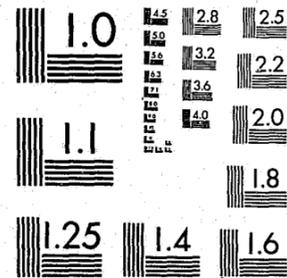


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DEPARTMENT OF URBAN STUDIES AND  
PUBLIC ADMINISTRATION  
OLD DOMINION UNIVERSITY  
NORFOLK, VIRGINIA 23508

Summary Report:

PRODUCTIVITY IN THE MANAGEMENT OF  
CRIMINAL INVESTIGATIONS

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Prepared for:

City of Portsmouth  
Department of Police

Under:

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Integrated Criminal Apprehension Program

September 1981



Institute of Urban Studies and Public Administration • (804) 440-3961 • Norfolk, VA 23508

September 18, 1981

Lt. R. Gaddis  
ICAP Coordinator  
Portsmouth Police Department  
711 Crawford Street  
Portsmouth, VA 23704

Dear Lt. Gaddis:

I am herewith transmitting the final evaluation report on the Management of Criminal Investigations component of the Portsmouth Police Department Integrated Criminal Apprehension Program. The final report is comprehensive in content and incorporates all of the material presented in the Preliminary Report of August 1980 and the Progress Report of February 1981.

The Detective Division was highly successful in the efforts to upgrade procedures for case management and performance monitoring of units and individuals. I attribute this success to: (1) the commitment of top management both at the departmental and detective divisional levels to the ICAP program in general and to its specific component dealing with the improved management of criminal investigations; (2) the highly cooperative attitude and willingness to innovate which characterized the approach of detective division managers to the program; (3) the experience and competence of the squad sergeants in the unit; and (4) the cooperation and positive response of the individual investigators who became involved in the research of past performance and the implementation of recommended changes.

I would like to highlight the fact that all of the proposed changes in the content of monthly reports, in the performance measures used to evaluate units and individuals and in the methods used to equalize and optimize caseloads were brought about by the joint efforts of the Evaluation Team and members of Detective Division. By their informed and active participation a number of sworn personnel functioned, in effect, as part of the research and evaluation team.

Significant improvements have been made in: (1) the content of monthly reports which now set forth workload and performance data in addition to UCR information; (2) the equity and accuracy of performance measures used to evaluate individuals and units; (3) the distribution of investigations between patrol and detective division, specifically the assignment of responsibility for property destruction cases to patrol division; (4) the equalization of caseloads among individual investigators; and (5) the accurate estimation of optimum caseloads in burglary and larceny squads.

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Lt. R. Gaddis  
September 18, 1981  
Page 2

The evaluation research has further established: (1) estimates of optimum individual caseloads in burglary (19-20 cases per month) and larceny (23-29 cases per month); (2) reasonable expectations of the proportion of reported burglaries and larcenies which will be cleared - burglary 35%, larceny 30%; (3) the proportion of assigned burglary and larceny cases which will be solved by investigators - burglary 50%, larceny 40%; (4) a means to determine the staffing level required in burglary and larceny squads; and (5) that the current staffing level in burglary and larceny squads is adequate.

Performance monitoring of all of these changes should be continued so that appropriate adjustments can be made to changes in crime trends and the characteristics of the Portsmouth social environment.

Although considerable improvement in the quality of the initial offense reports was noted in the early part of the evaluation research, the proportion of unfounded and misclassified reports referred to burglary squad has recently increased. This is an indicator that the issue of the preliminary investigation requires further attention. The quality of the initial report obviously involves the extent to which the initial reporting officer pursues, or is allowed to pursue, the preliminary investigation. This raises the question of priorities between patrol responsibilities and investigative responsibilities.

Evaluation research thus far has not addressed the matter of optimum caseloads in Homicide and Robbery, Sex Crimes and General Assignment type cases. Efforts are now underway to extend the performance measures and report formats to Youth and General Assignment cases and these efforts will require careful monitoring.

In conclusion, it is clear that the Portsmouth Police Department and Detective Division have derived significant benefits from the quality of their participation in the MCI component of ICAP. Accomplishments so far indicate that the expertise, cooperation and positive attitude within the division will actively support further efforts to enhance the investigative function.

Sincerely,

*W. Pindur*  
Wolfgang Pindur  
Principal Investigator

WP:bh  
Enclosure

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TABLE OF CONTENTS

	Page
PART I: INTRODUCTION . . . . .	1
Background . . . . .	1
Productivity in the Investigative Function . . . . .	2
General Studies . . . . .	2
The MCI Program . . . . .	3
Measuring Productivity: UCR Rates . . . . .	4
Measuring Productivity: Outcome Rates . . . . .	5
Measuring Productivity: Performance Goals . . . . .	6
PART II: PROPERTY CRIMES . . . . .	8
Introduction . . . . .	8
Methodology . . . . .	8
Data Sources: Case Management Records . . . . .	8
Research Tasks . . . . .	9
Interviews and Consultation . . . . .	9
Section A: Burglary Squad . . . . .	10
Research Questions . . . . .	10
Presentation of Burglary Squad Data . . . . .	11
Research Findings (Jan 79-Jun 80) . . . . .	19
Performance Monitoring: Burglary . . . . .	23
Statistical Analysis of Caseload (Jan 79-May 81) . . . . .	29
Case Tracking: Investigative Activities . . . . .	31
Summary and Conclusions: Burglary Squad . . . . .	41

Section B: Larceny . . . . .	44
Research Questions . . . . .	44
Operational Differences . . . . .	44
Presentation of Data . . . . .	45
Research Findings (Jan 79-Jun 80) . . . . .	51
Performance Monitoring: Larceny . . . . .	53
Caseload Analysis: Larceny . . . . .	59
Summary and Conclusions: Larceny . . . . .	61
PART III: CRIMES AGAINST PERSONS . . . . .	63
Introduction . . . . .	63
Methodology . . . . .	63
Section A: Caseloads and Case Outcomes (1 May - 31 December 1980) . . . . .	63
Purpose . . . . .	63
Qualifications on Caseload Data . . . . .	64
Homicide and Robbery: Outcome Rates . . . . .	65
Homicide and Robbery: Resolution Rates . . . . .	68
Sex Crimes: Case Outcomes . . . . .	69
Case Resolutions: Sex Crimes . . . . .	71
Summary of Findings . . . . .	72
Section B: Monthly Reports . . . . .	72
Background . . . . .	72
Formats . . . . .	73
Section C: Performance Monitoring: Crimes Against Persons . . . . .	74
Homicide and Robbery . . . . .	74
Impact of Homicide on Robbery Clearance Rate . . . . .	80

Sex Crimes . . . . .	83
Summary of Findings . . . . .	87
<b>PART IV: FINDINGS AND CONCLUSIONS . . . . .</b>	<b>89</b>
Property Crimes . . . . .	89
Crimes Against Persons . . . . .	91
Sex Crimes . . . . .	92
<b>PART V: DIRECTIONS FOR FURTHER RESEARCH . . . . .</b>	<b>93</b>

LIST OF TABLES

	Page
<u>Table</u>	
1 Burglary - Assigned Case Disposition Rates . . . . .	11
2 Burglary - Basis of the Unfounding of Cases . . . . .	12
3 Burglary - Unfounded and UCR Clearance Rates . . . . .	13
4 Burglary - Inactivation, Clearance and Outcome Rates . . . . .	14
5 Burglary - Clearance Rates, Inactivation Rates and Outcome Arrest Rates . . . . .	15
6 Burglary Detectives - Assigned Case Disposition . . . . .	16
7 Burglary - Caseloads and Inactivation Rates . . . . .	17
8 Burglary - Individual Caseload Recapitulation . . . . .	18
9 Caseloads and Unfounded Rates for Burglary . . . . .	18
10 Caseloads and Clearance Rates for Burglary Squad . . . . .	19
11 Burglary - Assigned Case Disposition Rates: Jan-Dec 79; Jan-Jun 80; Jul-Dec 80; Jan-May 81 . . . . .	24
12 Burglary - Unfounded and Exceptional Clearance Rates (Graph) . . . . .	26
13 Burglary - UCR Clearance Rates: Jan-Jun 80; Jul-Dec 80; Jan-May 81 . . . . .	27
14 Burglary - Inactivation by Screening and UCR Clearance Rates (Graph) . . . . .	28
15 Percentile Frequencies of Investigative Activities . . . . .	34
16 Time Spent on Specific Investigative Activities . . . . .	35
17 Time Gap Between Offense Occurrence and Case Assignment Related to Clearance . . . . .	37
18 Time Required to Process Cases . . . . .	38

19	Time Required for Case Dispositions . . . . .	38
20	Larceny - Clearances by Detective and Patrol Division (Jan-Jun 80) . . . . .	45
21	Larceny/Property Destruction: Case Disposition Rates (Jan-Dec 79; Jan-Jun 80) . . . . .	46
22	Larceny/Property Destruction: Case Disposition Rates (Jan-Jun 80) . . . . .	46
23	Larceny - Inactive, Clearance and Outcome Rates (Jan-Jun 80) . . . . .	47
24	Larceny/Property Destruction: Assigned Case Dispositions (Jan-Jun 80) . . . . .	49
25	Caseloads and Inactivation Rates (Jan-Jun 80) . . . . .	50
26	Caseloads, Clearance and Unfounded Rates (Jan-Jun 80) . . . . .	51
27	Larceny - Assigned Case Dispositions (Jan-Jun 80; Jul-Dec 80; Jan-May 81) . . . . .	54
28	Larceny - Assigned Case Outcomes (Jan-Jun 80; Jul-Dec 80; Jan-May 81) . . . . .	55
29	Larceny Rate Trends (Jul 80-May 81) (Graph) . . . . .	56
30	Larceny - Inactive by Screening and UCR Clearance Rates (Jan 80-May 81) (Graph) . . . . .	58
31	Case Outcomes - Homicide, Robbery, Assault (1 May - 31 Dec 80) . . . . .	65
32	Homicide (Highest Rate of Arrest) . . . . .	66
33	Assault (Highest Rate of Exceptional Clearance) . . . . .	67
34	Robbery (Highest Rate of Inactivation) . . . . .	67
35	Homicide and Robbery - Resolution Rates (1 May - 31 Oct 80) . . . . .	68
36	Sex Crimes - Case Outcomes (1 May - 31 Dec 80) . . . . .	69
37	Sex Crimes Detectives - Aggregate Case Outcome Rates % (1 May - 31 Dec 80) . . . . .	70
38	Sex Crimes: Resolution Rates (1 May - 31 Dec 80) . . . . .	71

39	Distribution of Caseload Among Crime Categories - Homicide and Robbery Squad (1 Jan - 30 Jun 81) . . . . .	74
40	Distribution of Caseload Among Crime Categories - Homicide and Robbery Squad (1 May - 31 Dec 80) . . . . .	75
41	Case Outcomes - Homicide and Robbery (May-Dec 80; Jan-Jun 81) . . . . .	75
42	Case Outcomes and Crime Categories (Jan-Jun 81) . . . . .	76
43	UCR Clearance Rates - Assault and Robbery (1 Jan 80 - 30 Jun 81) (Graph) . . . . .	77
44	Sex Crimes Detectives - Aggregate Case Outcomes (May-Dec 80; Jan-Jun 81) . . . . .	84
45	Sex Crimes Detectives - Distribution of Sex Crime Types Among Sex Crimes Detectives (May-Dec 80; Jan-Jun 81) . . . . .	85
46	Outcome Rates for Sex Crime Types - Two Periods Compared: May-Dec 80; Jan-Jun 81 . . . . .	86

LIST OF FIGURES

<u>Figure</u>		Page
1	Burglary Squad Report (Month) . . . . .	20
2	Investigative Activity Data Collection Form . . . . .	32

PART I: INTRODUCTION

The purpose of this report is to present the results of the evaluation studies conducted in the Detective Division of the Portsmouth, Virginia Police Department during June 1980 to July 1981. This research was done as a component of the Integrated Criminal Apprehension Program.

Background

The Portsmouth Police Department's concern with evaluating investigative productivity is demonstrated in a departmental memorandum dated July 9, 1979 in which Chief Boone wrote, "there is a lack of any instrument with which data may be captured to effectively evaluate and measure investigative unit and individual productivity. Also non-existent are mechanisms for capturing elements for measuring performance or accountability to commanding officers."

Based on Chief Boone's memorandum evaluation studies were conducted in Portsmouth to:

- A. Develop productivity measures for individual investigators and investigative units,
- B. Determine the relationships among the various case outcomes of investigations. The various terms used in describing case outcomes are discussed in the Glossary of Terms (Appendix A).
- C. Estimate the optimum caseloads for investigators in terms of agency goals.
- D. Provide a means whereby resource allocation decisions in the investigative function can be made on a better informed basis.

Initial research was conducted in the property crimes section of the Detective Division during June-August 1980. This was followed by performance monitoring in January-February 1981 and during June-July 1981. Initial research in the Crimes Against Persons section was accomplished during January-February 1981 and June-July 1981. Data was collected and monitored

over time in order to assess the impact of changes introduced as a result of the ongoing research findings. Data sources were departmental records, case assignment logs, monthly activity reports, monthly Uniform Crime Reports, time sheets, offense reports, supplemental investigation reports and in-depth personal interviews with key personnel.

#### Productivity in the Investigative Function

The discussion of the literature on investigative activity is organized into five categories: (1) general studies; (2) the Managing Criminal Investigations Program; (3) UCR rates as productivity indicators; (4) the use of outcome rates as productivity indicators; and (5) performance goals. Selected key studies are reviewed in each area and the relationship of past studies to the current evaluation effort is discussed.

#### General Studies

The milestone study of the investigative function is considered to be the two year study of police investigation conducted by the Rand Corporation.<sup>1</sup> Some of the key findings of the Rand study relative to investigative productivity are:

1. Differences in training, staffing workload and procedures appear to have no appreciable effect on crime, clearance or arrest rates.
2. The method by which police investigators are organized cannot be related to variations in crime arrest and clearance rates.
3. Substantially more than half of all serious reported crimes receive no more than superficial attention from investigators.
4. For cases that are solved, an investigator spends more time in post clearance processing than he does in identifying the perpetrator.

5. The information gathered at the crime scene is more critical to solution than that subsequently developed by investigation.
6. Of cases ultimately cleared in which the offender was not known at the time of the incident, almost all are cleared as a result of routine police work.
7. A secondary finding was that 29% of investigators' time was unaccounted for by the data collected for the study.

In a general study focusing on unproductive and highly solvable cases, Bernard Greenberg, et. al.<sup>2</sup> developed felony case decision models based on weighted solvability factors. These models provide an estimate of the probability of case solution whereby an educated decision can be made regarding early inactivation or continuation of the case.

#### The MCI Program

The results of the research by Rand and SRI were incorporated into LEAA's Managing Criminal Investigations (MCI) Program<sup>3</sup> which has as its stated goal "to increase arrests for crimes that are prosecutable which will increase the rate of conviction." The MCI Program is designed to:

1. Enhance the role of patrol officers by charging them with the responsibility of conducting preliminary investigations.
2. Install a Case Screening function which will immediately inactivate cases with small hope of successful conclusion and assign those cases which have expectation of solution.
3. Install management procedures for the continuing investigation to lead to more effective case assignment, improved case investigation and quality, progress monitoring and evaluation of results based on outcomes.

4. Improve police prosecutor relations to enhance the probability of conviction.
5. Install a monitoring system to provide police administrators the statistical data on investigative performance.

The setting of goals and the ability to measure productivity in terms of performance against those goals is the basis of sound management. MCI defines investigative productivity as "the number of investigative outcomes or activities per person hour or day . . . the greater the ratio of outcome per period of time worked, the higher the productivity of the unit or the individual investigator."<sup>4</sup>

The aspect of productivity which relates directly to questions of organization and resource allocation can be posed as the question, "at what level of commitment (caseload) is a detective most productive (clearances/convictions)?" If the answer to this question is known and if the rate of reported crime referred to the investigative division is known, then informed decisions can be made regarding the staffing requirements of the investigative function. Therefore, the ability to measure and evaluate productivity is the basic requirement in Managing Criminal Investigations.

#### Measuring Productivity: UCR Rates

The F.B.I. Uniform Crime Report has long been used by public officials and police administrators to evaluate police jurisdictions in general and the investigative function in particular.<sup>5</sup> The National Crime Panel of the Law Enforcement Assistance Agency learned through its national victimization survey that not only is a significant incidence of crime unreported, but that the amount of unreported crime varies considerably among jurisdictions. Harry Hatry of the Urban Institute<sup>6</sup> has several reservations about the

validity of UCR statistics. Clearance of a case when only one of two or more offenders is arrested, jurisdictional variance in criteria for unfounded or exceptional clearance of cases, arrest of an offender who has committed multiple offenses of which the police are unaware and the fact that the arrest and charge may not survive the initial judicial screening are all factors which dictate against the unqualified use of UCR clearance rates as a performance measure. Patrick Murphy points out, "it is a misuse of UCR figures to draw from them implications about the productivity of a police department."<sup>7</sup> Even though the F.B.I. itself warns against using UCR rates to make operational decisions, "the use of crime rates as evaluators still hangs like an albatross around the neck of police administrators."<sup>8</sup>

All of these foregoing problems are germane to productivity measurement in the investigative function.

#### Measuring Productivity: Outcome Rates

Since individual detectives have no control over the proportion of reported offenses inactivated by the initial screening function, outcome rates should be computed using assigned cases, minus unfounded cases, as the total caseload from which arrests, exceptional clearances and inactivation rates are derived. These rates, as well as case quality measures (i.e. cases surviving the initial judicial screening), provide a more accurate indicator of unit and individual performance and are consistent with the MCI Program. However, research should also address the difference between offense arrests and person arrests. Who is more productive, the detective who is credited with multiple arrests by apprehension of a person who has committed several crimes, or the detective who makes a single offense clearance by the arrest of several persons? Thus, the ratio of offense

clearance to persons apprehended needs to be studied in terms of productivity.

Another area not addressed by the literature is the relationship between kinds of clearances. Questions yet to be addressed are:

1. Will increased levels of inactivation by initial screening operate to increase outcome arrest rate for assigned cases, but at the same time operate to depress the UCR clearance rate?
2. If experienced investigators tend to unfound more cases than their less experienced peers, they will have a larger rate of arrest in both UCR and outcome terms. In this context, an unfounded case may be more "productive" than inactivation or exceptional clearance.
3. What is the relationship between arrest clearances and exceptional clearances? An exceptional clearance means that a perpetrator was identified but not arrested. Again, a question of relative productivity can arise when one detective, by having to inactivate a large proportion of assigned cases through legitimate exhaustion of leads, could have a low arrest rate. But, this low arrest rate could be double his exceptional clearance rate. Another detective could produce a higher arrest rate and at the same time have an exceptional clearance rate equal to or higher than the arrest rate.

#### Measuring Productivity: Performance Goals

The performance goal of increasing arrests for prosecutable crimes could create inconsistency between the objectives of the agency as a whole and the operational objectives of investigators in the field. An organizational objective would be to remove as many criminals as possible from the community, but a detective can increase the clearance rate by seeking to unfound as many reported offenses as possible or by concentrating on individuals or cases

which experience tells him are most likely to result in multiple offense clearances. Thus, before effective performance goals for an agency can be specified and measures of achievement developed, considerable insight into the activities, behavior and individual motives and goals of investigators must be gained.

Research into the behavior and activities of investigators can be frustrated by several factors. These factors include the "mystique" about detectives<sup>9</sup>, the nature of detective work, the detective's control over information and the power of knowledge and expertise which comes into play where specialized employees are the sole authorities on their jobs and the measurement of efficiency of the procedures which they follow.<sup>10</sup> The combination of these factors creates a situation where management is reluctant to actively interject itself unless special or crisis situations make intervention imperative.

## PART II: PROPERTY CRIMES

### Introduction

The research methodology for the study of Property Crimes involved extensive analysis of case management records, case tracking of a sample of burglary cases and concurrent interviews and discussions of preliminary and interim findings with the Officer-in-charge of the Property Crimes section and the sergeants in charge of the Burglary and Larceny Squads. Several procedural and organizational changes were implemented during the study which were monitored in order to assess their impact. The initial research was conducted during June-August 1980 and concentrated on data for calendar year 1979 and January-June 1980. Performance monitoring and additional caseload analysis was accomplished in February 1981 and June 1981. Data was collected for the period June-December 1980 and January-May 1980. This allowed for comparison of performance indicators for the various periods before and after the implementation of changes.

### Methodology

#### Data Sources: Case Management Records

Primary data sources were the Case Assignment Logs, Monthly Status Reports and Offense and Supplemental Report files maintained in the Burglary and Larceny Squads. The initial research analyzed data collected for 1979 and January-June 1980. Subsequent performance monitoring utilized data collected for July-December 1980 and January-June 1981. The case assignment logs are a record of each detective's caseload by month and the specific outcome of each case in terms of arrest, exceptional clearance, unfounding or inactivation. The Monthly Status Reports reflect the total offenses reported during the month, the number of cases assigned to specific investi-

gators and the outcomes of the assigned cases. The UCR clearance rate for the month is also included in the Monthly Status Report. The Offense and Supplemental Report files are a monthly chronological file of the reports filed by detectives. These reports provide investigative information and the basis upon which cases were unfounded, cleared by exception or inactivated.

### Research Tasks

The first research task was to gather aggregate monthly data for each of the two time frames (1979 and January-June 1980) in both Burglary and Larceny Squads. This data covered reported offenses, cases processed, case outcomes, outcome rates, inactivation rates and clearance rates.

The second research task was to gather individual data on each detective for each month in the two time frames.

The third task involved aggregating the data at the squad level for the two time frames and computing the various rates of arrest, exception, unfounding and inactivation.

The fourth task was to aggregate data for each detective for the two time frames and derive total caseloads, total hours worked and the various individual outcome rates of arrest, exception, unfounded and inactivation.

Once these tasks were completed, source data tables were developed that presented the needed information to answer the research questions.

### Interviews and Consultation

Informal interviews with the Officer-in-charge and the squad sergeants were concurrent with data collection and encompassed such matters as differences in outcome rates among crime categories, the relationship between clearance and inactivation rates and the validity of productivity measures. Twice during the initial study, working conferences were held with the Officer-

in-charge and the squad sergeants. Preliminary findings were reviewed and consensus reached for the path of continued research. The interviews, consultations and meetings made a major contribution to the development of the specific research questions to be employed in Burglary and Larceny Squads.

Section A: Burglary Squad

Research Questions

The research questions set forth below were derived from specific memoranda promulgated by the Chief of Police, the literature search and consultation with members of the Portsmouth Detective Division.

A. Burglary Squad Operations

1. What was the effect of the policy decision to carefully review unfounded and inactivated burglary reports?
2. What were the reasons for the unfounding of burglary reports?
3. Was there a relationship between the UCR clearance rate and the rate at which reports were unfounded?
4. What was the relationship between inactivation rates, UCR clearance rates and the rate at which detectives clear cases by arrest? Did the UCR clearance rate reflect how effectively detectives processed assigned cases?
5. What was the relationship between clearance rates, the rate at which cases are inactivated by initial screening and the rate at which cases were inactivated after investigation?

B. Burglary Squad Caseload

1. What were the caseloads and case disposition rates for burglary detectives for 1979 and January-June 1980?

2. Was there any relationship between a burglary detective's caseload and inactivation rate?
3. What was the current monthly caseload for burglary detectives?
4. Was there a relationship between monthly caseloads and the rate at which reports were unfounded by burglary detectives?
5. Was there a relationship between caseloads and assigned case clearance rates?

Presentation of Burglary Squad Data

Data is presented by restating each research question followed by the detailed research findings.

A. Burglary Squad Operations

WHAT WAS THE EFFECT OF THE POLICY DECISION TO CAREFULLY REVIEW UNFOUNDED BURGLARY REPORTS?

Table 1

BURGLARY

Case Disposition Rates  
(Assigned Cases)

January-December 1979 and January-June 1980

	<u>Arrest %</u>	<u>Exception %</u>	<u>Unfounded %</u>	<u>Inactivation %</u>
Jan-Dec 1979	27	17	13	43
Jan-June 1980	28	16	29	27

Table 1 indicates the impact of the Chief's policy decision to pay closer attention to unfounded cases. The percentage of unfounded cases increased from 13% in 1979 to 29% in 1980. A corresponding decrease of 16% was reflected in the inactivation rate: 43% in 1979, 27% in 1980.

To allay any concern that actual offenses were being purged as unfounded, all unfounded reports for January-June 1980 were reviewed to verify the reasons for unounding the report. In all cases, specific information was presented in the supplemental report which established that either no crime was committed or that the reported offense was not a burglary. It is interesting to note that regardless of the variation in unfounded and inactivation rates for the two time periods the percentage of assigned cases which were solved (cleared by arrest or exception) was 44% for both periods. Thus, for the 18 month period, we can say that burglary detectives, on the average, solved 44% of their assigned cases.

WHAT WERE THE REASONS FOR THE UNFOUNDING OF BURGLARY REPORTS?

Table 2  
BURGLARY

Basis of the Unfounding of Cases  
January-June 1980

One hundred and fifty-six unfounded cases/offenses of initially reported burglaries were reviewed to determine the most frequent reason for unounding or reclassifying the offense.

Reasons	Number of Cases	
	%	(%)
1. No evidence of attempted/forced entry; nothing taken	44	(28)
2. Vandalism or property destruction; no forced entry, nothing taken	32	(21)
3. Trespassing, nothing taken	29	(18)
4. Larceny; no forced entry-public place	25	(16)
5. Prowler, no forced entry, nothing taken	4	(3)
6. False report for personal gain	7	(4)
7. Mistaken report; retracted by complainant	12	(8)
8. Civil property dispute	3	(2)
	156	(100)

In 44 instances it was established that no crime was committed and in 90 cases the crime committed was not a burglary. These 134 cases represented 86% of the unfounded burglary reports for the period of January-June 1980 and also constituted 14% of the total reported burglary offenses and 29% of the cases assigned to burglary detectives. Four questions were raised in considering this data:

1. Were reporting officers and their supervisors making an adequate effort to ensure collection of all available information at the scene?
2. How well did reporting officers and their supervisors understand the elements of the offenses of burglary, larceny, vandalism, property destruction and prowling?
3. How well were preliminary investigations being conducted by patrol officers?
4. Was the supervisory review of preliminary investigations adequate?

WAS THERE A RELATIONSHIP BETWEEN THE UCR CLEARANCE RATE AND THE RATE AT WHICH REPORTS WERE UNFOUNDED?

Table 3  
BURGLARY

Unfounded and UCR Clearance Rates  
January-June 1980

	Jan %	Feb %	March %	April %	May %	June %
Clearance Rate	22	43	34	40	34	46
Unfounded Rate	7	17	16	25	23	19

- NOTES: 1. Clearance rate is the monthly UCR statistic.  
2. Unfounded rate is the monthly percentage of reported offenses determined by investigation to be unfounded.

The two rates appeared to vary together, but this should be interpreted only to mean that, based on this data, higher unfounded rates were associated with higher clearance rates, it does not mean that the higher unfounded rate caused the higher clearance rate.

WHAT WAS THE RELATIONSHIP BETWEEN INACTIVATION RATES, CLEARANCE RATES AND THE RATE AT WHICH DETECTIVES CLEAR CASES BY ARREST. DID THE CLEARANCE RATE REFLECT HOW EFFECTIVELY DETECTIVES ARE PROCESSING ASSIGNED CASES?

Table 4  
BURGLARY  
January-June 1980

Inactivation, Clearance and Outcome Rates

	Inactivation Rate %	Clearance Rate %	Outcome Arrest Rate %
Jan	80	22	39
Feb	65	43	44
March	72	34	48
April	57	40	48
May	67	34	39
June	68	36	34

NOTES:

1. The inactivation rate is computed by dividing the total cases inactivated by initial screening and investigators by the total cases processed (minus unfounded cases).
2. The clearance rate is the monthly UCR statistic.
3. The outcome arrest rate is the percentage of investigated cases (minus unfounded cases) cleared by arrest during the month.

A high rate of inactivation appeared to be associated with lower UCR clearance rates. However, in any given period of time, a high rate of

inactivation, caused by a large number of offense reports which offer little hope of solution, would generate a lower UCR clearance rate regardless of how effectively investigators process their assigned caseload. Inasmuch as the facts of the offenses remain the same, imposing a lower rate of inactivation would not necessarily produce a higher UCR clearance rate.

By comparing the UCR clearance rate and the outcome arrest rate in Table 4 it was seen that the UCR clearance rate did not give an accurate picture of how successfully detectives processed their assigned cases. In January with the low clearance rate of 22%, burglary detectives resolved 39% of their assigned cases by arrest. In March and May the UCR clearance rate was 34% for both months but the outcome arrest rates were 48% and 39%, respectively.

WHAT WAS THE RELATIONSHIP BETWEEN CLEARANCE RATES, THE RATE AT WHICH CASES ARE INACTIVATED BY INITIAL SCREENING AND THE RATE AT WHICH CASES WERE INACTIVATED AFTER INVESTIGATION?

Table 5  
BURGLARY

Clearance Rates, Inactivation Rates, and Outcome Arrest Rates

Month	% Inactive: Screening	% Inactivated: Detectives	Monthly Inactivation Rate	UCR Rate	Outcome Arrest Rate
Jan	76	24	80	22	39
Feb	77	23	65	43	44
Mar	76	24	72	34	48
Apr	66	34	57	40	48
May	82	18	67	34	39
June	69	31	68	36	34

There appeared to be no consistent relationship between the distribution of inactivations and the UCR and outcome arrest rates. For Jan-Mar, the

split between screening and detectives was stable but the UCR rates range from 22-43 percent and the outcome arrest rates ranged from 39-48 percent. April, with a larger proportion of detective inactivations, did have the highest arrest rates. May, with the lowest proportion of detective inactivations had lower arrest rates. However, May was characterized by a high number of exceptional clearances.

It was recommended that inactivations be monitored on a monthly basis to provide more data on the relationship between the proportion of cases inactivated by detectives and clearance rates.

B. Burglary Squad Caseloads

WHAT WERE THE CASELOADS AND CASE DISPOSITION RATES FOR BURGLARY DETECTIVES FOR 1979 AND JANUARY-JUNE 1980?

Table 6 shows the relationship between caseloads and case disposition for the individual detectives in the Burglary Squad

Table 6  
BURGLARY DETECTIVES-ASSIGNED CASE DISPOSITION  
Jan-Dec 79 - Jan-Jun 80

Detective	Jan-Dec 1979				
	Arrest	Exc	Unf	Inact	Total
A	74(32%)	49(21%)	33(14%)	76(33%)	232
B	41(24%)	25(15%)	15( 9%)	89(52%)	170
C	49(29%)	24(14%)	36(22%)	58(35%)	167
D	21(21%)	26(26%)	16(16%)	37(37%)	100
E	24(29%)	13(16%)	3( 4%)	43(51%)	83
F (7 mos)	16(24%)	8(11%)	11(15%)	35(50%)	70
Average	27%	17%	13%	43%	822

Detective	Jan-Jun 1980				
	Arrest	Exc	Unf	Inact	Total
A	39(25%)	36(23%)	43(28%)	38(24%)	156
B	24(22%)	12(11%)	50(46%)	23(21%)	109
C	38(42%)	17(19%)	14(15%)	22(24%)	91
D	22(29%)	8(11%)	26(34%)	20(26%)	76
E	15(25%)	10(16%)	14(23%)	22(36%)	61
F (7 mos)	14(29%)	5(10%)	8(17%)	21(44%)	48
Average	28%	16%	29%	27%	541

(2) WAS THERE ANY RELATIONSHIP BETWEEN A DETECTIVE'S CASELOAD AND INACTIVATION RATE?

Table 7

BURGLARY

Caseloads and Inactivation Rates  
January-June 1980

Detective	Cases Processed	Cases Inactivated	% Inactivated
A	156	38	24
B	109	23	21
C	91	22	22
D	76	20	26
E	61	22	36

There was no apparent relationship between caseloads and inactivation rates. In some instances, detectives with lower caseloads had higher inactivation rates. In other instances, detectives with relatively higher caseloads had relatively low inactivation rates.

WHAT WAS THE CURRENT MONTHLY CASELOAD FOR BURGLARY DETECTIVES?

Table 8

BURGLARY

Individual Caseload Recapitulation  
January-June 1980

Detective	Hours Worked	Cases Processed	Hours on Duty Per Case	Cases Per Month
A	1008	156	6.5	25
B	968	109	8.8	18
C	1000	91	10.9	15
D	1040	76	13.6	12
E	1052	61	17.2	9
				79

OVERALL AVERAGE MONTHLY CASELOAD PER MONTH = 13

NOTE: It is important to note that "hours on duty per case" includes all administrative and miscellaneous time not necessarily devoted to casework; therefore, the number of directly applied hours required to process a case could not be determined.

Table 8 shows that the individual caseload varied greatly from an average of 25 cases per month to 9 cases per month. It was recommended that the reasons for this great variation in caseload be examined.

WAS THERE A RELATIONSHIP BETWEEN MONTHLY CASELOADS AND THE RATE AT WHICH REPORTS ARE UNFOUNDED BY DETECTIVES?

Table 9

Caseloads and Unfounded Rates  
Burglary - January-June 1980

Detective	Caseload	Unfounded Rate
A	124	26
B	98	45
C	64	19
D*	60	37
E	50	24
F	48	17

\*Assigned for only four months.

The unfounded rate did not vary in any consistent way with the caseload.

WAS THERE A RELATIONSHIP BETWEEN CASELOADS AND ASSIGNED CASE CLEARANCE RATES?

Table 10

Caseloads and Clearance Rates  
Burglary Squad  
January-June 1980

Detective	Caseload	Clearance Rate
A	124	60
B	98	35
C	64	61
D*	60	41
E	50	40
F	48	39

\*Assigned for only four months.

The differences in the clearance rates did not appear to be associated with caseloads.

Research Findings (January 1979-June 1980)

A. Operations

1. The high rate of cases unfounded after investigation was the most significant finding in this portion of the study. If this workload could be reduced it would allow for assignment of cases which would normally be screened out by the squad sergeant and provide more insight into the relationship between clearances and inactivations after investigation.
2. UCR clearance rates and aggregate data about offenses which were submitted to the command staff did not accurately reflect the performance of detectives in processing their assigned cases. Figure 1 was the initial recommended format for a monthly internal report which would provide the UCR data, workload and performance

Figure 1

Burglary Squad Report (Month)

UCR DATA

- |                                     |                             |
|-------------------------------------|-----------------------------|
| 1. Reported Offenses _____          | 2. UCR Clearance Rate _____ |
| a. Assigned for investigation _____ | a. Arrest _____             |
| b. Inactivated by screening _____   | b. Exception _____          |

WORKLOAD/PERFORMANCE DATA  
(Cases Assigned for Investigation)

- |                                   |                                   |
|-----------------------------------|-----------------------------------|
| 3. Assigned Cases Processed _____ | 4. Cases Unfounded _____          |
| a. Carried over _____             | 5. Outcome: Processed Cases _____ |
| b. New cases _____                | a. Arrest _____                   |
| c. Reactivated _____              | b. Exception _____                |
| d. Sub-total _____                | c. Inactivation _____             |
| e. Carried fwd(-) _____           |                                   |
| Total _____                       |                                   |

INACTIVATION SUMMARY

- |   |
|---|
| 6. Total Offenses (minus unfounded) _____ |
| a. Inactivated by screening _____         |
| b. Inactivated after investigation _____  |
| c. Inactivation Rate _____                |

data on assigned cases and a breakdown on the inactivation process.

3. The research thus far indicated that UCR data for burglary was frequently more reactive to inactivation rates than to the outcomes produced by detectives. Therefore, it was difficult to determine a reasonable expectation of what percentage of burglaries would be solved. For the first six months of 1980 the clearance rate ranged from 22-43%. However, the consistency with which burglary squad clears 44% of assigned cases did provide a reasonable expectation of how many assigned cases would be solved. It can also be anticipated that there will be 1.7 arrests for each exceptional clearance, but a high degree of variance could be introduced by a number of cases in which the victim refused to prosecute or instances where the prosecutor decided to go to trial on less than the total of solved offenses.

B. Caseloads

Research indicated that the average monthly caseload for burglary detectives was approximately 13 cases a month. The fact that there has been no measurable impact on clearance and inactivation rates by the range of caseloads during the period of analysis (January-June 1980) indicates that caseloads were not excessive. But this does not mean that caseloads had been optimum: (the point where the assigned case clearances are maximized and assigned case inactivations are minimized). A more detailed analysis of burglary caseloads is presented later in this report.

C. Performance Measures for Burglary

1. The performance measures discussed and presented here can be viewed from several perspectives. They can be applied to units and individuals; they can be regarded as the average of past performance compared to current performance, they may be considered to be a goal statement for investigative units, and finally, they provide performance indicators for the monitoring of changes brought about by policy changes or organizational and procedural innovations. Based on past performance it is reasonable to anticipate: a monthly clearance rate of 35%; a clearance rate for assigned cases of 44% (Arrest - 28%; Exception - 16%) and; a ratio of arrest to exceptional clearance of 1.7:1.
2. In applying these measures to individual detectives the special circumstances involved in exceptional clearance must be considered. A higher ratio of exceptional clearances in any given month may be caused by victims' refusal to prosecute or by a prosecutor's decision to prosecute less than the total offenses. Allowances must also be made for the geographic assignment of investigators. Lower socio-economic residential and business areas tend to generate a higher rate of exceptional clearances.
3. In addition to the application of measures to units and individuals, it was also recommended that the unfounded rate of assigned burglary cases be monitored in conjunction with an effort to reduce the frequency with which the initial report proves to be unfounded or misclassified.

Performance Monitoring: Burglary

- A. As a result of the initial research findings, three significant changes were brought about in Burglary Squad during the period July-September 1980.
  1. Detectives from burglary squad briefed ongoing watches of the patrol force on a scheduled basis regarding the elements of the offenses of burglary, vandalism, property destruction and prowling. This was done in an attempt to reduce the rate of unfounded and/or misclassified offense reports.
  2. The previous caseload research reflected substantial variance in the workload assigned to burglary detectives. One of the factors causing this was a logical policy of the Squad sergeant to assign new, inexperienced detectives a lighter caseload than their peers. However, the case disposition rates indicated that the newer detectives were clearing cases at substantially the same rate as the others. Therefore, this policy was terminated and an effort was made to equalize caseloads.
  3. The MIS report formats (Section A, Figure 1) were implemented as a monthly procedure. The content of the forms underwent several revisions as a result of input from the Squad sergeant and individual detectives. There was general consensus that the various rates, (i.e., clearance, disposition and resolution) accurately reflected individual and squad performance. The revised forms are attached as Appendices B and C.

B. Monitoring Methodology. Performance monitoring was accomplished by comparison of case disposition and UCR clearance rates for different periods of time prior and subsequent to the introduction of changes discussed above.

Prior to Implementation  
 January-December 1979  
 January-June 1980

Subsequent to Implementation  
 July-December 1980  
 January-May 1981

C. Disposition of assigned cases: comparative data.

Table 11 reflects the average rates of the disposition of assigned cases during the selected time frames.

Table 11  
 BURGLARY

Case Disposition Rates  
 (Assigned Cases)

Jan-Dec 1979 : Jan-Jun 1980 : Jul-Dec 1980 : Jan-May 1980

	<u>Arrest %</u>	<u>Exception %</u>	<u>Unfounded %</u>	<u>Inactivation %</u>
Jan-Dec 79	27	17	13	43
Jan-Jun 80	28	16	29	27
Jul-Dec 80	29	27	17	27
Jan-May 81	28	20	23	29

Clearance of Assigned Cases

Jan-Dec 1979 -- 44%  
 Jan-Jun 1980 -- 44%  
 Jul-Dec 1980 -- 56%  
 Jan-May 1981 -- 48%

Resolution of Assigned Cases

Jan-Dec 1979 -- 57%  
 Jan-Jun 1980 -- 73%  
 Jun-Dec 1980 -- 73%  
 Jan-May 1981 -- 72%

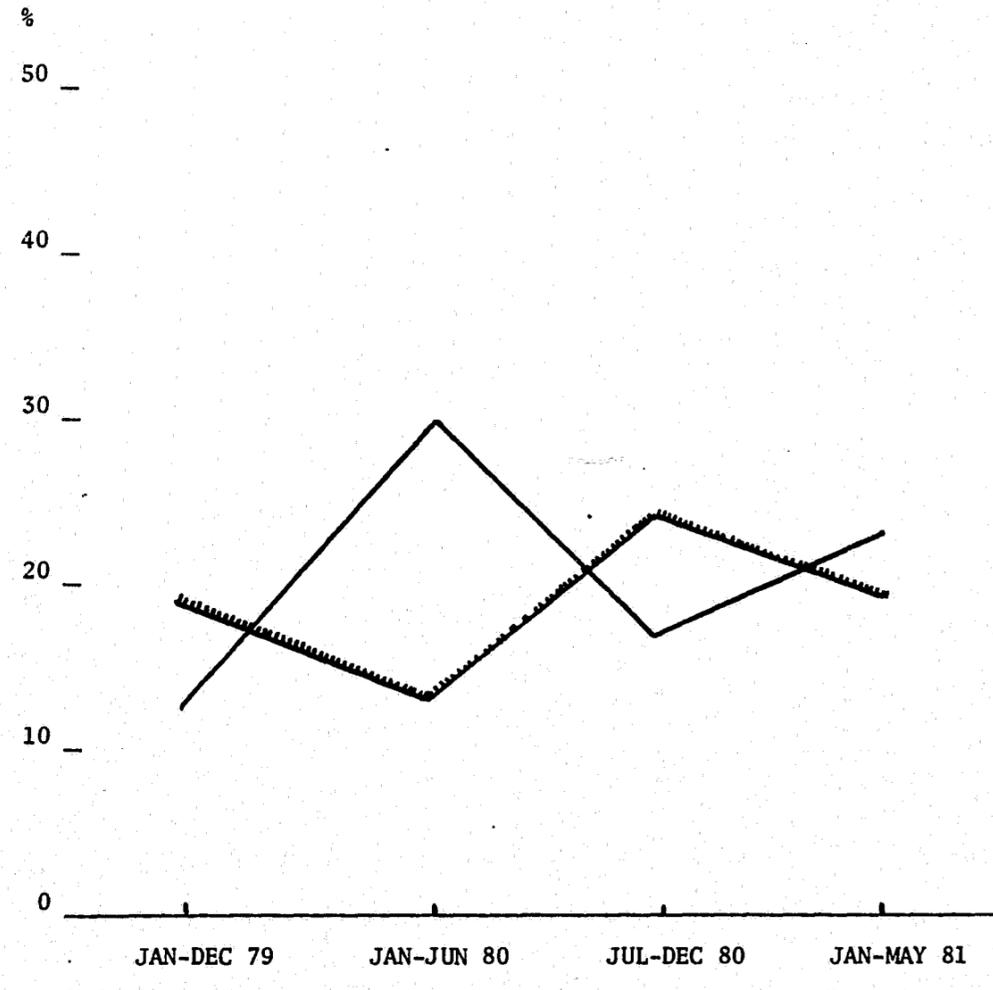
D. Discussion of the Comparative Performance Data

1. There was a marked decrease (12%) in the unfounded rate during July-December 1980 as compared to January-June 1980. However, during January-May 1981 this rate increased by 6%.
2. The exceptional clearance rate rose substantially (11%) during July-December 1980 and then fell back by 7% during January-May 1981.
3. The inactivation rate dropped substantially during 1980 and has remained stable.
4. The rate at which cases are cleared by arrest is stable over the entire period.
5. The rate at which cases are resolved (cleared or unfounded) rose substantially during 1980 (16%) and has remained stable.
6. The unfounded rate and the exceptional clearance rate vary inversely with each other: as one rises the other falls. This relationship is shown graphically in Table 12.

Table 12

BURGLARY

Unfounded and Exceptional Clearance Rates  
January 1979-May 1981



Time Frames

Unfounded rate: —————

Exceptional clearance rate: .....

E. UCR clearance rates. Table 13 presents this data for three time frames Jan-Jun 1980 : Jun-Dec 1980 and Jan-May 1981.

Table 13

BURGLARY

UCR Clearance Rates

Jan-Jun 1980

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>AVG</u>
22 *(185)	43 (105)	34 (174)	40 (83)	34 (114)	36 (128)	34%

Jul-Dec 1980

<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>AVG</u>
57 *(121)	68 (134)	65 (99)	55 (118)	54 (118)	47 (113)	58%

Jan-May 1981

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>AVG</u>
44 (93)	31 (109)	40 (112)	34 (91)	25 (146)	

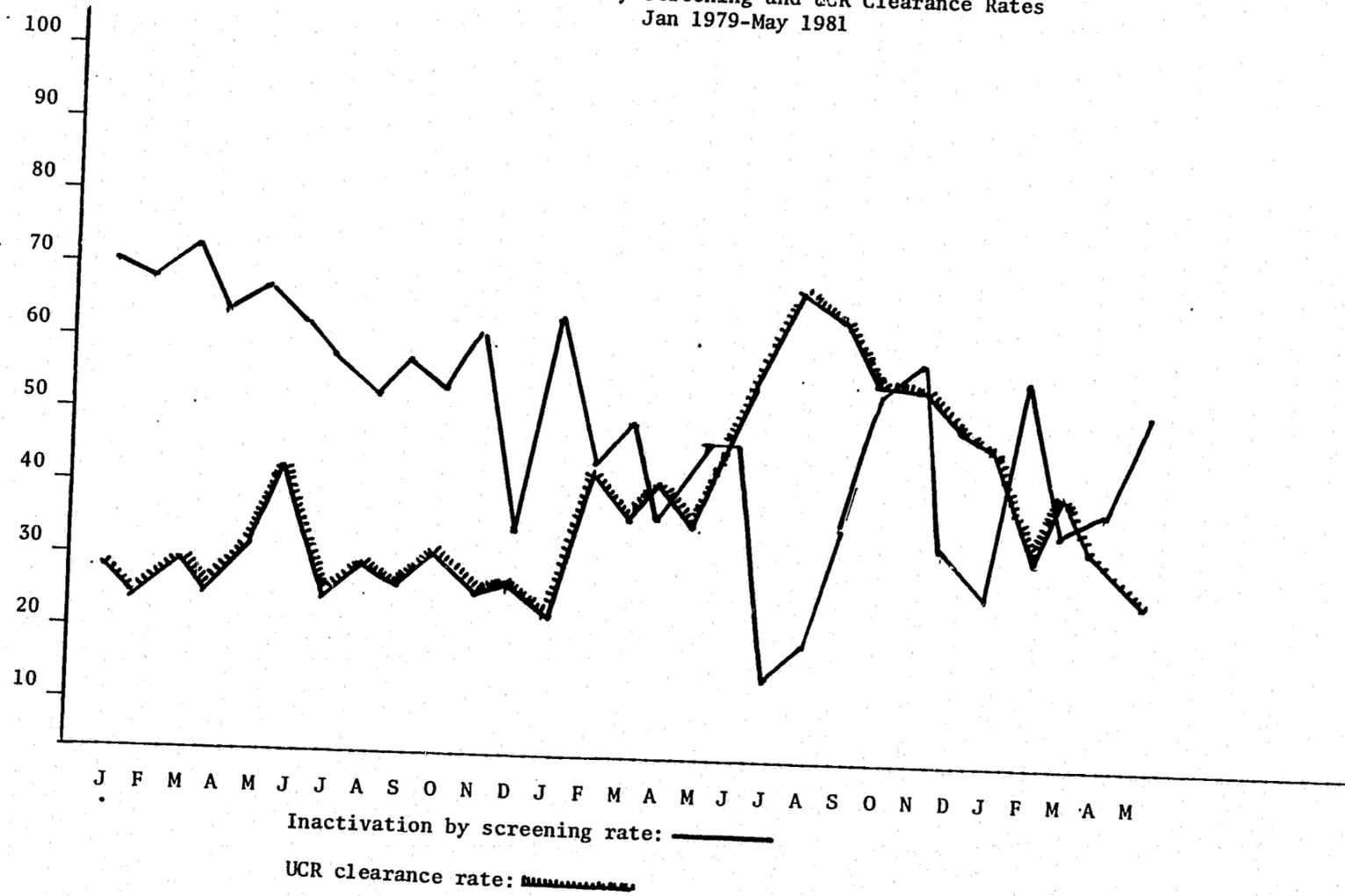
\*Numbers in parentheses are the total reported burglaries for the month.

F. UCR clearance rates and the inactivation by initial screening inactivation rate. Table 14 presents this data graphically for the period Jan 79-May 81. The relatively high clearance rates during July-September 1980 are explained in part by a "Sting" operation conducted during that period. It is also noted that the UCR clearance rate varies inversely with the inactivation by screening rate. Two explanations are possible. (1) If a large number of cases are "screened out" as having insufficient leads to make assignment unproductive there will be a smaller proportion of offenses which can be cleared; or (2) cases which have a potential for clearance are

Table 14

BURGLARY

Inactivation by Screening and UCR Clearance Rates  
Jan 1979-May 1981



being screened out because of inadequacies in the initial offense report/preliminary investigation. In other words information was available at the scene which was omitted or not collected.

Statistical Analysis of Caseloads (January 1979-May 1981).

A. Background. To analyze the caseload data it was necessary to find a way to measure the impact of caseload on investigative performance. Because the UCR clearance rate represents the proportion of reported burglary crimes which are solved, an attempt was made to determine the association between changes in this rate and changes in average caseloads and other explanatory variables. Explanatory variables (factors which would be associated with changes in the UCR clearance rate) selected were the inactivation rate, the clearance rate of assigned cases, the unfounded rate and monthly average caseload as a percent of total reported burglaries. Data was initially collected for the period Jan 79 - March 1981 and a regression equation was formulated to measure the association between changes in the UCR clearance rate and changes in the explanatory variables.

B. Hypothesized Relationships

1. The Inactivation Rate. A higher rate of initial inactivation would reduce the number of cases that could be cleared. Therefore, high inactivation rates would have an inverse relationship with the UCR clearance rate.
2. Clearance of assigned cases. The higher the percentage of cases assigned for investigation, the greater the number that could be solved and the higher would be the UCR clearance rate.
3. The unfounded rate. The effect of the unfounded rate was not hypothesized for direction. While unfounded cases reduce the

number of reported burglaries they also reduce the number of cases that could be cleared. It was assumed that this variable had an effect and it was included to determine whether that effect was positive or negative.

4. Average caseload as a percentile of total reported crime.

Previous research had indicated that average caseload had not "peaked" in terms of positive outcomes; it had not reached a level where the assigned case clearance rate started a downward trend. A positive covariance was hypothesized. By using the average monthly caseload  $\left( \frac{\text{Number of assigned cases}}{\text{Number of burglary detectives}} \right)$

as a percent of total reported burglaries for the month

$\left( \frac{\text{Average caseload}}{\text{Reported burglaries}} \right)$  the effects of caseload and the level

of reported burglaries were combined into one variable.

C. Results. Detailed presentation of the regression outcomes is contained in Footnote 13. In general terms, it was found that the caseload variable had the most impact on the UCR clearance rate. Increases in the average monthly caseload were clearly associated with increases in the UCR clearance rate. During the 29 month period for which data was collected the average monthly caseload as a percent of the total reported burglaries was 12.4%. Reported burglaries averaged 136 incidents a month; therefore, average monthly caseload was  $136 \times .124 = 17$  cases per detective. The statistical analysis estimated that a 1% increase in the caseload percentile would be associated with a 1.2% increase in the UCR clearance rate. However, the analysis cannot identify the caseload which is optimum in terms of maximizing the UCR clearance rate. Logically the optimum point

would occur when the caseload level is no longer associated with increases in the UCR clearance rate. This would mean that investigators are approaching a workload that results in an increase in case inactivations because less time is available to pursue individual cases. Thus, regression analysis is estimating that caseloads should be increased but it does not provide an estimate of how much they should be increased. This information can only be gained by experience. It is recommended that average caseload be increased to 19-20 cases a month and the outcomes monitored. Based on the average incidence of burglary a caseload of 20 would compute to an average caseload that is 14% of reported burglaries.

Case Tracking: Investigative Activities: Burglary Crimes

A. Background. During the period March-May 1981 data was collected on how burglary investigators distribute their time among various investigative activities. Figure 2 is the form used to collect this information. An initial version was prepared by the Principal Investigator and closely reviewed by detective division managers and the individual burglary detectives. After revision of the forms and a detailed briefing with the burglary squad, a form was attached to each offense report. After the case was processed, the completed forms with copies of the initial and supplementary reports were submitted to the evaluation team. One hundred fifty forms were collected between 1 May and 15 April 1981 and represented all of the assigned burglaries during the period. The code sheet in Appendix D was the instrument used by the evaluation team to collate the information. In addition to collecting data on time distribution it was possible to also extract information about solvability factors

Figure 2

Investigative Activity Data Collection Form

Assigned To:	Offense Report #	Date Assigned
1. Response Time	_____	_____
2. Evidence Collection (crime scene search)	_____	_____
3. Interviewing complainant:	Scene _____ Later _____	_____
4. Interviewing witnesses:	Scene _____ Later _____	_____
5. Canvassing neighborhood	_____	_____
6. Interrogation of suspects:	Scene _____ Later _____	_____
7. Field interview cards	_____	_____
8. Locating witness, suspect	_____	_____
9. Transporting victim, witness, suspect	_____	_____
10. Checking pawn sheets, precious metal, scrap metal	_____	_____
11. Utility checks, P.R.H.A., phone co. etc.	_____	_____
12. Crime analysis information	_____	_____
13. Computer checks	_____	_____
14. Informant contact	_____	_____
15. Surveillance, stake-out	_____	_____
16. Squad meeting discussing particular case	_____	_____
17. Out-of-town investigation	_____	_____
18. Search warrant	_____	_____
19. Supplemental report taken	_____	_____
20. Consultation with Commonwealth Attorney	_____	_____
21. Securing warrant	_____	_____
22. Extradition procedures	_____	_____
23. Securing petitions	_____	_____
24. Progress report	_____	_____
25. Case file preparation	_____	_____
26. Other (please be specific)	_____	_____
	_____	_____
	_____	_____

Note: If the investigation of this case led to the investigation of other cases, please note the offense report number(s) on this form.

so that analysis could include the importance of these information elements in regard to the clearance of burglaries in Portsmouth.

B. Frequency of specific investigative activities. Table 15 breaks down the specific investigative activities and categorizes them by the proportion of burglary cases in which those activities occur. For example, interviewing the complainant later occurred in 94% (or 141) of the 150 cases examined. It is noted that the activities in more than 50% of the cases are, with the exception of the progress report, actions which are also part of the preliminary investigation. Thus, the most frequent investigative activities are those which replicate what should have been done when the initial report was taken. In discussing this issue with detectives, this replication was defended on the grounds that relatively inexperienced patrol officers in some cases do not know the right questions to ask or that a complainant or witness will later recall information that was not given to the officer taking the initial report. It is also relevant that burglary detectives in Portsmouth are assigned to specific geographic segments of the city and it frequently happens that experience with these areas provides avenues for investigation that are not apparent to patrol officers. These factors aside, there was a consensus among the burglary detectives that a thorough and detailed preliminary investigation saves considerable time even though some ground may be covered twice.

Table 15  
Percentile Frequencies of Investigative Activities  
N = 150

<u>More than 50% of cases (50%-100%)</u>	
Interviewing complainant later	94%
Progress Report	81%
Locating witness/suspect	59%
Interviewing witness later	55%
Canvass neighborhood	53%
<u>Less than 50% but more than 25% of cases (25%-49%)</u>	
Interviewing suspects later	43%
Crime analysis information	35%
Evidence collection	29%
Consultation: CW Attorney	28%
Response time	26%
Computer checks	26%
<u>Less than 25% of cases but more than 10% (10%-24%)</u>	
Transporting victim/witnesses	24%
Squad meetings	24%
Other tasks	24%
Case file preparation	19%
Interview complainant: scene	17%
Check pawnshops: prec. metals	17%
F.I. Cards	15%
Arrest warrant	14%
Interview witness: scene	13%
Informant contact	13%
Supplemental report	11%
<u>Less than 10% of cases</u>	
Other reports processed	9%
Out of town investigation	9%
Surveillance	6%
Securing petition	4%
Search warrant	3%
Interview suspects (scene)	2%
Utility checks	1%
Extradition procedures	0%

C. Time spent on specific activities. Table 16 lists the investigative activities and reflects the mean and standard deviations of the time spent on them. The large standard deviations point up the great variation in time devoted to these activities among different cases.

Table 16

Time Spent on Specific Investigative Activities  
(In Minutes)

<u>Variable</u> (Number of cases in parentheses)	<u>Mean</u>	<u>Standard Deviation</u>
1. Response time (40)	6.6	4.8
2. Evidence collection (44)	50.3	60.1
3. Interview complainant (Scene) (25)	83.4	192.1
4. Interview complainant (Later) (141)	64.5	54.3
5. Witness at scene (19)	88.4	219.0
6. Witness later (83)	83.9	89.3
7. Canvass neighborhood (79)	65.0	80.5
8. Suspect at scene (3)	48.3	62.1
9. Suspect later (64)	105.7	63.7
10. F. I. Cards (23)	28.5	21.8
11. Locate witness, suspect (88)	216.7	367.7
12. Transport victim, witness, suspect (36)	58.4	160.5
13. Check pawn sheets, prec. metal, etc. (25)	97.6	132.2
14. Utility checks (2)	90.0	42.4
15. Crime analysis info. (53)	33.6	18.5
16. Computer checks (39)	23.8	10.8

Table 16 (Continued)

<u>Variable</u> (Number of cases in parentheses)	<u>Mean</u>	<u>Standard Deviation</u>
17. Informant contact (19)	28.7	23.6
18. Squad meetings (36)	22.1	12.1
19. Out of town (14)	257.7	201.48
20. Search warrant (5)	58.0	24.9
21. Supplemental report (17)	20.5	6.8
22. Consult C.W. Att. (42)	59.6	79.0
23. Arrest warrant (21)	74.6	50.2
24. Extradition (0)		
25. Secure petitions (6)	80.3	32.6
26. Progress report (122)	20.7	13.3
27. Case file prep. (29)	253.2	269.07
28. Other tasks (14)	9.4	16.8
29. Time spent (18) (Other tasks)	132.3	202.1
30. Surveillance/stake-out (9)	275.0	161.2

D. Time gap between offense occurrence and assignment of the case for investigation. It was logically assumed that the sooner a case was subject to a follow-up investigation the greater would be the probability of solution. However, the data in Table 17 indicates that this may not be the case as far as burglary investigations are concerned.

Table 17

## Time Gap Between Offense Occurrence and Case Assignment Related to Clearance

<u>Time</u>	<u># Cleared</u>	<u># Not Cleared</u>	<u>Total</u>
Same day	20 (30%)	46 (70%)	66 (100%)
Next day	8 (50%)	8 (50%)	16 (100%)
3 days	12 (38%)	20 (62%)	32 (100%)
4+ days	10 (38%)	16 (62%)	26 (100%)
	50 (36%)	90 (64%)	140 (100%)

The cases which were assigned the same day the offense occurred had the lowest proportion of clearances. It is important to remember, however, that assignment does not necessarily mean that active investigation took place immediately upon assignment. The data does indicate that the time devoted to a thorough initial screening process will probably not adversely effect the results of the follow-up investigations.

E. Man hours required to process burglary cases. Table 18 reflects the number of cases which were processed in specified blocks of time. Time is expressed in terms of hours and it is not possible to translate the hours into the number of days required. The hours of effort devoted to one investigation could either be a concentrated period of time or could span several days.

Table 18

## Time Required to Process Cases (Man Hours)

<u>Time</u>	<u># Cases Processed</u>	<u>% Processed</u>
8 hours	8	5.4
9-24 hours	92	61.4
25-56 hours	45	30.0
57-102 hours	5	3.3
	150	100.0

F. Time required for case dispositions. Table 19 provides case disposition information for the time blocks previously specified.

Table 19

## Time Required for Case Dispositions

<u>Time (hours)</u>	<u>Disposition (# of Cases) (%)</u>					<u>Total</u>
	<u>Arrest</u>	<u>Exception</u>	<u>Inactive</u>	<u>Unfound</u>	<u>Unfound: Misclass</u>	
8	1(12.5)	1(12.5)	5(62.5)		1(12.5)	8(100%)
9-24	14(15)	15(16)	33(36)	11(12)	19(21)	92(100%)
25-56	18(40)	6(14)	17(38)	2( 4)	2( 4)	45(100%)
57-102	1(40)	1(20)	1(20)		1(20)	5(100%)
	35	23	56	13	23	150(100%)

The proportion of cases cleared increases as more time is devoted to investigation and most inactivations (89%) occur in the 9-56 hour time frame. This is a logical progression whereby the least productive cases are phased out early in the investigative process and more time is allocated to those with a higher probability of solution.

G. Analysis of Solvability Factors.

1. Linear Probability Model.

In an attempt to determine the relationship between the presence of selected solvability factors and the probability of case clearance, regression analysis was performed utilizing a linear probability model.<sup>11</sup> The model was constructed with the following qualitative (dummy) variables.

Y = Case Clearances (Cleared: 1, Not Cleared: 0)

X<sub>1</sub> = Witness (Present: 1, Not Present: 0)

X<sub>2</sub> = Suspect named, described or location known (Yes: 1, No: 0)

X<sub>3</sub> = Vehicle identification, description (Yes: 1, No: 0)

X<sub>4</sub> = Traceable property (Yes: 1, No: 0)

X<sub>5</sub> = Fingerprints lifted (Yes: 1, No: 0)

2. Methodology.

The observations taken were from 150 burglary cases which represented the total assigned cases in Portsmouth's burglary squad from 1 April 1981 to 15 May 1981. To correct for the possible violations of the standard linear model (particularly heteroskedasticity) the regression was run using Generalized (weighted) least squares.

3. Results. The results of the regression were:

$$Y = .25 + .093X_1 + .204X_2 - .103X_3 - .036X_4 + .13X_5$$

sig .001 not sig. sig .01 not sig not sig not sig

$$R^2 = .08 \quad \text{Rho } .008$$

4. Discussion. The regression results, if significant, would be interpreted in the following manner: the probability of a case clearance (if there were a witness to the crime, there was suspect information, vehicle information, traceable property and fingerprints lifted) would be:

$$.25 + .093 + .204 - .103 - .036 + .13 = 53.8\%$$

However, in this case, the regression explained only 8% of the variance in case clearance and only the intercept and suspect information were statistically significant. It is also noted that X<sub>3</sub> (Vehicle Info) and X<sub>4</sub> (Traceable Property) had negative parameter estimates, even though those estimates were insignificant. X<sub>5</sub> (Fingerprints Lifted) had a positive estimate but was still insignificant.

5. Conclusions.

- a. A highly tentative estimate can be made that 25% of the assigned burglary cases would be cleared without the presence of any of the selected solvability factors. This must be qualified by the presence of other insignificant variables and the low R<sup>2</sup> (8%).
- b. Suspect information is the strongest and only significant variable affecting case clearance. This is consistent with other studies.<sup>2</sup> However, the weakness of the overall regression precludes a firm estimate that suspect information would increase the probability of clearance by 20%.

- c. The negative estimates for the contribution of vehicle information and traceable property and the insignificance of fingerprints are inconsistent with empirical experience and common sense. Visual inspection of the data revealed a substantial number of inactivated cases where vehicle and traceable property information was present. This could lead to a mathematical negative association that is inconsistent over time. The same circumstances could also apply to the insignificant parameter estimate for fingerprints.

Summary and Conclusions: Burglary Squad

A. Operations.

1. There has been substantial improvement in the disposition of burglary cases since 1979. The resolution of cases has increased from 57% and stabilized at a level of about 73%. Case inactivations have dropped from 43% in 1979 to 29% in 1981.
2. The ratio of arrests to exceptional clearance has consistently been greater than one.
3. The rate at which cases are unfounded/misclassified dropped dramatically in 1980 (from 29% to 17%) but has increased somewhat thus far in 1981 (17% to 23%). This increase appears to be associated with variation in the exceptional clearance rate which dropped from 27% to 20% while the arrest and inactivation rate remained stable.
4. The UCR clearance rate for 1981 currently averages 35% while in 1980 it averaged 58%. However, impact of the Sting Operation on the 1980 UCR clearance rate must be considered. The relationship

between the inactivation by initial screening rate and the UCR clearance rate discussed on pages 27 and 28 is also germane here. The drop in the UCR clearance rate has not been associated with any decrease in the assigned case clearance rate (Jan-June 80: 44% -- Jan-May 81: 48%).

5. The preliminary investigation by the first officer at the scene is a critical element that has not yet been directly evaluated. Increased productivity of investigators and better management information can only go so far in improving effectiveness; specifically the administration and resolution of assigned cases. The dimension that has not been addressed concerns the potential solvability of cases initially screened out and not assigned. If those screened out reports in fact contain all the information available at the scene then the system is approaching the optimum in dealing with total reported burglaries. However, if the initial report is cursory and overlooks important elements of information a potentially productive case will be screened out in error.

B. Caseloads.

1. Statistical analysis indicates that burglary detectives can handle more than 12-13% of the monthly reported burglaries as an average monthly caseload. The analysis does not forecast how much this percentile can be increased before it begins to depress the UCR clearance rate. This can only be determined by monitoring the impact of various caseloads on the assigned case clearance rate, the number of cases carried over into the next month and the incidence of overtime. Based

on this data it is recommended that an attempt be made to stabilize caseloads at 19-20 cases a month per detective.

2. The caseload analysis also indicated that the current staffing level in the burglary squad (one sergeant and six detectives) is adequate and consistent with the frequency of burglary crimes.

C. Case Tracking: Investigative Activities.

1. Those activities which occur most frequently in the conduct of burglary investigations are those which eventually replicate the preliminary investigation. Complete and thorough preliminary investigations will operate to decrease the amount of detectives time devoted to these activities.
2. The circumstances of each case investigated are sufficiently different to cause a wide variation in the amount of time devoted to specific activities.
3. The fact that a great proportion of cases are inactivated in 9-56 man hours supports the current procedure whereby cases are closed in 10 working days unless there is a specific justification to continue the investigation.

SECTION B. LARCENY

Research Questions

The specific research questions developed for larceny squad are listed below.

A. Larceny Squad Operations

1. What was the distribution of larceny clearances between patrol and detective division? Did this distribution have any impact on the UCR clearance rate?
2. What were the case disposition rates (Arrest, Exception, Unfounded, Inactivation) for larceny/property destruction for 1979 and for January-June 1980?
3. What was the relationship between inactivation rates, clearance rates and the rate at which detectives clear cases by arrest. Did the UCR clearance rate reflect how effectively detectives were processing assigned cases?

B. Larceny Squad Caseloads

1. What were the Larceny and Property Destruction caseloads and case disposition rates for Larceny detectives during January-June 1980?
2. Was there a relationship between caseloads and inactivation rates in larceny?
3. Was there any relationship between larceny caseloads, clearance rates and unfounded rates?

Operational Differences: Larceny and Burglary

Two factors which differentiated Larceny squad operations from the Burglary squad were that patrol cleared as many larcenies as did detectives and larceny detectives also processed property destruction cases. During

the period January-June 1980 detectives cleared, on the average, 15% of reported larcenies, while patrol cleared 16%. In many cases a patrol clearance involves taking custody of persons apprehended by retail business management or security personnel. During the same period approximately one third of the individual caseload was property destruction cases.

Presentation of Larceny Squad Data

A. Larceny Squad Operations

Data is presented by restating each research question followed by the detailed research findings. Data was collected for two time frames: January-December 1979 and January-June 1980.

WHAT WAS THE DISTRIBUTION OF LARCENY CLEARANCES BETWEEN PATROL AND DETECTIVE DIVISION. DID THIS DISTRIBUTION HAVE ANY IMPACT ON THE UCR CLEARANCE RATE?

Table 20

LARCENY

January 1980 - June 1980  
Clearances by Detective and Patrol Division

Month	Cleared by Detectives %	Cleared by Patrol %	UCR Clearance Rate %
January	16	7	23
February	23	18	41
March	16	15	31
April	9	21	30
May	14	16	30
June	11	19	30

Numbers are the percent of the total reported offenses (minus unfounded reports) cleared by arrest or exception. The total of detective and patrol clearance rates equal the UCR clearance rate.

The UCR clearance rate for larceny did not react in any consistent way with the distribution of clearances between detectives and patrol. During April-June patrol cleared more

larcenies than detectives with a total UCR clearance rate of 30% for the three months. In January and February detectives cleared more cases than patrol and the UCR clearance rate was 23% and 41%, respectively.

WHAT WERE THE CASE DISPOSITION RATES (ARREST, EXCEPTION, UNFOUNDED, INACTIVATION) FOR LARCENY/PROPERTY DESTRUCTION FOR 1979 AND FOR JANUARY-JUNE 1980?

Table 21

LARCENY/PROPERTY DESTRUCTION

Case Disposition Rates  
(Assigned Cases)  
January-December 1979 and January-June 1980

	Arrest %	Exception %	Unfounded %	Inactivation %
Jan-Dec 1979	27	25	13	35
Jan-Jun 1980	20	32	15	33

Table 22

LARCENY/PROPERTY DESTRUCTION

Case Disposition Rates  
January-June 1980

	Arrest %	Exception %	Unfounded %	Inactivation %
Larceny	22	31	16	31
Property Dest.	13	39	9	39

Table 21 shows that the essential difference between 1979 and the January-June 1980 disposition rates is that the latter period is characterized by a 7% drop in arrests and a 7% increase in exceptional clearances, while the unfounded and inactivation rates remained essentially stable. Table 22 separates larceny and property destruction and shows that the

ratio of arrests to exceptional clearances is much higher for larceny than property destruction. These ratios compute to .7 for larceny and .3 for property destruction. These rates are also significantly different from the arrest ratio of 1.7 for burglary. A sampling of offense reports and interviews with squad personnel indicate that the high proportion of juvenile offenders involved in petty larceny and property destruction crimes generates a higher rate of exceptional clearance. Accommodations between the parents of the offender and the victim are often made, or restitution of some sort is effected.

WHAT WERE THE RELATIONSHIPS BETWEEN INACTIVATION RATES, CLEARANCE RATES AND THE RATE AT WHICH DETECTIVES CLEAR CASES BY ARREST. DID THE CLEARANCE RATE REFLECT HOW EFFECTIVELY DETECTIVES PROCESSING ASSIGNED CASES?

Table 23  
LARCENY  
Inactivation, Clearance and Outcome Rates  
January-June 1980

	<u>Inactivation Rate</u>	<u>UCR Clearance Rate</u>	<u>Outcome Arrest Rate</u>
Jan	86	23.5	28
Feb	81	41	13
March	86	31	31
April	86	30	34
May	85	30	40
June	89	30	24

NOTES:

1. The inactivation rate is computed by dividing the total cases inactivated by initial screening and investigators by the total cases

processed (minus unfounded cases).

2. The clearance rate is the monthly UCR statistic.
3. The outcome arrest rate is the percentage of the total caseload assigned to detectives which was cleared by arrest.

As was the case with burglary, the UCR clearance rate did not give an accurate picture of investigative performance. February, which had the highest clearance rate (41%) also saw the lowest number of cases cleared by arrest (13%). The highest percentages of arrests took place during April and May (34% and 40%, respectively), but the UCR clearance rate was at an average level of 30%. As with burglary there was some indication that higher inactivation rates may be associated with lower clearance rates. The higher inactivation rates of 86 and 89 percent were associated with the lower clearance rates of 23, 30 and 31 percent, while the lowest inactivation rate of 81% was associated with the highest clearance rate (41%).

B. Larceny Squad Caseloads

WHAT WERE THE LARCENY AND PROPERTY DESTRUCTION CASELOADS AND CASE DISPOSITION RATES FOR LARCENY DETECTIVES DURING JANUARY-JUNE 1980?

Table 24  
LARCENY AND PROPERTY DESTRUCTION

Assigned Case Dispositions  
January-June 1980

Detective	Cases	Arrest	Exception	Unfounded	Inactivated
A	Larceny(76%) 79	18(23%)	22(28%)	17(22%)	22(27%)
ACLD(Mo)	Prop Dest(24%) 25	2( 8%)	11(14%)	3(12%)	9(36%)
17	Total Cases 104	20(19%)	33(32%)	20(19%)	31(30%)
B	Larceny (73%) 61	24(39%)	13(21%)	4( 7%)	20(33%)
ACLD	Prop Dest(27%) 23	4(17%)	5(22%)	0( 0%)	14(61%)
14 (Mo)	Total Cases 84	28(33%)	18(21%)	5( 6%)	34(40%)
C	Larceny (76%) 97	16(16%)	42(43%)	16(16%)	23(25%)
ACLD	Prop Dest(24%) 30	4(13%)	17(57%)	4(13%)	5(17%)
21 (Mo)	Total Cases 127	20(16%)	59(46%)	20(16%)	28(22%)
D	Larceny (83%) 59	18(31%)	17(29%)	13(22%)	11(18%)
ACLD	Prop Dest(17%) 12	2(17%)	4(33%)	0( 0%)	6(50%)
12 (Mo)	Total Cases 71	20(28%)	21(30%)	13( 8%)	17(24%)
E*	Larceny (65%) 34	3( 9%)	9(27%)	11(32%)	11(32%)
(3) ACLD	Prop Dest(35%) 19	1( 5%)	4(21%)	2(11%)	12(63%)
18 (Mo)	Total Cases 53	4( 8%)	13(25%)	13(25%)	23(42%)
F*	Larceny (79%) 34	6(18%)	9(26%)	3( 9%)	16(47%)
(4) ACLD	Prop Dest(21%) 9	1(11%)	6(67%)	1(11%)	1(11%)
11 (Mo)	Total Cases 43	7(16%)	15(35%)	4( 9%)	17(40%)

Average caseload per month = 15

Larceny = 11

Prop Dest = 4

\*Data on E and F is for 3 and 4 months, respectively.

Once again, as with burglary, there was no apparent relationship between caseloads and inactivation, unfounded or clearance rates. With only minor exceptions, the case assignment ratio of Larceny to Property Destruction was 4 to 1, and a higher rate of clearance

by arrest for larceny was apparent. The average monthly caseload was 15 cases per month.

WAS THERE A RELATIONSHIP BETWEEN CASELOADS AND INACTIVATION RATES IN LARCENY AND PROPERTY DESTRUCTION?

Table 25  
Caseloads and Inactivation Rates  
January-June 1980

LARCENY

Detective	Cases Processed	Cases Inactivated	% Inactivated
A	97	23	24
B	79	22	28
C	61	20	33
D	59	11	19

PROPERTY DESTRUCTION

Detective	Cases Processed	Cases Inactivated	% Inactivated
A	30	3	17
B	25	9	36
C	23	14	61
D	12	6	50

NOTE: An important qualification in considering this data is that the amount of time spent by individuals on casework was not known. There was no apparent relationship between caseloads and inactivation rates.

WAS THERE ANY RELATIONSHIP BETWEEN LARCENY CASELOADS,, ASSIGNED CASE CLEARANCE RATES AND UNFOUNDED RATES?

Table 26

Caseloads and Clearance and Unfounded Rates  
January-June 1980

LARCENY

Detective	Caseload	Assigned Case Clearance Rate	Unfounded Rate
A	97	59	16
B	79	51	22
C	61	60	7
D	59	60	22

There is no apparent relationship between caseloads, clearance rates and unfounded rates.

Research Findings (January 1979-June 1980)

A. Larceny Squad Operations

1. There were several problems involved in the procedure of assigning both larcenies and property destruction cases to the same squad. First, property destruction is not reportable under UCR, therefore, detectives had a split caseload - part of which will have highly visible outcomes (larcenies) and another part (property destruction) which received substantially less attention. This produced a cross effect where there was greater motivation to actively pursue larceny cases and devote less effort to property destruction. Second, there are different expectations regarding these two crimes. Even though detectives were clearing 53% of

assigned larceny and 52% of assigned property destruction, the proportion of arrests were significantly lower for property destruction (13%) than larceny (22%). A detective who received a larger proportion of property destruction cases made less arrests. Apparently recognizing this difference the larceny squad sergeant consistently assigned cases so that each detective was carrying a caseload which is 75% larceny and 25% property destruction cases. Obviously case assignment procedures in larceny squad required more administrative time and effort than in burglary squad.

Based on the foregoing it was recommended that the property destruction cases not be assigned to larceny squad.

2. The stability of the monthly inactivation rate in larceny with an 8% range (81-89%) makes it possible to make estimates as to expected outcomes in relation to reported offenses.
  - a. It is reasonable to expect that 30% of reported larcenies will be solved (cleared).
  - b. It is reasonable to expect that 50% of larceny cases assigned for follow-up investigations will be solved (cleared).
3. As was the case in Burglary Squad, the internal monthly report of squad operations provides aggregate data and UCR clearance rates but does not provide management with sufficient information about the disposition of assigned cases or inactivation rates. It is recommended that the monthly reporting format in Figure 1 be employed in the Larceny Squad as well as in the Burglary Squad.

B. Larceny Squad Caseloads. Research showed that the average monthly caseload for larceny detectives had been 15 cases a month. But, as with burglary, the range of caseloads over time and among detectives had no measureable impact on clearance, inactivation and unfounded rates. Again, this does not mean caseloads have reached an optimum in terms of the desired outcomes and the heaviest possible caseload. Caseload analysis in Larceny Squad was further hampered by the mixed assignment of Larceny and Property Destruction cases.

C. Performance Measures for Larceny Squad

1. Monthly clearance rate - 30%
2. Clearance rate for assigned cases - 53%

Arrest - 22%  
Exception - 31%

3. Ratio of arrests to exceptional clearance - .7:1

D. Performance Measures for Assigned Property Destruction Cases

1. Clearance of assigned cases - 52%

Arrest - 13%  
Exception - 39%

2. Ratio of arrests to exceptional clearance - .3:1

Performance Monitoring: Larceny

A. As a result of the previous research, two significant changes were implemented in Larceny Squad during July-October 1980:

1. The reporting formats developed for Burglary Squad (Appendices B and C) were found to be compatible with Larceny Squad operations and were implemented as the squad reporting system in July 1980.
2. Effective October 1, 1980 property destruction crimes were assigned to Patrol Division and the Larceny Squad was committed

solely to larcenies (except grand larceny-auto).

B. Monitoring Methodology.

To assess the impact of these changes, operational data were compared for the period January-June 1980 (prior to implementation) and two periods subsequent to implementation (July-December 1980 and January-May 1981).

1. Table 27 presents the comparable data for assigned case dispositions:

Table 27

LARCENY

Assigned Case Dispositions

Jan-Jun 1980 : Jul-Dec 1980 : Jan-May 1981

	<u>Arrest %</u>	<u>Exception %</u>	<u>Inactivated %</u>	<u>Unfounded %</u>
Jan-Jun 80	22	31	31	16
Jul-Dec 80	15	25	35	25
Jan-May 81	15	25	35	25

It is noted that the data for the two periods subsequent to implementation is identical. There has been an increase in the inactivation and unfounded rates and a decrease in the clearance rates by arrest and exception. These trends will be discussed after presentation of data concerning inactivation by screening and UCR clearance rates.

2. Table 28 shows the results in assigned case outcomes for the three periods. (Unfounded cases are not considered.)

Table 28

LARCENY

Assigned Case Outcomes  
(Arrest : Exception : Inactivation)

Jan-Jun 1980 : Jul-Dec 1980 : Jan-May 1981

	<u>Arrest %</u>	<u>Exception %</u>	<u>Inactivation %</u>
Jan-Jun 80	28	37	35
Jul-Dec 80	20	31	49
Jan-May 81	20	33	47

Assigned Case Clearance Rates

Jan-Jun 80 - 65%

Jul-Dec 80 - 51%

Jan-May 81 - 53%

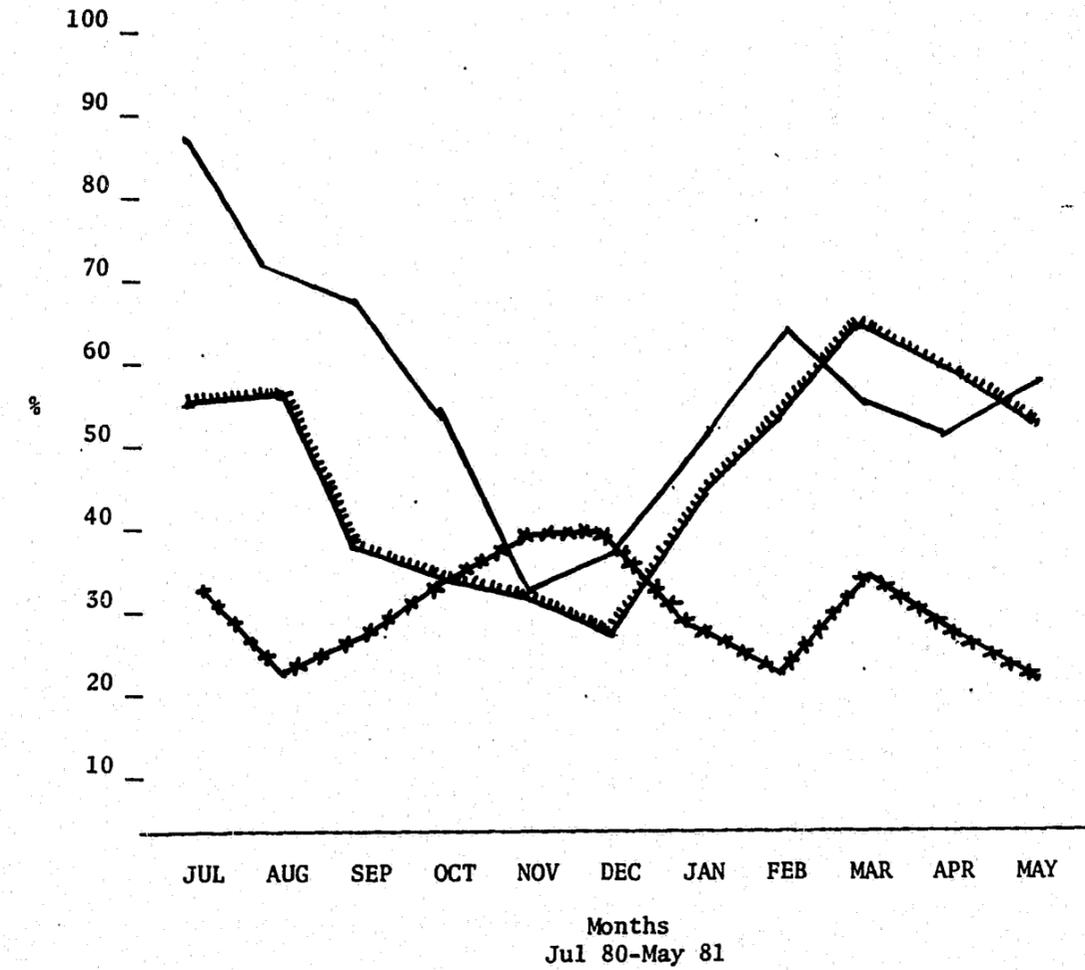
As with case dispositions, the data on case outcomes reflects a decrease in case clearances and an increase in inactivations. However, as the subsequent tabular presentations will show, this trend does not represent a deterioration in investigative effectiveness.

- Table 29 presents Larceny Case Trends for the period July 1980-May 1981 in graphic form. The monthly percentiles of the inactivation by screening rate, the assigned case clearance rate and the UCR clearance rates have been plotted and trend lines drawn for each rate.

Table 29

LARCENY RATE TRENDS JUL 80-MAY 81

Inactivation by Screening Rate  
Assigned Case Clearance Rate  
UCR Clearance Rate



Months  
Jul 80-May 81

Inactivation by Screening rate: —————

Assigned case clearance rate: - - - - -

UCR clearance rate: x x x x x

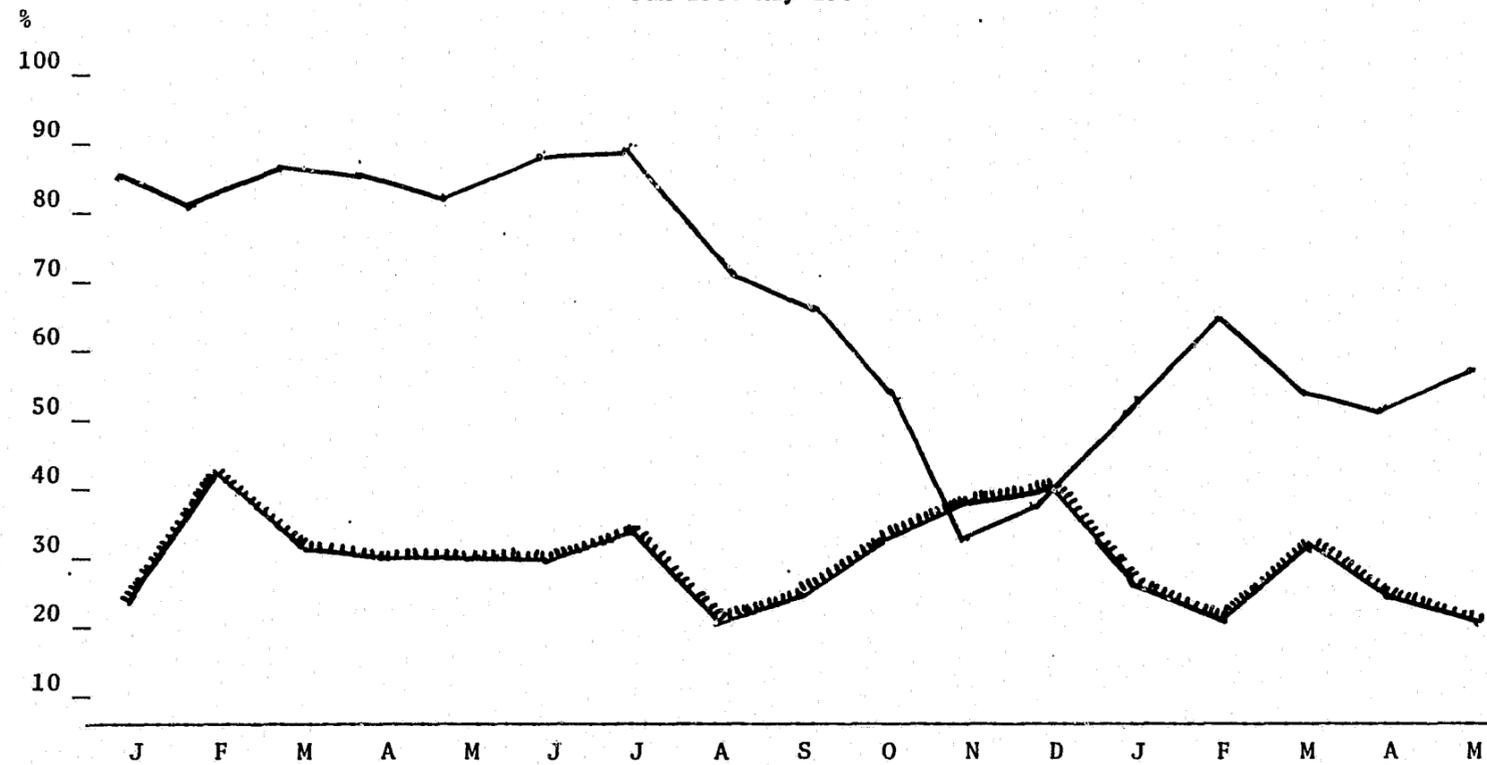
The trend lines show that during August-December the inactivation by screening rate and the assigned case clearance rate were decreasing. During the same period the UCR clearance rate steadily rose. Thus, as a smaller proportion of reported larcenies were inactivated by initial screening, detectives were apparently receiving more cases of low solvability potential and this operated to lower the assigned case clearance rate. However, the concurrent increase in the UCR clearance rate indicates that a larger proportion of reported crime was being cleared each month. In January and February both the inactivation by screening and assigned case clearance rates rose while the UCR clearance rate dropped. The graph shows an inverse relationship between the inactivation by screening and assigned case clearance rates on one hand and the UCR clearance rate on the other. It appears that screening out fewer cases does cause assignment of more unsolvable cases but at the same time it is associated with higher UCR clearance rates.

4. Table 40 shows just the UCR clearance rate and the inactivation by initial screening rate for January 1980-May 1981. The inverse relationship between the two rates is clearly apparent.

Table 30

LARCENY

Inactivation by Screening and UCR Clearance Rates  
Jan 1980-May 1981



Jan 1980-May 1981

Inactivation by screening rate: ———

UCR clearance rate: - - - - -



c. AC%L is a usable variable for after-the-fact analysis, but because the number of reported larcenies is not known until the end of a given month it is not directly useful to operational managers. An estimate of monthly average caseload is needed. During the period October 1980-May 1981 the mean reported larcenies per month was 286. By using this figure as the average frequency of reported larcenies, the AC%L can be applied to estimate average monthly caseloads.

<u>Average Reported Larcenies</u>	<u>AC%L</u>	<u>Average Monthly Caseload</u>
286	6%	17
286	7%	20
286	8%	23
286	9%	26
286	10%	29
286	11%	31
286	12%	34

d. This analysis indicates that the point of diminishing returns in terms of caseloads has not been reached in Larceny Squad, i.e., that point where AC%L is no longer associated with increases in the UCR clearance rate or is negatively associated. However, as was noted in connection with burglaries, there is logically a point where increased caseloads would result in an increasing proportion of post-investigation inactivations as the workload allows less time to pursue cases.

Summary and Conclusions: Larceny Squad

A. Inactivation by Screening Rates.

Inactivation by initial screening rates in excess of 40% to 50% are associated with a decline in the UCR clearance rate. Therefore, in addition to applying solvability and experiential factors in the

case screening process, the proportion of cases screened out should be monitored.

B. Closely related to the inactivation by screening rate is the average monthly caseload as a percent of total monthly reported larcenies (AC%L). Obviously for this rate to go up the inactivation by screening rate must go down. At this point in time AC%L should be increased and an effort made to increase the average monthly caseload for larceny detectives to the 23-29 range.

C. The caseload analysis also indicated that the current staffing level in the larceny squad (one sergeant and six detectives) is adequate and consistent with the frequency of larceny crimes.

### PART III: CRIMES AGAINST PERSONS

#### Introduction

Research in the Crimes Against Persons section of Criminal Investigation Division initially focused on caseloads and case outcomes among units and individuals and on development of reporting formats for the section similar to those developed for the Property Crimes Section. The data for this research was drawn from the time frame May-December 1980 and study was completed in February 1981. Performance monitoring and analysis of data for the period January-June 1981 was accomplished during July 1981.

#### Methodology

Case assignment logs, case files, offense reports and monthly activity reports for the period 1 May - 31 December 1980 and 1 January-30 June 1981 were researched to provide the necessary data to compute caseloads and case outcomes on a monthly basis for the Homicide and Robbery and Sex Crimes squads and the individual teams and detectives assigned to those squads.

#### SECTION A: Caseloads and Case Outcomes (1 May-31 December 1980)

Purpose. The purpose of this section is to present the results of the analysis of caseloads and case outcomes in the Crimes Against Persons section of the Criminal Investigation Division, Portsmouth Police Department. For a number of reasons comparative analysis was constrained in this section due to changes in record keeping procedures and case assignment policy in the Homicide and Robbery Squad which took place after January 1980. In order to provide accurate insight into

operations and case outcomes, the period 1 May - 31 December 1980 was chosen for examination.

#### Qualifications on Caseload Data

- A. Inactivations. The matter of case inactivations in the Crimes Against Persons section was not as clearly specified as in the Crimes Against Property section. In many instances cases were administratively inactivated due to a lack of evidence and/or exhaustion of leads, but due to the seriousness of the crime and the possibility of new information, an inactivated case may still be informally assigned to a team or individual detective. The case might not be pursued on the same basis as the current caseload, but the associated facts and leads are periodically checked by the investigator/s. Thus, actual caseload may be slightly higher than the formal record keeping system would indicate.
- B. Special incidents. Another factor which makes specification of true workload difficult in this section is the processing or monitoring of incidents such as missing persons and dead bodies. Because these incidents have the potential to be reclassified as a crime against a person they are referred to the Squad Sergeant of Homicide and Robbery Squad (who also acts as the supervisor for the Sex Crimes Unit). Frequently these incidents involve active investigation and follow-up even though they may never be reclassified as a crime. It is difficult to quantify and systematically aggregate this workload with the UCR reportable cases.
- C. Workload. The caseload and outcome rates contained in this section reflect the actual performance of units and individual detectives in processing their assigned caseloads. However, for the reasons stated above,

caseload may not be as accurate an indicator of true workload in the crimes Against Persons section as was the case in the Property Crimes section.

Homicide and Robbery Squad: Outcome Rates

A. Cases are assigned to two-man investigative teams in Homicide and Robbery Squad. Therefore, all data is presented in a way that is consistent with this procedure. Table 31 presents case outcomes by team for the period 1 May - 31 December 1980. Case outcomes are: arrest, exceptional clearance or inactivation.

Table 31  
CASE OUTCOMES  
Homicide-Robbery-Assault  
1 May - 31 December 1980

TEAM: A	Category	Outcome			Total
		Arrest	Except	Inact	
TOTAL CASES: 61	Homicide	3(75%)	1(25%)		4 (100%)
UNFOUNDED: 9	Robbery	6(25%)	3(13%)	15(62%)	24 (100%)
	Assault	4(18%)	12(54%)	6(28%)	22 (100%)
	Misc.	1(50%)	1(50%)		2 (100%)
		<u>14(27%)</u>	<u>17(33%)</u>	<u>21(40%)</u>	<u>52 (100%)</u>
TEAM: B	Category	Outcome			Total
		Arrest	Except	Inact	
TOTAL CASES: 86	Homicide	8(80%)	1(10%)	1(10%)	10 (100%)
UNFOUNDED: 2	Robbery	20(41%)	9(18%)	20(41%)	49 (100%)
	Assault	12(50%)	7(29%)	5(21%)	24 (100%)
	Misc.	1(100%)	1(100%)		1 (100%)
		<u>40(48%)</u>	<u>18(21%)</u>	<u>26(31%)</u>	<u>84 (100%)</u>
TEAM: C	Category	Outcome			Total
		Arrest	Except	Inact	
TOTAL CASES: 113	Homicide	4(80%)		1(20%)	5 (100%)
UNFOUNDED: 13	Robbery	6(19%)	7(22%)	19(59%)	32 (100%)
	Assault	22(35%)	32(52%)	8(13%)	62 (100%)
	Misc.	1(100%)	1(100%)		1 (100%)
		<u>33(33%)</u>	<u>39(39%)</u>	<u>28(28%)</u>	<u>100 (100%)</u>

B. The data reflects some significant differences in caseloads and outcomes as related to the type of crime.

1. Caseload distribution:

- a. Team C processed more assaults (62) than Team B (24) and A (22).
- b. Team B processed more homicides (10) than the other two teams (4 and 5 respectively).
- c. Robbery caseloads are unevenly distributed, 24, 49 and 32 cases per team, respectively.

2. Relative outcomes:

- a. Robbery was associated with a high rate of inactivation; 62%, 41% and 59%.
- b. Assault was associated with high rate of exceptional clearance; 54%, 29% and 52%.
- c. Higher homicide caseloads were associated with higher arrest rates for overall assigned cases.

C. Thus, outcome rates generated by the three teams may be more a result of the distribution of crime categories in their assigned caseload than any factors relating to relative performance. The following tables show how team outcomes conformed to the outcomes associated with crime categories.

1. Homicide:

Table 32  
Homicide (Highest Rate of Arrest)

Team	% Homicide Cases	Arrest Outcome Rate %
B	12	48
A	7	27
C	5	33

The team assigned the most homicides had the highest arrest rate. The fact that Team A processed a higher percentage of homicides than Team C is caused by the fact that they processed the smallest number of total cases. In terms of numbers, Team A had one less homicide case (4), than Team C (5).

2. Assault:

Table 33

Assault (Highest Rate of Exceptional Clearance)

Team	% Assault Cases	Exceptional Outcome Rate % (Total Caseload)
C	62	39
A	43	31
B	28	21

A higher proportion of assault cases was associated with a higher exceptional outcome rate.

3. Robbery:

Table 34

Robbery (Highest Rate of Inactivation)

Team	% Robbery Cases	Inactivation Outcome Rate % (Total Caseload)
A	47	47
B	58	31
C	32	28

Differences here reflect an association between robbery and inactivations even though Team B has the most robberies but not the highest inactivation rate. After average assignment of 5 robbery cases a month for seven months (May-Nov), this team was assigned 13 robberies in December -- all of which were cleared (11 by arrest; 2 by exception). This explains why the relationship between robbery caseload and the inactivation rate was atypical in this instance.

Homicide and Robbery: Resolution Rates

A. Inasmuch as unfounded cases are the result of investigation, they must be considered as workload in any analysis of performance. Therefore, the resolution rate was developed to reflect the rate at which detectives resolve cases by arrest, exceptional clearance or a determination of unfounded. Table 35 presents the resolution rates for the three investigative teams in Homicide and Robbery Squad.

Table 35

HOMICIDE AND ROBBERY

Resolution Rates  
1 May - 31 October 1980

NOTE: Percent of total processed cases resolved by arrest, exceptional clearance or a determination of unfounded.

TEAM: A	Case Resolutions	
Total cases <u>61</u>	Arrest	<u>14</u> 23%
	Exception	<u>17</u> 28%
	Unfounded	<u>9</u> 15%
		40 60%

Resolution Summary:

Arrest/Exception: 31(78%) Unfounded: 9(22%)

TEAM: B	Case Resolutions	
Total cases <u>86</u>	Arrest	<u>40</u> 47%
	Exception	<u>18</u> 20%
	Unfounded	<u>2</u> 2%
		60 69%

Resolution Summary:

Arrest/Exception: 58(97%) Unfounded: 2(3%)

TEAM: C	Case Resolutions	
Total cases <u>100</u>	Arrest	<u>33</u> 33%
	Exception	<u>39</u> 39%
	Unfounded	<u>13</u> 13%
		85 89%

Resolution Summary:

Arrest/Exception: 72(85%) Unfounded: 13(15%)

B. The rate at which the teams resolve assigned cases has a range of 29% (60%-89%). The high rate of resolution by Team C may be partially attributed to the fact that they handled more assault cases which tend to result in a higher rate of exceptional clearance rather than inactivation. There was no association between the relative unfounded rates and caseloads, i.e., heavier caseloads did not necessarily result in higher unfounded rates.

Sex Crimes: Case Outcomes

A. Case outcomes for the three detectives in the Sex Crimes unit is presented in Table 36.

Table 36 CASE OUTCOMES SEX CRIMES 1 May - 31 December 1980					
Detective A	Category	Arrest	Except	Inact	Total
Total Cases: 54	Rape	3(21%)	8(57%)	3(22%)	14 (100%)
Unfounded: 7	Sex Assault	4(50%)	4(50%)		8 (100%)
TOTAL: 47	Other Sex Crimes	10(59%)	5(29%)	2(12%)	17 (100%)
	Mail/Phone Calls	2(25%)	5(63%)	1(12%)	8 (100%)
		19(40%)	22(47%)	6(13%)	47 (100%)
Detective B	Category	Arrest	Except	Inact	Total
Total Cases: 46	Rape	12(70%)	3(18%)	2(12%)	17 (100%)
Unfounded: 3	Sex Assault	1(12%)		7(88%)	8 (100%)
TOTAL: 43	Other Sex Crimes	3(30%)	1(10%)	6(60%)	10 (100%)
	Mail/Phone Calls	2(25%)	1(12%)	5(63%)	8 (100%)
		18(42%)	5(12%)	20(46%)	43 (100%)

Table 36 (Continued)

Detective C	Category	Arrest	Except	Inact	Total
Total Cases: 41	Rape	6(50%)	5(42%)	1(8%)	12 (100%)
Unfounded: 4	Sex Assault	8(80%)	1(10%)	1(10%)	10 (100%)
TOTAL: 37	Other Sex Crimes	4(40%)	3(30%)	3(30%)	10 (100%)
	Mail/Phone Calls	2(40%)	2(40%)	1(20%)	5 (100%)
		20(54%)	11(30%)	6(16%)	37 (100%)

B. Analysis of Data. Case assignments are evenly distributed when it is considered that Detective C had been assigned special administrative projects during the period in addition to investigative work. There appeared to be no specific relationship between types of sex crimes and outcomes; and no sharp differences in the distribution of types of crimes although Detective B was assigned 17 rapes while 14 and 12, respectively, were assigned to the other two detectives.

C. In aggregate outcome rates there is a difference among the three detectives as shown in Table 37.

Table 37  
SEX CRIMES DETECTIVES  
Aggregate Case Outcome Rates %

Detective	Arrest	Exception	Inactivation
A	40	47	13
B	42	12	46
C	54	30	14

d. In the relationship between exception and inactivation, Detective B's outcome rates are the inverse of the other two detectives with a 46% inactivation rate. This high inactivation rate was derived almost exclusively from crimes other than rape inasmuch as his inactivation rate for rape was only 12%. This could be caused by

the circumstances of the particular cases assigned or may be associated with the greater number of rape cases assigned.

Case Resolutions: Sex Crimes

A. Table 38 shows the case resolution rates for detectives assigned to sex crimes.

Table 38

SEX CRIMES

Resolution Rates  
1 May - 31 December 1980

NOTE: Percent of total assigned cases resolved by arrest, exceptional clearance or a determination of unfounded.

		<u>Case Resolutions</u>	
1. Detective A			
TOTAL CASES:	54	Arrest	19 39%
		Exception	22 46%
		Unfounded	7 13%
			48 88%
<hr/>			
2. Detective B			
TOTAL CASES:	46	Arrest	18 39%
		Exception	5 11%
		Unfounded	3 6%
			26 56%
<hr/>			
3. Detective C			
TOTAL CASES:	41	Arrest	20 49%
		Exception	11 27%
		Unfounded	4 9%
			35 85%

B. Again, there is a substantial resolution rate variation among detectives with two at 88% and 85% and one at 56%. This is explained by the higher inactivation rate of Detective B's cases which was discussed earlier.

Summary of Findings

- A. The three crime categories of homicide, robbery and assault were associated with certain specific outcome rates. Homicide was characterized by a high rate of arrest, a high proportion of robberies resulted in inactivation and assault was associated with a high rate of exceptional clearance.
- B. The various outcome rates generated by the investigative teams in Homicide/Robbery were more a result of the distribution of assigned cases among the crime categories of homicide, robbery and assault than a result of relative effectiveness of the teams.
- C. The variance in the proportions of type of crimes among the caseloads of the teams makes any comparisons of relative effectiveness of the teams extremely difficult.
- D. Sex crimes were characterized by fairly uniform distribution of caseloads but there is substantial variation in outcome rates, with one of the investigators generating a significantly higher inactivation rate than his two peers.

SECTION B. MONTHLY REPORTS; CRIMES AGAINST PERSONS

Background

Research conducted in the Crimes Against Persons section revealed problems similar to those initially found in the Property Crimes. Again, the rate at which cases were inactivated by screening had more impact on UCR clearance rates than did the outcomes of cases assigned for investigation and the monthly report did not highlight these outcome rates. The ability to track case outcomes by crime category was complicated somewhat by the multiple crime categories assigned to the functional squads in the section. Homicide and Robbery detectives also

investigate felony and simple assaults, missing persons and threatening phone calls or correspondence. The sex crimes unit handles various types of sex crimes, and depending on workload also assists with missing persons investigations and threatening phone calls and correspondence.

#### Report Formats

For the above reasons, development of reporting formats for the Crimes Against Persons section was an involved process which involved several revisions in order to capture the necessary information and still have an instrument that was not administratively burdensome. The formats developed are attached as Appendices E through H. The need to monitor the various types of crimes handled by individuals and units resulted in a report which is considerably more complex than that employed in the Property Crimes section.

### SECTION C: PERFORMANCE MONITORING, CRIMES AGAINST PERSONS

#### Homicide and Robbery

- A. In addition to the implementation of the monthly reporting system in February 1981, a case assignment policy was introduced which attempted to equalize the assault, robbery and homicide caseloads among the investigative teams in Homicide and Robbery Squad. To assess the impact of these changes additional data was collected for the time frame January-June 1981 and compared to the previous data.
- B. Caseload Distribution: Homicide, Robbery and Assault.
1. Table 39 shows the percentile distribution of assigned cases by crime category for each of the three investigative teams.

Table 39

#### DISTRIBUTION OF CASELOAD AMONG CRIME CATEGORIES

Homicide and Robbery Squad  
1 Jan-30 June 1981

	<u>Homicide %</u>	<u>Robbery %</u>	<u>Assault %</u>	<u>Mis. %</u>	
Team A	6%	28%	56%	4%	100%
Team B	6%	29%	56%	9%	100%
Team C	4%	35%	61%	-	100%

2. Data Analysis.

It is clear that the effort to more evenly distribute the types of cases has been successful. There is very little variance among the three teams and there is a substantial difference between this data and that shown in Table 40 for the previous period of 1 May-31 December 1980, which reflects very uneven caseloads in terms of crime categories.

Table 40

DISTRIBUTION OF CASELOAD AMONG CRIME CATEGORIES

Homicide and Robbery Squad  
1 May-31 December 1980

	<u>Homicide</u>	<u>Robbery</u>	<u>Assault</u>	<u>Misc.</u>	<u>Total</u>
Team A	8%	46%	42%	4%	100%
Team B	12%	58%	28%	2%	100%
Team C	5%	32%	62%	1%	100%

C. Case Outcomes. Table 41 compares the overall case outcomes produced for the three investigative teams for the two time periods May-December 1980 and January-June 1981.

Table 41

CASE OUTCOMES: HOMICIDE AND ROBBERY

May-Dec 1980 : Jan-Jun 1981

	<u>Arrest</u>	<u>Exception</u>	<u>Inactivation</u>
Team A			
May-Dec 80	27%	33%	40%
Jan-Jun 81	26%	22%	52%
Team B			
May-Dec 80	48%	21%	31%
Jan-Jun 81	37%	20%	43%
Team C			
May-Dec 80	33%	39%	28%
Jan-Jun 81	38%	22%	40%

All three teams have experienced an increase in the proportion of cases inactivated and, conversely, a decrease in overall clearances.

Team C has made a greater proportion of arrests as opposed to exceptional clearance in the latter period (Jan-Jun 81) and their results are very close to the results produced by Team B. Team C arrest rate is stable for the two periods, but the Jan-June 1981 time frame saw a substantial increase in their inactivation rate and a proportionate reduction in the exception clearance rate. Inasmuch as caseloads have been equalized to a great extent, the differences in outcomes among the teams cannot be attributed to caseload characteristics.

D. Case Outcomes and Crime Categories. The previous research noted that homicide was associated with a high rate of arrest, robbery with a high inactivation rate and assault with a high rate of exception clearance.

1. The data for Jan-June 1981 was analyzed to see if these relationships were still apparent. Table 42 presents the data.

Table 42

	<u>Arrest</u>	<u>Exceptional</u>	<u>Inactivation</u>
Homicide	78%	11%	11%
Robbery	22%	12%	66%
Assault	46%	37%	17%

2. Analysis of Data.

There is a substantial difference in regard to assault. The average exceptional clearance rate for this crime was 45% and the arrest rate was 34% during May-December 1980. Thus, these two rates have undergone a reversal during January-June 1981 and assault is presently characterized by a high rate of arrest.

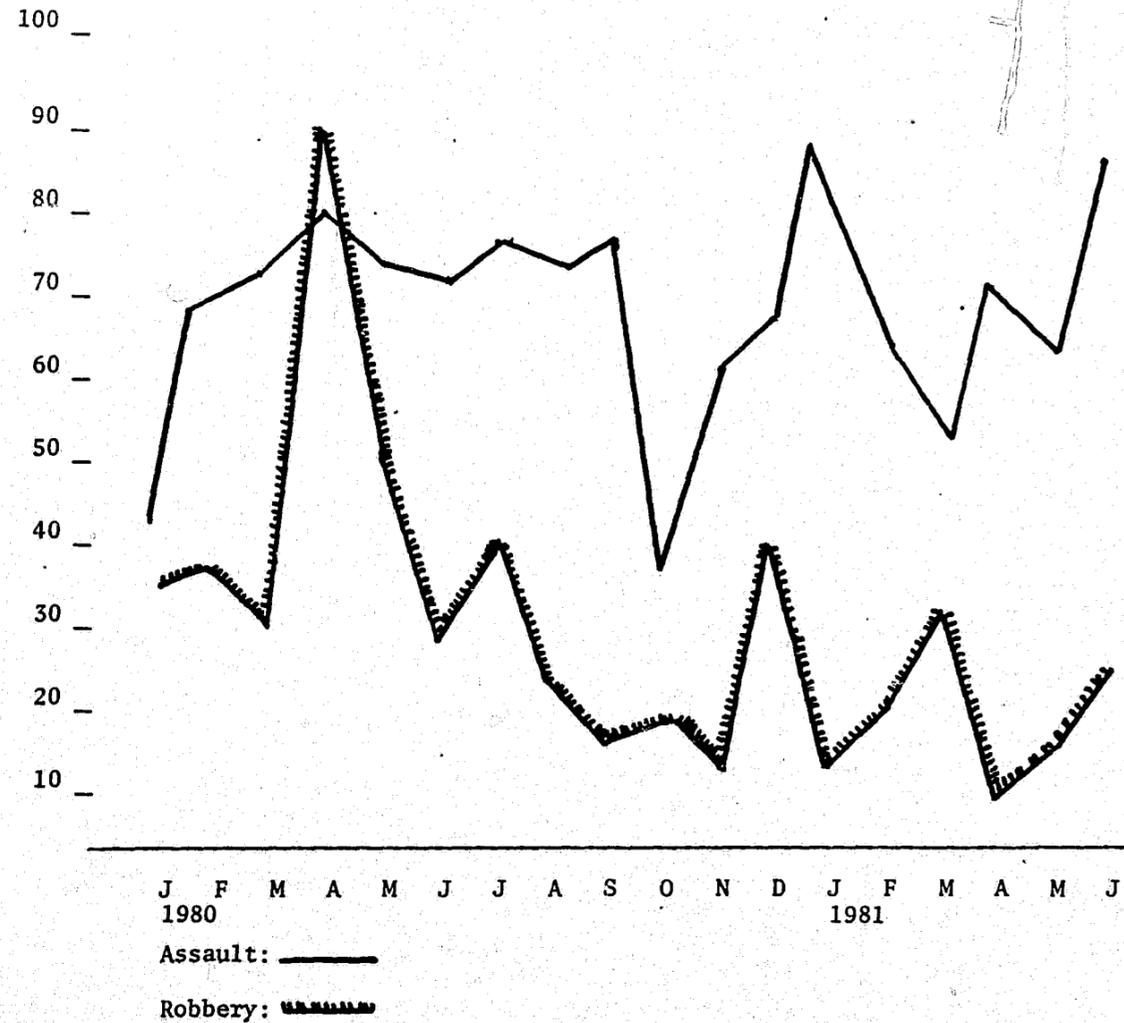
E. UCR Clearance Rates: Robbery and Assault. To provide a long term view of the trend in the UCR clearance for these two crimes, data was collected for the 18 month period Jan 1980-June 1981.

1. Table 43 presents the data in graphic form.

Table 43

UCR CLEARANCE RATES: ASSAULT AND ROBBERY

1 Jan 80 - 30 June 81



2. Analysis of Data.

a. Assault

(1) Assault had a relatively stable clearance rate from February 1980 to September 1980 and then varied substantially for the rest of the period as the data below reflects.

Feb-Sep 80	Average UCR Clearance Rate	74%
	Standard Deviation	3.3
	Variance	10.8
Oct 80-Jun 81	Average UCR Clearance Rate	65%
	Standard Deviation	14.5
	Variance	209.2

(2) In attempt to explain the increased variance during the latter period the relative frequency of assaults during the two periods was examined.

Feb-Sep 80	Average number of assaults per month	78
	Standard deviation	16.0
	Variance	269
Sep 80-Jun 81	Average number of assaults per month	63
	Standard deviation	9.7
	Variance	94.8

Variance in the number of assaults was actually greater during the period when the UCR clearance rates were relatively stable: 269 as compared to 94.8. The relative frequency of assaults does not explain the variance in the UCR clearance rate.

(3) Data was available on the inactivation by initial screening

rate for the period February-June 1981 and this information was analyzed to see if this rate had any bearing on the variance in the UCR clearance rate.

Average rate - 38.6  
 Standard deviation - 8.3  
 Variance - 70.24

The standard deviation is not particularly large; 67% of observations would fall between  $38.6 \pm 8.3$  (46.9 to 30.3). Therefore, the inactivation by initial screening rate does not appear to explain the substantial variance in the UCR clearance rate.

b. Robbery

(1) Robbery has a lower overall clearance rate than assault and a decreasing variance in the first six months of 1980:

1979: Average UCR Clearance rate: 30.4  
 Standard deviation 14.7  
 Variance 216

1980: Average UCR Clearance rate: 34.8  
 Standard deviation 19.9  
 Variance 396

1981: Average UCR Clearance rate: 19.6  
 Standard deviation 8.2  
 Variance 67

(2) This data also reflects a decline during January-June 1980 in the average monthly clearance rate (from 34.8 in 1980 to 19.6).

Impact of Homicide frequency on the Robbery clearance rate

Past experience in the Homicide and Robbery Squad had led the officer-in-charge to believe that a heavy homicide caseload impacted negatively on the robbery clearance rate. It is reasonable to assume that a high visibility crime such as homicide would automatically take priority for a number of reasons and in many cases involve more than one detective team. Therefore, it was logical to theorize that a high incidence of homicide could pre-empt robbery investigations in an organization where the same investigative teams handle both crimes.

A. To test the hypothesis that a high frequency of homicide impacts negatively on the robbery clearance rate a univariate regression equation was developed which tested the relationship between the following variables:

$$Y = B - B_1 X_1$$

$$\text{UCR Clearance Rate (Robbery)} = B - \text{Incidence of Homicide}$$

1. UCR Clearance Rate = the monthly statistic reported for Jan 1979-May 1981 (29 observations)
2. B = the estimate of the monthly robbery clearance rate if no homicides were being investigated.
3. Incidence of Homicide = the number of homicides worked on each month: Jan 79-May 81.

B. Regression Results.

UCR Clearance Rate = 41.9 - 3.7  
 (Robbery)  
 Standard errors (6.25) (1.69)  
 t ratios 6.70 2.18  
 Significance .001 .05

$$R^2 = .15 \quad F \text{ (Critical)} = 3.34 \quad F \text{ (Estimate)} = 4.75$$

$$\text{Significance} \quad .05$$

C. Analysis of Results

1. Significance. The estimate for the intercept (B) and the parameter estimate for the incidence of homicide are statistically significant, as is the F statistic for the regression. However, the  $R^2$  of .15 means that only 15% of the variation in the clearance rate for robbery is explained by the incidence of homicide. Thus, use of the regression results to predict the effect of homicide frequency on the robbery clearance rate would result in a wide range of possible results - this will be discussed in detail below.
2. Test of Results. The mean (average) number of homicides is 3.2 and inspection of the data showed that in seven of the 29 months the number of homicides investigated was 3. The average UCR clearance rate for robbery for these seven months was 29.7. Estimating this result by using the regression equation results in an estimate of:  $41.9 - (3 \times 3.7) = 30.8$ . Thus, the error in the estimate is only 1.1%. But it must be remembered that this tests the equation on the data which produced it. The equation measures what has happened with substantial accuracy. To estimate, or predict, what will happen involves a different procedure.
3. Prediction. To predict results in a given situation it is possible to again compute a confidence interval with 95% probability. To estimate the interval (two figures within

which the UCR clearance rate will fall) for the incidence of 3 homicides in a given month in the future, the following mathematical procedure is used:

$$\text{UCR} = 41.9 - 3.7 = 38.2$$

$$\text{Standard error of the estimate} = 16.539$$

$$t_{.025} = 2.052$$

$$\begin{aligned} \text{Confidence Interval } 95\% &= 38.2 \pm (2.052 \times 16.539) \\ &= 38.2 \pm 33.94 \\ &= 4.26 - 72.14 \end{aligned}$$

Thus, if no homicides were investigated in a given month the UCR clearance rate would be between 4% and 72%. This is not usable information. The large standard error of the estimate is a concomitant of the low  $R^2$  (.15).

4. Based on the data for the 29 months the frequency of homicides does have a negative effect on robbery clearance rate but many other factors are involved. The relationship is relatively weak and cannot be used for prediction or resource allocation with any accuracy.

Sex Crimes

A. The research conducted for the period May-December 1980 did not result in any significant findings in regard to Sex Crimes. With an additional six months (January-June 1981) of data available it was possible to evaluate caseloads and the outcomes associated with the various categories of sex crimes as well to examine relative performance for the previous (1980) and current (1981) time frames.

B. Average monthly caseloads: Sex Crimes Detectives

Time Frame		Time Frame	
May-December 1980		January-June 1981	
Detective	Avg. Caseload	Detective	Avg. Caseload
A	6.75	A	4.5
B	5.75	B	6.5
C	<u>5.12</u>	C	<u>5.5</u>
Overall Avg.	5.8	Overall Avg.	5.5

For the 14 months considered average caseload has been approximately six cases a month.

C. Aggregate Case Outcome Rates. Table 44 presents case outcome rates for the two periods examined:

Table 44

SEX CRIMES DETECTIVES

Aggregate Case Outcome Rates  
May-December 1980 : January-June 1981

Detective	Arrest	Exception	Inactivation
<u>A</u>			
May-Dec 80	40%	47%	13%
Jan-Jun 81	37%	30%	53%
<u>B</u>			
May-Dec 80	42%	12%	46%
Jan-Jun 81	34%	38%	28%
<u>C</u>			
May-Dec 80	54%	30%	14%
Jan-Jun 81	48%	19%	33%

Two detectives (A&C) have had substantial increases in the assigned case inactive rate and corresponding decreased in the assigned case clearance rate. Detective B has a lower inactivation rate for the latter period and a substantial increase in the exceptional clearance rate. In the matter of overall assigned case clearance rates there is little relative difference:

Detective A.	67%
Detective B	72%
Detective C	67%

The data also shows that Detective C has a significantly higher arrest rate for the two periods ( $54 + 48/2 = 51\%$ ) than the other two detectives (38% for each).

D. Distribution of Sex Crimes types among detectives. Table 45 shows the percentile distribution of sex crimes types for the total assigned caseload for the two time frames.

Table 45

## SEX CRIMES DETECTIVES

Distribution of Sex Crime Types Among Sex Crimes Detectives  
May-December 1980 : January-June 1981

<u>Detective</u>	<u>Rape</u>	<u>Sexual Assault</u>	<u>Other Sex Crimes</u>	<u>Mail/Phone Calls</u>
<u>A</u>				
May-Dec 80	30%	17%	36%	17%
Jan-Jun 81	26%	22%	37%	15%
<u>B</u>				
May-Dec 80	39%	19%	23%	19%
Jan-Jun 81	30%	10%	37%	23%
<u>C</u>				
May-Dec 80	32%	27%	27%	14%
Jan-Jun 81	15%	25%	36%	24%

There are variations in the distribution of sex crimes types (the most noticeable is the 15% rape caseload for detective C as opposed to 26% and 30% for detectives A and B during the period January-June 1981). However, these variations do not appear to be related to any differences in relative case outcomes.

E. Outcome rates for Sex Crimes Types. In order to shed more light on the possible relationship between caseload composition and case outcome rates, the outcome rates for each type of sex crime was computed for the two periods. This data is presented in Table 46.

Table 46

## OUTCOME RATES FOR SEX CRIME TYPES

Two Periods Compared  
May-December 1980 : January-June 1981

<u>Rape</u>	<u>Arrest</u>	<u>Exception</u>	<u>Inactivation</u>
May-Dec 80	49%	37%	14%
Jan-Jun 81	37%	26%	37%
<u>Sexual Assault</u>			
May-Dec 80	50%	19%	31%
Jan-Jun 81	61%	28%	11%
<u>Other Sex Crimes</u>			
May-Dec 80	46%	24%	30%
Jan-Jun 81	45%	8%	47%
<u>Mail/Phone Calls</u>			
May-Dec 80	29%	38%	33%
Jan-Jun 81	14%	72%	14%

1. Rape. For the period May-December 1980 this crime is clearly associated with a high rate of arrest. There was a decrease in the arrest proportion (12%) between the two periods, but the arrest rate for January-June 1981 was higher than the exceptional clearance rate and equal to the inactivation rate.
2. Sexual Assault. The association of this crime with a high proportion of arrest is even clearer than is the case with rape (50% and 61% for the two periods respectively). The fact that these crimes are not part of the UCR system is significant in regard to evaluating investigative productivity. The system does not reflect the effectiveness of investigative activity in regard to a crime that can logically be expected to have a high

degree of community concern.

3. Other Sex Crimes and Mail/Phone Call Offenses. Although other sex crimes is associated in a relatively high rate of arrest, the variance between exceptional clearance and inactivation makes it questionable to associate these crimes with any specific outcome. The variance of outcomes with regards to Mail and Phone Call offenses does not allow any inferences to be made.

#### Summary of Findings: Crimes Against Persons

##### A. Homicide and Robbery

1. The more uniform caseload distribution allows for comparative performance evaluation among investigative teams.
2. Homicide and robbery investigations continue to have characteristic outcomes with homicide resulting in a high rate of arrest and robbery associated with a high rate of inactivation. Assault which had previously been associated with a high rate of exceptional clearance is currently characterized by high rates of arrest. It is questionable that the circumstances of assault crimes have undergone a consistent change therefore it is recommended that the reporting and classification procedures involved in assault cases be closely examined.
3. The crimes of robbery and assault have an extreme variation in the monthly UCR clearance rate which frustrates the ability to make any prediction as to a reasonable expectation of clearance. It is further noted that, in general terms, the clearance rate for robbery is declining.

4. The statistical relationship between the incidence of homicide and the clearance rate for robbery is relatively weak - but it does exist and it is negative. It can be said with some assurance that a heavy homicide caseload will pre-empt investigative activity that would normally be devoted to robbery cases. There is no apparent effect of the homicide caseload on assault clearances.

##### B. Sex Crimes

1. Rape and sexual assault are characterized by high rates of arrest. Even though sexual assault is not reportable under the UCR system, it is a category that encompasses criminal acts which can attract a high level of community concern. This is another instance where UCR statistics fail to measure police effectiveness.
2. The caseload in the sex crimes unit is distributed on a fairly even basis among the various categories of this crime. Caseload composition does not appear to be related to the outcome rates achieved by the individual investigators and relative comparisons of performance can be legitimately made. It is noted that Detective C has a consistently higher rate of arrest than the other two detectives in the unit.
3. Average monthly caseload in the sex crimes unit is six cases per month. However, there is no indication as to whether this is an optimum workload in terms of outcomes.

PART IV  
FINDINGS AND CONCLUSIONS

A. Property Crimes

1. Burglary

- a. Based on past performance the statistical estimate of the optimum caseload in burglary squad is 19-20 cases per month. It should be emphasized that the number of burglaries which will occur in a given month can only be estimated and the maintenance of individual caseloads at a specific level will not always be possible. However, the estimate of 19-20 cases a month can be used to identify full commitment and to make resource allocations based on the average frequency of burglary crimes. Based on this caseload estimate the current staffing level in burglary is adequate.
- b. The unfounded/misclassified rate has started to increase after the initial decrease achieved during 1980. This may indicate some deterioration in the quality of the initial reports and a need for more training in crime classification.
- c. The current UCR average clearance rate of 35% is considered to be a reasonable estimate of the proportion of burglary cases which will be solved in Portsmouth. The average of 46.5% for 1980 was strongly influenced by the Sting Operation conducted during that year and is an overly optimistic expectation.
- d. It is reasonable to expect that burglary investigators will, in the long run, clear approximately one-half of their assigned cases.

- e. The analysis of burglary solvability factors clearly indicated that suspect information was the only statistically significant factor associated with case clearance. Our research thus far indicates that the experienced judgment of squad sergeants and detectives in evaluating the presence or absence of certain elements of information (solvability factors) provides a sound basis for case screening. The effectiveness of the case screening procedure should be the subject of continued monitoring and research.
- f. The most frequent investigative activities in the burglary squad replicate the actions which should be taken during the preliminary investigation. Thus, the quality of the preliminary patrol investigation must be examined. In addition, the elements of a preliminary investigation must be specified.

2. Larceny

- a. Insofar as circumstances allow, the average monthly caseload for larceny detectives should be between 23-29 cases a month and assigned case outcomes closely monitored. Based on the average frequency of larceny crimes the current staffing level of one sergeant and six investigators is considered adequate.
- b. There is a clear inverse relationship between the inactivation by screening rate and the UCR clearance rate.
- c. The inactivation by screening rate is an important indicator of trends in the UCR clearance rate. When initial inactivations approach the 40-50% range the assignment of more cases should be considered even though those cases have marginal solvability.

- d. If larceny detectives are assigned to a larger proportion of larcenies their individual clearance rates will drop as they receive a greater number of cases with marginal solvability. However, in terms of total reported larcenies, a larger proportion will be cleared, because in terms of numbers more cases are solved.
- e. It is reasonable to expect that larceny investigators will, in the long run, clear at least forty percent of their assigned cases.
- f. The current UCR clearance rate of 30% is considered to be a reasonable estimate of the proportion of larceny cases which will be solved in Portsmouth.

B. Crimes Against Persons

1. Homicide, Robbery and Assault

- a. Homicide cases are most frequently cleared by arrest, while robbery most frequently results in inactivation. Assault, which previously was characterized by exceptional clearance is now most frequently cleared by arrest. The reason for this is not clear and may be the result of classification and procedural changes which should be checked for consistency with UCR reporting criteria.
- b. Caseloads are now more evenly distributed among the teams in Homicide and Robbery squads which will allow for evaluation of comparative performance.
- c. The extreme variation in the monthly UCR clearance rates for assault and robbery makes it difficult to replicate the caseload analysis done for property crimes. The substantial

unexplained variation presently frustrates the ability to make an association between caseloads and outcomes.

- d. Additional research will be required in order to better approximate the optimum caseload for Homicide and Robbery investigators.

3. Sex Crimes

- a. Rape and sexual assault are both characterized by high rates of arrest. This should be kept in mind when comparing the relative performance of investigators in the unit.
- b. Caseloads in the unit are quite evenly distributed among the categories of crime handled by the unit.
- c. A mixed caseload of six per month has been the past average but this does not necessarily establish the optimum caseload. Additional research is needed to establish the optimum caseload for the sex crimes unit.

PART V

DIRECTIONS FOR FURTHER RESEARCH

- A. Preliminary Investigations. Thus far, research in the investigative function has concentrated on Criminal Investigations Division. The role of the patrol force in the investigative function has not been directly evaluated. Research thus far has revealed that the most frequent investigative activities are those which replicate the preliminary investigation and it is also relevant that the unfounded/misclassified rate for burglary and larceny is 23% and 25% respectively. These factors indicate a clear need to evaluate the preliminary investigative function and assess its conformity with the overall investigative mission.
- B. Caseloads. The recommendations regarding caseloads in the property crimes section should be monitored on a continuing basis to insure that maximum productivity is achieved. The caseloads in the Crimes Against Persons section requires more research to provide management with a usable estimate of what level of caseload represents a reasonable commitment for investigators.
- C. Team Assignments. The team assignment policy in Homicide and Robbery Squad should be thoroughly examined to determine if this procedure is in fact more productive than case assignment to individuals.
- D. General Assignment Function. Crimes involving checks, auto theft and other miscellaneous offenses are not all UCR reportable but commit substantial investigative resources. Performance indicators and case-load analysis is required in order to provide effective management of these investigations.

FOOTNOTES

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3. Managing Criminal Investigations Manual. Office of Technology Transfer. National Institute of Law Enforcement and Criminal Justice, June 1977. Also see: Managing Criminal Investigations. Peter Block & Donald R. Weidman, U.S. Department of Justice, 1975; Managing Criminal Investigations. Ilene Greenberg & Robert Wasserman, National Institute of Law Enforcement and Criminal Justice, August 1979; Managing Criminal Investigations. Chief Thomas F. Hastings, Rochester Police Department, Rochester, New York; Managing Criminal Investigations. Final Evaluation Report and Executive Summary, Department of Police, Montgomery County Maryland, July 1979; Advisory Committee on Crime Analysis System Support. Report of the Subcommittee on Investigative Resource Allocation. Sicaras, Connery and Newton, International Association of Chiefs of Police, LEAA Grant #77-55-99-6023.
4. Managing Criminal Investigations, p. 147.
5. Police Accountability. Patrick V. Murphy. Readings on Productivity in Policing. Wolfe and Heaphy, Editors. Police Foundation, 1975, p. 37.
6. Wrestling with Police Crime Control Productivity Measurement. Harry P. Hatry. Readings in Productivity in Policing. Wolfe and Heaphy, Editors. Police Foundation 1975, p. 105-106. Also see: Local Government Police Management. International City Management Association, 1977. p. 150-151; Assessing the Current Crime Wave, Albert J. Reiss, Jr. Crime in Urban Society, Currell Publishing Co., Inc., N.Y. 1970, p. 28-35.
7. Police Accountability: Patrick Murphy, p. 37.
8. Local Government Police Management. Bernard L. Garmire, Editor, International City Management Association, 1977, p. 151.
9. Managing Criminal Investigations Manual, preface vii.
10. Ibid.
11. Basic Econometrics. Damodar Gujarati, McGraw Hill, 1978.
12. Enhancement of the Investigative Function. Greenberg, et. al. Stanford Research Institute, 1972-73.

13. Regression Analysis Burglary Caseload.

A. Equation #1

Y - UCR Clearance Rate

X<sub>1</sub> - Inactivation Rate (Initial Screening)

X<sub>2</sub> - Clearance Rate of Assigned Cases

X<sub>3</sub> - The Unfounded Rate

X<sub>4</sub> - Average Caseload as a Percentile of Total Reported Crime

N = 27 (months: January 1979-March 1981)

$$y = B_0 - B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4$$

1. Analysis of Results

Y	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>
UCR Clearance Rate	Inactivation Rate	Assigned Case Clearance Rate	Unfounded Rate	Caseload % of total Burglaries
Estimated Coefficients	-.08	.35	-.28	3.8
Standard Error	.099	.067	1.36	.62
t ratio 22 DF	.81	5.2	2.02	6.2
Sig. P =	.45	.002	.07	.002
Standardized Coefficient	.09	.51	.19	.66

a. Significance of the regression:  $R^2 = .85$   $F = 30.837$   
85% of the variation in Y is explained by the regression at a significance level of at least .01.

b. Significance of the parameter estimates.

(1) Screening Inactivation Rate. (X<sub>1</sub> = -.08). The

estimate indicates that a 1% increase in the inactivation rate would decrease the UCR clearance rate by .08%. However, this estimate is not statistically significant.

(2) The assigned case clearance rate. (X<sub>2</sub> = .35). The estimate indicates that a 1% increase in assigned case clearances would be associated with a .35% increase in the UCR clearance rate. The coefficient is significant at the .002 level and the standardized coefficient of .51 is relatively high.

(3) The unfounded rate. (X<sub>3</sub> = .28). A 1% increase in the unfounded rate would be associated with a .28 decrease in the UCR clearance rate. The significance level of .07 is relatively high. It is noted, however, that both the estimate and the standardized coefficient are relatively small; the estimate may be significant statistically but it accounts for only small changes in the UCR clearance rate.

(4) Average monthly caseload as a percentile of total reported burglaries. (X<sub>4</sub> = 3.8). A 1% increase in this rate would be associated with a 3.8 increase in the UCR clearance rate. The estimate is significant at the .002 level. It is also noted that this is the largest parameter estimate and has the highest standardized coefficient.

2. Conclusions: Equation #1

a. During the period analyzed the inactivation rate had no significant impact on the UCR clearance rate. However,

this is not to say that this is an irrelevant variable. Any extreme variation in this rate in the future might change both the significance and the effect of this parameter.

- b. The unfounded rate had no significant impact on the UCR clearance rate during the period of the study. However, the same qualifications placed on the importance of the inactivation rate also apply here.
- c. The rate at which detectives clear their assigned cases is significantly associated with the UCR clearance rate. This is an obvious relationship which could be established without any statistical analysis. It should also be kept in mind that the circumstances of the case may have more to do with clearance than investigative performance.
- d. Monthly caseload as a percent of the total reported burglaries for the month is clearly the most important variable in terms of significance and impact. It is much more critical than the assigned case clearance rate for the simple reason that it can be changed by case assignment policy. The regression coefficient indicates that an increase in average monthly caseload as a percent of monthly reported burglaries would be associated with an increase in the UCR clearance rate.

3. Equation #2. The mean for the caseload statistic in the preceding analysis was 12.1. Because the caseload increased during the months of April and May 1981, causing the new mean for the 29 (vice 27) month period to be 12.4, an additional regression equation was run which included the additional two months data.

a. Analysis of Results: Equation 2

Y	=	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>	X <sub>4</sub>
UCR Clearance Rate		Inactivation Rate	Assigned Case Clearance Rate	Unfounded Rate	Avg. Caseload % of Total Burglaries
Estimated Coefficients		-.27	.21	.0027	1.2
Standard Error		.096	.093	.16	.69
t ratio		2.81	2.32	.016	1.74
Sig P = (one tail)		.01	.025	not/sig	.05
Standardized Coefficient		.49	.37	.022	.19

(1) Significance of the regression:  $R^2 = .59$ . 50% of the variation in Y is explained by the regression at a significance level of .01.

(2) Significance of the parameter estimates.

(a) Screening inactivation rate. The estimate indicates that a 1.0% increase in the inactivation rate would be associated with .27% decrease in the UCR clearance rate. The estimate is now significant but accounts for a small change (approximately 1/4 of 1%) in the clearance rate.

(b) Assigned case clearance rate. The estimate indicates that a 1.0% increase in the assigned case clearance rate would be associated with a .21% increase in the UCR clearance rate. Again the estimate is significant but accounts for a relatively small change in the UCR clearance rate.

(c) The unfounded rate. The estimate indicates that a 1.0% increase in the unfounded rate would be associated with a negligible increase .0027% in the UCR clearance rate. The estimate is now positive, where before it was negative. It is also not significant where before it was significant at the .07 level.

(d) Average monthly caseload as a percent of total monthly reported burglaries. The estimate indicates that a 1.0% increase in the caseload statistic would be associated with a 1.2% increase in the UCR clearance rate. It is still the largest parameter estimate although the standardized coefficient is not as large as in the previous equation (.66).

b. Conclusions

(1) Increase in the inactivation rate is associated with a small decrease in the UCR clearance rate. Example: a 4% increase in the inactivation rate would be associated with a 1.08% decrease in the UCR clearance rate. Therefore, it can be anticipated that substantial increases in the inactivation rate (20%-30%) would have a noticeable impact on the UCR clearance rate (5.4%-8.1%). However, the extent to which policy can influence increases in the UCR clearance rate by manipulation of the inactivation rate is limited. The facts of the case remain the same and assignment of more unsolvable cases will not by itself influence results.

- (2) Assigned case clearance rate. As would be expected, an increase in the assigned case clearance rate is still significantly associated with increases in the UCR clearance rate. Example: a 4.7% increase in this rate is associated with a 1% increase in the UCR clearance rate.
- (3) The unfounded rate has a very small parameter estimate and is not significant.
- (4) Monthly average caseload as a percent of total monthly reported burglaries (AC%B) is still associated with the largest change in the UCR clearance rate and is statistically significant. Example: a 5% increase in AC%B is associated with a 6% increase in the UCR clearance rate. However, there is logically a point where AC%B could increase to a point where detectives would be over-committed and clearance rates would be adversely affected.
- (5) The detailed results are not reported here but a separate regression equation was run to see if the average monthly burglary detectives caseload, by itself, had any association with the UCR clearance rate. Analysis indicated that it did not. Average monthly caseload only became significant where it is reflected as a percentage of total reported burglaries for the month.
- (6) The mean (or average) monthly AC%B for the period analyzed was 12.4%. The monthly average for reported burglaries was 136; therefore average monthly caseload for a burglary detective was  $136 \times .124 = 16.8$ , or about 17 cases a month. AC%B cannot be an exact statistic when used operationally.

The number of burglaries that are going to occur in a given month is not known. However, knowing the average frequency will allow approximation. An AC%B of 14% would compute to an average monthly caseload of 19. Inasmuch as statistical analysis indicates positive results to be obtained from increases in the AC%B, target monthly caseloads for individual detectives could be established at 19-20 cases and results monitored over time.

#### GLOSSARY OF TERMS

UCR Clearance Rate: That percentage of reported crime for the given period which is cleared by arrest or exception in accordance with UCR criteria.

Unfounded Rate: That percentage of assigned caseload which is determined to be unfounded or misclassified. A case is unfounded when investigation reveals that the reported crime did not occur or was improperly categorized by crime type.

Disposition Rates: These rates reflect the distribution of investigations among the various possible results of arrest, exception, inactivation and unfounded.

Case Outcome Rates: These rates reflect the percentile distribution of investigative results among the possible outcomes of arrest, exceptional clearance and inactivation. Unfounded cases are not considered.

Case Resolution Rate: This is the proportion of total caseload which culminates in arrest, exceptional clearance or a determination of unfounded.

CRIMINAL INVESTIGATION DIVISION

SQUAD \_\_\_\_\_

MONTH \_\_\_\_\_

UCR DATA

- |   |                               |
|---|-------------------------------|
| 1. Reported Offenses<br>(Minus unfounded reports) _____ | 2. UCR Clearance Rate _____ % |
| a. Cleared by patrol/other _____ %                      | a. Arrest _____ %             |
| b. Inactivated by screening _____ %                     | b. Exception _____ %          |
| c. New cases assigned for investigation _____ %         | TOTAL _____ %                 |

WORKLOAD/PERFORMANCE DATA

- |   |                                    |
|---|------------------------------------|
| 1. <u>Assigned Cases Processed</u>            | 3. <u>Case Resolutions:</u>        |
| a. New cases assigned for investigation _____ | a. Arrest _____ %                  |
| b. Cases carried over _____                   | b. Exception _____                 |
| c. Cases reactivated _____                    | c. Unfounded _____ %               |
| d. Cases transferred in _____                 | TOTAL _____                        |
| Sub-total _____                               |                                    |
| e. Cases carried fwd. (-) _____               | 4. <u>Resolution Rate:</u> _____ % |
| f. Cases transferred out (-) _____            |                                    |
| Sub-total _____                               |                                    |
| TOTAL _____                                   |                                    |
| 2. <u>Case Dispositions:</u>                  |                                    |
| a. Arrest _____ %                             |                                    |
| b. Exception _____ %                          |                                    |
| c. Inactivated _____ %                        |                                    |
| d. Unfounded _____ %                          |                                    |
| TOTAL _____                                   |                                    |

APPENDIX B

Explanatory Note:

This report format is used to summarize the activities of the burglary and larceny squads. The first section, UCR data, provides supporting information on the UCR clearance data for the month and reflects the distribution of clearances between arrest and exception. It also refers to the proportion of cases inactivated by initial screening. The second section presents workload and performance data for the squad based on the assigned caseload (total reports minus those inactivated by initial screening). The workload data (assigned cases processed) breaks down the number of cases actually processed during the month and does not confine itself strictly to the number of cases assigned during the month. Case dispositions reflect the ultimate disposition of all cases processed during the month by showing the number and proportion of cases which fell into each possible outcome. Case resolutions show the distribution of the cases which were resolved by the squad for the month and the overall resolution rate reflects the squad caseload performance for the month.

CRIMINAL INVESTIGATION DIVISION  
 INDIVIDUAL DETECTIVE DATA FORM

NAME \_\_\_\_\_

SQUAD \_\_\_\_\_

MONTH \_\_\_\_\_

Case Load \_\_\_\_\_

1. Cases Processed

Carried over	_____	_____	%
New cases	_____	_____	%
Reactivated	_____	_____	%
Transferred in	_____	_____	%
Sub-total	_____		
Carried fwd. (-)	_____	_____	%
Transferred out (-)	_____	_____	%
Sub-total	_____		
TOTAL	_____		

2. Case Dispositions

Arrest	_____	_____	%
Exception	_____	_____	%
Inactivated	_____	_____	%
Unfounded	_____	_____	%
TOTAL	_____		

3. Case Resolutions

Arrest	_____	_____	%
Exception	_____	_____	%
Unfounded	_____	_____	%
TOTAL	_____		

4. Resolution rate

\_\_\_\_\_ %

Explanatory Note:

This form recapitulates monthly performance data for the individual detectives in the burglary and larceny squads. Basically it replicates the workload and performance data section of the squad report for each detective. It breaks down the caseload into the various crime categories and reflects the number of cases actually processed by the individual detective for the month. Individual data on dispositions, resolutions and resolution rates is presented so that comparisons among detectives can be made. The assigned caseload (total number of assigned cases) is given at the upper right.

Code-book  
 Portsmouth ICAP  
 Phase III  
 Case Tracking Time Analysis  
 1981

<u>Column</u>	<u>Variable</u>	<u>Variable labels</u>
1-3		Case Number
4-13	1	First name, last name of the detective
14-19	2	Offense Report Number
20-25	3	Date case was assigned
26-31	4	Date the case was cleared
32-34	5	1 Response time in actual minutes
35-37	6	2 Evidence collection (crime scene search)
38-40	7	3 Interviewing complainant at scene
41-43	8	3 Interviewing complainant later
44-46	9	4 Interviewing witnesses at scene 8. N/A-reactivation report
47-49	10	4 Interviewing witnesses later
50-52	11	5 Canvassing neighborhood 9. N/R
53-55	12	6 Interrogation of suspects at scene
56-58	13	6 Interrogation of suspects later
59-61	14	7 Field interview cards
62-65	15	8 Locating witness, suspect
66-68	16	9 Transporting victim, witness, suspect
69-71	17	10 Checking pawn sheets, previous metal,
72-74	18	11 Utility checks, P.R.H.A., phone co. etc.
75-77	19	12 Crime analysis information

APPENDIX D

<u>Column</u>	<u>Variable</u>	<u>Variable labels</u>
78-80	20	13 Computer checks
81-83	21	14 Informant contact
84-87	22	15 Surveillance, stake-out
88-90	23	16 Squad meeting discussions
91-94	24	17 Out-of-town investigations
95-97	25	18 Search warrant in actual minutes
98-100	26	19 Supplemental report taken
101-103	27	20 Consultation with commonwealth attorney
104-107	28	21 Securing arrest warrant
108-109	29	22 Extradition procedures
110-112	30	23 Securing petitions
113-115	31	24 Progress report
116-118	32	25 Case file preparation
119-120	33	26 Other tasks
		1 Led to another offense report
		2 Reactivating report
		3 Suspect gave written statement
		4 Talking to suspect's parents/wife
		5 Collecting fingerprint info. & requesting I.D./comparison
		6 Collecting evidence and photo taken
		7 Fill out offense report/youth card
		8 Complaint would not prosecute
		9 Photo line-up
		10 Worked in conjunction with another report
		11 Checking pawn shop
		12 Check other reports with same MOs
		13 Interview police officer
		14 Recovering stolen articles
		15 Juvenile conference
		16 Polygraph examination
121	34	Number of other reports processed
		_____ actual number

Column	Variable	Variable labels	
122-124	35	Time spent on other tasks _____ in actual minutes	
<u>Offense Report Information</u>			
125	36	Witness	
126	37	Suspect named	
127	38	Suspect location known	
128	39	Suspect described	
129	40	Suspect identified	
130	41	Suspect vehicle identified	
131	42	Suspect vehicle described	1 Yes
132	43	Stolen property traceable	2 No
133	44	Stolen property described	
134	45	Physical evidence collected (at scene)	
135	46	Fingerprints lifted/found	
136	47	Photos taken	
137	48	Type of entry 1 Forced 2 Unforced	
<u>Supplemental Report Information</u>			
138	49	Case disposition 1 Arrest 2 Exceptionally cleared 3 Inactive 4 Unfounded 5 Unfounded/misclassified 6 Other	

Changes made in the code-book later

Card 1, Column 13, Variable 1  
Time lap between the case assigned and offense reported/occurred

1. Same day (1)	3. 3 days
2. Next day (2)	4. 4 days or more

CRIMINAL INVESTIGATION DIVISION  
HOMICIDE & ROBBERY SQUAD

MONTH \_\_\_\_\_

UCR DATA

Department UCR Clearance Rates:	Homicide _____ %	Robbery _____ %	Assault _____ %
Reports Received _____	Homicide _____	Robbery _____	Assault _____
Inactivated by screening _____ %	_____	_____	_____
Assigned for invest. _____ %	_____	_____	_____

WORKLOAD/PERFORMANCE DATA

1. Assigned cases processed:	Homicide	Robbery	Assault	Misc.
New cases assigned	_____	_____	_____	_____
Carried over	_____	_____	_____	_____
Reactivated cases	_____	_____	_____	_____
Transferred in	_____	_____	_____	_____
Sub-total	_____	_____	_____	_____
Carried forward	_____	_____	_____	_____
Transferred out	_____	_____	_____	_____
TOTAL	_____	_____	_____	_____
2. Case Dispositions:	Arrest	Except.	Inact.	Unfounded
Homicide	_____ %	_____ %	_____ %	_____ %
Robbery	_____ %	_____ %	_____ %	_____ %
Assault	_____ %	_____ %	_____ %	_____ %
Misc.	_____ %	_____ %	_____ %	_____ %
SUB-TOTAL	_____	_____	_____	_____
TOTAL	_____	_____	_____	_____
3. Case Resolutions:	Arrest	Except.	Unfounded	
Homicide	_____ %	_____ %	_____ %	
Robbery	_____ %	_____ %	_____ %	
Assault	_____ %	_____ %	_____ %	
Misc.	_____ %	_____ %	_____ %	
SUB-TOTAL	_____	_____	_____	
TOTAL	_____	_____	_____	
4. Resolution Rate:	_____ %			

APPENDIX E

**Explanatory Note:**

This form provides monthly summary data for the Homicide and Robbery Squad broken down by the categories of crime handled by the squad. UCR data provides UCR clearance data for the month and specifies the number and proportion of cases inactivated by initial screening or assigned for investigation. Workload performance data reflects the detailed caseload in terms of cases actually processed, the disposition of those cases among the possible outcomes and a data breakdown on cases resolved.

**HOMICIDE & ROBBERY**

	<u>MONTH</u>				
	<u>(Detective)</u>	<u>Assigned Caseload</u>			
<b>1. Cases Processed:</b>		<u>Homicide</u>	<u>Robbery</u>	<u>Assault</u>	<u>Misc.</u>
New Cases	___	___	___	___	___
Carried Over	___	___	___	___	___
Reactivated	___	___	___	___	___
Transferred in	___	___	___	___	___
Sub-total	___	___	___	___	___
Carried fwd.	___	___	___	___	___
Transferred out	___	___	___	___	___
TOTAL	___	___	___	___	___
<b>2. Case Dispositions:</b>		<u>Arrest</u>	<u>Except.</u>	<u>Inact.</u>	<u>Unfounded</u>
Homicide	___ %	___ %	___ %	___ %	___ %
Robbery	___ %	___ %	___ %	___ %	___ %
Assault	___ %	___ %	___ %	___ %	___ %
Misc.	___ %	___ %	___ %	___ %	___ %
SUB-TOTAL	___	___	___	___	___
TOTAL	___	___	___	___	___
<b>3. Case Resolutions:</b>		<u>Arrest</u>	<u>Exception</u>	<u>Unfounded</u>	
Homicide	___ %	___ %	___ %	___ %	
Robbery	___ %	___ %	___ %	___ %	
Assault	___ %	___ %	___ %	___ %	
Misc.	___ %	___ %	___ %	___ %	
SUB-TOTAL	___	___	___	___	
TOTAL	___	___	___	___	
<b>4. Resolution Rate:</b>	___ %				

**Explanatory Note:**

As was the case with the forms for burglary and larceny, this form recapitulates the workload performance data for individual detectives in the homicide and robbery squad. In addition to the assigned caseload, the actual number of cases processed is given along with disposition and resolution information.

CRIMINAL INVESTIGATION DIVISION

SEX CRIME UNIT

MONTH

U.C.R. DATA

Department: U.C.R. Clearance Rate: Rape \_\_\_\_\_ %

Reports Received \_\_\_\_\_

Inactivated by screening \_\_\_\_\_ %

Assigned for investigation \_\_\_\_\_ %

Workload/Performance Data:

1. Assigned Cases Processed	Rape	Sex Assault	Other Sex Crimes	Mail/Phone/Calls
New Cases	_____	_____	_____	_____
Carried Over	_____	_____	_____	_____
Reactivated cases	_____	_____	_____	_____
Transferred in	_____	_____	_____	_____
Sub-total	_____	_____	_____	_____
Carried forward	_____	_____	_____	_____
Transferred out	_____	_____	_____	_____
TOTAL	_____	_____	_____	_____
2. Case Disposition:	<u>Arrest</u>	<u>Except.</u>	<u>Inact.</u>	<u>Unfounded</u>
Rape	_____ %	_____ %	_____ %	_____ %
Sex Assault	_____ %	_____ %	_____ %	_____ %
Other Sex Crimes	_____ %	_____ %	_____ %	_____ %
Mail/Phone Calls	_____ %	_____ %	_____ %	_____ %
SUB-TOTAL	_____ %	_____ %	_____ %	_____ %
TOTAL	_____	_____	_____	_____
3. Case Resolutions:	<u>Arrest</u>	<u>Exception</u>	<u>Unfounded</u>	
Rape	_____ %	_____ %	_____ %	
Sex Assault	_____ %	_____ %	_____ %	
Other Sex Crimes	_____ %	_____ %	_____ %	
Mail/Phone Calls	_____ %	_____ %	_____ %	
SUB-TOTAL	_____ %	_____ %	_____ %	
TOTAL	_____	_____	_____	
4. Resolution Rate:	_____ %			

APPENDIX G

**Explanatory Note:**

As with Homicide and Robbery Squad the report format for sex crimes presents cases processed and disposition and resolution data broken down by the categories of crime handled by the unit. The UCR data only covers rape, the other crimes handled by the unit are not reportable under that system.

**SEX CRIMES**

**MONTH**

	(Detective)		Assigned Caseload	
	Rape	Sex Assault	Other Sex Crimes	Mail/Phone Calls
<b>1. Cases Processed:</b>				
New cases	_____	_____	_____	_____
Carried over	_____	_____	_____	_____
Reactivated	_____	_____	_____	_____
Transferred in	_____	_____	_____	_____
Sub-total	_____	_____	_____	_____
Carried forward	_____	_____	_____	_____
Transferred out	_____	_____	_____	_____
TOTAL	_____	_____	_____	_____
<b>2. Case Dispositions:</b>				
Rape	_____ %	_____ %	_____ %	_____ %
Sex Assault	_____ %	_____ %	_____ %	_____ %
Other Sex Crimes	_____ %	_____ %	_____ %	_____ %
Mail/Phone Calls	_____ %	_____ %	_____ %	_____ %
SUB-TOTAL	_____	_____	_____	_____
TOTAL	_____	_____	_____	_____
<b>3. Case Resolutions:</b>				
Rape	_____ %	_____ %	_____ %	
Sex Assault	_____ %	_____ %	_____ %	
Other Sex Crimes	_____ %	_____ %	_____ %	
Mail/Phone Calls	_____ %	_____ %	_____ %	
SUB-TOTAL	_____	_____	_____	
TOTAL	_____	_____	_____	
<b>4. Resolution Rate:</b>				
	_____ %			

Explanatory Note:

This is the individual sex crimes detective workload performance report format. It is identical in content with formats used in the other units.

**END**