constitute boring assignments.

CLEA 021

Taking of statements from witnesses at the scene of the crime hindered by the activities of others.

CLEA 022

Officers arriving in response to an alarm in the course of a robbery expose themselves and victims to danger.

CLEA 016

A machine which simulates a testimonial situation takes the officer's testimony soon after the crime event and makes a tape which can later be reviewed.

CLEA 017

Adhesive string could be used to mark off sensitive area.

CLEA 018

Physical evidence in or about car (e.g., temperature of vehicle's coolant and tires) may indicate whether it could have been used in robbery a short time previously.

CLEA 019

Further training.

CLEA 020

(a) Silent alarms
(b) listen-in equipment
(c) night surveillance equipment
(d) night vision equipment to alleviate boredom of officers on stakeouts.

CLEA 021

A mobile van equipped like a detective's office to afford some privacy.

CLEA 022

Body armor for officers and situational information offered while police car is en route to crime scene.

AUTHOR: L. G. Gunn

ID NUMBER: CLEA 002

DATE: 31 July 1973

SOURCE: Commercial Robbery
Independent Analysis Report
ESIP Field Site
Columbus, Georgia

TITLE: Prediction of Commercial Robbery Targets

PROBLEM STATEMENT

Police have not actively pursued techniques for predicting likely commercial robbery targets primarily because of manpower shortages.

DISCUSSION

Although the findings of this report cite numerous patterns regarding the location, type of business, number of employees, etc., which could provide the basis for predictive models, the non-availability of crime analysis personnel has forced reliance on experience and intuition. An inexpensive automated capability for crime analysis appears to be an operationally feasible solution to this problem. Further, an analogue law enforcement application may be found in study of the techniques and equipment used in military photo intelligence targeting wherein physical and environmental characteristics are used to predict probable enemy use and occupation of a particular target. Aerial photography also appears to offer better insight into probable escape route prediction and stakeout location selections than do physical surveys on the ground. As a result of photographs taken during this study, these techniques will be employed in Project CARES. Aerial photography is expected to be particularly useful in determining probable escape routes where the offender escapes on foot and the target is contiguous to vacant property.

AUTHOR: L. G. Gunn

ID NUMBER: CLEA 003

DATE: 31 July 1973

SOURCE: Commercial Robbery
Independent Analysis Report
ESIP Field Site
Columbus, Georgia

TITLE: Commercial Robbery Target Population Training

PROBLEM STATEMENT

There has been no rigorous attempt at training/educating the commercial robbery target population.

DISCUSSION

Several findings of this report suggest that target population training programs are operationally feasible and could produce reduction of property loss, injuries and possibly reduce commercial robbery rates. Further, training could enhance police apprehension rates and provide for sounder convictions of offenders. The study identifies target population practices and policies in robbery prevention. Some of these should be implemented more consistently, and others, especially those which evoke violence, should be discouraged. Although the target population is quite large (6,500), an easily defined sub-group of the population has accounted for about 70% of the commercial robbery offenses. It is estimated that employees, managers, supervisors and owners of this sub-group would amount to about 2,000 persons. When compared to a residential burglary training or educational program such as Project Identification, the resources required for this suggested commercial robbery program are relatively insignificant. High turnover rates, however, are expected to require a continuing program.

AUTHOR: L. G. Gunn

ID NUMBER: CLEA 004

DATE: 31 July 1973

SOURCE: Commercial Robbery
Independent Analysis Report
ESIP Field Site
Columbus, Georgia

TITLE: Lineup Equipment

PROBLEM STATEMENT

Faulty line-up procedures are cited by prosecutors and police as a continuing problem.

DISCUSSION

The principal problem which results in a poor line-up appears to be the lack of sufficient volunteers (usually only prisoners in the police lockup and available officers) with appearance characteristics similar to the suspect(s)). The solution to this problem appears to lie in two approaches. First, to develop the means of modifying the appearance of available volunteers. Second, to maintain on file visual recordings from which selections may be made. The first approach suggests several equipment solutions. The solution could lie in make-up kits consisting of a variety of facial hair, wigs, clothing, eyeglasses, etc., or mugshot overlays of the same type of appearance items and equipment for manufacture of photographic line-up mugshots. The second approach suggests the use of a video tape recordings file. Recordings from this file would be shown to witnesses along with a tape of the suspect which could be filed for use in future line-ups. This technique would have the advantage of audio recording of voices which in some cases could assist a witness with positive identification.

AUTHOR: L. G. Gunn

ID NUMBER: CLEA 005

DATE: 31 July 1973

SOURCE: Commercial Robbery
Independent Analysis Report
ESIP Field Site
Columbus, Georgia

TITLE: Efficiency in Police Processing of Victims and Witnesses

PROBLEM STATEMENT

The problem of uncooperative witnesses could be aggravated by the amount of time required for interviews, obtaining statements, etc.

DISCUSSION

The process of obtaining pertinent information, statements and reactions to a line-up from witnesses is a lengthy process (three (3) - four (4) hours). Although this is a problem it does not appear to be serious in commercial robbery. Several suggestions are evident. Manpower and time-saving equipments could be employed to reduce administrative times for report and statement preparation. The programmable typewritten tape recorders and voiceprint equipment could have application. The wording of opening and closing paragraphs of witness statements are provided by police and requires only short phrases for completion by a witness. This situation appears applicable to the programmable typewriter. The principal delay occurs in the witness having to wait for the official transcription of this statement to be produced so that he can state, "I can read and write, and the statement that I have given to Detective _____ is the truth, so help me God." If at the end of a recorded transcript the witness were to verbally state, "I have listened to the recording.... is the truth so help me God" and the tape was transcribed and then handled as evidence until the trial, the witness could be released immediately after recording his statement. Later, authentication, if required, could be possible through use of voiceprint equipment.

AUTHOR: L. G. Gunn

ID NUMBER: CLEA 006

DATE: 31 July 1973

SOURCE: Commercial Robbery
Independent Analysis Report
ESIP Field Site
Columbus, Georgia

TITLE: Disguise of Unmarked Police Automobiles

PROBLEM STATEMENT

Unmarked police cars are easily recognized in spite of attempts to disguise them through painting and installation of external appearance items.

DISCUSSION

The findings of this report suggest that potential offenders conduct area reconnaissance in search of police stakeouts and that they are relatively successful in locating unmarked police cars. Except for specialized activities such as vice and Project CARES, rental cars are viewed as too expensive (\$185.00/month) by police administrators. Consequently, a study of the various methods for quickly and inexpensively changing the appearance of an automobile is required. The solutions may lie in applique kits, soluble paints or less expensive lease agreements with used car dealers.

AUTHOR: L. G. Gunn

ID NUMBER: CLEA 007

DATE: 31 July 1973

SOURCE: Commercial Robbery
Independent Analysis Report
ESIP Field Site
Columbus, Georgia

TITLE: Systematic Search For Fleeing Offenders

PROBLEM STATEMENT

Patrol search for commercial robber(s) after they have left the scene is not systematic.

DISCUSSION

The report findings show that patrol search after a robbery contributes significantly to apprehension of offenders. However, officers in beats adjacent to the beat containing the robbery location rely totally on intuition and experience. Further, there is no attempt at command and control of the search. Therefore, the search, while not completely random, lacks a systematic approach. Operationally, it appears feasible and desirable to establish command and control over the search operation. The function could be accomplished by a trained dispatcher or the shift director at the controls of equipment which would allow prediction and display of probable escape routes from the target and most productive search areas as a function of time after robbery. The author expects that the techniques of search theory and anti-submarine warfare could produce considerable insight and possible solutions to this problem.

AUTHOR: L. G. Gunn

ID NUMBER: CLEA 008

DATE: 31 July 1973

SOURCE: Commercial Robbery
Independent Analysis Report
ESIP Field Site
Columbus, Georgia

TITLE: Fingerprint Surfaces Evaluating Instrument

PROBLEM STATEMENT

Myths about the utility of fingerprints in criminal investigation and identification of suspects are used by defense attorneys to attack logical police practices, waste identification technician resources and may ultimately result in release of a guilty offender.

DISCUSSION

All jury members "know" from watching law enforcement episodes on television that fingerprints play an important role in every case. Therefore, juries apparently expect police to obtain fingerprints regardless of what the offender is reported to have touched. In an attempt to counter these myths, identification technicians may dust for prints on surfaces where latent prints could not be present knowing that an admission on the witness stand that this had not been attempted will bias the jury. One of the findings of this study is that fingerprints did not aid in apprehension, identification or conviction of any of the 113 commercial robber(s), although pounds of fingerprint dust must have been used.

The solution to this problem could lie in the development of a device which could sense the physical characteristics of a particular surface and determine if latents could exist on that surface. Such a device is scarcely necessary for a trained identification technician but could provide scientific basis for testimony. Such a device could possibly be demonstrated in court during examination by the prosecutor. Further removal of this point of leverage for the defense could result in reduced court time for identification technicians in cases in which fingerprints have no bearing.

AUTHOR: L. G. Gunn

ID NUMBER: CLEA 009

DATE: 31 July 1973

SOURCE: Commercial Robbery
Independent Analysis Report
ESIP Field Site
Columbus, Georgia

TITLE: Robbery Alarm Equipment

PROBLEM STATEMENT

Means of reporting commercial robberies while in progress or immediately after their occurrence is sometimes expensive, unreliable and rarely used.

DISCUSSION

The solution to this problem will probably have more impact on commercial robbery than any other in this report. The concept of the sensorized transmitted alarm appears to be one solution area requiring development. (See M-73225 for description of this equipment.) The principal deficiencies which need to be attacked with regard to this concept are its expense, not only in the capital investment sense, but in manpower requirements for continued use of such equipment by medium sized or small departments. In the opinion of the author, the following areas should be addressed:

- a. Stimulation of industry interest in the concept of unique wireless (RF, ultrasonic, etc.) transmission from sensors to remotely located alarm processors.
- b. Stimulation of industry interest in false alarm screening through alarm processor logic.
- c. Development of innovative sensors, e.g., sensors which can be activated by an employee without actions which could be interpreted by the offender as an offensive action, sensors activated by the robber's own actions, and floor safe sensors which are easily, reliably and inconspicuously defeated during normal operations, but reliably and automatically activated during a robbery.

- d. Development of inexpensive, disposable sensor monitors to pinpoint which sensor set off the alarm. This will help in the diagnosis of false alarm problems in a multi-sensor environment.
- e. Development of inexpensive dual message alarm capability to accommodate the situation requiring "go versus no go", "robbery versus burglary" knowledge is required.

The findings of this study show that conventional holdup alarms which operate in conjunction with silent burglar alarm systems are inexpensive but are neither widely used nor effective in reporting robberies in progress. The principal problem is thought to revolve around the sensors employed. In Columbus, the sensors are either panic button or last bill cash register sensors. Activation of the panic button may imply offensive action to the robber. Last bill sensors employ a flexible cord which allows the cash drawer to slide open and may wear out in continuous use. If reliable sensors of the design mentioned were available, the present situation regarding business-owned/leased holdup alarms could be substantially improved. In addition, the dual message capability mentioned in "e" above, is required to preclude dispatcher's or central station monitor's requirement for manual records search to decide whether the alarm means robbery or burglary in progress. Finally, there appears to be an application for a robbery or holdup counterpart to the local burglar alarm. Simple active sensors could be used to silently alert police helicopters, beat cars or stakeouts through visible light rooftop beacons.

AUTHOR: L. G. Gunn

ID NUMBER: CLEA 010

DATE: 31 July 1973

SOURCE: Commercial Robbery
Independent Analysis Report
ESIP Field Site
Columbus, Georgia

TITLE: Increasing Potential Witnesses to Commercial Robbery

PROBLEM STATEMENT

Means of increasing the number of potential witnesses to commercial robbery are required.

DISCUSSION

This problem concerns both the apprehension and prevention aspects of commercial robbery.

Apprehension The technique of alerting proprietors of adjacent businesses of a robbery in progress appears attractive but has not been widely employed. The approach envisioned includes co-operatives of small businesses having visual vantage points of each other, similar hours and interconnected by inexpensive means of alert. Potential witnesses having been notified of a robbery could notify police and look outside for descriptions of offender(s) and their vehicles. This approach is being contemplated by the Miami Police Department under the project name "Neighborhood Robbery Alert System."

Prevention One of the findings of this study is that elements of the target population discourage loitering in order to decrease losses resulting from shoplifting. In doing so, these businesses decrease the number of potential witnesses to commercial robbery, thereby increasing their attractiveness to the offender as a potential target. If inexpensive anti-shoplifting equipment were available which would allow greater tolerance for loitering, the average number of potential witnesses would be increased. This equipment, if technically feasible, in conjunction with business policies of offering common use items such as cigarettes, milk and fast-food items at cost or below cost to attract volume, could considerably reduce the attractiveness of robbery targets.

AUTHOR: L. G. Gunn

ID NUMBER: CLEA 011

DATE: 31 July 1973

SOURCE: Commercial Robbery
Independent Analysis Report
ESIP Field Site
Columbus, Georgia

TITLE: Reduction of Commercial Robbery Property Losses

PROBLEM STATEMENT

Means of reducing the property losses of commercial robbery are required.

DISCUSSION

Although the average amount of money lost in commercial robberies is small, cash policies of the target population have not been successful in reducing amounts available to the offender below the threshold at which he will not rob. Means of further reducing the offender's expected take are required. The most obvious solutions lie in improvements of cash handling devices. An automatic change making register which accepts bills and change of different denominations and provides change without opening the storage chamber is one suggestion.

AUTHOR: L. G. Gunn ID NUMBER: CLEA 012

DATE: 15 August 1973

SOURCE: Commercial Robbery
Independent Analysis Report
ESIP Field Site
Columbus, Georgia

TITLE: Application of Bait Money Concepts to Other Objects

PROBLEM STATEMENT

Locating or naming of suspects after a commercial robbery through informers, patrol search and witnesses is effective only about 30% of the time.

DISCUSSION

The report finds that small valuable items other than money are taken in about 30% of the commercial robberies. Means of exploiting this finding could substantially increase apprehension rates. As a result of this finding, two applications of existing techniques are suggested. First, it may be feasible to employ bait money concepts with small valuable items placed in clear view from a position near the cash register. For example, a small portable radio containing a small pyrotechnic, tear gas, and marking dye could be employed. In addition, small valuable items could be equipped with a vehicle-tracking beacon which could aid in the search in addition to providing corroborating evidence that the suspect apprehended in possession of the item had been at the robbery scene.

The suggestion for using bait money concepts with small valuable items presents several more problems. First, the manufacturer of most realistic and reliable bait money pack, ICI America, apparently holds patents which preclude serious competition. In addition, ICI America's major clients are banks. In a discussion between the author and a representative of this company, it was agreed that the City could purchase bait money packs for use in Project CARES only after lengthy explanations that the City would own the devices and would not reveal publicly the concept of operation or the physical design. In other words, it appears the manufacturer is not interested in developing markets for its device other than with

financial institutions. The other problem is best illustrated by the following scenario -- robber takes bait money pack or small valuable item, escapes in vehicle, reaches 80 mph, pyrotechnic goes off, releasing tear gas and dye inside car, offender loses control of vehicle, hits and kills or maims innocent citizen, suits against the City or Department?

AUTHOR: L. G. Gunn

ID NUMBER: CLEA 013

DATE: 15 August 1973

SOURCE: Commercial Robbery
Independent Analysis Report
ESIP Field Site
Columbus, Georgia

TITLE: Verification of Informer-Provided Information

PROBLEM STATEMENT

It is not now operationally feasible to determine if an informer is telling the truth.

DISCUSSION

The study shows that police may obtain information regarding robbery planning or the naming of suspects. False information can result in wasted resources and/or unintentional harassment of non-suspects. The police face the dilemma of either:

- a. asking the informer to take a polygraph examination
- b. accepting the information as true, or
- c. ignoring the information, assuming it is false.

Assuming that robbery planning information is received from an informer and that the relationship between the officer and the informer is delicate, the following matrix is presented;

Strategy	INFO IS TRUE	INFO IS FALSE
a.	Informer insulted; Relationship is jeopardized.	Informer embarrassed; Future utility, if any, lost.
b.	Great	Police resources wasted; e.g., Section VI.
c.	Bad	Great

Means of covertly determining with reasonable accuracy the validity of information received from an informer would greatly improve this problem. Presently informer information on robbery planning is not cultivated. If it were and the validity could be determined most of the time, perhaps through voice stress analysis, improvements in both apprehension and prevention endeavors of the police could be realized.

AUTHOR: L. G. Gunn

ID NUMBER: CLEA 014

DATE: 15 August 1973

SOURCE: Commercial Robbery
Independent Analysis Report
ESIP Field Site
Columbus, Georgia

TITLE: Evidence Collection Devices

PROBLEM STATEMENT

Present methods of presenting the facts of what occurred in a particular robbery do not convey to a jury the vicious nature of the crime.

DISCUSSION

Development in the areas of problem CLEA 009 should be accompanied by development of evidence recording techniques which can be automatically activated by an alarm. Video and oral recording of the events of the robbery are seen as invaluable tools for a prosecutor. A tape recording of an offender saying, "OK, you M___F___, give me the G___D___ money or I'll blow your F___ head off" in the hands of the prosecutor with records of proper evidence chain is likely to result in a guilty plea. If not, the impact on the jury is likely to be far greater than an officer or victim testifying that such a statement or something similar to it was spoken by the defendant.

Existing approaches include expensive, poor resolution video tape recorders and conventional tape recorders installed in each target. This is the approach taken by the Tampa Police Department STAVS Program and planned by Jacksonville and Panama City. The concept of centrally located evidence recording devices, receiving evidence transmissions from listen-in microphones in remote-target locations is one suggestion for a more economical approach.

AUTHOR: L. G. Gunn

ID NUMBER: CLEA 015

DATE: 15 August 1973

SOURCE: Commercial Robbery
Independent Analysis Report
ESIP Field Site
Columbus, Georgia

TITLE: Testimony Review Equipment

PROBLEM STATEMENT

The review of testimony between a prosecutor and a witness or police officer appears to be a desirable practice as it avoids last minute surprises, inconsistencies and unintentional omissions; however, this is only accomplished part of the time and then usually minutes before court because of administrative problems and coordination of the parties involved.

DISCUSSION

Officers often rely on written reports to refresh their memory regarding an offense, which on the average occurred 60 days before indictment and 88 days before the trial and may have been written by another (See Section IX). Presently, witnesses have only their memory to rely on, although it has been suggested to proper authorities that witnesses be provided with copies of their statements. It appears operationally feasible that such a review could be carried out with inter-active television which would not necessarily have to be accomplished in a real time mode. That is, questions contemplated by the prosecutor could be recorded and answered by the witness under realistic conditions without both parties being physically present at the same time. Further, the fact that the human being can listen and comprehend speech rates much greater than the rates of normal conversation might provide a vantage point to the prosecutor who is normally busy with many cases.

AUTHOR: L. G. Gunn

ID NUMBER: CLEA 016

DATE: 15 August 1973

SOURCE: Commercial Robbery
Independent Analysis Report
ESIP Field Site
Columbus, Georgia

TITLE: Physical Simulation of Testimony

PROBLEM STATEMENT

Officers are continually called upon to provide impromptu testimony on events which may have occurred months before.

DISCUSSION

Commercial robbery provides a good example of the worst case of this problem. The beat man or patrolman is usually first on the scene of a commercial robbery. However, the detective called to the scene assumes supervision of the situation and subsequently files an offense report detailing what happened. Assuming suspects are arrested, the beatman, having been first on the scene may be subpoenaed to testify. In the meantime, he has probably processed hundreds of calls and probably has not even seen a copy of the offense report which describes what he did. Administrative solutions have already been suggested which will provide the officer with a copy of the offense report. However, the problem of impromptu testimony from a report prepared by another still exists.

What is proposed here is that the development of a testimony simulator be considered. Physically, the simulator would consist of a sound-proof room with physical features deemed necessary for realism. The officer would review the offense report, enter the simulator, and select a scenario on a keyboard -- for example, convenience store robbery, victim shot, first on the scene, first aid rendered, broadcast description of offenders. After the officer had selected a scenario, he would select "prosecutor" on the keyboard at which time a series of questions drawn from a library of tape recordings would begin. The officer, during the time he is answering the questions, could receive visual feedback on his appearance, confidence, etc., from a television monitor. After completing the series of questions from the prosecutor, he would key in cross

examination and proceed with a series of questions tailored to the scenario he has selected. A variety of scenarios can be envisioned running the gamut of serious crimes, for patrol, investigative services, identification technicians, witnesses and victims.

In addition to a valuable tool for improving case preparation, such a device would be an excellent training device.

Because of the obvious expense of such a simulator, it is suggested that evaluation of technical feasibility include the concept of regionalization and local timesharing of this capability. Perhaps such a capability should even be considered as a National system.

If such a capability existed, the solution to Problem CLEA 015 is also possible, i.e., the prosecutor could monitor the officer's or witness's simulated testimony.

AUTHOR: L. G. Gunn

ID NUMBER: CLEA 017

DATE: 15 August 1973

SOURCE: Commercial Robbery
Independent Analysis Report
ESIP Field Site
Columbus, Georgia

TITLE: Protection of Crime Scene

PROBLEM STATEMENT

Officers are prone to concentrate on interviewing witnesses and victims upon arrival at the scene of a commercial robbery and may neglect physical evidence.

DISCUSSION

In addition to protecting the crime scene, the first officer on the scene is responsible for rendering first aid and broadcasting an initial description of the offenders. After this has been accomplished and detectives and identification personnel summoned, he becomes sort of a traffic director. That is, he stands by the door rejecting curiosity seekers, newsmen and admitting police personnel. In essence, he has lost control of the immediate areas where physical evidence could be.

A suggested approach to this problem is the development of portable and expendable boundary marking equipment to keep victims, witnesses and police personnel from the immediate areas where physical evidence possibly exists. In this way, the scene could be reserved for experienced identification personnel. A simple solution would be an adhesive string packaged like dental floss or scotch tape, colored to maximize visibility.

AUTHOR: L. G. Gunn

ID NUMBER: CLEA 018

DATE: 15 August 1973

SOURCE: Commercial Robbery
Independent Analysis Report
ESIP Field Site
Columbus, Georgia

TITLE: Physical Evidence From Abandoned Vehicles

PROBLEM STATEMENT

Opportunities for additional physical evidence and investigative information in the case of abandoned automobiles are ignored.

DISCUSSION

Although statistics have not been developed, it is known that police often find an abandoned automobile which may have been used in a robbery. Conventional techniques include tag and registration checks, determining if the engine is "hot" and visual inspection of the interior of the automobile without touching it. Identification work is usually accomplished after the automobile has been towed to police headquarters.

An opportunity appears to exist for collecting additional physical evidence or at least investigative information which would allow elimination of automobiles which were not used in the robbery. A calibrated instrument which could consider prevailing temperature of the vehicle's coolant and tires, time after the robbery and distance from the robbery scene might be able to distinguish between vehicles which could/could not have been used in a particular robbery. Such an instrument could preclude police confiscation of vehicles fitting the escape vehicle's description which belong to persons not involved in the robbery. This has occurred on several occasions.

AUTHOR: L. G. Gunn

ID NUMBER: CLEA 019

DATE: 15 August 1973

SOURCE: Commercial Robbery
Independent Analysis Report
ESIP Field Site
Columbus, Georgia

TITLE: Positive Reinforcement for Preventative Patrol Efforts

PROBLEM STATEMENT

Present practices do not provide positive reinforcement for patrol efforts in crime prevention.

DISCUSSION

This problem applies not only to individual beat officers but organizationally as well to the Bureau of Patrol Services. As stated in Section IV, patrolmen are oriented in most cases toward apprehension of commercial robbers. Should police administrators place more emphasis on commercial robbery prevention, it will be necessary to develop the methodology and techniques to provide feedback regarding the success of preventative patrol operation.

AUTHOR: L. G. Gunn

ID NUMBER: CLEA 020

DATE: 15 August 1973

SOURCE: Commercial Robbery
Independent Analysis Report
ESIP Field Site
Columbus, Georgia

TITLE : Improvement of Conventional Stakeouts

PROBLEM STATEMENT

Conventional stakeouts have been relatively unsuccessful.

DISCUSSION

Although sophisticated equipment is already available and in development for specialized stakeouts, application of conventional stakeouts is expected to continue. The findings of this paper seriously question the utility of such techniques to the problem of commercial robbery. It is recommended that an area of study be established which addresses the areas of officer boredom, silent local alarms for stake-out use, listen-in capability, and night surveillance. One suggestion for the boredom problem is development of equipment, which incorporates the principles of night vision devices, which would allow officers to pursue various visual activities such as reading, studying or watching television while waiting for an audible alarm.

AUTHOR: L. G. Gunn

ID NUMBER: CLEA 021

DATE: 15 August 1973

SOURCE: Commercial Robbery
Independent Analysis Report
ESIP Field Site
Columbus, Georgia

TITLE: Physical Environment for Witness/Victim Interviews

PROBLEM STATEMENT

The physical environment for post-robbery witness/victim interviews is usually substandard and not controllable by the detective in charge.

DISCUSSION

Presently post-robbery interviews are conducted within the place of business where the robbery occurred. Granted, portions of the interviews must be conducted here; however, the environment may be confusing and may reinforce the emotional state of the witness/victim. Various distractions occur in this environment. For example, supervisors of convenience store chains often arrive shortly after police and begin inventory of the cash register. Identification technicians may be taking photographs and dusting for prints. If there are several witnesses, three or four-way conversations may ensue with each trying to resolve a particular point about the robbery events or add information omitted by the one being interviewed. In some cases, members of the press are admitted which adds to the confusion. In others, owners insist on returning to business as usual and actually begin serving customers. Finally, patrol officers or supervisors may return to the scene to obtain more information regarding the type of vehicle or description of suspect(s) they are attempting to locate during search operations.

What is suggested here is a mobile interviewing environment which includes means of excluding these external stimuli. A reasonably sound-proofed van truck which is equipped with writing surfaces, proper lighting, radio communications and seating accommodations for witness/victims is suggested. The van could be equipped with additional sophistications as required, e.g., whole body identikits, first aid equipment, tape recorders, etc.

Such a piece of equipment is expected to have even more utility in cases of serious street crimes (forcible rape, aggravated assault, street robbery, murder, arson) in which there is a tendency for large crowds to gather.

AUTHOR: L. G. Gunn

ID NUMBER: CLEA 022

DATE: 15 August 1973

SOURCE: Commercial Robbery
Independent Analysis Report
ESIP Field Site
Columbus, Georgia

TITLE: Officer, Bystander, Victim Safety During Robbery Stakeout
Operations

PROBLEM STATEMENT

The concept of using department owned alarm equipment which allows reporting of commercial robberies in progress to stakeouts or uniformed patrol officers greatly increases the chances of shootouts and hostages.

DISCUSSION

This problem is most applicable to operations such as Project CARES or Tampa STAVS. The desired events are for police response time to be reduced to something in the area of 30-45 seconds. In the majority of cases, it is expected that officers will arrive on the scene while the offender(s) are still on the premises. Such a scenario greatly increases the possibility of violence especially for the uniformed officer who is automatically identified by his dress and vehicle. Further, victim/employees and witnesses are potential hostages should the offender(s) be faced with and recognize that apprehension is imminent. This situation could gravitate to barricade situations with hostages, kidnappings, etc.

What is suggested here is that an area of development be instituted to examine this problem from the points of view of officer, victim, witness, bystander and offender safety. The solution to this problem is expected to be mostly procedural; however, body armor and means of providing arriving officers with situational information in addition to the in-progress alarm are operationally feasible solutions.

APPENDIX II

SOURCES OF INFORMATION AND SURVEY DETAILS

The sources tapped for this project are listed below. The methodology employed in the research is explained in the paragraph following the list.

Department Compiled Statistics and Records

Uniform Crime Report inputs 1971, 1972, and 1973.
1971 and 1972 Annual Reports
Recorder's Court records
Superior Court records
Offense records

Interviews with Police

Chief of Police
Patrol
Investigative Services
Intelligence
Vice Squad
Selective Enforcement Personnel in Tampa, Jacksonville,
Panama City and Miami, Florida

Interviews with Target Population

Convenience Store District Managers
Store Managers and Owners
Employees

Manufacturers

Public Safety Laboratories
ICI America Corporation
Monitor Corporation
Burglar Alarm Service Company
IBM

Miscellaneous Interviews

Assistant District Attorney
Defense Attorney
Former Assistant U.S. Prosecutor
Crime Coverage Insurance Agent
Incarcerated Offender

Survey of Five Convenience Store Chains

Operating policy
Physical facilities
Employees
Security

Survey of Holdup Alarms

Extent of use
Effectiveness
Cost
Comparison of users with comparables

Survey of "Immune" Targets

Robbery prevention
Physical environment

Targets Robbed More Than Once in 1972

Physical environment

Direct Observation

Patrol detection of armed robbery
Detective response
Patrol apprehension of suspects
Robbery stakeout
ID response
Booking of suspects
Witness and victim interviews
Preliminary hearing of suspects

METHODOLOGY

Data was collected for this report through a variety of techniques ranging from interviews to detailed examinations of police and court records to surveys of particular aspects of the crime of armed robbery. The following paragraphs provide the details for the various data collection tasks.

Interviews

Interviews with Police

Interviews were conducted with a large number of personnel in the Columbus, Georgia Police Department. The primary purpose was to attempt to extract lessons regarding commercial robbery. Sometimes it was possible to ask questions at the scene of a robbery during the actual investigation. In addition, the author either visited or held extended telephone interviews with specialized robbery enforcement personnel in Tampa, Jacksonville, Miami, Panama City, and Los Angeles.

Interviews with Target Population

Interviews were conducted with personnel of potential and historical robbery targets, primarily convenience stores, package liquor stores, and gasoline service stations with extended hours. Several approaches were taken. First, the district managers of five of the larger convenience stores chains were interviewed as to the physical configuration of their stores, number of employees, store hours, alarms, cash policy, insurance, employee screening, and general policy. The five particular chains were selected on the basis of their historical experience with robberies; three chains which comprise twenty-seven stores experienced only six robberies in 1972, while two other chains comprising twenty stores experienced nineteen offenses in 1972.

Second, a list of targets which have been "immune" to robbery since the beginning of 1969 was compiled by asking experienced officers and detectives for suggestions of businesses which appear to be good targets but had not been robbed for several years. These suggestions were subsequently compared against police records resulting in a list of immune targets. An attempt was then made to identify reasons for immunity through telephone and personal interviews with proprietors.

Interviews with Offenders

Approximately four hours of interview time was accumulated with a robbery offender. Two hours of this was recorded on video tape. Although it was reasonably well established that the interviewee was responding honestly to questions, little can be said in defense of his representativeness of the typical robbery offender. Unfortunately, time did not permit interviews with additional offenders.

Interviews with Assistant District Attorney

The Assistant District Attorney was interviewed and asked to provide a description of a typical case. In addition, he was asked to provide suggestions for improvement and to cite specific cases which he had prosecuted.

Interview with Crime Coverage Insurance Agent

The various aspects of crime coverage including rate determination, fidelity bonding, basic forms of robbery coverage and average claim value were discussed.

Interviews with Manufacturers

Several manufacturers of anti-robbery equipment were contacted during this study. Discussions included robbery alarms, robbery sensors, and bait money.

Observations

Patrol

The author, while riding with a Section Sergeant on patrol, observed the reaction of victims and witnesses to an armed robbery immediately after (30-40 seconds) it occurred. The offenders escaped.

Investigative Services and Identification Section

In addition to interviews, the author accompanied detectives and identification technicians to the scene of an armed robbery on several occasions. In one case, a near-the-scene chase, shoot-out, and apprehension was observed. In this case, the activities of the police and courts were followed until the due date for this report. Unfortunately, the trial is still pending.

CONTINUED

1 OF 2

Traditional Robbery Stakeout

The mechanics of a traditional robbery stakeout were observed for one evening.

Project CARES Stakeout

The author observed and rode with Project CARES Stakeouts and participated in development of tactics, installation, and testing of alarm equipment. During a visit to the Tampa Police Department, the reaction of several employees who had used police department alarm equipment was obtained.

Recorders Court

The processing of robbery suspects in Recorders Court was observed on several occasions.

Surveys

Physical Facilities of Convenience Stores

The physical security features of convenience stores were documented in a survey. The number of cash registers, types and numbers of safes and alarms were determined for forty-five stores.

Holdup Alarms

A list of all targets which have a holdup alarm were compiled. A list of comparables was selected on the criteria of some type of business and some type of physical environment. After compilation and selection of comparables, the two groups' robbery records were compared.

Convenience Store Employees' Records

During the interviews with convenience store district managers, current employee lists were obtained. The names of 151 employees were checked against court records.

Reports and Records

Offenses and Supplemental Reports

Offense and supplemental reports for commercial robbery during calendar year 1972 and the first half of 1973 were examined and a variety of data was recorded to quantify Modus Operandi, targets which experienced multiple offenses, and the extent of property loss and violence attributed to commercial robbery. These data were extracted from approximately 180 commercial robberies reports.

Court Records

The disposition of 1972 robbery offenders was obtained from court records.

Newspaper Clippings

Newspaper clippings relating to armed robbery were examined for the period December 1971 - 15 July 1973.

APPENDIX III
BEAT DESCRIPTIONS

Beat 1

Business	20%
Residential	80%
Blacks	10%
Whites	90%

This section of town is largely comprised of military personnel, since this beat connects with the military reservation. Average income bracket from 8 to 12 thousand.

Beat 2

Business	60%
Residential	40%
Blacks	45%
Whites	55%

This section of town is largely comprised of retired military personnel, having a large amount of apartment complexes located in it, with persons constantly moving in and out.

Beat 3

Business	30%
Residential	70%
Blacks	75%
Whites	25%

This section is comprised of low rent districts, and apartment complexes, basically a run-down area.

Beat 4

Business	40%
Residential	60%
Blacks	25%
Whites	75%

This section is largely comprised of military and retired military. Trailer parks and apartments with persons moving in and out. Average income 5 thousand to 12 thousand per year.

Beat 5

Business	10%
Residential	90%
Blacks	45%
Whites	55%

This section is mainly middle-class working people with some military. Income from 6 to 15 thousand per year.

Beat 6

Business	30%
Residential	70%
Blacks	50%
Whites	50%

This section is mainly middle to lower class. Apartment complexes and apartment houses mainly with persons moving in and out. Income 2 to 8 thousand per year.

Beat 7

Business	25%
Residential	75%
Blacks	70%
Whites	30%

This section is mainly apartment and lower class districts. Some upper class. Income ranges from 12 to 100,000 per year for upper class, 2 to 6 thousand for lower class.

Beat 8

Business	70%
Residential	30%
Blacks	70%
Whites	30%

Mainly business district with some apartment houses. Income 4 to 10 thousand per year.

Beat 9

Business 65%
Residential 35%

Blacks 50%
Whites 50%

Section is mainly business with some apartment houses but mostly single dwellings. Middle class with income from 6 to 12 thousand per year.

Beat 10

Business 35%
Residential 65%

Blacks 35%
Whites 65%

Middle class with mainly single dwelling structures. Some apartments, mostly duplex. Income 8 to 15 thousand per year.

Beat 11

Business 20%
Residential 80%

Blacks 15%
Whites 85%

Section is mainly military and middle class. Income 10 to 20 thousand per year.

Beat 12

Business 20%
Residential 80%

Blacks 10%
Whites 90%

Section mainly military and retired military. Single dwelling houses 10 to 20 thousand per year.

Beat 13

Business 30%
Residential 70%

Blacks 25%
Whites 75%

Mainly lower to middle class. Single dwelling frame houses and apartment complexes. Income 4, to 10 thousand per year.

Beat 14

Business 30%
Residential 70%

Blacks 30%
Whites 70%

Lower to middle class. Apartments and single dwelling structures. Income 4 to 10 thousand per year.

Beat 15

Business 25%
Residential 75%

Blacks 35%
Whites 65%

Section contains lower, middle and upper class. Income 4 to 100,000 per year.

Beat 16

Business 30%
Residential 70%

Blacks 20%
Whites 80%

Middle to upper class section. Mainly working class with some retired. 10 to 25 thousand per year.

Beat 17

Business 25%
Residential 75%

Blacks 20%
Whites 80%

Lower to middle class. Mainly textile workers. 4 to 12 thousand per year income.

Beat 18

Business 20%
Residential 80%

Blacks 15%
Whites 85%

Middle to upper class. Business people with some lower class in suburbs. Income from 8 to 200,000 per year.

Beat 19

Business 20%
Residential 80%

Blacks 20%
Whites 80%

Lower, middle and upper class. Single dwelling houses. Income from 6 to 20 thousand per year.

Beat 20

Business 45%
Residential 55%

Blacks 15%
Whites 85%

Middle to upper class. Single dwellings with income from 30 thousand per year. Many businesses and shopping centers.

Beat 21

Business 70%
Residential 30%

Blacks 60%
Whites 40%

Mainly Business District with Apartment houses. Income from 6 to 10,000 per year.

Beat 22

Business 80%
Residential 20%

Blacks 30%
Whites 70%

Mainly Business District with Apartment Complexes. Income from 4 to 8,000 per year.

END