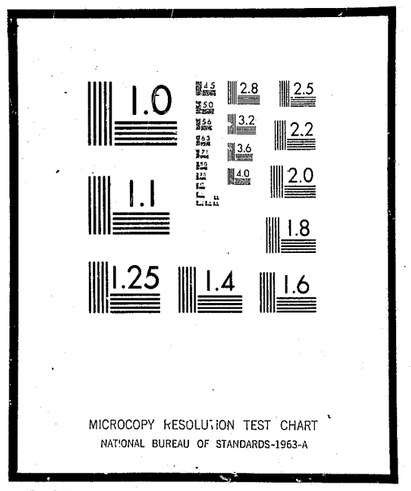

R-75-109

LAW ENFORCEMENT ASSISTANCE ADMINISTRATION
POLICE TECHNICAL ASSISTANCE REPORT

SUBJECT: Boston, ~~Massachusetts~~ - Police Department -, Crime Analysis Unit Capability Development

REPORT NUMBER: 75-86

FOR: Boston, Massachusetts, Police Department
Boston Population: 641,000
Police Strength (Sworn): 2,498
Total: 2,877
City Area: 47 square miles

CONTRACTOR: Westinghouse Justice Institute

CONSULTANT: Cliff J. Macsas

CONTRACT NUMBER: J-LEAA-003-76

DATE: December 29, 1975

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Foreword

This request for technical assistance was made by the Boston, Massachusetts, Police Department. The requested assistance was concerned with planning the design for a crime analysis unit within the Boston Police Department.

Requesting Agency: Boston Police Department,
Mr. Joe Lambert, Director
Police Planning and Research Division

Mr. Robert J. DiGrazia, Police Commissioner

State Planning Agency: Massachusetts Committee on Criminal Justice,
Mr. Clifford Karchmer, Police Program Specialist

LEAA Region I: Mr. John M. Keeley, Police Specialist

1. INTRODUCTION

The Planning and Research Division of the Boston, Massachusetts, Police Department requested technical assistance in developing a crime analysis unit capability to become operational on or about January 1, 1976. The consultant was specifically selected to provide the assistance because of his experience and background in designing, implementing, and commanding the crime analysis unit for the Dallas, Texas, Police Department. It is the desire of the Boston Police Department to establish a crime analysis unit whose chief function will be the analysis of crime data to identify crime patterns and trends which can be combatted by deployment of regular patrol forces, tactical units, and crime prevention teams. Initially, the crime analysis unit will be manually operated to establish background experience and analytical techniques. Eventually, the function is expected to be fully automated.

Specifically, the consultant was to provide technical assistance and accomplish the following tasks:

- Meet with members of the Planning and Research Division to be involved in crime analysis to review and evaluate progress to date and discuss ideas under consideration.

- Assist individual members to develop a list of information items needed to analyze specific crimes.

- Assist staff individually and collectively in the development of information dissemination formats.

- Assist the Director in examining organizational alternatives and establishing program goals and objectives.

The consultant spent five days providing over-the-shoulder guidance and advice on the development of the crime analysis unit while on assignment with the Planning and Research Division of the Boston Police Department. At that time, the following persons were interviewed:

- Mr. Joe Lambert, Director, Planning and Research Division

- Mr. Steven Mandra, Research Assistant

- Mr. Joe McNulty, Police Officer
- Mr. Peter Brodrick, Police Officer
- Miss Patricia Sadler, Research Assistant

Discussions were also held with Mr. Clifford L. Karchmer, Police/Crimes Program Specialist, Massachusetts Committee on Criminal Justice. At the request of Mr. John Francini of Westinghouse and Mr. John Keeley, Police Specialist of the LEAA Region I office, Mr. Karchmer arranged for the consultant to discuss crime analysis problems, procedures and methods with representatives from the Quincy, Arlington, Woburn, and Fall River, Massachusetts, Police Departments.

2. UNDERSTANDING OF THE PROBLEM

The Boston Police Department will be receiving an LEAA-funded grant to establish a crime analysis unit for the purpose of analyzing crime data to identify crime patterns and trends. The unit is to become operational on or about January 1, 1976. The main objective of the Boston crime analysis unit will be to produce information needed to effectively deploy field forces, apprehend criminal perpetrators, and prevent offenses. The crime analysis unit will only be peripherally involved with statistical analyses which are generally useful for administrative purposes.

Prior to seeking technical assistance, the Boston Police Department had already made major decisions necessary to establish the unit and had, to a great extent, implemented them. The unit would initially be established within the Planning and Research Division of the Department, with Mr. Joe Lambert, Director, in operational command. Four members of Mr. Lambert's staff have been designated to serve in a crime analysis team capacity. These personnel are Steve Mandra, Joe McNulty, Patricia Sadler, and Peter Brodrick. Mr. McNulty and Mr. Brodrick are both sworn officers with field experience. Mr. Mandra has police experience with the Washington, D.C., Police Department and has been with the Boston Police Planning Division for three years. Although Miss Sadler does not have direct police experience, she has been employed by Planning Division for six months and has been involved in several successful planning assignments. Messrs. Lambert, Mandra, and Brodrick attended the LEAA-sponsored Crime Analysis Workship presented by the California Technological Research Foundation. This fairly comprehensive workshop gave the team a good understanding of the concepts and procedures involved in crime analysis. Having advanced to this point, the Director recognized the necessity of making another decision vital to the establishment of an ongoing crime analysis unit: Taking into consideration the limitations of time and resources, on what areas or crimes will the unit primarily concentrate its efforts? It was decided that the unit would concern itself exclusively with robbery of business establishments, robbery of individuals, auto thefts, and rapes. Plans have also been developed to include burglary in the analysis process at a future date.

A team member has been assigned as an analyst to each one of the selected crimes. The analyst will be concerned exclusively with a particular type of offense and perform the necessary analysis needed to identify patterns or trends within a crime type. Arrangements have been made with the Department's record section to supply copies of the reported offenses of the selected crime to the Planning and Research Division. When these copies are received, a secretary separates the offenses by crime classification; each analyst is given the offenses which fall within his crime type.

In order to familiarize the analysts with the various elements of the offenses and develop analytical techniques, Mr. Lambert secured a backlog of several months' offenses in each selected crime. He then assigned the analysts to their review and submission of a written report on any patterns or trends which became apparent. This assignment is to be completed before the unit becomes functional in January.

As previously stated, all of these decisions were made and implemented prior to seeking technical assistance. It was from this point in the establishment of the unit that the consultant was needed to advise and give direction in the planning of the general functions of the crime analysis unit. Thus, the problem to be addressed was one of designing individual functions based on the needs of the Boston Police Department. This must be done within the framework of what is possible with existing data and manual analysis of the data. Since the Boston Police Department lacked prior experience in crime analysis, the boundaries of that framework were not apparent. To avoid costly experimentation, technical assistance was requested to provide a general design for the unit, which will result in attaining the maximum effectiveness in data and manpower.

The work tasks did not vary from those requested in the application for technical assistance. The budgetary and organizational influences and constraints encountered were no different than those found in any police department of comparable size. A great deal of enthusiasm was evident on the part of Mr. Lambert and his team. This enthusiasm can be a valuable asset in accelerating the unit through its early operational period which, at best, will be frustrating due to the newness of the crime analysis concept.

One political factor which may prove to be a detractor from the effectiveness of the unit should be noted. The sworn officers in the Planning and Research Division have just recently been summarily removed from the police union. The action was taken because of the Division's administrative nature; however, it has caused some bitterness. There is at least one officer bringing suit against the union for slanderous remarks made about him. It remains to be seen what effect this action will have on the crime analysis unit; however, it could possibly cause problems in two areas. First, it could complicate the dissemination of the information process by widening the gulf of mistrust between what is traditionally a staff unit and the general field forces. Second, it could pose a problem when additional personnel must be recruited from within the ranks. An officer may be hesitant to join a division where he will lose his union protection. Hopefully, the enthusiasm of the unit and obvious need for the function will create credibility and prestige within the Department, which will overcome these problems.

3. ANALYSIS OF THE PROBLEM

The basic design of the crime analysis unit was accomplished before technical assistance was sought. Consultation was needed for the design of individual processes and, certainly, for some reinforcement of expectations. In short, a point was reached in the unit planning, where members of the Planning and Research Division needed to talk with someone experienced in the field. Due to the nature of the problem and the need, all observations and recommendations made in this report and to the Boston Police Department are based on the consultant's past experiences with the Dallas Police Department.

There are four broad groupings in the crime analysis function, be it in Boston, Massachusetts, or Dallas, Texas. These groupings are:

- Data gathering
- Data analysis
- Information dissemination
- Systems and functional evaluation

It is in the context of these groups of functions that the crime analysis unit must establish its routine tasks. Thus, it was within the context of these groups that the problem was addressed.

3.1 Data Gathering

The main source of criminal data utilized by the Boston crime analysis unit will be the incident report, which has been instituted into the Department just this past year. The report (see Appendix A) is a form which is hand-printed by the officer who initially investigates the offense. Although the form captures sufficient data for the analytical process, it is somewhat unsystemized. This will not, however, prove to be a great hindrance to a manual system; and it is a weakness encountered in almost any department. If, at a later date, the crime analysis function is to be automated, it will probably be necessary to alter this report. At the present time, the data is adequate.

Arrangements have not been made for the crime analysis unit to receive any additional police reports. Only those offenses selected will be routed to the Division, sorted, and given to the analyst. There was indecision about what to do, if anything, with arrest reports.

3.2 Data Analysis

When each analyst receives his offenses, he will seek patterns and trends within his own crime type. Plans are for maintaining spot maps and working files on offense reports. The general design of the filing system has not been established; the spot maps to be used do not contain block numbers. The latter will seriously handicap a spotting operation. Since the analysts are generally unaware of the other's work due to a separate office situation, a serious gap in the analysts' knowledge of the overall crime picture will occur. The offenses will tend to spill over into other classifications (i.e., stolen cars will be used in armed robberies). As well, the present system does not allow for one analyst to take over another's function in case of absence.

3.3 Information Dissemination

No firm plans regarding the method of information dissemination have been made. Generally, there are two types of information generated by a crime analysis unit. The first is routine information that is turned out on a regular basis (e.g., suspect lists, crime profiles, and crime bulletins). The second is information about specific patterns or trends which have arisen. It was suggested that the routine information be printed on a standardized form and the specific pattern and trend information on a special memorandum. Mr. Lambert was provided a copy of the Dallas Unit's Operation Manual (see Appendix B) which has examples of several of these bulletins.

3.4 System and Functional Evaluation

Due to a shortage of time, evaluation of the unit was addressed briefly. It was emphasized, however, that the unit must be evaluated on the basis of information supplied and not by the increase or decrease in crime. Since the unit does not make arrests or file cases, it cannot be evaluated on the effects of these functions. The unit must be judged by the timeliness of its information, the acceptance of its information by the users, and the quality of service rendered to the Department. Mr. Lambert agreed that any evaluation performed should be done on the basis of these criteria rather than on the city's crime rate.

4. FINDINGS AND CONCLUSIONS

The following conclusions were reached after completion of discussions with and observations of the Boston Crime Analysis Team:

- The basic makeup and organizational location of the unit is good. Adequate administration of the unit has been provided, and it is staffed with professionally competent people. There have not, however, been any arrangements made for the day-to-day supervision and coordination of the unit's efforts; and there is a strong need for someone to act as liaison to the user groups. Since Mr. Lambert must manage an entire Division with diverse functions, he will not have time to constantly supervise and coordinate the crime analysis unit. As well, neither he nor the analysts will have time to interface with the user groups to the extent necessary. If the unit is to achieve a credibility with the field forces, someone must sell the services of the unit to them. For the unit to achieve any success, it will be necessary to constantly change, expand, and modify its services and techniques. At the present time, there is no adequate arrangement for anyone to act as a catalyst for this change, to supervise the routine tasks of the unit, or represent it to the users.

- The data collected on the incident report is sufficient for analysis purposes; however, it will not suffice alone. The greatest benefit of a crime analysis unit is that it is the one place where all of the information comes together. In order to achieve as complete a picture as possible, it will be necessary to gather information from such sources as arrest reports and investigative supplement reports. The analyst who conducts rape analyses should have access to all sex crime offenses. It will also become necessary for the analyst to review burglary offenses due to the fact, generally speaking, that burglaries are committed along with forcible rapes which occur in residences.

- The sorting of offenses and determination of what is needed is an integral part of the analysis function and should not be conducted by one individual. The offenses and other reports should be presented to the entire unit at a central location, where they can sit down together and sort through them. This will provide each analyst a wider comprehension of the crime patterns in the city and allow each analyst to become more familiar with one another's needs and duties. This sorting period will not take more than an hour or so and will greatly facilitate the general usefulness of each member of the team.

- In the day-to-day review of offense information, the analyst will continually deal with broad physical and M.O. descriptions of suspects. There will be a definite need to match these descriptions with those of known perpetrators. The most practical way to do this is to build and maintain a suspect description file from information taken from arrest reports. This file can utilize the punch-sort card system, which was explained to the individuals who attended the Crime Analysis Workshop. It will not be necessary for each analyst to maintain his own file; but, rather, a general file should be maintained by one person for the entire unit. When building this file, suspect descriptions should not be limited to only those persons arrested for the crimes selected for analysis by the unit since many suspects commit a variety of crime types (i.e., a person who habitually commits armed robbery may be arrested for carrying a weapon).

- The crime analyst will need a street name or nickname file. This will be especially applicable for crimes of individual robbery and rape. Once again, the arrest reports are an excellent source of obtaining these nicknames. The file should be maintained for the general use of the unit and include the nickname, true name, and personal data of every person arrested if that person has a nickname.

- In the area of auto theft analysis, it will be necessary to correlate auto theft recoveries as well as the thefts. Both items of information should be spotted on the map. Geographically speaking, recovery locations will manifest themselves in patterns more often than theft locations. It is also necessary that the analyst working on auto theft work especially close with the other analysts, as many times stolen cars are used in the commission of other crimes. When this is discovered, the analyst should request that upon recovery the automobile be examined for fingerprints. The crime scene search technician is more likely to obtain a full set of prints from the abandoned car than from the scene of an armed robbery.

- The unit has plans to maintain a spot map operation. This is a very valuable operation to a manual system as it ensures that each offense will be reviewed by the analyst. It also graphically demonstrates geographical crime problems. The most common patterns discovered will be a concentration of one type of offense in the same area, and a spot map will serve to quickly point up these areas. The map which is currently available, however, seriously handicaps this effort by its lack of block numbers. To enhance the process, the block numbers should be marked on a master set of maps and thus avoid the analysts wasting time trying to properly spot the crime locations.

5. RECOMMENDATIONS

The following recommendations should be implemented by the Boston Police Department to enhance the operational capability of the Crime Analysis Unit.

- Mr. Lambert should augment the staff of the Crime Analysis Unit with a police sergeant to act in a supervisory capacity for the unit and as a liaisor to the user groups. Preferably, this sergeant should be familiar with the field practices of the Department and have credibility with the forces. It should be noted that this recommendation is not based on any lack of ability by Mr. Lambert or his staff. Rather, it is based entirely on the fact that the broad responsibilities of Mr. Lambert will make it extremely difficult for him to spend the required supervisory time with the unit or perform the necessary liaison duties.

- The crime analysts should be responsible for sorting through the offenses and determining what reports are to be used for analyses. This should take place at a central location and be performed with all of the analysts sitting down together, where they will have an opportunity to become familiar with each other's needs and to interface with each other concerning current patterns and trends.

- The Record Section of the Boston Police Department should be instructed to send copies of all Robbery, Sex Crime, Auto Theft, Offense and Arrest reports; all Investigative Supplemental reports; and all Intelligence bulletins to the crime analysis unit.

- Each analyst should maintain his own working file of offenses. The offenses should be filed by the crime and police division for a sixty-day period. A separate file should be maintained on specific problems which includes all available information about the problem and should be maintained for its duration.

- A suspect description file should be maintained by a designated analyst for the use of the entire unit. This data should come from arrest reports and should reflect physical descriptions and broad M.O. data. The method for maintaining and accessing this file would be the punch-sort card system.

- A designated analyst should maintain a nickname file for the general use of the Unit. This data should be obtained from the arrest reports and filed in alphabetical order of the nickname.

- Spot maps should be maintained routinely on the selected crimes with color-coded spots designating the month of occurrence. A series of acetate overlays should be used so that the maps never have less than a full month of data nor more than three months at one time. In the case of auto theft, a different shaped spot should be used to differentiate between stolen cars and recovered cars.

- The Unit's maps should have the block numbers penned in by a clerk prior to beginning the spot map operation. This can be done from a commercial city map or by the use of a mapsco type of book.

- The Unit should routinely produce and disseminate crime bulletins concerning suspect descriptions, overall seasonal trends, and suspect vehicle descriptions. These bulletins should be printed on a practical format with a Crime Analysis Unit Heading. Each bulletin should request an officer taking action, based on the bulletins' information on the subject, to contact the Unit.

- When the Unit discovers a specific crime pattern or series of crimes which can be connected, a special memo should be prepared and addressed to the lowest ranking officer with authority to take action on the identified problem. The memo should be distributed through the established chain of command for information purposes. Additionally, person to person interchange of analytical findings should be encouraged.

- A log should be maintained by the Crime Analysis supervisor listing the number of offenses reviewed, bulletins issued, problems identified, and requests answered by the Unit. The supervisor should use the log to submit a monthly report to the Director on the activities of the Crime Analysis Unit. These reports will be needed in the planning for future resources and in the evaluation process.

APPENDIX A

Boston Police Department
Incident Report

HAND PRINT

01. District	02. ☐ Original ☐ Supplementary	BOSTON POLICE DEPARTMENT INCIDENT REPORT	Page	of

03. Complaint No.	04. Nature of Incident	05. Crime Code	06. Status ☐ Unfounded ☐ Inactive ☐ Arrest (☐ Under 18) ☐ Except. Cl.	07 Date of Occur. A.	B.

08. Location of Incident (#, Street)	(Intersection-Alpha Order)	Apt.	09. Dispatch Time ☐ A ☐ P	10. Time of Occur. ☐ A A. ☐ P	B. ☐ A ☐ P

11. Victim (Last,First,MI)	12. Phone	13. Sex ☐ M ☐ F	14. Race	15. Marital ☐ Marr. ☐ Unmarr.

16. Address (#, Street—City & State if Other Than Bos. or Mass.)	Apt.	17. Age	18. DOB

19. Person Reporting (If Different Than Above)	20. Address	Apt.	21. Phone

22. Narrative

VEHICLES

23. ☐ Stolen ☐ Recov. ☐ Lv. Scene ☐ Aband. ☐ In Cust. ☐ Other ☐ Used in Crime	24. Reg. State, Number	25. Plate Type Year (Exp.)	26. Vehicle ID Number
27. Vehicle Make/Year	28. Model	29. Style	30. Color (Top/Bottom)
31. Owner's Name	32. Owner's Address		

PERSONS

33. ☐ Arrest ☐ Witness ☐ Missing ☐ Warrant ☐ Suspect ☐ Summons	34. Name (Last,First,MI)	35. Booking Number	36. Alias

37. Warrant No.	38. Address	39. Sex ☐ M ☐ F	40. Race	41. Age	42. DOB	43. Height

44. Special Characteristics or Description (Include Clothing)	45. Weight	46. Build	47. Hair	48. Eyes

PROPERTY

49. Serial No. or Ident-I-Guard No.	50. Type of Property	51. Brand Name/Descrip./Model	52. Value	53. UCR Class	54. Recov.

MODUS OPERANDI

55. Unusual Event at Time of Attack (Funeral, Sport, etc.)	56. How Attacked (Beating, Fire Escape, etc.)	57. Means of Attack (Tools, Weapons)

58. Object Being Attacked (Cameras, Grudges, etc.)	59. Weather	60. Lighting	61. Neighborhood

62. Type of Building	63. Place of Entry	64. Transportation of Suspects (Car, Foot, MBT, etc.)

65. Unusual Actions and Statements of Perpetrator

66. Additional Information

67. Key Situations ☐ Licensed Premise ☐ Drugs ☐ Juveniles ☐ Others	68. Special Units Notified (Reporting)	Teletype #	69. Date of Report	70. Time Completed ☐ A ☐ P

71. Unit Assigned	72. Tour of Duty	73. Reporting Officer's Signature	74. Reporting Officer's ID	75. Partner's ID

APPENDIX B

Crime Analysis Operations and Applications

CRIME ANALYSIS OPERATIONS AND APPLICATIONS

DALLAS POLICE DEPARTMENT

July 1, 1974

Prepared by Crime Analysis Section

Planning and Research Division

R-75-109
B-2

Function of the Crime Analysis Section

Objective:

The Crime Analysis Section is primarily responsible for the detection of criminal modus operandi, discovery of crime patterns within geographical areas and the association between known offenders and crimes. This Section publishes Special Modus Operandi Bulletins, Crime Analysis Bulletins, Burglary Car and Suspect Listings, and Stolen Car Recovery Patterns which contain information that will alert field officers to crime problems thereby aiding in the attainment of primary police objectives.

The Tactical Section's crime problems and the police helicopter flying schedules are identified in this office as well as target identification for other special teams.

This Section, in the achievement of its objectives, maintains spot maps (delineating specific offenses), Field Contact File, Nick Name File, Suspect Car File, Suspect File, and other necessary data to identify a crime problem in the shortest possible time.

Dallas Police Department Position Description

SECTION SUPERVISOR
CRIME ANALYSIS SECTION

CIVIL SERVICE CLASS TITLE: Lieutenant of Police
DIVISION, SECTION OR UNIT: Planning and Research Division
Crime Analysis Section
HOURS ASSIGNED: 8:15 - 5:15
IMMEDIATE SUPERVISOR: Captain of Police
NUMBER OF SUBORDINATES SUPERVISED: Four

SUMMARY:

A Lieutenant of Police assigned to the Crime Analysis Section organizes and directs the activities of the Section, maintains liaison with line units and outside agencies, and maintains the efficiency and discipline of his subordinates. He conducts and directs appraisal and analytical activities and publishes various periodic and special reports describing criminal activity and persons believed responsible. The position differs from other supervisory positions that activities performed are of a staff nature and depend on effective liaison to achieve their objectives.

The Lieutenant reviews, edits and approves the production of the Section, and participates in crime review meetings to present current criminal data to other units. The Lieutenant confers with supervisors in field divisions in order to exchange information regarding offenses and suspects. The Lieutenant is supervised by the Division Commander, Planning and Research Division. The position requires supervisory ability, ability to maintain effective liaison, and the ability to analyze and present a variety of criminal data to all levels of the Department.

DUTIES AND RESPONSIBILITIES:

60% 1. SUPERVISION

a. Directs, coordinates and assists in the preparation of crime data derived from crime reports submitted by field units and other sources. Directs the gathering, tabulation, analysis and dissemination of information relating to criminal personalities and activities in the city. Reviews daily and periodic crime summaries and bulletins prepared by the Section.

Cont'd.

20% 2. STAFF DUTIES

a. Analyzes, reviews and evaluates assembled crime data and prepares conclusions and recommendations based on this data for publication and/or for review by command personnel.

b. Prepares narrative portions of periodic crime summaries and other reports.

20% 3. LIAISON ACTIVITIES:

a. Maintains close coordination with all field divisions in order to expeditiously disseminate crime information of value to beat officers.

b. Carries out liaison activities with outside agency personnel in order to exchange crime information which includes more than one jurisdiction.

Dallas Police Department Position Description

CRIME ANALYSIS PERSONNEL

CIVIL SERVICE CLASS TITLE: 2-Police Analysts 8
1-Patrolman
DIVISION, SECTION OR UNIT: Planning and Research Division
Crime Analysis Section
HOUR HOURS ASSIGNED: 8:15 - 5:15
IMMEDIATE SUPERVISOR: Lieutenant of Police
NUMBER OF SUBORDIANTES SUPERVISED: None

SUMMARY:

This personnel gathers information pertaining to crime from line divisions, and in turn supplies derived information to these divisions in the form of crime pattern recapitulations, suspect and associates lists, field contact logs, areas or buildings having a high crime potential, and the like. These positions differ from others in the Division in that primary emphasis is placed on daily appraisal and evaluation of crime patterns and trends.

All crime reports submitted by line divisions are reviewed daily and modus operandi and other pertinent informtion is extracted. Various reports, including field contact reports, are reviewed and attempts are made to relate offenses and suspects. This personnel prepares and disseminates daily and special bulletins containing summaries of crimes occurring during the past day and any other information of value to field officers. They prepare a Crime Summary which reports preliminary statistical data for a certain period of time. These positions require a sound knowledge of police operations, excellent analytical ability and ability to maintain effective working relationships with field units. Persons in this position must be self motivated and work with a minimum of direct supervision.

DUTIES AND RESPONSIBILITIES

100% 1. Staff Duties

a. Analysis and Dissemination of Crime Data

(1) Receives, sorts, and reviews reports of Part I crimes submitted by line divisions; verifies proper crime and classification descriptions and prepares a synopsis of the crime.

(2) Researches and analyzes offense, intelligence, and arrest reports; makes comparative analysis of similar offenses,

Cont'd.

similar criminal methods of operations and possible suspects; prepares crime and related information reports for distribution to police staff and field personnel; performs research and analysis work for specific crime or crime problems, upon request from any concerned division.

(3) Identifies crime problems as to area of concentration, time committed, and possible suspects; maintains spot maps according to type of offense committed. Based on gathered information, makes decisions for the deployment of various police units such as tactical squads and helicopter units.

(4) Briefs police staff on crime trends, crime concentrations, unusual offenses, and possible suspects.

(5) May work with other law enforcement agencies to exchange information and to compile information on mutual crime subjects.

(6) Submits offense evaluation reports to criminal investigators whenever offenses have a similar modus operandi.

b. Special Publications

(1) By appraisal and evaluation of reported and derived data, prepares special bulletins containing information describing a particular series of related crimes, possible responsibles, potential times and locations of occurrence, method of operation, and the like.

(2) Through study and analysis of residence of known offenders and their movements throughout the city, prepares reports which serve to alert field officers to their methods and to provide other crime prevention information.

c. Field Contact Report Information

(1) Receives, sorts, and reviews field contact reports for possible connections to offenses, to note associates of the person interrogated, and to extract other information which may be of value.

(2) Provides requested information from field contact reports to other units of the Department and to ouside law enforcement agencies.

Cont'd.

d. Maintenance of Crime and Offender Maps:

(1) Maintains spot maps on which offenses in the categories or burglary, robbery, and auto theft are indicated. Maps reflecting total crime and special problems undergoing study are also maintained.

Dallas Police Department Position Description

CRIME ANALYSIS PERSONNEL

CIVIL SERVICE CLASS TITLE: Research Analyst 13
DIVISION, SECTION OR UNIT: Planning and Research Division
Crime Analysis Section
HOURS ASSIGNED: 8:15 - 5:15
IMMEDIATE SUPERVISOR: Lieutenant of Police
NUMBER OF SUBORDINATES SUPERVISED: None.

SUMMARY:

This is an advanced level position responsible for conducting logical analysis of complex or involved management and operational problems and fomulating mathematical models for solution by digital computer or other mathematical techniques.

DUTIES AND RESPONSIBILITIES:

1. Studies problem and prepares mathematical model of problem area in form of one or several equations that relate constants and variables, restrictions, alternatives, conflicting objectives, and their numerical parameters.

2. Gathers, relates, and identifies data with variables in model by applying mathematical tests.

3. Writes follow-up reports, evaluating effectiveness of research implementation.

4. Prepares monthly statistical reports.

CRIME ANALYSIS OPERATIONS AND APPLICATIONS

Daily Crime Posting:

Every morning the Operations Analysis Unit receives from the Reproduction Unit of the Report Section copies of all Offense/Incident Reports, Arrest Reports, and Supplements to Offense Reports received by the Report Section over the past twenty-four hour period. Offense/Incident Reports of the following kind are sorted out: (1) Bicycle Thefts, (2) Armed Robbery of a business establishment, (3) Burglary of a business, (4) Burglary of a residence, and (5) Automobile Theft. Each of these categories is handled by one of the three people who post the offenses on the appropriate wall map. Since the same person handles the same kind of offense each day, this person is probably the most knowledgeable person in the Department concerning that kind of offense.

By studying these reports daily and mentally noting suspects, modes of operation, automobiles involved, and time and location of occurrence, the individuals detect trends, establish connections between offenses, and make predictions. The information generated from this analysis helps the Special Operations Division deploy their tactical forces to where the greatest problems are and helps the scheduling for the Police Helicopter Section. In addition, the information developed from daily analysis is also valuable to investigators, patrolmen, and other field elements in solving past crimes.

The actual posting of the five offenses mentioned above to wall maps consists of placing a $\frac{1}{4}$" round adhesive coding dot to acetate overlays covering large 6' x 7' wall maps of the city. The coding dots are color coded by month and the occurrence date of the offense is written on each coding dot. The dots remain on the board for approximately three months. Each month the sheet of acetate is removed and a new sheet is added. When a sheet of acetate is removed, it is rolled up and stored for future reference. Each specific offense mentioned earlier is posted on a separate wall map.

Each Tuesday morning, the Operations Analysis Unit conducts a meeting with all patrol district commanders and representatives of other sections of the Police Department. The wall maps are reviewed and problem areas discussed. When requested, bulletins are prepared concerning problem areas. These bulletins are completed by Operations Analysis personnel. A bulletin is a summary of any type of crime which has occurred in a police beat over a time period of between ten and forty days. The bulletin lists the date, time, and location of each offense.

It describes the method of entry, type of property taken, weapon used or type of car stolen, depending upon the type of offense being treated in the bulletin. Also, descriptions and names of suspects are listed. A map of the beat with the locations of the offenses indicated is included with the bulletin. The bulletins are routed to the appropriate patrol division commander (see the example of a typical bulletin in the attachments).

Crime Statistics and Charts:

The statistical analyst assigned to the Operations Analysis Unit is responsible for maintaining wall charts on the following types of crime: (1) Index Crime Total, (2) Non-Index Crime Total, (3) Murder, (4) Rape, (5) Robbery, (6) Aggravated Assault, (7) Burglary, (8) Theft Over $50.00, and (9) Auto Theft. The monthly frequency of these crimes is charted on large, acetate covered wall charts for easy reference. The previous year data is displayed so that current frequencies can be readily compared to previous year frequencies. The frequency of clearances is plotted on each year also so that comparisons may be made between offenses and clearances of the current year and the past year.

Nickname and Alias Name Files:

Any nickname or alias names appearing on any of the reports received by the Operations Analysis Unit are entered in the nickname or alias name filing system described below.

File 1 - Alias Name File - Alias names are filed alphabetically with true name, race, Police Department ID number, address, date of arrest, age, height, weight, and date of birth.

File 2 - Nickname File - Nicknames are filed alphabetically with true name, race, Police Department ID number, address, date of arrest, age, height, weight, and date of birth.

File 3 - Nickname File - Filed alphabetically by nickname, contains true name and race.

File 4 - Nickname and Alias Name File - Filed alphabetically by alias or nickname, contains real name, race, address, date of arrest, age, height, weight, and date of birth.

File 3 contains information obtained from field elements, intelligence reports, etc. The information is not complete because the people whose

names are listed therein have not been arrested. File 4 contains information on people who have been arrested but not filed on. If and when these people are filed on, an ID number is assigned by the Identification Section. This ID number is recorded on the index card in File 4, and the card is moved to File 1 or File 2.

Offense and Supplement Filing:

After the offense reports have been sorted, studied, and the locations posted on the wall maps, they are filed by type of offense, beat, and date. Files are maintained for Residence Burglary, Auto Thefts, Armed Robbery, Business Burglary, and Bicycle Theft, i.e., the posted offenses. Each file contains four sets of folders. Each set of folders contains a slot for every beat in the city. Each set of folders contains one month of data. At the end of each month, the folder containing the least recent data is emptied and used for the next month's data. Therefore, the retention period for the data is from three to four months. Supplements concerning any offense on file are placed with that offense. If a supplement indicates that an offense or group of offenses have been cleared these offenses are marked cleared and the supplement filed. For a summary of the complete offense, posting and filing cycle, see the flowchart "Daily Crime Spotting" that follows.

Miscellaneous:

Locations of fences (business and/or residences which are known locations for the handling of stolen property) have been posted on the residential burglary map. This is done to determine relationships between burglary locations and a place of disposal for the stolen property.

All offenses involving an automobile description as a clue are filed in a special file. They are grouped by the make of the automobile described on the offense.

A file is maintained containing all Offense/Incident Reports, Arrest Reports, and Supplements thereto concerning Murder and Aggravated Assaults. Offense/Incident Reports concerning any type of crime are filed upon request.

Special reports as well as bulletins concerning crime problems are made upon request or when any of the Operations Analysis Unit's personnel feel that such reports are warranted.

Conclusion:

The preceding descriptions of the functions of the Dallas Police Department's crime analysis unit, the Operations Analysis Unit, hopefully answer the questions requested to be completed by the Foundation.

The Operations Analysis Unit was set up for the Department by the IACP in mid 1968. As such, it was probably among the first such units in operation. Through the years, this Department has sent representatives from the Operations Analysis Unit to visit such police departments as those in Kansas City, St. Louis, Los Angeles, and New York. The Department feels that the police in these cities are among the leaders in developing effective crime analysis units.

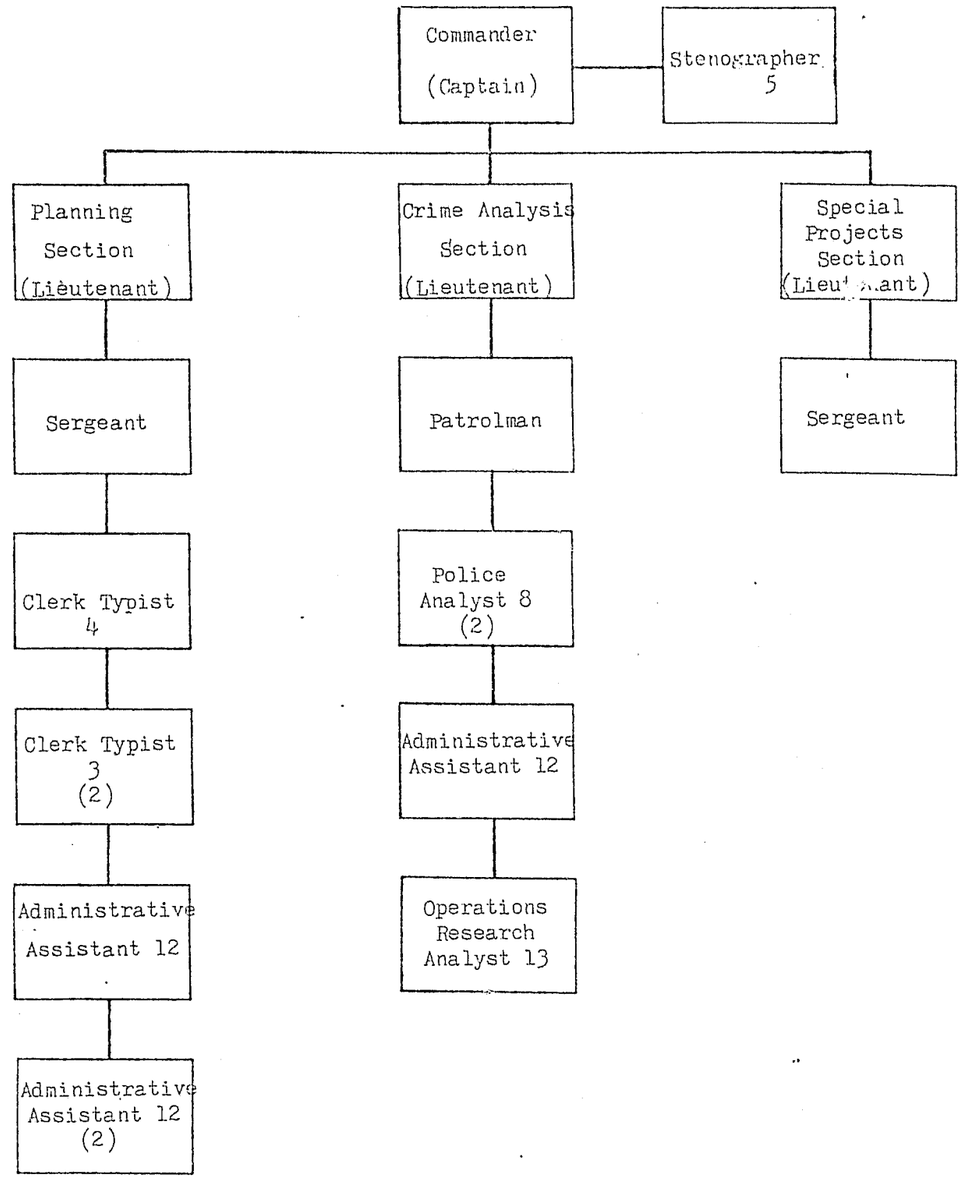
The Department is unaware of any pertinent current literature pertaining to the subject of this report.

The Dallas Police Department currently shares with other City departments two IBM 360 Model 50 computers and one IBM 360 Model 20 computer. One of the Model 50's is primarily used for teleprocessing (several visual on-line terminals are located throughout the Dallas Police Department) and the other Model 50 is primarily used for batch processing. The Model 20 is also used for batch processing.

Several computer reports are generated for the Dallas Police Department via the Department's Data Processing Section and the City's Data Services Department. Some of these reports are run on a regular basis (daily, weekly, bi-weekly, monthly, or yearly) while some are special project runs on a one-time basis. An example is given in the attachments of the most useful (to Operations Analysis personnel) regular computer report "Reported Crime By Location." This report is run daily and lists reported offenses for each police beat (109 beats), sergeant sector (16 sectors - a sector being a grouping of beats for which a patrol sergeant is responsible), patrol divisions (or districts on the example printout), and a total for the entire city by crime category and police watch. The daily totals as well as monthly cumulative totals are provided by this printout.

In closing, the Department wishes to reiterate its pleasure in having been chosen to participate in the Foundation's study. Any help that we can provide will be gladly furnished.

PLANNING AND RESEARCH DIVISION



(The following example sections have been condensed.)

BULLETIN EXAMPLES

THIS BULLETIN FOR INFORMATION
URPOSES ONLY

D - Door
W - Window
V - Vent
Wall - Knocked Hole in Wall
R - Roof

BUSINESS BURGLARIES

ate 10/24/72 Beat 112 113 Bulletin Number 1070 Information Covers [illegible] Days

Number of Offenses This Month: _____ Number of Offenses Last Month: _____ (Total)

ARRATIVE (LIST OFFENSES):

DATE	TIME	LOCATION	*METHOD OF ENTRY	TYPE PROPERTY TAKEN	SUSPECTS
AT 112					
/7-9/72	10:30pm-7:45am	424 Second Ave. (Rob & Lup Cafe)	W/D	$35, $20 Money Order $10 Money Order, 9 cases of Beer	
/10-11/72	9:00pm-1:30am	527 N. Haskell Ave. (Barnetts Garage)	W	Unk.	(1)
/10-11/72	9:00pm-1:30am	527 N. Haskell Ave. (Edge's Service Station)	W	Unk.	(2)
/12/72	9:00pm-12:05am	3802 Gaston Ave. (Miller Enco Serv. Sta.)	W/D	$5	
/12-16/72	10:00pm-6:15am	715 N. Washington Ave. (Stephan F. Austin School)	W	Port. TV	
AT 113					
/1/72	5:30pm	110 N. Peak St. (Clark's Automotive)	V	None	(3)
/5/72	6:00pm-8:05pm	4014 Elm St. (RCH Designs, Inc. of Dallas)	D	No Loss	
/5-6/72	5:00pm-1:45am	500 S. Haskell Ave. (American Tire Co.)	D	None	
/9-10/72	7:00pm-8:30am	4033 Elm St.. (J. C. Salvage Co.)	D	Meats	
/14-15/72	12Noon-9:00am	500 S. Haskell Ave. (Bill Valentine Truck Tire Co.)	W	Tires, Lug, Adding Mach., Tape Deck/ Speakers, Elec. Stove, Tool box/Tools, Battery Charger	
/72	1:25am	3903 Elm St. (L. P. M. Parts & Serv. Inc.)	D/W	Adding Mach., Type- writer, IBM Computer, Elec. Motor Scooter, Boxes of Gears, Tires, Change	(4)

THIS BULLETIN FOR INFORMATION PURPOSES ONLY

DATE: 10/24/72

BEAT: 112 & 113

BULLETIN: 1070

BUSINESS BURGLARIES

SUSPECTS

SUSPECT NO	DESCRIPTION
(1)	Kenneth Wayne Mornes C/M/21 #72-64045
(2)	Kenneth Wayne Mornes C/M/5-7-51 #72-64045
(3)	W/M/21, 5'10", 130#, long hair, mustache, blue jeans, sleeveless checkered shirt.
(4)	Raleigh Ralph Zundel W/M/42 #72-66314; Bobby Ray Anderson W/M/25 #72-66316; James L. Simmons W/M/45 #72-66315; White 1967 Ford Station Wagon 73 Fla. 43W 315

ARMED ROBBERIES OF BUSINESS ESTABLISHMENTS

Bulletin # 174 Date March 1-27, 1973 Beat Sections of 214, 221, 234

Number of offenses this month 5 Number of offenses last month 2 (both CBA)

Date & Time	Location	Beat	Weapon	Suspects
3-12-73 4:20 PM 66643-E	Warehouse Liquor 5823 Blackwell	234	gun w/brown handle in waist	W/M/30's, 5'9", 150#, ruddy comp., small mustache. Entered store 45 minutes before actual robbery and asked the time.
3-13-73 9:52 PM 67924-E	Safeway 5828 Abrams	217	.32 blue auto.	W/M/25-30, 5'8", 220#, dark collar length hair, needed shave, strong body odor. W/M/20's, 6'1", 180#, long brown hair. Got groceries then pretended he forgot his wallet. Went out to white 1971 Grand Prix and got #2 suspect, then they robbed the store.
3-25-73 7:45 PM 79573-E	Minyards 6515 Abrams	234	large blue auto.	W/M/35, 6', 165#, sandy blond hair, thin face, ruddy comp., poss. same suspect as Warehouse Liquor. Paid for groceries first then pulled gun from behind his back and robbed store.
3-26-73 9:00 PM 80518-E	Wards Drug Store 5848 Abrams	214	.45 blue auto. .32 rev.	W/M/25, 6', 160#, brown shoulder length hair, sharp nose. W/M/18-20, curley hair sitting in a silver Buick Riviera. Handed pharmacist a list of narcotics he wanted. Very nervous.

R-75-109
B-20

AUTO THEFTS

Original X Supplement ___ Continuation

Bulletin Number 1045 Date 10/5/72 Beat 222 Info. Covers 9 Days

Number of Offenses This Month 13 Number of Offenses Last Month —

DATE	TIME	LOCATION	TYPE CAR	SUSPECTS
/1-2/72	9:30pm-6:00am	10425 Lockyer (Pvt. Res.) (Rec. 10545 Lakemere Beat 222 - Cond. OK)	1964 VW 2-dr White MLZ 671	W/M/14, W/F/12, W/F/10 W/M/15, W/M/10
/2/72	2:00am-10:30am	10451 Foxton (Apt. Parking)	1965 VW 2-dr Red KDK 165	Poss same as above
/4-5/72	6:00pm-7:10am	10439 Foxton (Apt. Parking) (Rec. 10535 Lakemere Beat 222 - Cond. OK)	1966 VW 2-dr. White LHL 802	Richie Ramsey W/M/14-15 10611 Lorwood
/5-6/72	6:00pm-7:45am	10707 Havenlake (Apt. Parking) CBA	1967 VW 2-dr. Tan Okla XH 7205	Richard Ramsey W/M/16
/(/72	12Mid-7:30am	1121 Whitehaven (Apt. Stairway)	1971 Honda 100 Gold W 15369	
/9-11/72	6:00pm-8:00am	11500 E. N.W. Hwy (Used Car Lot) (Rec. Waxahachie, Tex. Cond. Stripped)	1970 VW 2-dr White LLS 462	
/14-15/72	10:00pm-5:50am	10676 Kingsley (Apt. Breezeway)	1972 Yamaha 250 Gold W 6038	
/16/72	8:00am-1:30pm	9606 Rolling Rock (Apt. Parking)	1972 Honda 750cc Brn. 72 Ariz. Unk.	W/M/28-29, 5'11", 190#, Brn. hair, med. length, mustache; lives at 4827 Covey Ct.
/20-23/72	9:00am-4:00pm	11400 LBJ Frwy (Public Street)	1965 VW 2-dr. Green NMG 128	
/27-28/72	7:00pm-9:00pm	10676 Kingsley Rd. (Apt. Breezeway)	1972 Yamaha 250cc Orange/Gold W 14133	
/27-28/72	9:00pm-8:30am	8828 Larchwood (Pvt. Driveway)	1970 Toyota 4-dr. White MVC 890	
/(/72	7:30pm	11844 E. Northwest HWY. (Car Lot)	1967 Chev. 2-dr. White LMH 325	W/M/late 20's, 5'11" 170#, blk. hair

PLANNING AND RESEARCH DIVISION

OPERATIONS ANALYSIS

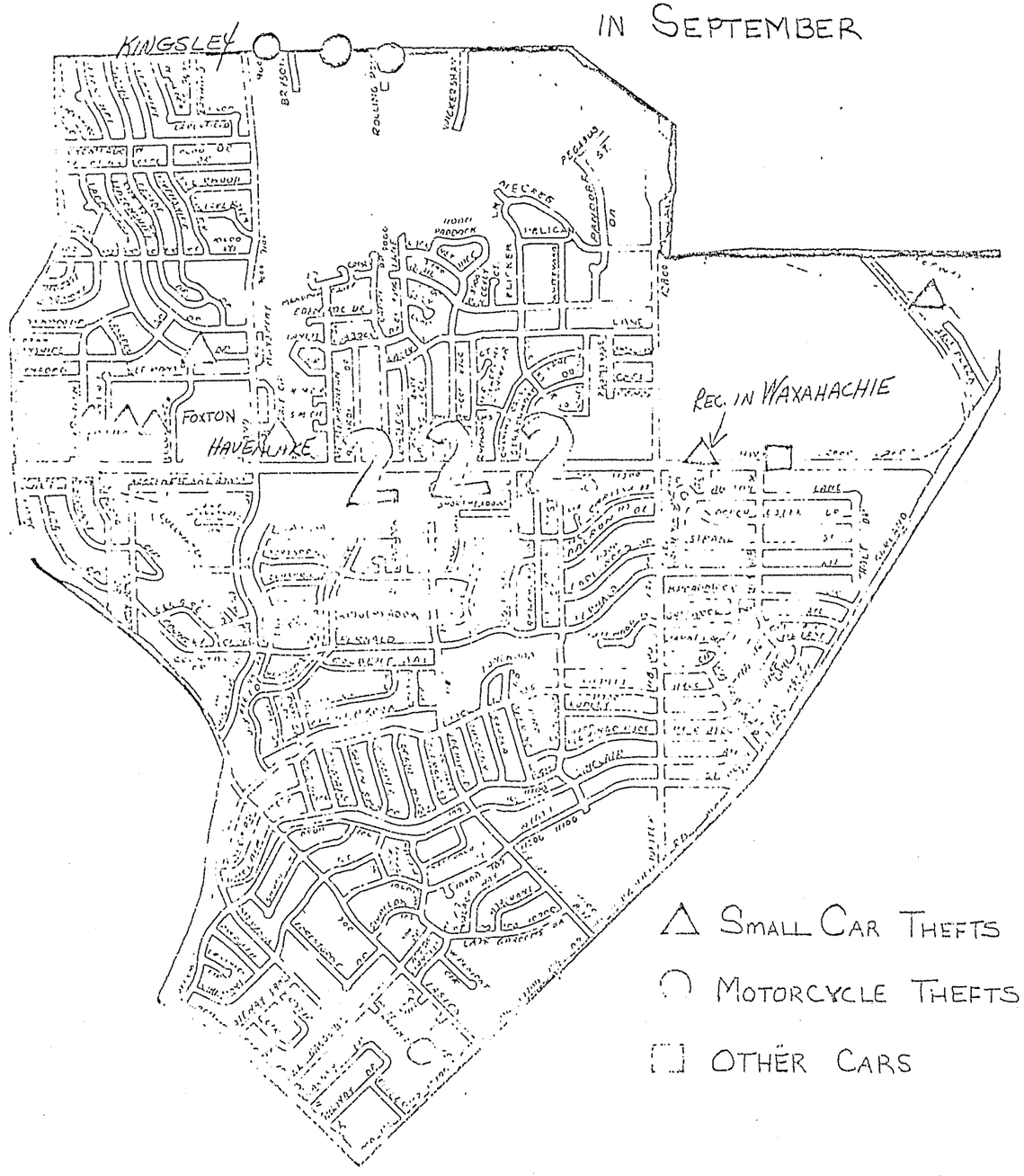
(Continuation)

DATE	TIME	LOCATION	TYPE CAR	SUSPECTS
9/29-30/72	7:00pm-12:45pm	9318 Larchwood (Res. Driveway)	1962 VW 2-dr. Blue MLK 865	

SUMMARY:

Thefts of VW's and small cars are still occurring on this beat. The area these are disappearing from is relatively small (see map). Motorcycles are another popular target. Please note that none of these have been recovered.

VEHICLE THEFTS IN SEPTEMBER



R-75-109
B-23

AUTO THEFT RECOVERIES

DIVISION: Central MONTH: June YEAR: 1974

WHERE STOLEN			WHERE RECOVERED		
BEAT	LOCATION	DATE	BEAT	LOCATION	CONDITION
111	1000 S. Central Bus. Pkg. Lot #181700-F	6/14/74	111	1000 S. Central	Good
112	3909 Simpson Apt. Pkg. Lot #185509-F	6/17/74	112	3609 Simpson	Driveable
112	500 Second Ave. Co. Pkg. Lot #195196-F	6/25/74		I-45 Corsicana	Driveable
113	4600 Eastside Public St. #175192-F	6/8/74	523	6900 Lemmon	
113	4611 Columbia Apt. Pkg. Lot #177332-F	6/10/74	214	1900 Kidwell	Driveable
13	100 N. Carroll Bus. Pkg. Lot #190171-F	6/21/74		DeFuniak Springs, Florida	Driveable
113	4200 Main Public St. #191442-F	6/21/74	123	3000 Alamo St.	Non-Driveable
113	4000 Simpson Pkg. Lot #191610-F	6/22/74	518	4600 Leath	Driveable
114	900 St. Joseph Pkg. Lot #171274-F	6/5/74	137	S. Akard St.	
114	3500 Live Oak Sales Lot #179792-F	6/12/74	114	3600 Convent St.	Driveable
115	4106 Ross Pkg. Lot #188044-F	6/19/74	122	500 Wood	Driveable
115	4100 Ross Pkg. Lot #189277-F	6/20/74	122	500 Wood	Unk

CARS AND SUSPECTS

OPERATIONS ANALYSIS SECTION
PLANNING AND RESEARCH DIVISION

DATE: November 1 - 30, 1972

For Information Purposes Only

LISTED *

CAR	SUSPECT	BEAT - LOCATION SERVICE NUMBER
[illegible] - White		326 - 6618 Lucy St. - #312145
[illegible] - 1968 - Skylark - Black/ [illegible]ite - 72 Tex. (Veh. reg. to [illegible]ice F. Lowery, 5813 Bonnie View Road #2135)	2 C/M's/16-20, 1 red cap and long dark coat	339 - 5717 Bellcrest - #328052-D
CADILLAC - 1968 - 4-dr. - White	C/M/early 20's, 5'11", 150#, med. afro, light skin, blue jean jacket, blue jeans; C/M	335 - 3424 Southern Oaks #C - #320517-D
[illegible]ILLAC - Green - KZY 626	3 C/M's, two were tall, one sitting in car.	516 - 4042 Applegrove St. - #317940-D
[illegible]ROLET - 1964 - Gray - [illegible] 512	6 C/M's/Teenagers (Lic. reg. to a '67 Chev. 4-dr. - Chester Lee Coleman; 3663 Delhi)	339 - 4108 Happy Canyon Dr. - #306990-D
[illegible]ROLET - 1961-62 - Bel Air - [illegible]ite (Clean) - Blk. Tires	2 C/M's/18-20, 6' 170#, large afro; dark comp., white T-shirts, blue jeans	335 - 3476 Southern Oaks #311831-D
[illegible]ROLET - 1969 - Impala - [illegible]n	Herbie Manatall W/M Ph# 391-7125	325 - 2104 Bergstrom St. #306695-D
[illegible]OLET - 1967 - Camaro - [illegible]rgandy - had a white strip [illegible]n the side.	C/M/20's, dark clothes, tall and slender, blue golf hat; C/M/20's, tall and slender	118 - 4070 N. Central Exp #521 - #307858-D
[illegible]LET - 1961 - Black with [illegible] stripe		115 - 1320 N. Peak St. - #310270-D
[illegible] - Yellow - CLH 980	* Samuel G. Skibell W/M/24, 10/26/48	231 - 4682 Matilda #A - #312568-D
[illegible]ROLET - 1963-64 - White	"Jerry" W/M/23-24	226 - 2615 Maverick - #317288-D
[illegible] LET - 1967 - Impala - [illegible]t. Yellow	LA/M, 5'7", goatee and mustache, wearing sport clothes; W/M W/F/20-23, blond	226 - 2630 Heatherwood Dr. - #324454-D

R-75-109
B-25

HELICOPTER SCHEDULE

June 15, 1974 to June 21, 1974

	Business Burglary Auto Theft 11 pm - 7 am		Residential Burglary 7 am - 3 pm		Business Armed Robbery Individual Robbery 3 pm - 11 pm	
Saturday 6/15/74	Primary	500	Primary	200	Primary	100
	Secondary	100	Secondary	300	Secondary	300
	Alternate	300	Alternate	400	Alternate	400
Sunday 6/16/74	Primary	500	Primary	200	Primary	100
	Secondary	100	Secondary	300	Secondary	300
	Alternate	300	Alternate	400	Alternate	400
Monday 6/17/74	Primary	500	Primary	200	Primary	100
	Secondary	100	Secondary	300	Secondary	300
	Alternative	300	Alternate	400	Alternate	400
Tuesday 6/18/74	Primary	500	Primary	200	Primary	100
	Secondary	100	Secondary	300	Secondary	300
	Alternate	300	Alternate	400	Alternate	400
Wednesday 6/19/74	Primary	500	Primary	200	Primary	100
	Secondary	100	Secondary	300	Secondary	300
	Alternative	300	Alternate	400	Alternate	400
Thursday 6/20/74	Primary	500	Primary	200	Primary	100
	Secondary	100	Secondary	300	Secondary	300
	Alternate	300	Alternate	400	Alternate	400
Friday 6/21/74	Primary	500	Primary	200	Primary	100
	Secondary	100	Secondary	300	Secondary	300
	Alternate	300	Alternate	400	Alternate	400

11 P.M. to 7 A.M. - BUSINESS BURGLARY AND AUTO THEFT

500's — This area had an increase in business burglaries over the past two months. Bars and warehouses appear to be the problem. Fly the area south of Northwest Highway including the west Dallas area.

100's — The 110's and 120's are the problem in this area. Several bars and restaurants have been hit in this area by prying open a door. Usually the coin machines are pried open and the money taken.

300's — Beats 311 and 312 have been hit hard, especially bars and restaurants. Watch these beats closely; also fly the area from Forest Avenue north to the division boundary.

7 A.M. to 3 P.M. - RESIDENTIAL BURGLARY

200's — In this Division, concentrate on beats 231 and 237 for garage thefts and residential burglaries. Several offenses have occurred on these two beats so far this month. Beats 231 and 234 are down but need to be watched.

300's — In this Division, beats 242 and 243 have a terrible problem in the apartments. On these two beats watch for suspects leaving apartments with portable T. V.'s. The 330's continue to be a problem month after month. Pay close attention to beats 333 and 334.

400's — The area between Hampton and Lancaster Road needs coverage daily as this is one of the hottest areas in Dallas. Beats 415, 412, and 422 are the hardest hit at this time.

3 P.M. to 11 P.M. - BUSINESS AND INDIVIDUAL ROBBERY

100's — Drive-in grocery robberies are picking up this month. Watch these stores closely, especially in the 120's. The 110's and 120's also have the majority of the individual robberies this month. Watch around bars for people being robbed on the parking lots.

300's — Church's Fried Chicken in the 900 block of Corinth Street has been robbed five (5) times in the past three months, including two (2) this month. Watch this location and some robberies are also occurring down the rest of Lancaster. Individual robberies are occurring around Forest and Oakland. Watch around the bars in this area.

400's — Lancaster Road and Ledbetter are the two (2) streets to watch in this Division. So far, all the business robberies have occurred on or around these two (2) streets.

Tactical Section
Special Operations Division

Date Return Due: _____

Problem # A-16-74 Squad Assigned A2 & A3 Nature: Residence Burglary

Location Area Bounded by: Beat 425

New Problem: ____ Continuing Problem: X Special Event: _____

Spot Map Information Covering Period: June 1, 1974 to July 9, 1974

Objectives: To prevent residence burglaries and apprehend suspects.

DATE	TIME	LOCATION	TYPE PROPERTY TAKEN	METHOD OF ENTRY	SUSPECT
7/1/74 Monday	7:05am-6:05pm	3309 S. Vernon #165 Adra Davis #202416-F	stereo set, 9" black & white TV, coat, .22 cal. pistol, album	D	
7/1/74 Monday	7:20pm	1437 Brook Valley E. C. Anderson #202499-F	edger	unk	(1)
6/10-7/2/74 Monday - Tuesday	5:00pm-9:00am	619 Oak Forest David Anderson #203188-F	fishing rods,	G	
7/2/74 Tuesday	6:30am-4:00pm	3629 Fawn Valley #1030 Clifton Carrington #203460-F	tape deck, 19" black & white TV, golf clubs, movie camera	FD	
7/2/74 Tuesday	2:25am	950 W. Kiest #104 Sharon Hawthorne #202929-F	$170.00	W	(2)
7/2/74 Tuesday	10:45pm-11:30pm	5210 Lake Placid Mitch Kelley #203982-F	bike	G	
7/2/74 Tuesday	4:00pm-11:00pm	822 Meadowheath Linda E. Louden #204042-F	bike	unk	
7/4/74 Thursday	11:00am-3:45pm	5233 S. Hampton Booker McGill #205948-F	9" color TV	unk	

DISTRIBUTION:

Chief Souter
Captain Bryant
Unit Commanders
2 Section File
Chief Fannin
Lieutenant Macsas (P & R)
Sergeant of Squad Assigned
Patrol District Managers

Sgts. Howard/Wafer
Sergeant of Police
Tactical Section
Special Operations Division

DATE	TIME	LOCATION	TAKEN	ENTRY	SUSPECT
6/22/74 Saturday	7:00pm-10:0[illegible]pm	3435 Navajo Oren Critchfield #192398-F	lawn mower, tool box, tools	G	
6/14-16/74 Friday Sunday	5:00pm-10:00[illegible]	5629 Marblehead James L. Jones #192984-F	unk	G	
6/17-23/74 Monday Sunday	8:00am-6:00pm	1114 Oak Meadows Orin Kjos #193352-F	lamp, meat	unk	
6/3-23/74 Monday Sunday	8:00am-4:00pm	3653 Cripple Creek John L. Mann #193261-F	bike	G	
6/21-22/74 Friday Saturday	1:00pm-6:00pm	5832 Lake Placid Boyd Loyd #19474146-F	unk	D	
6/19-23/74 Wednesday Sunday	8:00am-unk	5629 Marblehead James Lamar Jones #194786-F	tape carrier, tapes ice cream freezer, 25" color TV, wigs, lawn mower, edger, money, radio, stereo, shot gun, liquor, silver tray, food	G	
6/24/74 [illegible]day	11:50am	706 Meadow Heath Tom Peacock #194050-F	bikes	G	(10)
6/26/74 Wednesday	6:30am-2:00pm	832 Greencove J. W. Dulworth #196531-F	lawn mower	G	
6/26/74 Wednesday	2:30am-7:55am	1629 Meadow Valley Don Mitchell #196125-F	credit card	unk	
6/28/74 Friday	6:15am-10:30am	1137 Misty Glen Guy J. Hunter #198944-F	lawn mower	G	
6/28/74 Friday	11:00am-10:30pm	659 W. Pentagon Norma McDowell #199285-F	19" color TV, 19" black & white TV, sewing machine	D	

SUSPECTS:

(1) N/M. N/M.

(2) N/M.

(` N/M/25/5-6 to 5-7/skinny, short hair.

(4) 2/N/M's.

(5) N/M/20's, afro, checked shirt.

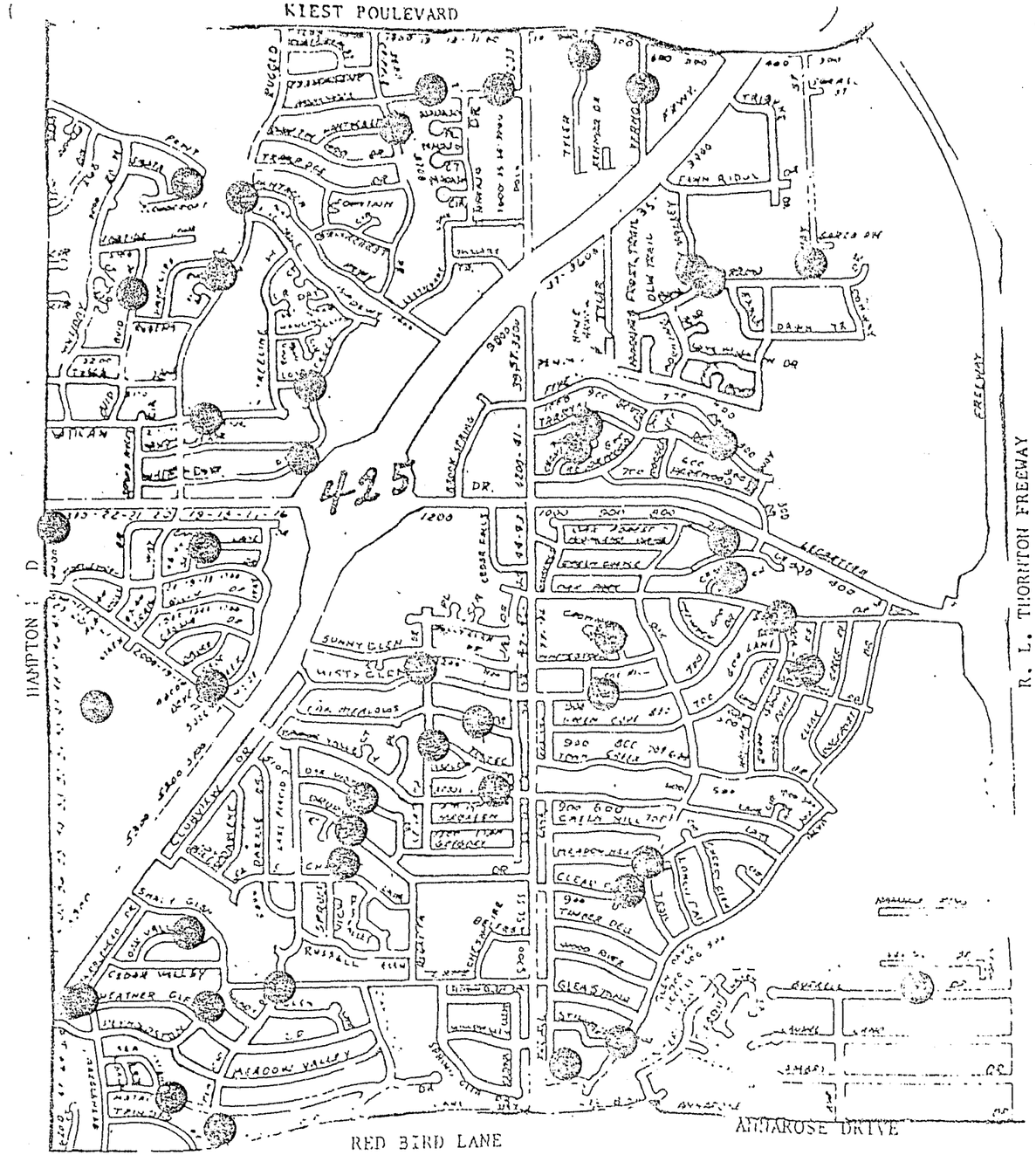
(6) Eddie Maddox, W/M/14, 2200 Myrtlewood.

(7) 2/W/M's/16-17.

(8) Robert Douglas Crice, Jr., W/M/28, DOB 4-7-45, 4651 Country Creek.

(9) Glenn Anthony Richie, N/M/15, 5825 Spring Glen.
Roger Bernard Johns, N/M/14, 2541 Club Manor.
William Steve Hudson, N/M/12, 4520 Woodstock.

(10) N/M/10-12/slender, bushy hair, white t-shirt, cut off blue jeans.
N/M/10-12/husdy, wine shirt, cut off blue jeans.


KIEST POULEVARD
HAMPTON
R. L. THORNTON FREEWAY
RED BIRD LANE
ANITAROSE DRIVE
MEADOW VALLEY
SUNNY GLEN
CEDAR VALLEY
DAWN TR
DR.

R-75-109
B-31

CONTINUED

1 OF 2

BUSINESS ARMED ROBBERY ANALYSIS

Prepared by Operations Analysis Unit

December 1, 1972

R-75-109
B-32

INTRODUCTION

Due to the fact that the city is now entering that phase of the year that has traditionally been high in business robbery occurrence, it is hoped that this survey of recent business robberies will be beneficial as an indicator on what to expect through the Christmas season.

Operations Analysis has reviewed the business robberies occurring during the period October 1, 1972 through November 20, 1972, and categorized the offenses by business type and time of occurrence (both by day of week and hour of day). The pertinent statistics developed from this sample are presented in the following pages.

DATA

There were 158 business robberies during this time span (see preceding paragraph). They are categorized by type of business as follows:

Business	No. Robberies	Percent
Drive-In Groceries	33	21%
Drive-In Foods (Jack-In-The Box, Etc.)	21	13%
Grocery Markets	20	13%
Service Stations	18	11%
Liquor Stores	7	4%
Restaurants	7	4%
Cleaners	5	3%
Miscellaneous	47	30%
Total	158	99%

Considering just the top four (4) categories above (i.e., Drive-In Groceries, Drive-In Foods, Grocery Markets, and Service Stations), the day of week and time of day breakdowns for the whole group are:

By day of week:

Day	No.	Percent
Sunday	14	15%
Monday	25	27%
Tuesday	9	10%
Wednesday	8	9%
Thursday	16	17%
Friday	12	13%
Saturday	8	9%
Total	92	100%

By time of day:

Time Period	No.	Percent
1 a.m. - 9 a.m.	13	14%
9 a.m. - 12 Noon	4	4%
12 Noon - 3 p.m.	10	11%
3 p.m. - 6 p.m.	6	7%
6 p.m. - 9 p.m.	19	21%
9 p.m. - 1 a.m.	40	43%
Total	92	100%

From the preceding table, the busiest time period is between 6 p.m. and 1 a.m. Indeed, sixty-four percent (64%) of the robberies above occur in this span. The breakdown by type of business robbed during these hours is:

Business	No.	Percent
Drive-In Groceries	25	42%
Service Stations	12	20%
Drive-In Foods	11	19%
Grocery Markets	11	19%
Total	59	100%

In the preceding table, the Drive-In Food robberies all occurred between 9 p.m. and 1 a.m.

November offenses as of November 28, 1972:

Beat		
110	- 5	
120	- 8	(Three [3] Clear or Known)
130	- 5	
210	- 13	(One [1] Clear or Known)
220	- 4	
230	- 2	
310	- 6	
320	- 11	(Two [2] Clear or Known)
330	- 6	
410	- 11	(One [1] Clear or Known)
420	- 7	(Three [3] Clear or Known)
430	- 3	
510	- 2	
520	- 18	(Two [2] Clear or Known)
530	- 3	

CONCLUSION

Heaviest offenses are occurring this month in the following areas:

- 110's
- 120's
- 210's
- 520's
- The area in the southeast section of the 410's and down Lancaster Road in the 420's.
- Buckner Boulevard from the 1300-2300 blocks.

These areas are outlined on the map on the following page.

As a summary and conclusion, the following analysis tying in business type, time of day, and day of week is presented:

Drive-In Groceries:

The most frequent time span of occurrence is between 6 p.m. and 1 a.m. with all days of the week except Wednesday and Thursday affected. Sixty-one percent (61%) of all robberies of these businesses fall during the above times and days.

Drive-In Foods:

The most frequent time span of occurrence is between 9 p.m. and 1 a.m. with Mondays, Tuesdays, and Thursdays being favored. Fifty-two percent (52%) of the robberies of businesses of this type occur in the above time span, and seventy-three percent (73%) of these robberies occur during the above mentioned days.

Grocery Markets:

While collectively forty percent (40%) of the grocery market robberies occur between 9 p.m. and 1 a.m. with no particular day of the week predominant, Mondays between 12 noon - 3 p.m., and Thursdays between 3 p.m. and 9 p.m. stood out in this sample (forty percent [40%] of the robberies of this type occurred during these days and times).

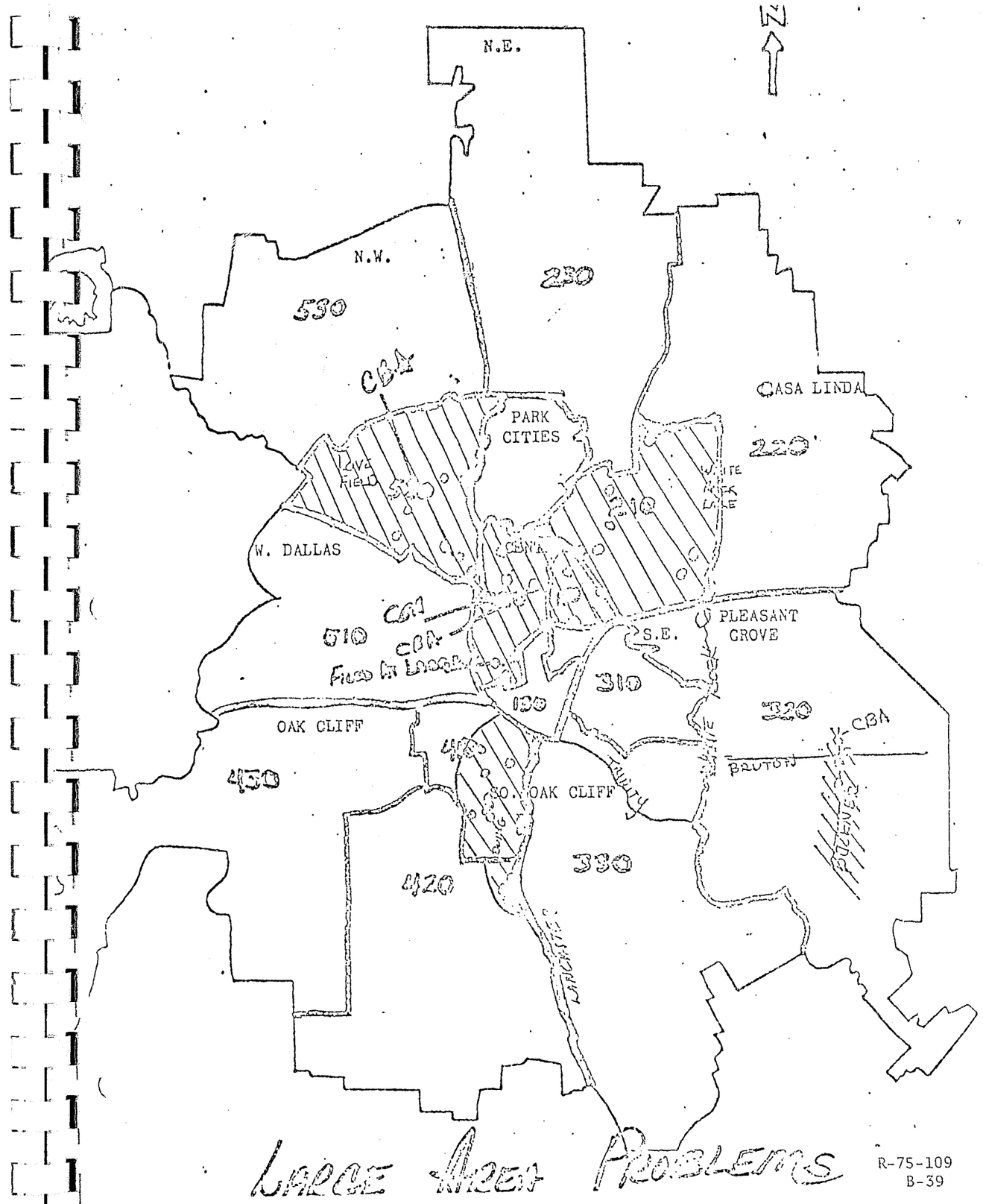
Service Stations:

Forty-four percent (44%) of the service station robberies in the sample occurred on Mondays between 6 p.m. - 1 a.m., and Thursdays between 9 p.m. - 1 a.m.

Approximately 66% of the armed robberies thus far in the city have been committed by black suspects. Because of the high number of armed robberies in the 520 sector, this area was chosen to be analyzed for suspect information. The analysis revealed a parallel between suspects in this area and all over the city.

In the Love Field area (520's), 86% of the businesses that were hit were robbed by colored suspects. In over two-thirds of these, more than one suspect was involved. It was not unusual to find three or four traveling together. The suspect description as a general rule is: C/M/20's (in some cases a little younger), about 5'7" to 5'9", 160 # - 175 #, and Afros of all shapes and sizes. Although there may be several suspects involved, it is seldom mentioned in the offense report of more than one gun.

Cars were seen in only 26% of the robberies in the 520's.


N.E.
N.W.
530
230
CBA
CASA LINDA
220
PARK CITIES
Love Field
W. DALLAS
CBA
510
CBA
Fwd to Loop
S.E.
PLEASANT GROVE
310
130
320
CBA
OAK CLIFF
430
S. OAK CLIFF
330
420
LARGE AREA PROBLEMS

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Memorandum

CITY OF DALLAS

DATE August 2, 1973

TO Deputy Chief J. M. Souter
Special Operations Division

SUBJECT Ski Mask Rapist

The following offenses have occurred in the Northeast District with the same suspect listed.

A description of the suspect is as follows:

White Male in his twenties
5'6" to 5'9" tall
165 to 175 lbs. - stocky build
No hair on his chest
Wears a dark ski mask with red around eyes and mouth
Wears a white sock on his left hand probably to cover a tatoo or deformity
Carries a paring knife in his right hand

The offenses are as follows:

Abduction - 4618 Amesbury, #161, 7/20/73, Service No. 206418. Suspect confronted one girl in the laundry room of the apartments. He forced her back to her apartment where there was two more girls. They were made to disrobe and dance in the nude. He also fondled their breasts. He told them he only wanted to look at their bodies. Then he forced them to drive to Waxahachie where he got out.

Criminal Assault - 6012 Sandhurst, #1009, 7/24/73, Service No. 209906. He raped the complainant, them he emptied her purse and her two roommate's purses, but took nothing. He told complainant he had always been in love with her.

Burglary - 13530 Maham, #250, 7/27/73, Service No. 213754. When complainant came home, suspect came out of bedroom. He told her not to scream and she wouldn't get hurt. She screamed and he fled. He left ropes, knife, plastic pulls from cords, and a wash towel torn in half.

Attempt Criminal Assault - Detective Don Burcham of the Richardson Police Department stated that just prior to the burglary at 13530 Mahan, they had an attempt criminal assault on Spring Valley with same M.O. and same suspect.

Kathryn Bonham

Kathryn Bonham
Operations Analysis Section
Planning and Research Division

KB:dt

R-75-109
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The following attachment is a portion of our Beat Count. This is prepared for each of the five divisions in the Police Department.

CRIME COMPARISON ANALYSIS

June, 1974

Crime Analysis Section

R-75-109
B-42

CITY SUMMARY

The citywide crime situation on June 30, 1974, as compared with May 31, 1974, and June 30, 1973, is as follows:

Offense	June 1974	May 1974	June 1973
Murder	16	15	25
Rape	65	63	57
Business Robbery	79	55	133
Individual Robbery	159	150	128
Aggravated Assault	362	310	482
Business Burglary	631	739	553
Residential Burglary	1381	1362	1131
Auto Theft	639	612	618
Theft/Person	39	38	42
BEMV	431	457	385
Auto Accessory Theft	908	858	596
Bicycle Theft	521	438	358
BECOM	72	64	50
Shoplift	546	589	434
Other Thefts	1236	1229	977
TOTAL	7085	6979	5969

Crime increased by 106 offenses or 1.52% in June compared to the month of May. Compared to June 1973, there was an increase of 1,116 offenses or 18.7%.

Total burglaries increased by 19.5% over the same period last year. Major increases in June occurred in business robbery, aggravated assault, residential burglary, auto theft, auto accessory theft, and bicycle theft. Trend bulletins are presently being issued by each division analyst.

The statistics presented on this and the following pages are of reported offenses only. The statistics were extracted from the daily printout "Reported Crime by Location" for June 30, 1974 and 1973, and May 31, 1974.

CITY SUMMARY

IN-THE-ACT ARRESTS

The following information on "In-The-Act Arrests" is based on information extracted from the daily Activity Report to the Chief of Police:

Offense	This Month	Last Month	Year to Date
Business Robbery	4	1	15
Individual Robbery	2	1	7
Business Burglary	22	25	161
Residential Burglary	29	15	153
Auto Theft	43	21	215
Theft/Person	0	0	3
BEMV	14	11	54
Auto Accessory Theft	0	0	0
Bicycle Theft	0	0	3
BECOM	4	3	15
Shoplift	0	0	0
Other Thefts	11	17	66
TOTAL	129	94	692

DIVISION SUMMARY

(ALL CRIMES)

CENTRAL DIVISION

The Central Division comparison of reported offenses for June, 1974 is as follows:

Offense	June 1974	May 1974	June 1973
Murder	5	5	3
Rape	7	9	9
Business Robbery	18	9	21
Individual Robbery	42	41	34
Aggravated Assault	48	63	89
Business Burglary	81	102	91
Residential Burglary	97	92	90
Auto Theft	97	78	108
Theft/Person	10	13	13
BEMV	72	87	76
Auto Accessory Theft	106	110	78
Bicycle Theft	24	24	19
BECOM	8	10	7
Shoplift	142	177	96
Other Thefts	217	218	162
TOTAL	974	1038	896

A decrease of 64 offenses or -6.17% occurred in the division in June as compared to May's total. Compared to June, 1973, crime increased by 78 offenses or 8.7%.

Types of offenses that do show some increases are detailed in the pages that follow.

CENTRAL DIVISION

IN-THE-ACT ARRESTS

The following information on "In-The-Act Arrests" is based on information extracted from the daily Activity Report to the Chief of Police:

Offense	This Month	Last Month	Year to Date
Business Robbery	3	1	6
Individual Robbery	0	1	2
Business Burglary	2	4	16
Residential Burglary	3	0	13
Auto Theft	4	2	18
Theft/Person	0	0	0
BEMV	0	2	5
Auto Accessory Theft	0	0	0
Bicycle Theft	0	0	1
BECOM	0	0	0
Shoplift	0	0	0
Other Thefts	0	1	6
TOTAL	12	11	67

BUSINESS ROBBERY

BEAT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
111	0	0	0	1	0	0							1
112	0	1	2	1	0	1							5
113	0	0	0	0	0	4							4
114	3	0	1	1	2	0							7
115	0	0	0	1	0	0							1
116	1	0	0	1	0	0							2
117	2	1	0	1	0	0							4
118	3	1	0	0	1	1							6
ector	9	3	3	6	3	6							30
121	0	0	0	0	0	0							0
122	0	0	0	0	0	1							1
123	0	0	0	0	2	0							2
124	2	3	1	0	2	0							8
125	0	0	0	0	0	3							3
126	1	0	0	0	1	1							3
[illegible]	3	1	2	0	0	4							10
128	0	0	0	0	0	0							0
ector	6	4	3	0	5	9							27
131	0	0	0	0	0	2							2
132	0	1	0	0	1	0							2
133	1	0	0	1	0	0							2
134	1	0	0	1	0	0							2
135	0	0	0	0	0	1							1
136	1	0	1	0	0	0							2
137	2	0	0	0	0	0							2
138	1	0	0	1	0	0							2
ector	6	1	1	3	1	3							15
TOTAL	21	8	7	9	9	18							72

Analysis:

Business robberies increased slightly from last month. There were no problems experienced this month.

Special Reports

- Examples -

ATTACHMENT I

PROJECT CRIME CONTROL

- Preliminary Analysis -

R-75-109
B-49

PROJECT CRIME CONTROL: PRELIMINARY ANALYSIS

Introduction:

The Dallas Police Department, in an effort to test what effect extra plainclothes policemen would have on the occurrence of residential burglaries in a given area, put into effect in March "Project Crime Control". This effort involved the selection of three similar areas in the city that were subject to approximately equal numbers of residential burglaries over a given time span. For this purpose, Beats 125, 127 and 128 in the Central District were chosen.

The experiment (Project Crime Control) was divided into two initial phases: (1) the Control Period, comprised of January and February; and (2) the Experimental Period, comprised of March and April. During the Control Period, no plainclothes police officers were brought into the areas. The only police in the areas were the normal patrol elements. During the Experimental Period, plainclothes policemen were brought into Beats 127 and 128 to supplement the regular patrol elements there. Beat 125 was left as it was (no additional police) and designated the Control Area. Beats 127 and 128 were termed Experimental Areas. Below is a presentation of the experiment and the data gathered thus far.

Problem:

Does plainclothes police saturation of a given area affect the occurrence of residential burglaries there?

Hypothesis:

Plainclothes police saturation of a given area for a given time period does reduce the occurrence of residential burglaries there.

Definitions:

Dependent Variable - the number of residential burglaries occurring

in the test areas (Beats 125, 127 and 128) before, during, and after saturation by plainclothes police officers.

Independent Variable - Saturation (no plainclothes officers present or plainclothes officers present supplementing regular patrol elements).

Control:

Experimental Areas - Beats 127 and 128

Control Area - Beat 125

Experimental Period - March and April

Control Period - January and February

Variables to be Controlled -
(1) Similar (homogeneous) areas to work
(2) Same assignment periods (dates worked the same)
(3) Appropriate working hours for plainclothes police officers (hours of highest residential burglary occurrence).

Apparatus and Personnel:

Apparatus - unmarked police cars, bicycles, and standard police equipment.

Personnel - two squads provided by Special Operations each consisting of a Sergeant and his patrolmen.

Procedure:

(1) Select the areas to be utilized in the experiment (Beats 125, 127 and 128).

(2) Select the time periods to be covered (January-February, and March-April).

(3) Select two squads from Special Operations to utilize in the experiment.

(4) Select the appropriate hours for the plainclothes officers to work (provided by the Operations Analysis Unit, Planning and Research Section).

(5) Designate the experiment areas (Beats 127 and 128).

(6) Designate the Control Area (Beat 125).

(7) Conduct the experiment (gather data from the three designated areas before saturation, during saturation, and after saturation).

(8) Repeat the experiment interchanging the experimental and control areas (i.e., the control area then becomes the experimental area and the experimental areas then become the control area).

(9) Evaluate the hypothesis in light of the experimental evidence gathered.

(10) Accept or reject the hypothesis.

Partial Data:

The chart presented below represents the data gathered for the 1st half of "Project Crime Control". It is the data for steps (1) through (7) of the experiment as outlined in the Procedure above. Only step (8) in the Procedure (the repeating of the experiment reversing the control and experimental areas) remains to be done - and the final analysis (Steps (9) and (10)).

Chart: Initial Data

	No. of Residential Burglaries			
	Control Period		Experimental Period	
	Jan.	Feb.	Mar.	Apr.
Control Area - Beat 125	16	7	19	21
Experimental Area - Beat 127	8	13	12	4
Experimental Area - Beat 128	10	12	7	9

Preliminary Analysis:

In order to select three areas of the city as much alike as possible,

it was necessary to delete portions of each of the beats selected above in order to achieve the desired homogeneity. Thus, Beat 125 becomes the area bounded by Fitzhugh, the M.K.T. Railroad, Sneed, and Cole; Beat 127 becomes the area bounded by the North Dallas Tollway, Hall, and Reagan; and Beat 128 becomes the area bounded by Lemmon, Gilbert, Hawthorne, and Knight. To reiterate, not the entire beats but portions of each beat comprise the actual experimental and control areas. For reasons of simplicity, however, the control and experimental areas were referred to in the previous discussions by their beat designations (the beats they lie in - Beats 125, 127 and 128). For simplicity again, the experimental and control areas will continue to be referred to by their beat designations.

The above sacrifice for homogeneity has, however, a drawback. By selecting areas smaller than beats, comparison with last year's residential burglary counts for the same areas is impossible since historical information is only collected geographically by reporting area and beat (the experimental and control areas do not follow reporting area boundaries). Hence, the significance of seasonal variation in the data is unknown. Thus how much of the variation in the data from month to month is due to seasonal causes cannot be determined for the designated areas.

With this limitation in mind, a look at the above chart reveals a strong trend toward fewer residential burglaries in the experimental areas during saturation and at the same time (during saturation of Beats 127 and 128) an increase in residential burglaries in the control area (Beat 125). This is illustrated below.

The change in the number of residential burglaries per area before and during saturation is expressed in the following chart:

Percent Change By Period

Beat	Control Period	Experimental Period	Percent Change
125	23	40	+ 73.9%
127	21	16	- 23.8%
128	22	16	- 27.3%

Another way of expressing the same findings as above is to determine the average number of residential burglaries per month in both the Control Period and the Experimental Period and compare these averages for each beat. This yields:

Percent Change By Average No. of Residential Burglaries Per Period

Beat	Control Period	Experimental Period	Percent Change
125	11.5	20.0	+ 73.9%
127	10.5	8.0	- 23.8%
128	11.0	8.0	- 27.3%

The month to month comparisons of the residential burglary counts are as follows:

Percent Change By Month

Beat	Control Period	Experimental Period	
	Jan./Feb.	Feb./Mar.	Mar./Apr.
125	- 56.2%	+ 171.4%	+ 10.5%
127	+ 62.5%	- 7.7%	- 66.7%
128	+ 20.0%	- 41.7%	+ 28.6%

Each of the above charts indicates that a decrease in residential burglaries occurred in the Experimental Areas during saturation while an increase occurred in the Control Area, which is contiguous to the Experimental Areas (the entry in the last cell of the Percent Change By Month table although being + 28.6% represents data that is still less than the corresponding entries during the Control Period - see the initial data chart). Thus, upon mere inspection of all the charts presented in this report, it appears that the hypothesis being tested in the experiment, i.e. saturation of a given area by plainclothed police officers will reduce the occurrence of residential burglaries, is a fair hypothesis and stands a good chance of being supported in the final analysis.

To be considered in that final analysis, however, is the effect of seasonal variation (which must be estimated in this case) and a valid statistical test for the acceptance or rejection of the hypothesis (Chi-Square, for instance).

Conclusion:

The hypothesis being tested in the experiment appears to be supported by the data collected thus far; therefore, the experiment should be continued and the hypothesis weighed in light of the final data.

Calculations:

The Chi-Square calculations for the January and February residential burglary data are as follows:

Table 1:

f_o	f_e	$f_o - f_e$	$(f_o - f_e)^2$	$(f_o - f_e)^2/f_e$
16	11	5	25	2.273
7	11	-4	16	1.455
8	11	-3	9	.818
13	11	2	4	.364
10	11	-1	1	.091
12	11	1	1	.091
66	66	--	--	5.092

$X^2 = \sum \frac{(f_o-f_e)^2}{f_e} = 5.092$, the calculated value of Chi-Square.

The tabular value is gotten from a standard Chi-Square table (see Xerox copy). For the data above, the table is entered under 5 d.f. (degrees of freedom) and 0.05 across the top of the table (a 95% confidence level or 5% chance of error in the hypothesis - a normal error factor) and the tabular value is found to be 11.070. Thus, the calculated value is much smaller than the tabular value and the observed frequency could well have deviated from the expected frequency due to chance or random factors alone.

The Chi-Square calculations for the March, April, and May residential burglary data are:

Table 2:

f_o	f_e	$f_o - f_e$	$(f_o - f_e)^2$	$(f_o - f_e)^2/f_e$
19	12	7	49	4.083
21	12	9	81	6.750
13	12	1	1	.083
12	12	0	0	0
4	12	-8	64	5.333
12	12	0	0	0
7	12	-5	25	2.083
9	12	-3	9	.750
12	12	0	0	0
109	108	--	--	19.083

$X^2 = \sum \frac{(f_o-f_e)^2}{f_e} = 19.083$, the calculated value of Chi-Square.

The tabular value for 8 d.f. and .05 is 15.507. Therefore, the calculated value is larger and the difference between the two distributions is due to something other than chance.

To confirm the above conclusion, another statistical test, the Kolmogorov-Smirnov One - Sample Test was used. The calculations are as follows:

Table 3:

f_o	f_e	F_o	F_e	Difference
19	12	19/109	12/109	7/109
21	12	40/109	24/109	16/109
13	12	53/109	36/109	17/109
12	12	65/109	48/109	17/109
4	12	69/109	60/109	9/109
12	12	81/109	72/109	9/109
7	12	88/109	84/109	4/109
9	12	97/109	96/109	1/109
12	12	109/109	103/109	1/109
109	108	---	---	---

In the last column above, 17/109 is the largest difference between the F_o and F_e columns. Therefore 17/109 or 0.156 becomes the calculated value for the data above. The expected value is obtained from the formula $D = \frac{1.36}{\sqrt{n}}$, where D is again the difference between F_o and F_e and n is the number of data points (109 in this case) and 1.36 is a constant used for a 95% confidence level. Using the above formula,

$$D = \frac{1.36}{\sqrt{109}} = \frac{1.36}{10.44} = .130$$

and since the value obtained in the table above, 0.156, is greater than the value given by the formula, the two distributions are too different from one another for chance or random variation to have been the only cause for the difference. Therefore something else caused the difference.

This table shows the black area:

VALUES OF CHI SQUARE (χ^2)

d.f.	0.99	0.98	0.95	0.90	0.80	0.70
1	0.000157	0.000628	0.00393	0.0158	0.0642	0.148
2	0.0201	0.0404	0.103	0.211	0.446	0.713
3	0.115	0.185	0.352	0.584	1.005	1.424
4	0.297	0.429	0.711	1.064	1.649	2.195
5	0.554	0.752	1.145	1.610	2.343	3.000
6	0.872	1.134	1.635	2.204	3.070	3.828
7	1.239	1.564	2.167	2.833	3.822	4.671
8	1.646	2.032	2.733	3.490	4.594	5.527
9	2.088	2.532	3.325	4.168	5.380	6.393
10	2.558	3.059	3.940	4.865	6.179	7.267
11	3.053	3.609	4.575	5.578	6.989	8.148
12	3.571	4.178	5.226	6.304	7.807	9.034
13	4.107	4.765	5.892	7.042	8.634	9.926
14	4.660	5.368	6.571	7.790	9.467	10.821
15	5.229	5.985	7.261	8.547	10.307	11.721
16	5.812	6.614	7.962	9.312	11.152	12.624
17	6.408	7.255	8.672	10.085	12.002	13.531
18	7.015	7.906	9.390	10.865	12.857	14.440
19	7.633	8.567	10.117	11.651	13.716	15.352
20	8.260	9.237	10.851	12.443	14.578	16.266
21	8.897	9.915	11.591	13.240	15.445	17.182
22	9.542	10.600	12.338	14.041	16.314	18.101
23	10.196	11.293	13.091	14.848	17.187	19.021
24	10.856	11.992	13.848	15.659	18.062	19.943
25	11.524	12.697	14.611	16.473	18.940	20.867
26	12.198	13.409	15.379	17.292	19.820	21.792
27	12.879	14.125	16.151	18.114	20.703	22.719
28	13.565	14.847	16.928	18.939	21.588	23.647
29	14.256	15.574	17.708	19.768	22.475	24.577
30	14.953	16.306	18.493	20.599	23.364	25.508

VALUES OF CHI SQUARE (χ^2)

0.50	0.30	0.20	0.10	0.05	0.02	0.01
0.455	1.074	1.642	2.706	3.841	5.412	6.635
1.386	2.408	3.219	4.605	5.991	7.824	9.210
2.366	3.665	4.642	6.251	7.815	9.837	11.345
3.357	4.878	5.989	7.779	9.488	11.668	13.277
4.351	6.064	7.289	9.236	11.070	13.388	15.086
5.348	7.231	8.558	10.645	12.592	15.033	16.812
6.346	8.383	9.803	12.017	14.067	16.622	18.475
7.344	9.524	11.030	13.362	15.507	18.168	20.090
8.343	10.656	12.242	14.684	16.919	19.679	21.666
9.342	11.781	13.442	15.987	18.307	21.161	23.209
10.341	12.899	14.631	17.275	19.675	22.618	24.725
11.340	14.011	15.812	18.549	21.026	24.054	26.217
12.340	15.119	16.985	19.812	22.362	25.472	27.688
13.339	16.222	18.151	21.064	23.685	26.873	29.141
14.339	17.322	19.311	22.307	24.996	28.259	30.578
15.338	18.418	20.465	23.542	26.296	29.633	32.000
16.338	19.511	21.615	24.769	27.587	30.995	33.409
17.338	20.601	22.760	25.989	28.869	32.346	34.805
18.338	21.689	23.900	27.204	30.144	33.687	36.191
19.337	22.775	25.038	28.412	31.410	35.020	37.566
20.337	23.858	26.171	29.615	32.671	36.343	38.932
21.337	24.939	27.301	30.813	33.924	37.659	40.289
22.337	26.018	28.429	32.007	35.172	38.968	41.638
23.337	27.096	29.553	33.196	36.415	40.270	42.980
24.337	28.172	30.675	34.382	37.652	41.566	44.314
25.336	29.246	31.795	35.563	38.885	42.856	45.642
26.336	30.319	32.912	36.741	40.113	44.140	46.963
27.336	31.391	34.027	37.916	41.337	45.419	48.278
28.336	32.461	35.139	39.087	42.557	46.693	49.588
29.336	33.530	36.250	40.256	43.773	47.962	50.892

ATTACHMENT II

PROJECT CRIME CONTROL

- Final Analysis -

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PROJECT CRIME CONTROL: FINAL ANALYSIS

Introduction:

Early last month a preliminary report on "Project Crime Control" (See Attachment I) was released outlining the approach to be used in determining what effect, if any, plainclothes police officer saturation had on the occurrence of residential burglaries in a given area. Ten steps were listed in the procedure adopted for the project. The preliminary report covered steps (1) through (7) in the procedure and included an analysis of the data gathered for the first half of the experiment. This report covers steps (8) through (10) of the procedure and presents a final analysis of all the data gathered.

Recap:

To determine whether saturation of an area by plainclothes police officers would have an effect on the occurrence of residence burglaries there, three areas that experienced approximately the same number of residence burglaries in 1971 and were similar in population and housing makeup were selected. Areas within Beats 125, 127, and 128 were chosen. In the first half of the experiment, Beat 125 was designated as the Control Beat (no saturation occurred there), and Beats 127 and 128 were designated as the Experimental Beats (saturation occurred in these two areas). The results (residential burglary data) were gathered, compared and a preliminary analysis made in the initial report.

In the second half of the experiment, Beat 127 was designated as the Control Beat (tactical forces were withdrawn from the area) and Beat 125 was designated as an Experimental Beat (the area was saturated by plainclothes policemen). Beat 128 remained saturated in this half of the experiment also. Thus, the terms of step (3) in the procedure outlined in the "Preliminary Analysis" were complied with:

"Repeat the experiment interchanging the experimental and control areas."

The remainder of this report presents the data gathered in step (8) above in conjunction with the data gathered in the first half of the experiment and continues through the final two steps of the procedure - (9) evaluation of the hypothesis: "plainclothed police saturation of a given area for a given time period does reduce the occurrence of residential burglaries there;" in light of the experimental evidence gathered, and (10) acceptance or rejection of the hypothesis.

Data: No. of Residential Burglaries*

	Control Period		First Experimental Period		Second Experimental Period
	Jan.	Feb.	Mar.	Apr.	May
Control Area Beat 125	16	7	19	21	Experimental Area Beat 125 13
Experimental Area Beat 127	8	13	12	4	Control Area Beat 127 12
Experimental Area Beat 128	10	12	7	9	Experimental Area Beat 128 12

*During the Control Period, no police action was taken in Beats 125, 127, and 128 other than normal patrol activities. During the First Experimental Period, Special Operation's tactical forces were asked to saturate Beats 127 and 128 with non-uniformed police officers. Beat 125 was left alone to serve as a Control Area for comparative purposes. During the Second Experimental Period, Beat 127 was made the Control Area (tactical forces withdrawn) and plainclothed police officers used to saturate Beat 125, making it an Experimental Area. Beat 128 was left alone to continue as an Experimental Area.

Data Evaluation:

An examination of the table on the preceding page shows that residential burglaries decreased in the Experimental Areas and increased in the Control Areas. This would, of course, support the hypothesis being tested. However, the problem arises as to whether it is really police saturation that caused the offense fluctuation or some other cause, possibly chance. Due to the nature of the experiment, all the influencing factors could not be carefully controlled as is possible with experiments conducted in laboratories. Thus, to further test the hypothesis during May, an Experimental Area (Beat 127) was made into the Control Area and the previous Control Area (Beat 125) was made into an Experimental Area. As the table reveals, the hypothesis is again supported. Although this considerably strengthens the hypothesis, could these results still have happened due to chance?

To answer the question above, it is necessary to determine what might have occurred in the Experimental and Control Areas had the police saturation not occurred. A fair estimate of this would be that nothing would have occurred, i.e., residential burglaries would have continued to occur in these areas at the same rate as in the past. In fact, the burglary rate increased in March, April, and May in these areas over what it had been in January and February. The residential burglary rate in January and February had been 11 offenses per month in the Experimental and Control Areas and 12 offenses per month in March, April, and May in the same areas. Therefore, if anything, residential burglaries might be expected to increase in these areas during the Experimental Period. Thus, expecting the residential burglary count to remain the same during the Experimental Period (March, April, and May) with only chance factors causing fluctuation is a conservative hypothesis. This hypothesis (denoted by H_0) will be statistically compared against the hypothesis that plainclothed police saturation does influence the occurrence of residential burglaries, in fact, decreases them. This hypothesis will be denoted H_1 and is the hypothesis that originally generated the experiment.

The basic statistical test generally used to evaluate experimental data of this sort is called Chi-Square and is denoted by the symbol X^2. The test involves determining whether a distribution of outcomes (the residential burglary count per month for each beat, in this case) is the same as another distribution of outcomes, the expected distribution. In other words, Chi-Square determines if two distributions are alike or different.

Chi-Square can be used to evaluate the data in this experiment since H_0, the expected hypothesis, states that the expected number

of residential burglaries per month for a given area is a constant distribution given by an average value with any variation from this average due to chance factors only. The alternate hypothesis, H_1, assumes that police saturation decreases the number of residential burglaries in a given area, i.e., with saturation, the distribution is not constant. Thus, the Chi-Square test can compare the observed distribution (supported by H_1) to the expected distribution (supported by H_o) and determine if there is a difference between them or if they are both the same distribution. If the calculated value of Chi-Square is less than a tabular value found in a standard Chi-Square table, then the data is not strong enough to indicate a real difference in the two distributions and H_o, the expected hypothesis, prevails. If the calculated value of Chi-Square is greater than the tabular value, then there is a real difference between the two distributions caused by something other than chance, i.e., police saturation, and H_1, the alternative hypothesis, prevails. The actual Chi-Square calculations are given in Attachment II.

To begin with, an average value was calculated as the expected value for the number of residential burglaries in Beats 125, 127, and 128 for January and February. This average was 11 burglaries per month and was the expected monthly frequency. The observed monthly frequency (the actual burglary counts per beat per month) was then compared against the expected frequency as below:

f_o (actual count)		f_e (expected count)
16	(Beat 125 - Jan.)	11
7	(Beat 125 - Feb.)	11
8	(Beat 127 - Jan.)	11
13	(Beat 127 - Feb.)	11
10	(Beat 128 - Jan.)	11
12	(Beat 128 - Feb.)	11
66		66

Chi-Square was calculated (See Attachment II, Table 1) and the two distributions were found to be similar, i.e., only chance factors caused the fluctuation in f_o above.

Similarly, for the Experimental Period (March, April, and May) an average monthly value for the number of residential burglaries per beat was calculated and compared to the actual values:

f_o (actual count)		f_e (expected count)
19	(Beat 125 - Mar.)	12
21	(Beat 125 - Apr.)	12
13	(Beat 125 - May)	12
12	(Beat 127 - Mar.)	12
4	(Beat 127 - Apr.)	12
12	(Beat 127 - May)	12
7	(Beat 128 - Mar.)	12
9	(Beat 128 - Apr.)	12
12	(Beat 128 - May)	12
109		108

Chi-Square was again calculated (see Attachment II, Table 2) and found to be greater than the tabular value. Thus, the actual count f_o differs from the expected count f_e by more than mere chance would allow and H_o, the expected hypothesis, must be rejected and H_1, the alternative hypothesis, accepted instead. Therefore, non-uniformed police saturation of a given area does influence the occurrence of residential burglaries and the experimental data does support the original hypothesis, H_1.

Another more conclusive test than Chi-Square was also run on the Experimental data and the same outcome resulted, i.e., H_o was rejected and H_1 accepted (see Attachment II, Table 3).

Conclusion:

The most important conclusion was that the experiment proved that the idea of plainclothed police saturation does work in reducing residential burglaries, at least in the trial areas. In May when plainclothed police elements were introduced into the area, residence burglaries in Beat 125 decreased by 8 offenses (38.1%) from April's total. By contrast, Beat 127, where plainclothed elements were withdrawn, had an increase of 8 offenses (200.0%) in May over April's total of only 4 offenses. Beat 128, where the extra police elements were allowed to remain for another month, experienced an increase of 3 offenses (33.3%) over April's total.

The experiences in Beats 125 and 127 reflect the conclusion above. Beat 128, however, does not. In March and April, the first two months of police saturation in Beat 128, residential burglaries did decrease. The increase during May, the third straight month of saturation there, might be indicative of many things. Perhaps the burglars were aware of the police pullout in Beat 127, contiguous to Beat 128.

If this was so then they might have suspected a similar pullout in Beat 128. Hence, the burglary increase. Or, perhaps, three months in a given area is too long. Whatever, the first two months in Beat 128 were successful and the whole experiment proved to be beneficial in productive police deployment.

END