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THE USES OF

LAW ENFORCEMENT MANAGEMENT INFORMATION



THE COMMISSION ON
PEACE OFFICER STANDARDS AND TRAINING
STATE OF CALIFORNIA

29666

SNI 11/6/75

THE USES OF
LAW ENFORCEMENT MANAGEMENT INFORMATION

COMMISSION ON PEACE OFFICER STANDARDS & TRAINING
TECHNICAL SERVICES DIVISION
WORKING DRAFT
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PROJECT NUMBER..... COPY NUMBER.....

Commission on
Peace Officer Standards and Training
State of California

Preface

This report on The Uses of Law Enforcement Management Information represents staff work prepared by POST's Center for Police Management personnel. The report is intended to answer some basic questions relating to management information requirements and provide suggested approaches to meeting fundamental needs. No attempt has been made to describe, define, or promulgate a complete "management information system." A conscious effort has been made to avoid dwelling on subjects already adequately addressed in this area.

Because the subject matter is broad, reasonably complex, and highly important to law enforcement administrators, POST staff will continue to research and develop work in this area. This report will be subject to future revision and refinement. POST staff solicits constructive criticism of this document. Any suggestions for improvement will be welcomed and seriously entertained.

POST staff members principally responsible for development of this report were Senior Consultants Dale A. Kelley and Allan K. Stuckey. Primary coordination and editing of this study was the responsibility of Glen E. Fine, Bureau Chief, Center for Police Management.


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INTRODUCTION

Information, like manpower and equipment, is a definite resource in a law enforcement agency. How is it used or misused will have a marked effect on the management of the agency.

The administrator of a typical law enforcement agency must have information to meet two main requirements; these are:

- external reporting requirements
- internal operation and management information requirements

In attempting to fulfill these requirements, certain questions arise:

- what information is needed?
- where is it obtained?
- how can it be used?

This document is designed to answer these questions. Its purposes are threefold:

1. To identify the general and basic information requirements of a typical local law enforcement agency;
2. To define where data can be obtained to meet the basic information requirements identified; and
3. To provide practical examples of how data can be organized for proper use.

Current Uses of Data and Information

Law enforcement agencies spend extensive amounts of time and money collecting, storing, and retrieving data. A large amount of data is collected with little or no reference to the objective for which it is collected. Much of the data is not used, or is used primarily to meet external reporting or short-term internal operational requirements.

Many administrators believe that the collection of data automatically satisfies information requirements. What they often fail to realize is that this data must be systematically processed and analyzed to produce the information need by decision makers.

Need for Information and Data Processing

The collection, processing, and analysis of essential statistical and management data are legitimate functions of a law enforcement agency. A law enforcement administrator cannot expect to be knowledgeable about the operation and management of his organization if he lacks meaningful statistical and management information.

Information derived through analysis of pertinent data over a period of time can be utilized by operational and management personnel at all levels of the organization. Furthermore, as the size of a law enforcement agency increases, and the volume and variety of services provided to meet new demands grow, the ability to collect, organize, and utilize meaningful information becomes vital.

The data-handling capabilities of local law enforcement agencies have not kept pace with their increasing needs for information. To gain the maximum benefits from the various types of data they collect, law enforcement agencies should utilize some formal system of data processing. However, many agencies have avoided data processing due to the narrow definition which has been applied to the term.

To many, data processing means computers, and computers mean money. Therefore, many agencies have gone without needed information to avoid the costs associated with computer processing. Data processing does not necessarily require the use of computers. Data can also be processed manually or by the use of relatively inexpensive unit record equipment. While all agencies cannot afford electronic data processing, the majority of agencies can afford manual or automatic data processing.

Proposed Solutions to Meet Information and Data Processing Needs

Because many law enforcement agencies cannot afford to lease or purchase computers, publications which propose computer-based information systems are of limited value. Since the majority of current publications propose computer systems, adequate guidelines for the development of non-computerized methods for collecting, processing, and using law enforcement information are not available.

In an attempt to fill the gap, a research project was developed in the POST Center for Police Management. Specifically, CPM consultants were assigned the task of developing a document which would provide law enforcement agencies with practical guidelines for the collection and utilization of law enforcement data and information.

Due to the broad scope of this project, the information addressed has been divided into two documents. The first document covers the basic information requirements of a law enforcement agency and proposed programs for meeting these requirements. The second document describes detailed procedures for conducting a patrol workload study for purposes of allocation and distribution of patrol manpower.

Research on the use of law enforcement data and information was conducted through review of pertinent literature and on-site visits to agencies. This publication contains the results of that research and address the expressed purposes of the project in two major chapters:

Chapter I is an overview of the general information requirements of a typical local law enforcement agency. The overview is included to provide background and understanding of the scope of law enforcement information requirements. In the subsequent chapter, however, the scope of the project is limited to the basic management information requirements common to a great number of law enforcement agencies.

Chapter II defines the data needed to meet the basic management information requirements, and identifies the sources from which the data can be acquired in most law enforcement agencies.

It also contains examples of forms which can be used as data collecting and organizing tools to meet information needs.

GLOSSARY OF TERMS

DATA - any representation of a fact or an idea that can be communicated or manipulated by some process.

DATA ELEMENT - a specific fact (in the law enforcement field, a type of event, and the time and location of the event are data elements).

SOURCE DOCUMENT - a form or report from which data elements are extracted for processing.

INFORMATION - knowledge derived through the analysis of data.

DATA PROCESSING - a systematic sequence of operations performed on data.

MANUAL DATA PROCESSING - the processing of data using hand or manual methods.

AUTOMATED DATA PROCESSING - a term used to describe both electronic data processing (EDP - computer based), and electric accounting machine (EAM - also called Unit Record Systems).

CHAPTER I

INFORMATION REQUIREMENTS OF A
LAW ENFORCEMENT AGENCY

INFORMATION REQUIREMENTS OF A LAW ENFORCEMENT AGENCY

The purpose of this chapter is to describe the main information requirements of a law enforcement agency. For purposes of this document, these information requirements are divided into two broad categories:

- Information needed to fulfill external reporting requirements;
- Information needed to fulfill internal operational and management requirements.

External Reporting Requirements

Law enforcement agencies need data and information to respond to inquiries from outside agencies for two reasons:

1. To satisfy legal reporting requirements; and
2. To cooperate in the sharing and mutual exchange of information with other criminal justice and governmental agencies.

California law enforcement agencies respond to numerous and varied legal and voluntary information requirements. There is, however, a common set of external reporting requirements which a majority of agencies recognize and adhere to. This complete set of requirements is displayed in Figure 1, on pages 6-8.

This table contains the name of the agency, by government level, to which the information is submitted; the type of information that is submitted; and the basis, voluntary or required. For required information, the section and code initials are included in the appropriate column.

The need for law enforcement agencies to fulfill external reporting requirements is apparent - all agencies benefit through the mutual sharing and exchange of information. Furthermore, since the external information requirements are well defined in codes, or by the requesting parties, most agencies do not find it difficult to supply the needed information. Except for situations where a great deal of data is requested, most external information requirements are handled on a routine basis.

Figure 1

EXTERNAL REPORTING REQUIREMENTS

AGENCY Information Submitted to:	TYPE OF INFORMATION	BASIS	
		Voluntary	Required Section/Code
FEDERAL			
Federal Bureau of Investigation (FBI)	1. Fingerprint Cards a. Arrest b. Police Applicants 2. Teletype -- NCIC 3. Death Notices of Individuals Entered in FBI Files 4. Verbal -- General Info.	 x x x ¹ x x	
National Bomb Data Center	1. Bombings and Attempted Bombings	 x	
STATE			
Department of Justice Identification and Information Branch Bureau of Identification	1. Crime Reports a. All Felony Crime Reports b. Sex Crime Reports 2. Lost, Stolen, Found, and Pawned Property Reports 3. Fingerprint Cards a. Arrest b. Gun License Applications c. Registrations -- Sex Narcotics 4. Report of Arrested Person's Transfer or Release, or Disposition of Case 5. Verbal -- General Info.	 x	11107pc 11107pc 11108pc 11112pc 12052pc 290pc 11115pc
Bureau of Criminal Statistics (BCS)	1. Monthly Crime and Clearance Statistics 2. Monthly Arrest and Citation Statistics 3. Report of Law Enforcement Officers Killed or Injured in Accident or Assault 4. Justifiable Homicide Reports 5. Violation of Obscenity Law Reports	 x ² x x x x x x	13020pc 13020pc 13020pc 13022pc 13021pc
Law Enforcement Consolidated Data Center (LECDC) (Automated Information Services)	1. Calif. Law Enforcement Telecommunications System (CLETS) 2. Criminal Justice Information System (CJIS) a. Stolen Vehicle System (SVS) b. Stolen Bicycle System (SBS) c. Wanted Persons System (WPS) d. Automated Firearm System (AFS) e. Automated Property System (APS) f. Criminal History File (CHS)	 x x x x x x x	

EXTERNAL REPORTING REQUIREMENTS

AGENCY Information Submitted to:	TYPE OF INFORMATION	BASIS	
		Voluntary	Required Section/Code
<u>STATE (Continued)</u> Business and Transportation Agency California Highway Patrol (CHP)	1. Vehicle Collision Reports 2. Impound reports on certain abandoned vehicles 3. Disposition of impounded low val- ued vehicles - under \$200 value 4. Verbal -- General Info.	x	20008cvc 22853cvc 22705cvc
Department of Motor Vehicles (DMV)	1. Implied Consent -- Refusal to Take Drunk Driving Test 2. Theft, Loss, or Recovery of Undocumented Vessel 3. Teletype a. Automated Management Info- mation System (AMIS) 1) Vehicle Reg. File 2) Drivers License File b. Automated Name Index (ANI) 4. Vehicles impounded under Local Abatement Procedure 5. Verbal -- General Info.	x x x x x	13353cvc 10551cvc 226600a cvc
Department of Alcoholic Beverage Control (ABC)	1. Crime Reports (Liquor Licen- ses) 2. Verbal -- General Info.	x	24202bpc
Commission for Teacher Preparation and Licensing	1. Written Notice of Arrest of Public School Teacher for Sex Offense (261, 290pc)		291pc
<u>COUNTY</u> Sheriff (If City Police Dept.)	1. Warrant Information 2. Crime and Arrest Information 3. Juvenile Information 4. General Information	x x x x	
Court (Depending on Type and Location)	1. Complaints a. Misdemeanor b. Felony 2. Crime and Arrest Reports		x x x
District Attorney	1. Crime and Arrest Reports 2. Verbal -- General Info.	x	x
Coroner	1. Death Reports 2. Suicide Notices		x x
Health Department	1. Animal Bite Reports 2. Sanitation		Div. 3 Chap. 3 Art. 1, H & S

EXTERNAL REPORTING REQUIREMENTS

AGENCY Information Submitted to:	TYPE OF INFORMATION	BASIS	
		Voluntary	Required Section/Code
<u>COUNTY (Continued)</u> Superintendent of School	1. Written Notice of Arrest of Public School Teacher for Sex Offense (261, 290pc)		291pc
<u>CITY</u> Manager/Mayor/Council/Depart- ment Administrators	1. City Property Damage Reports 2. City Liability Reports 3. Special Reports 4. Verbal -- General Info.		x x x x
Fire Department	1. Crime Report -- Arson 2. Verbal -- General Info.	x	x
<u>OTHER LAW ENFORCEMENT AGENCIES</u>	1. Teletype 2. Verbal -- General Info.	x x	
<u>OTHER AGENCIES OR OFFICIALS</u> Superintendents of Public School Districts	1. Telephone Notice of Arrest of School Teacher or other School Employee for Sex Offense (261, 290pc)		291pc
Private School Authorities	1. Written and Telephone Notice of Arrest of Private School Teacher for Sex Offense (290pc)		291.1pc
<u>PRIVATE CITIZENS</u> Property Owner	1. Notice in writing to registered and legal owner of impounded motor vehicles		x 22852cvc

¹ Entry of data and query of NCIC files is accomplished through California Department of Justice Criminal Justice Information System.

² Joining CLETS is voluntary. However, when a law enforcement agency has joined, it is required legally (15165GC) to conform to the operating policies, practices, and procedures approved by the Attorney General's Committee on the California Law Enforcement Telecommunications System.

CALIFORNIA LEGAL CODE LEGEND

pc = Penal Code
cvc = California Vehicle Code
bpc = Business and Professions Code
GC = Government Code
H & S = Health and Safety Code

For these reasons, this document does not concentrate on external information requirements, but will focus on the types of information needed by a law enforcement agency to fulfill internal operations and management requirements.

Internal Information Requirements

A law enforcement agency has numerous internal information requirements. However, this discussion and the main thrust of this document will principally concern two areas:

- operational information
- management information

It should be noted that these two areas are not always clear cut and mutually exclusive. Data and information in one area may also be used to satisfy requirements in the other area.

Operational Information

This type of information is associated with the line functions of law enforcement agencies and provides the basis for decisions regarding general police services. It is mainly used to make short-term manpower and resource allocations, and for short-range planning purposes. Operational information is required primarily for the patrol, traffic, and investigative functions of a law enforcement agency.

An example of operational information would be information concerning a particular crime, such as burglary. Data about the crime, date, location, and time of occurrence constitute operational information about that burglary. This type of information might be used to investigate the crime or to help prevent or deter future burglaries.

Information and data which fall into the operational category includes, but is not limited to, information and data about:

- Motor vehicle collisions
- Civil disasters/disorders
- Incidents

- Investigations
- Modus Operandi
- Criminal Offenses
- Stolen, found, recovered property
- Wanted persons
- Warrants
- Field interviews

Much of the operational information required by police officers is descriptive in nature and is used to identify people, places, and things during routine operations. Descriptive information is needed by field officers on an immediate basis. Therefore, the trend has been to place this type of information into automated information systems capable of providing rapid retrieval upon request by field officers.

Operational information can also be summarized over a selected period of time and used for short-term planning evaluations. Thus, a monthly summary of data concerning burglaries by hour of the day, day of the week, and location might be used to plan special patrol strategies.

The same information, when collected over longer periods of time can be utilized by management decision makers for long term planning purposes.

Management Information

Management information encompasses a broad spectrum of categories. These categories include such things as information about the technical operations of the department (communications, records/identification, crime laboratory), maintenance information concerning existing equipment and human resources, and information concerning the environment (community composition, geography, political climate) within which the department must function.

While this type of information is necessary for the overall management

of the agency, it is the intent of this document to discuss what is termed basic information requirements.

In addition to other duties, law enforcement administrators are responsible for the performance of four major categories of activities:

- Monitoring and measurement
- Direction
- Coordination
- Evaluation of department needs and the acquisition of resources

To accomplish these activities, the administrator must have information which will provide a basis for analysis regarding:

- Definition of city/county law enforcement problems
- Definition of total department activity, including types, quantity, and quality of actions
- Measurement of the effectiveness of current department operations; and,
- Capabilities for response to special problems.

The analysis of the information provides the basis for management decisions regarding the optimal allocation of current resources, establishing performance standards, measuring performance against these standards, and the evaluation and justification of budget requirements.

To fulfill the management information requirements listed above, two types of data are needed:

1. Crime and incident data; and,
2. Activity Data.

1. Crime and major incident data: Crime and incident data is defined as data which are either recorded through dispatch action and/or police services which result in any form of field input document. Field input

documents include Crime Reports, Incident Reports, Traffic Collision Reports and Citations, Arrest Reports, and Field Interview Cards.

Crime and incident data should be collected to show relationships such as:

- a. Type and frequency of events for the entire city as well as smaller reporting areas;
- b. Type and frequency of events by date, day of the week, and time of day; and,
- c. A comparison of these relationships to historical patterns. The historical comparison produces trend identification, a measurement of the effectiveness of current methods of operation, and indications of requirements for change.

2. Activity Data: Crime and major incident data normally reflects 25% or less of the total activity of a law enforcement agency. To establish complete control, managers must have access to data and information on total departmental activity. The remaining data is referred to as activity data. Activity data can be divided into measurements of the quantity and quality of activities and services performed. Quantity measurements are required to establish realistic standards against which to measure personnel performance, establish service priorities, assign current resources to the priorities, and plan and justify future resource requirements.

Examples of quantity related measurements include the number of and time expended on such activities as patrol, miscellaneous activities, report writing, court appearances, community relations, training, special duty, and public service activities such as house and business checks.

Examples of quality related measurements are response times, clearance rates, and report quality.

When combined, crime and incident and activity data furnish the law enforcement administrator with tools for evaluating the efficiency and effectiveness of the operation of a law enforcement agency. However, the identification of types of management data and information is only one part of the process. Management data and information must also be collected and organized for use by decision makers.

In discussing data collection, certain questions surface: What specific data is needed? Where can the needed data be obtained? The following chapter answers these questions by listing and discussing the data elements needed and the sources from which they can normally be extracted.

CHAPTER II

PROPOSED OUTPUT DOCUMENTS TO MEET INFORMATION REQUIREMENTS

PROPOSED OUTPUT DOCUMENTS TO MEET INFORMATION REQUIREMENTS

To meet the present and growing need for information, many law enforcement agencies have developed and implemented management information systems. The systems vary in size, complexity, cost, and types of operations performed. However, regardless of the kind of data processed or the kind of equipment used, all data processing involves at least three basic elements:

- Entering source data into the system (input)
- The processing of this data within the system (processing)
- Obtaining information from the system (output)

The purpose of this chapter is to define, in detail, the input and output elements which are necessary to meet the basic information requirements of a law enforcement agency. The processing element will not be dealt with extensively, as it was believed that this element is the least difficult to address. While the processing of the data is important, the method of processing is not of vital concern. The data identified in this chapter and the rest of the document may be processed either manually or by automated equipment, depending on the resources of the agency.

Source Documents Needed to Capture Data Elements

A discussion of the use of data in law enforcement agencies necessarily focuses upon the output, or reports, generated by an information system. However, it can be seen that in order to obtain desirable output, the input, in the form of raw data, into the system must be considered. The output of an information system is defined in terms of the input. The popular term "GIGO" (Garbage In Garbage Out) describes accurately the relationship between input and output of an information system. Input, then, is an important aspect of and has a direct bearing on the use of data in law enforcement agencies.

Input can be defined as the acquisition, or capture, of data and its placement into a system. All police agencies capture, or collect, data through the use of structured report forms. While the number of report forms may vary from agency to agency, a core set of forms is normally present. This core set of forms is very important in that

it serves as the basis for the collection of data for the police management information system.

Taken collectively, the core set of report forms are known as source documents and include those listed below:

Crime Report(s)

Arrest Report

Traffic Collision Report

Follow-up Report

Dispatch Card(s)

Citations (traffic and parking)

Officer Daily Activity Report

Two of the source documents, the Crime Report and Dispatch Card, are also shown in the plural sense because some agencies utilize more than one form to record crime data and dispatch data.

Data Elements

Source documents contain spaces, in a structured format, for the recording of facts which describe the event being reported. The facts recorded are known as data elements which vary from source document to document. There are, however, three basic law enforcement activity data elements which normally appear on all source documents: the event type, the geographical location of the event, and the time the event occurred.

Figure 2. displays an example crime report source document. The three basic data elements are highlighted on the example form with a brief description of each included in the margin.

The event type and time of occurrence data elements are well defined and have standard usage in California law enforcement agencies.

The location data element, however, is described differently in various agencies as a result of the methods utilized to geographically

Figure 2

Event Type: The Penal Code title or other code definition of the event reported.
Example: Burglary

Geographical Location: For use of local agency. The reporting area should include the beat and area where the event occurred. Example: 419 would refer to beat 4, reporting area 19.

Time the Event Occurred:
Includes the month, day of the month, year, time and day of week the event occurred. Example: 5/20/74, 1020 hours, Monday. If the exact time of occurrence is not known, the time span in which the event occurred should be included.

[illegible]

divide the jurisdictions for reporting purposes. Also, some jurisdictions record beat information only and do not record subdivisions such as reporting areas. In these cases, while the agency is able to identify location of occurrence in general terms, it is difficult to utilize location information to identify specific problem areas.

It is suggested that those agencies which have not subdivided their jurisdictions into reporting areas, do so. The purpose of this division is to provide a means of identifying areas of the jurisdiction where criminal and/or police activity are occurring. For a suggested method of dividing a jurisdiction for purposes of location data collection, see Appendix A.

To assist agencies in identifying the relationship between output documents, data elements, and source documents, the Data Element Matrix on page 19 was developed. Column one contains the titles of the Output Documents which are discussed later in this chapter. Column two lists the data elements which are required for the completion of each Output Document. Column three is subdivided into the seven basic source documents from which the data elements are extracted during the collection phase.

The Matrix should serve as a guide to enable agencies to determine what data elements are needed to complete the basic output documents, and from which source document(s) the element(s) would most efficiently be extracted. For example, by reading across the columns it can be seen that the following data elements are needed to complete the Traffic Statistics portion of the Monthly Statistical Summary:

Type of Collision

Date: Month, Year

No. of Fatalities

No. of Injuries

Type of Citation

Date: Month, Year

Column three indicates that the source document for the first four elements is the Traffic Collision Report, and for the last two elements the source documents are the Parking and Traffic Citations.

Figure 3

DATA ELEMENT MATRIX

		SOURCE DOCUMENTS						
OUTPUT DOCUMENTS		Crime Reports	Arrest Report	Traffic Collision Report	Follow-up Report	Dispatch Cards	Citations (Parking and Traffic)	Daily Activity Report
MONTHLY STATISTICAL SUMMARY								
a. Criminal Data	- Type of Offense - Type of Arrest - Type of Clearance - Date: Month, Year	X	X					
b. Investigation Data	- Type of case assigned - Type of Clearance - Date: Month, Year	X	X	X	X			
c. Traffic Data	- Type of Collision - No. of Fatalities - No. of Injuries - Type of Citation - Date: Month, Year		X	X			X	
d. Miscellaneous Activity	- Type of Activity - Date: Month, Year				X	X		
OFFENSE SUMMARY		X						
	- Type of Offense - Date: Month, Day of Week, Year - Time: Hour of Occurrence - Location: Beat	X						
TRAFFIC ANALYSIS								
a. Collisions by Type and Location	- Type of Collision - Date: Month, Year - Location: Reporting Area, Street On and Street Near - No. of Fatalities - No. of Injuries		X	X				
b. Collisions by Cause and Location	- Primary Cause of Collision - Date: Month, Year - Location: Reporting Area, Street On and Street Near		X	X				
c. Collisions by Time and Location	- Date: Month, Day of Week, Year - Time: Hour of Occurrence - Location: Reporting Area, Street On Street Near		X	X				
d. Traffic Citations by Type and Location	- Type of Violation - Date: Month, Year - Location: Reporting Area, Street On and Street Near					X		
e. Citations by Time and Location	- Date: Month, Day of Week, Year - Time: Hour of Occurrence - Location: Reporting Area, Street On and Street Near					X		
f. Total Citations by Type and Officer	- Type of Violation - Date: Month, Year - Officer Name					X		
SUMMARY OF PATROL ACTIVITIES BY OFFICER								
	- Type of Activity - Date: Month, Year - Officer Name				A	X		
					A	X		
					A	X		

Similarly, the data elements and related source documents for the remaining output documents listed can be determined. It should be noted that under the Summary of Officer Activities, two entries have been made in the Source Documents Column. The "x" indicates that the primary source document is the Daily Activity Report. The "A" indicates that if the needed data elements are routinely collected on dispatch cards, they could be utilized as an alternative source document.

Output Documents

There are two classifications of output documents needed by law enforcement agencies, routine reports and special reports. Routine reports are those done on a continuous basis (i.e., monthly) and special reports are those that are required by a particular need for information and would be developed on a request basis.

Routine Reports

This section will deal exclusively with routine reports. The routine reports described below are designed to meet basic operational and management information needs.

Monthly Statistical Summary

Monthly Offense Summary

Monthly Traffic Analysis Reports

- (1) Traffic Collisions by Location and Type
- (2) Traffic Collisions by Location and Cause
- (3) Traffic Collisions by Location and Time
- (4) Traffic Citations by Location and Type
- (5) Traffic Citations by Location and Time
- (6) Total Citations by Officer and Type

Monthly Summary of Patrol Activities by Officer

The remainder of this section contains examples of the actual output reports which would fulfill the routine information needs of a typical law enforcement agency. For purposes of brevity and clarity, a standard discussion outline was adopted to describe the output reports.

Specific procedures for transferring data elements from source documents to the output reports featured here have not been developed. Procedures for accomplishing this process will vary between departments and so each department should establish those procedures which best fit their operation (i. e., hand tally, keypunch or direct entry into a computer).

The discussion outline consists of the following elements for each output document:

Title - The title of the output document (report).

Source Document - The report the data is taken from.

Frequency - How often the report should be produced.

Format - The manner in which the data should be arranged to show relationships for analysis.

Information Usage - How the information displayed on the report can be used.

Distribution - Those in the agency or elsewhere who should receive the report.

ROUTINE REPORTS

I. TITLE: Monthly Statistical Summary

SOURCE DOCUMENTS: Crime Reports, Arrest Reports, Follow-up Reports, Traffic and Citation Reports and Dispatch Records.

FREQUENCY: Monthly

FORMAT: Figure 4, P. 24-26

This report contains four sections:

- Criminal Data
- Investigation Data
- Traffic Data
- Miscellaneous Activities

The Criminal Data section is divided into two categories; Index Crimes (Part I) and Other Offenses. These categories are further subdivided into type of offense, offenses reported and arrests, with a detailed breakdown of numbers of offenses and arrests and total clearances. This division of offenses enables the reader to readily identify the types of criminal activity occurring in the jurisdiction, the rate of increase or decrease by month, year to date and last year to date. The arrest and clearance data provides a gauge by which to judge the departments' effectiveness in responding to the crime problems.

Data contained in the Investigation section provides information about the caseload handled by the Investigation Division, and rate of clearance achieved by the month, year to date, and last year to date.

Information concerning the traffic and citation situation is contained in the Traffic Data section. The types and numbers of collisions, fatalities, injuries and citations are provided here with a detailed breakdown of each.

The fourth section of the Summary, Miscellaneous Activities, provides

data concerning miscellaneous, non crime activity or services provided by the department.

The categories of data shown on the form were chosen as examples. An agency requiring different or additional breakdowns could simply insert them into the present format.

INFORMATION USAGE: The Monthly Statistical Summary will furnish current data on the nature and frequency of criminal, investigative, traffic and miscellaneous activities. This report enables the law enforcement administrator and city officials to define the types of crimes that are occurring in their jurisdiction, what the percentages of increase or decrease are, what the rate of clearance is, and generally what activities the police department is engaged in.

From this summary report, the Chief, members of the department and city/county officials can obtain a "capsule" picture of criminal and police activities on a monthly basis.

DISTRIBUTION: Chief/Sheriff, Department Supervisors, City Manager, City Council (County CAO, Board of Supervisors).

Figure 4

CALIFORNIA POLICE DEPARTMENT
MONTHLY STATISTICAL SUMMARY

Report Date		
Mo.	Dy.	Yr.
Reporting Period		
Mo.	Yr.	

CRIMINAL DATA

TYPE OF OFFENSE		INDEX CRIMES												
		NUMBER OF OFFENSES AND ARRESTS							TOTAL CLEARANCES					
			This Month	Last Month	% Change $\pm$	Year To Date	To Date Last Year	% Change $\pm$	NUMBER			CLEARANCE RATE		
									This Month	Year To Date	To Date Last Year	This Month	Year To Date	To Date Last Year
Criminal Homicide	Reported													
	Arrests													
Forcible Rape	Reported													
	Arrests													
Robbery	Reported													
	Arrests													
Assaults	Reported													
	Arrests													
Burglary	Commercial	Reported												
	Arrests													
	Residential	Reported												
	Arrests													
Theft	Reported													
	Arrests													
Auto Theft	Reported													
	Arrests													
TOTAL	Reported													
	Arrests													

		OTHER OFFENSES												
		Reported	Arrests											
Arson	Reported													
	Arrests													
Forgery	Reported													
	Arrests													
Fraud	Reported													
	Arrests													
Stolen Property	Reported													
	Arrests													
Vandalism	Reported													
	Arrests													
Weapons	Reported													
	Arrests													
Prostitution/Vice	Reported													
	Arrests													
Sex Offenses	Reported													
	Arrests													
Drug Laws	Reported													
	Arrests													
Gambling	Reported													
	Arrests													
Liquor Laws	Reported													
	Arrests													
Drunk Driving	Reported													
	Arrests													
Drunk	Reported													
	Arrests													
Disorderly Conduct	Reported													
	Arrests													
Vagrancy	Reported													
	Arrests													
Nonsupport	Reported													
	Arrests													

Figure 4

TYPE OF OFFENSE	OTHER OFFENSES (CONT'D)												
	NUMBER OF OFFENSES AND ARRESTS							TOTAL CLEARANCES					
		NUMBER			CLEARANCE RATE			This Month	Year To Date	To Date Last Year	This Month	Year To Date	To Date Last Year
		This Month	Last Month	% Change $\pm$	Year To Date	To Date Last Year	% Change $\pm$						
Petty Theft	Reported												
	Arrests												
Malicious Mischief	Reported												
	Arrests												
Hit & Run	Reported												
	Arrests												
All Other Offenses	Reported												
	Arrests												
Suspicion	Reported												
	Arrests												
Curfew/Loitering	Reported												
	Arrests												
Runaway	Reported												
	Arrests												
TOTAL	Reported												
	Arrests												

INVESTIGATION DATA

TYPE OF OFFENSE	NUMBER OF CASES ASSIGNED							CLEARANCES					
	This Month	Last Month	% Change $\pm$	Year To Date	To Date Last Year	% Change $\pm$		NUMBER			CLEARANCE RATE		
								This Month	Year To Date	To Date Last Year	This Month	Year To Date	To Date Last Year
Homicide													
Rape													
Assaults													
Robbery													
Burglary													
Grand Theft													
Auto Theft													
Petty Theft													
Sex Offenses													
Drug Offenses													
Other Offenses													
TOTAL													

Figure 4

TRAFFIC DATA

COLLISIONS	This Month	Last Month	% Change ±	To Date	To Date Last Year	% Change ±
Fatal						
Injury						
Non-injury						
TOTAL						
No. of Fatalities						
No. of Injuries						
CITATIONS						
Traffic Citations						
Parking Citations						
TOTAL						

MISCELLANEOUS ACTIVITIES

TYPE	NUMBER					
	This Month	Last Month	% Change ±	To Date	To Date Last Year	% Change ±
Disturbance						
Suspicious Activities						
Silent Alarm						
Audible Alarm						
Back-up Other P. D.						
Fire Follow-up						
Other						
TOTAL						

2. OFFENSE SUMMARY

TITLE: Offenses by Location by Day of Week and Watch

SOURCE DOCUMENT: Crime Reports

FREQUENCY: Monthly

FORMAT: Figure 5. P. 29

This report offers a brief profile of the major offenses occurring in the city/county by the day of week, watch, and beat. As an example, the seven major Part I offenses have been entered on the form in Figure 5. It is envisioned that each department will enter those offenses which are occurring most frequently in their jurisdiction or those which the department feels may be a problem. The particular offenses selected by a department might be examined on a rotating basis (certain offenses for a three-month or so period) so that many offenses might be examined over a one-year period. The procedure for selecting which offenses to examine and for what period of time is flexible and is meant to be determined by selected department personnel or the agency administrator. As a general guideline, it is suggested that those offenses which show a significant increase on the Monthly Statistical Summary should be further examined through the use of the Monthly Offense Summary.

The report itself is generally self-explanatory and contains columns for three watches, an unknown column, and a column for totals.

This format enables the reader to identify:

1. The numbers of offenses occurring on each day of the week, by the type of offense and general time of day (watch);
2. Those offenses which might follow a particular pattern (for example, burglaries may show a pattern of occurring during the day shift on Monday and Tuesday);
3. Day of the week when the greatest number of offenses occur and the watch with the largest volume of offenses. A summary sheet is produced for each beat or patrol area in the jurisdiction.

INFORMATION USAGE: The purpose of this summary of offense data is to provide the administrator, department planning personnel, and the patrol commander with information to assist them in identifying the type and level of offenses, and the general areas and times of occurrences.

This type of information will provide a better basis for decision making in the areas of allocation of patrol resources (concentration of patrol units in locations of high offense occurrence) and crime prevention.

This Offense Summary is designed to provide only basic knowledge concerning offenses.

DISTRIBUTION: Chief of Police/Sheriff, Planning and Research Division, Patrol Commander, Watch Commander, members of Patrol Division.

CALIFORNIA POLICE DEPARTMENT

OFFENSE SUMMARY

Report Date		
Mo.	Dy.	Yr.
Reporting Period		
Mo.	Yr.	

LOCATION BY DAY OF WEEK AND WATCH

BEAT 1	DAY OF WEEK AND WATCH																														TOTALS					
OFFENSE	SUNDAY					MONDAY					TUESDAY					WEDNESDAY					THURSDAY					FRIDAY										SATURDAY
	1	2	3	Unk	Tot.	1	2	3	Unk	Tot.	1	2	3	Unk	Tot.	1	2	3	Unk	Tot.	1	2	3	Unk	Tot.	1	2	3	Unk	Tot.	1	2	3	Unk	Tot.	
Criminal Homicide																																				
Forcible Rape																																				
Robbery																																				
Assault																																				
Burglary																																				
Theft																																				
Auto Theft																																				
TOTALS																																				

3. TRAFFIC ANALYSIS REPORTS

There are six (6) output reports in the Traffic Analysis category. The frequencies, information usages, and distributions for the reports are the same. Only the titles and formats of the reports vary. Therefore, for the purpose of brevity, the frequency, information usage, and distribution elements need only be listed once, which is shown below. The title and format are then listed for each report.

FREQUENCY: Monthly/Quarterly/Annually

INFORMATION USAGE: Through the use of these reports a fairly detailed picture of the traffic problems faced by a department is available. The type of information accumulated provides the basis for traffic safety and traffic enforcement problem-solving. By knowing what types of collisions are occurring, what the primary causes are, when they are occurring, and where they are occurring, traffic enforcement or patrol manpower can be more effectively utilized. In addition, the analysis of traffic collision data is very useful in traffic engineering decisions and in designing specific traffic safety measures.

By having access to traffic collision and citation information useful comparisons may be made between collisions and citations in general for the jurisdiction and for specific locations. This type of information is valuable in allocating traffic and/or patrol manpower for selective enforcement of certain types of violations which are shown to be the primary causes of collisions at certain locations. Also, comparisons of these two types of reports will provide an indicator of whether or not the violations for which the citations are being issued are those violations which contribute most heavily to the prevention of collisions.

The "citation by type and officer" report will furnish supervisors and the chief administrator with performance data concerning traffic enforcement personnel and identify the types of violations for which officers are issuing citations.

DISTRIBUTION: Police Chief, Department Traffic Bureau, and/or Patrol Division, City Traffic Engineer.

Note: The California Highway Patrol through its Integrated Traffic Records System, presently provides the following reports to local law enforcement agencies:

- (1) Location Detail Report
- (2) Vehicle/Driver Action/Condition Report
- (3) Involved Party Category Report
- (4) Primary Collision Factor Report
- (5) Hourly and Daily Distribution of All Collisions

These reports are provided on a quarterly basis and do not include citation information.

- A. TITLE: COLLISIONS BY LOCATION AND TYPE
 SOURCE DOCUMENT: Traffic Collision Reports
 FORMAT: Figure 6. P. 32.

The format of this report is actually a listing of collisions by their location, which is expressed in terms of the reporting area (RA), the street on which the collision occurred and the nearest cross street. The number and types of collisions as well as number of persons killed and/or injured is keyed to the location of the collision.

- B. TITLE: COLLISIONS BY LOCATION AND CAUSE
 SOURCE DOCUMENT: Traffic Collision Reports
 FORMAT: Figure 7. P. 33

This report is similar to Figure 5 in that it is a listing of collisions by location, with primary cause being substituted for type of collision. Example of primary causes of collisions are included on the form. However, these are only examples and each department should enter those causes which they deem to be important or applicable.

A column for totals is included so that the total number of collisions and a breakdown by primary cause is available.

- C. TITLE: COLLISIONS BY LOCATION AND TIME
 SOURCE DOCUMENT: Traffic Collision Reports
 FORMAT: Figure 8. P. 34

Again employing a listing design, this report includes the hour of the

TRAFFIC ANALYSIS

Report Date		
Mo.	Dy.	Yr.
Reporting Period		
Mo.	Yr.	

COLLISIONS BY LOCATION AND TYPE

LOCATION			No. of Collisions	TYPE OF COLLISION			No. Killed	No. Injured
RA.	Street			Fatal	Injury	Property Damage		
	On	Near						
						</		

TRAFFIC ANALYSIS

Mo.	Dy.	Yr.
Reporting Period		
Mo.	Yr.	

[illegible]

Figure 7

CALIFORNIA POLICE DEPARTMENT
TRAFFIC ANALYSIS

Report Date		
Mo.	Dy.	Yr.
Reporting Period		
Mo.	Yr.	

COLLISIONS BY LOCATION AND TIME

[illegible]

day and the day of week. The main element in this report is the hour of the day. Using one-hour time periods (00-01, 01-02, 02-03) all collisions that occurred during each hour of the day are listed by location and day of the week. Thus, during the reporting period, between the hours of 00-01, ten collisions might occur. Each collision is listed by its location and then the day of the week (1 through 7) it occurred. Obviously, to cover all twenty-four hours may entail numerous sheets (as might the two previous reports, depending on the number of collisions that occur during the reporting period.)

D. TITLE: TRAFFIC CITATIONS BY LOCATION AND TYPE
SOURCE DOCUMENT: Traffic Citation Reports
FORMAT: Figure 9. P. 36.

Similar in format to the previous reports, this is a listing of each traffic citation by the location at which it was given and the primary violation cited. Two spaces for entering totals are included so that the reader can identify the number of citations issued for certain streets or areas and the total number of traffic citations issued during the reporting period.

E. TITLE: TRAFFIC CITATIONS BY LOCATION AND TIME
SOURCE DOCUMENT: Traffic Citation Reports
FORMAT: Figure 10. P. 37

The format for this report is identical to that of Figure 8, "Collisions by Time and Location", except that citation is the key element.

F. TITLE: TOTAL CITATIONS BY OFFICER AND TYPE
SOURCE DOCUMENT: Traffic Citation Reports
FORMAT: Figure 11. P. 38

This report is a breakdown of traffic and parking citations issued by each officer, by type of violation. The format utilized allows for ease in the identification of total citations written by each officer by type and totals for the department.

TRAFFIC ANALYSIS

TRAFFIC CITATIONS BY LOCATION AND TYPE[illegible]

CALIFORNIA POLICE DEPARTMENT
TRAFFIC ANALYSIS

TRAFFIC CITATIONS BY LOCATION AND TIME

- 37 -

CALIFORNIA POLICE DEPARTMENT

TRAFFIC ANALYSIS

Report Date

Mo. Dy. Yr.

Reporting Period

Mo.	Yr.
-----	-----

TOTAL CITATIONS BY OFFICER AND TYPE

[illegible]

Figure 11

4. SUMMARY OF OFFICER ACTIVITIES

TITLE:	Monthly Summary of Patrol Officer Activities
SOURCE DOCUMENT:	Officers' Daily Activity Report or Dispatch Records
FREQUENCY:	Monthly
FORMAT:	Figure 12. P. 40

This report is also a summation of a month's activity and provides a breakdown of each patrol officer's activity, by category. Thus, an example entry would include the officer's name, and the number of traffic citations, arrests, reports, recovered vehicles, F.I.'s, and warrants he was responsible for that month.

A summation of total hours worked and breakdown of number of hours expended in assigned, self-initiated, traffic and patrol activities is also available, including percentage of time spent on patrol.

Total columns for each watch and the entire division are included for comparison purposes.

A sample Daily Activity Report and Monthly Activities Recap (P. 41 & 42) have been included for those departments who will manually process activity data. Data from the individual activity form (Figure #13) could be transferred to the Monthly Activity Recap form (Figure #14) on a daily basis. At the end of the month, each officer's monthly total could be transferred to the Monthly Summary form, thus displaying a monthly breakdown of activities by officer.

INFORMATION USAGE: Important supervisory information is derived from this report. It provides a method of measuring officer performance and patrol division performance in terms of numbers of activities and totals. The format also allows comparisons between officers and watches. This report can be utilized by supervisors to measure individual officer performance and to monitor time spent in the four activity categories identified (assigned, self-initiated, traffic and patrol).

This report is not meant to be used as the basis for workload studies. However, with some modification in the structure of the form, it could be used as an alternate source document for conducting workload studies (dispatch cards are the primary source documents for workload studies).

Report Date		
Mo.	Dy.	Yr.
Reporting Period		
Mo.	Yr.	

[illegible]

Figure 13

[illegible]

MONTHLY ACTIVITIES RECAP

OFFICER'S NAME				I.D. No.		WATCH		MONTH		YEAR		FIELD SUPERVISOR				SUPERVISOR APPROVING							
DATE	TRAFFIC CITATIONS			FELONY ARRESTS		MISD. ARRESTS		JUVENILE ARRESTS		REPORTS			RECOVERED VEHICLES		F.L.'s		WARRANTS		DUTY TIME	ASSIGN TIME	INITIATED ACTIVITY	TRAFFIC ACTIVITY	PATROL TIME
	Haz	Park	Other	Call	OBS	Call	OBS	Call	OBS	Crime	Traff	Other	Call	OBS	PED	Auto	Assign	Serve	Hours	Hours	Hours	Hours	Hours
1																							
2																							
3																							
4																							
5																							
6																							
7																							
8																							
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26																							
27																							
28																							
29																							
30																							
31																							
TOTAL																							

Figure 14

Graphic Presentation

Graphic presentation is a technique which often enhances the understanding and clarification of data. Graphs facilitate rapid identification of changes in data and possible trouble spots, and allow ease of comparison. The following are examples of how collision and citation data derived from the included traffic analysis reports, could be graphically portrayed.

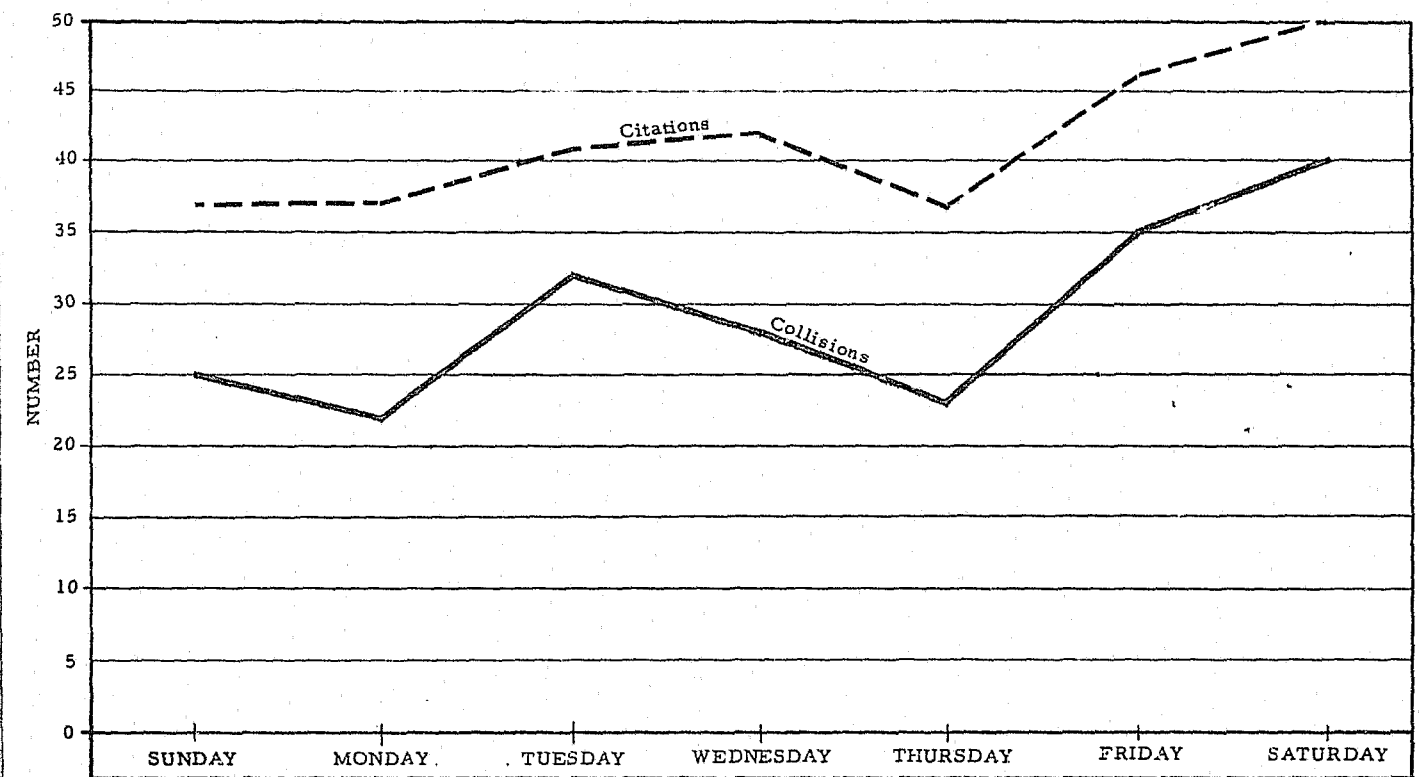
The first graph shows the number of collisions and citations by day of week. It could be drawn on a monthly, quarterly, or annual basis. The graph indicates the number of citations and collisions occurring on each day of the week, what the high and low days were and whether or not the high collision day(s) correspond to the high citation day(s). Graph number three shows the numbers of collisions and citations by location (beat). Traffic collisions and the level of enforcement activity in each patrol area is identified in this graph.

CONTINUED

1 OF 2

Figure 15

COLLISIONS AND CITATIONS BY DAY OF WEEK



COLLISIONS AND CITATIONS BY HOUR OF DAY

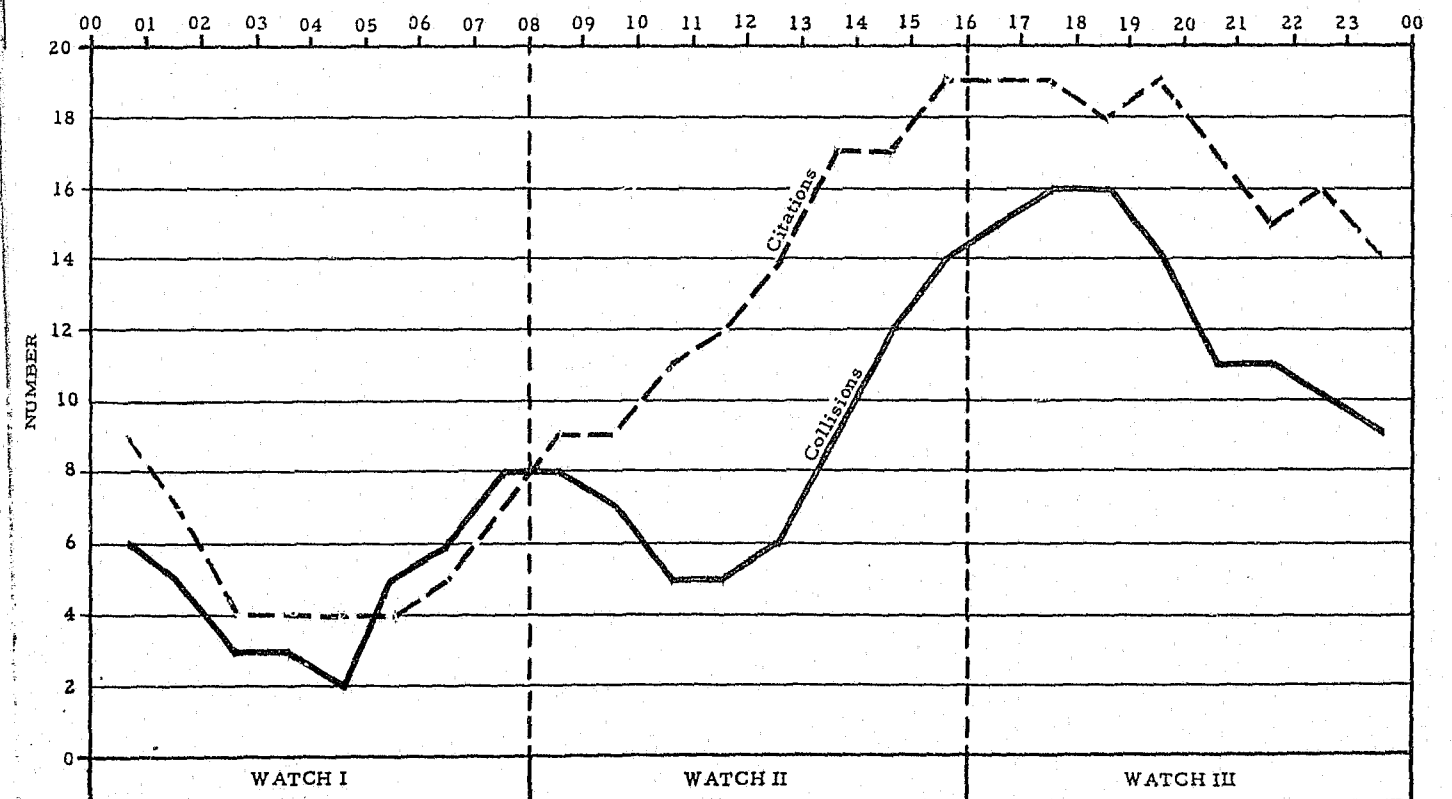
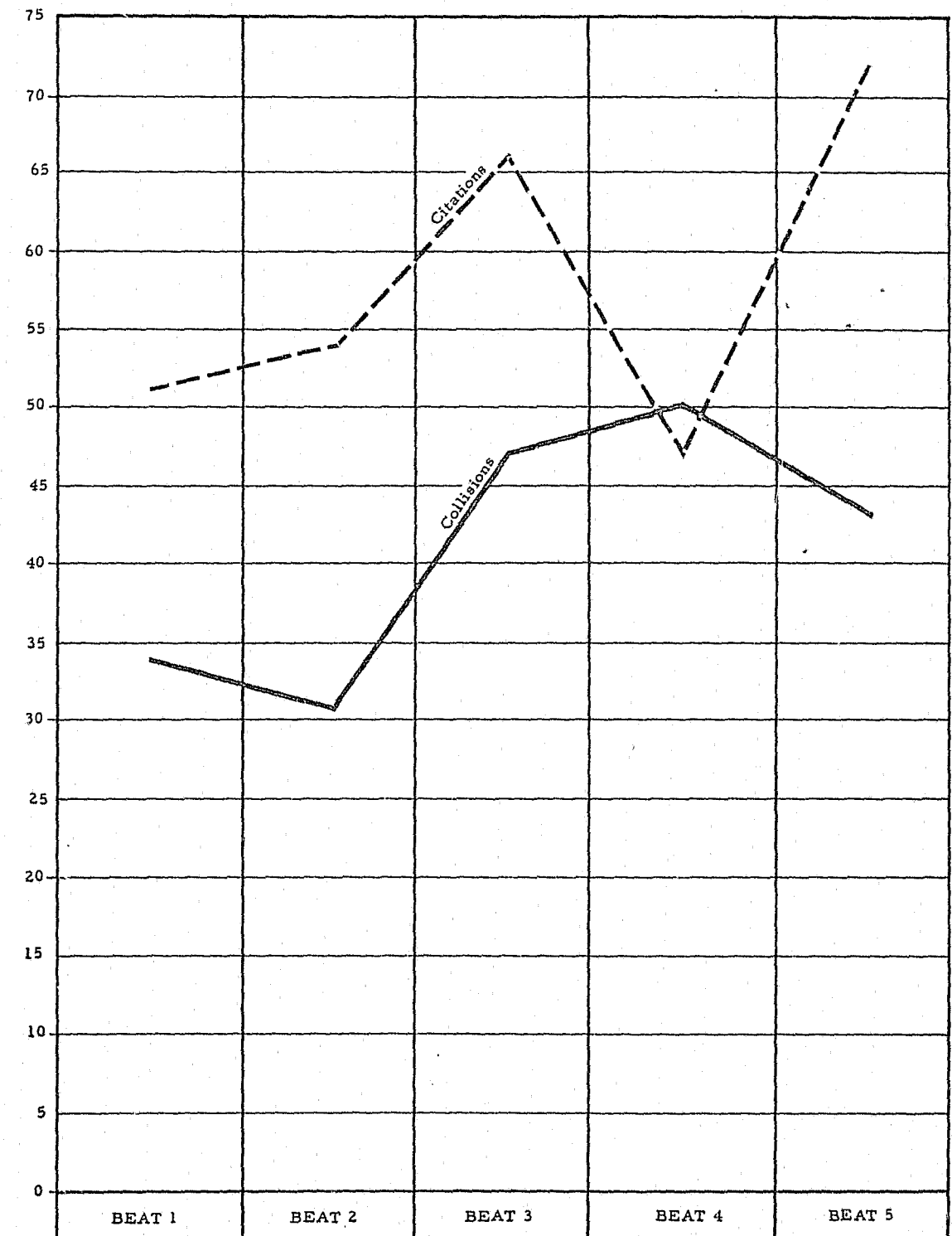


Figure 17

COLLISIONS AND CITATIONS BY BEAT



SUMMARY

If the law enforcement administrator is to positively affect the efficiency and increase the effectiveness of his department, he must have access to timely, accurate information concerning its operation.

The best method of supplying this information is by the use of a formal data processing system, be it electronic, automated or manual.

This document has identified the basic management information requirements the law enforcement administrator is faced with and suggests forms for collecting and organizing information to meet these requirements.

Obviously, this document does not deal with all the information which an administrator may feel is necessary to manage his department. However, it does provide a standard basis of information from which more comprehensive programs could be developed.

It is hoped that by using all or some of the ideas or forms contained in the publication local law enforcement agencies can improve their information systems and thereby improve their operations.

APPENDIX A

GEOGRAPHICAL DIVISION OF A JURISDICTION (City/County)

Before procedures for the collection and processing of law enforcement data can be implemented, the jurisdiction (city or county) must be subdivided into manageable sections or parts. The purpose of this division is to provide a means for ready identification of areas of criminal and other activity which require police service within the jurisdiction.

In order to ascertain generally where police service activities are occurring, there must be an accurate method of identifying the location. After this is accomplished, the means of identification is entered on standard police field reports, which after examination and summary, reflect the frequency, type, and time of activity by location. The distribution and direction of police resources is based on the evaluation of such information. In addition, this allows for a measurement of equal workloads for members of the patrol division and police service in proportion to need.

The National Advisory Commission on Criminal Justice Standards and Goals recommended in the Report on Police that, "A census tract, reporting area, or permanent grid system should be developed (by every police agency) to determine geographical distribution of data..."¹

Though numerous geographic division theories, concepts and definitions exist among those knowledgeable in the field of distribution and assignment of patrol forces, there is general agreement that at least two levels of division are required. These are small reporting districts, areas, grids, etc., and larger patrol areas or beats into which the smaller division are grouped for patrol purposes. For purposes of this document the smaller areas are referred to as "reporting areas" and can be defined as "small geographical areas into which a jurisdiction is divided for the purpose of crime reporting and collection of statistics." The larger units will be referred to as beats.

It should be noted that some large jurisdictions utilize three levels of division which include, from smallest to largest, reporting area, beat, and district. In these instances, a large number of reporting areas necessitates the use of districts into which the reporting areas

¹The National Advisory Commission on Criminal Justice Standards and Goals, Report on Police (Washington, D. C.: Government Printing Office, 1973), pp. 199

are grouped. The main use of the district designation is to facilitate the locating of a reporting area. Many California police agency jurisdictions will not require a large number of reporting areas, thus the district designation may not be needed.

In some jurisdictions, reporting areas correspond to the federal census tracts. However, this method of designation has certain disadvantages. Census information is usually only available every ten years and census tracts are usually only drawn for jurisdictions of 50,000 population or more. Also, due to jurisdictional boundaries, census tract reporting areas would not be feasible for some communities. Another method of outlining reporting areas is to divide the jurisdiction into permanent grids of a selected size such as one quarter square mile or a particular number of square blocks.

Taking into account that there probably is no one "best" method for determining the size of reporting areas within a particular jurisdiction, it is recommended that the following procedure be utilized.

PROCEDURE FOR DIVIDING A JURISDICTION

1. Mount a large map of the jurisdiction which clearly shows major streets and natural boundaries, and cover it with a transparent plastic overlay.
2. Using a red grease pencil for writing on the overlay, divide the jurisdiction into reporting areas. The specific size of a reporting area is dependent upon population density, type of general area (i. e., business, residential, rural, etc.), and previous event activity if such data is available. In a business district or heavily populated residential area where block sizes are uniform, each reporting district should contain eight (8) to twelve (12) square blocks. In rural areas, thinly populated residential areas, and areas with irregular or no block designations, reporting areas may vary in size from 1/4 square mile on up. However, reporting areas should not be too large or their use as location indicators will be defeated. The reporting area boundaries should follow natural boundaries, streets, railroad tracks, freeway routes, etc. Consideration should also be given to assigning individual reporting areas to prominent structures, shopping centers, parks, schools, etc., to adequately identify the activity requiring police service which occurs in or around and is related to such locations.

3. Number each reporting area consecutively. If the number of reporting areas approaches or exceeds 99 for the total jurisdiction, the numbering should begin with 001. If not, then the numbering should begin with 01. If districts are used, the reporting area number will always be preceded by the district number. The total number of reporting areas in a district should not exceed 99. This is to allow for sufficient spaces to be "reserved" on source documents if mechanical or electronic processing is or may be used by the agency.

In the larger jurisdiction where district divisions are used, it is generally advisable to leave some numbers unassigned in each district. Thus, when the need arises to identify additional reporting areas in the district, two digit numbers will be available without revising the total numbering system, or programming to accomodate an additional digit.

The figure on page 51 illustrates an actual example of a portion of a city which has been divided into reporting areas. Each area has been assigned a reporting area number using the above method.

4. From the map overlay a street number index by each reporting area should be completed. An example of a Street Number Index is displayed on page 52.

The development of the Street Number Index is a time consuming, clerical job. However, it must only be done one time, and when completed it provides permanent location data from which all source documents can be coded with the reporting area. Each street address and intersection will be identified with a reporting area number. Personnel will use these numbers, to identify locations for data processing purposes, on communications dispatch records as well as all crime, arrest, traffic, and incident reports.

Figure 18

REPORTING AREAS

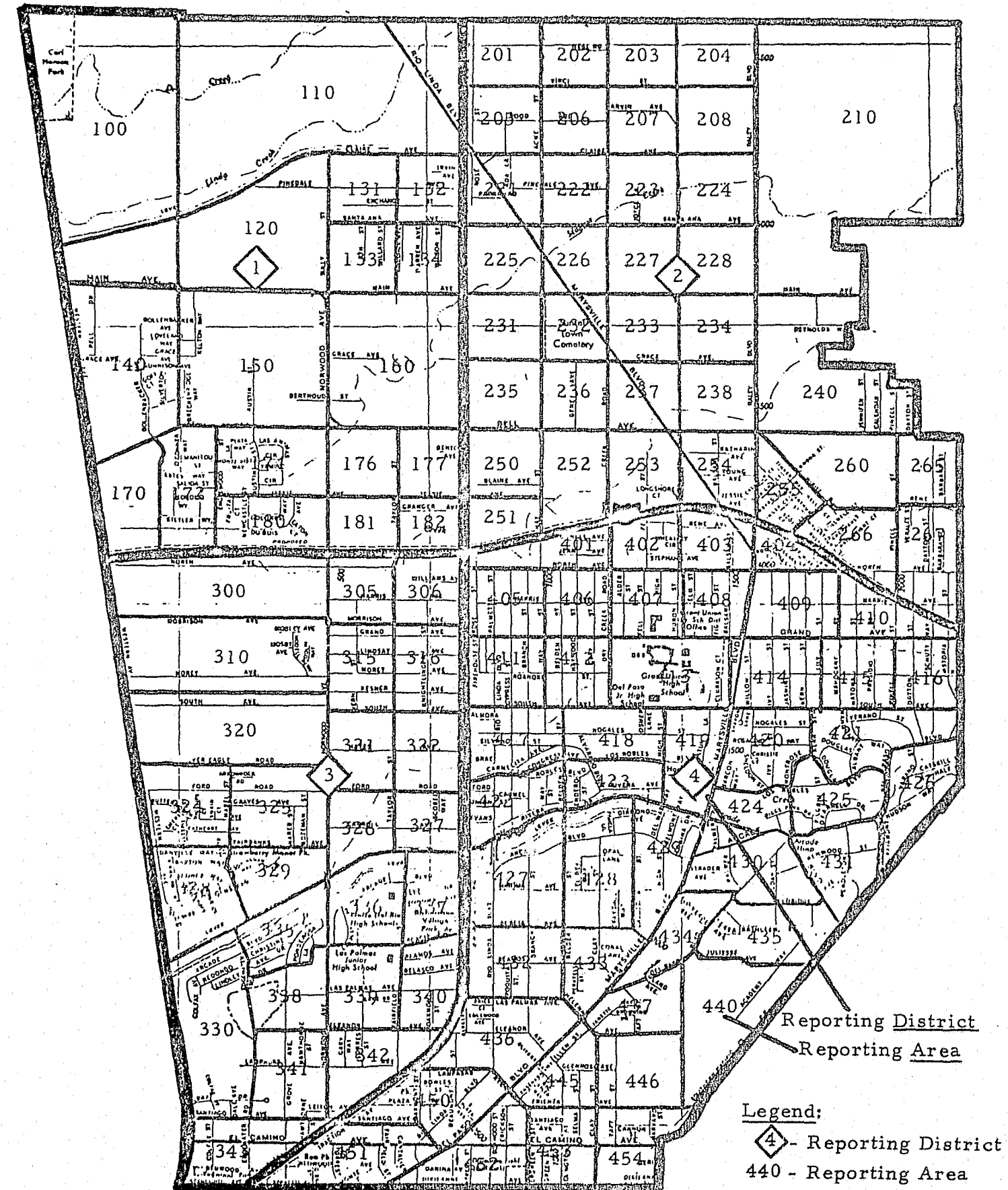


Figure 19

Illustration of Street Number Index with Reporting Area

MARYSVILLE BLVD. 2901 - 5200		
Address		Reporting Area
2901 - 2999	odd	433
2900 - 3100	even	434
3001 - 3299	odd	429
3100 - 3300	even	430
3301 - 3599	odd	419
3300 - 3400	even	424
3400 - 3600	even	420
3601 - 3799	odd	414
3600 - 2800	even	414
3801 - 3999	odd	408
3800 - 4000	even	409
4000 - 4100	all	403
4100 - 4300	all	244
4300 - 4400	all	243
4400 - 4600	all	237
4600 - 4650	all	233
4650 - 4800	all	232
4800 - 4900	all	226
4900 - 5000	all	225
5000 - 5200	all	221

END

7 abcs/more