INTEGRATED CRIMINAL APPREHENSION PROGRAM

The Role of Communications in Managing Patrol Operations

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INTEGRATED CRIMINAL APPREHENSION PROGRAM

THE ROLE OF COMMUNICATIONS IN
MANAGING PATROL OPERATIONS

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1. INTRODUCTION

1.1 Background of the ICAP Program

The Integrated Criminal Apprehension Program (ICAP) represents a recently developed police service delivery concept that focuses on building a structured approach to the management and integration of police services. The program has emanated from the accumulated experience and literature developed through a number of LEAA-sponsored police programs. The unique feature of ICAP is that it provides an overall framework for the integration of the various police service delivery functions and support services. Further, it establishes a solid developmental base for increasing the overall effectiveness and efficiency of a police organization.

The emerging maturation of the police function has been stimulated by the growing recognition of certain key issues that have surfaced over the last decade. First, there is an apparent conflict in police goals. Recent studies have dispelled the myth that the police officer spends most of his time engaged in crime-related activities. On the contrary, it is now realized that, on the average, police officers spend only a small proportion of their available time in crime-related activities. In fact, far greater blocks of a police officer's time are consumed by activities related to crisis intervention and order maintenance. The conflict arises when one considers that police organizations place crime-related activities at the top of a goals hierarchy when most of their time is, by demand, consumed in other, non-crime-related activities. This apparent conflict has stemmed from the ever-increasing
pressures placed on the police to become more responsive to a multitude of community needs. The net results of such pressure have been a poorly organized concept and logic flow of the police function and an abrogation of the crime responsibility.

Second, the police have assumed an almost totally reactive style of administration and operation. This stance largely has been precipitated by constant and increasing demands for police service. Additional factors include constricting court decisions, police unionization, increased litigation, and increased political visibility. The response to this litany of pressures has been the creation of a style of policing characterized by low productivity, unstructured management of resources, and an emphasis placed more on controlling available police manpower.

Third, a proliferation of police-related programs has been developed, far too often without first obtaining insight into the range of feasible alternative solutions available to apply to a particular problem. The rush to be innovative, brought on by public pressure and the availability of Federal funds, has created both positive and negative results. On the plus side, there now exists a large body of police literature and experience that can and should be integrated into the police service delivery process. On the other hand, many programs have been developed that were competitive instead of compatible, poorly thought out instead of well conceived, and peripheral to the police function. Thus, developmental efforts in the police area have dwelt on solutions, while backing into the analysis and decision processes that should logically occur before solutions are developed.
Finally, because the police role encompasses a wide range of extremely complex and involved functions, attempts to quantify specific police tasks for the eventual improvement of productivity have proven to be extraordinarily difficult. Most departments have attempted to meet the challenge of local austerity pressures and increased productivity by emphasizing the improvement of specific techniques and increased organizational output (such as increased arrest rates). As a result, heavy emphasis has been placed upon the enhancement of training through more comprehensive recruit classes and stepped-up inservice training of patrol officers. Although these efforts have certainly contributed to increased police effectiveness in a number of departments, overall the emphasis on improved skills and output has failed to address the more significant problem of increased organizational effectiveness and efficiency.

To resolve the dilemma of police priorities and proper utilization of resources, the ICAP concept introduces a structured, systematic approach to the planning, development, and integration of police functions and services. Of paramount importance to the ICAP concept is the recognition that, in normal operations, a majority of departmental resources are committed to the patrol function. These resources represent perhaps the best potential for increasing organizational effectiveness, with a special emphasis on effectively managing the patrol workload and increasing quality arrests, case clearances, and successful prosecution of the serious, habitual offender. Whereas previous efforts to modernize police operations have used approaches that often were fragmented and compartmentalized, the ICAP concept permits consideration of all police service delivery activities and
functions within the context of the department's stated goals and objectives. Thus, ICAP offers a uniform approach to structuring and integrating the various police activities (i.e., patrol, investigations, crime prevention, traffic, etc.) to meet the overall goals and objectives.

It is clear that a number of steps need to be taken in the direction of a more systematic approach to the management and delivery of police services. First, the police must assume the initiative by accepting crime as a responsibility and by organizing themselves to effectively direct activities to maximize time and available resources. Second, the large number of police programs and concepts must be integrated into a logic framework, so that positive interrelationships of functions and activities can be defined, properly ordered, and effectively utilized. Finally, sound management practices must be adopted to increase the effectiveness and efficiency of police organizations while reducing, or at least stabilizing, spiralling costs.

1.2 The Structured Approach to Police Service Delivery

The ICAP program stresses the introduction or enhancement of a decision model into everyday police operations. Unlike most police service delivery models, which have stressed the delivery of service to the community based upon time-honored traditions and informal evaluation of results, the ICAP program introduces a decision-based model, as shown in Figure 1-1. This model clearly recognizes the need for systematic collection and analysis of information for input into the police decision-making process. Thus, the ICAP approach is characterized by:
Figure 1-1. ICAP Model Logic Flow and Program Objectives
• Formal planning.
• Decisions based on empirical information and structured methods.
• Decision components easily recognized, measurable, and subject to manipulation, based on feedback.
• Operational identity of an analytic capacity.
• Prediction-oriented and active empirical perspective.
• Uniformity and consistency of overall direction.

Tied to the ICAP model and logic flow as sets, subsets, and further development of the hierarchy of service delivery management models are the great number of individual police concepts, methods, and techniques. These have functioned competitively and autonomously in the absence of a logical structure for their ordering and manipulation within police organizations. The following paragraphs provide a brief discussion of each of the key components of the ICAP model.

Generally speaking, a police manager can improve his problem-solving and decision-making skills by using information efficiently. Because information is the raw material with which police managers work, the most effective way to improve police managerial performance is to improve the use of information. Since the ICAP concept focuses on the analysis of information to enhance the quality and types of decisions concerning police service delivery, the reference here is to information of an operational
rather than administrative nature. Hence, the data collection component of the ICAP model is concerned with the collection and ordering of information generated by department field elements such as patrol, investigations, traffic, juvenile, warrant service, and intelligence units.

By definition, analysis is a step in the ICAP process in which information derived from the data collection phase is subjected to review to identify significant facts and derive conclusions. For purposes of ICAP implementation, three types of analyses are identified:

- Crime analysis.
- Operations analysis.
- Intelligence analysis.

It is important to note that the term analysis, as used in the ICAP context, should not be confused with the term planning. On the contrary, the analysis functions described in the following paragraphs are intended to be placed within the particular division by which the information derived from analysis will be used in day-to-day operations. This is in stark contrast with the traditional police concept of a planning and analysis function that is placed organizationally within the administrative bureau or command section and focuses more on short- and long-term planning for overall system improvement. In a broad sense, the combined functions of crime analysis, intelligence analysis, and operations analysis occupy an integral part of the decisionmaking process for allocation and deployment of resources. Together, they provide the essential information input for both strategic and tactical decisions made by police commanders and managers at all levels of the organization.

1-7
The term *planning*, as used in the ICAP concept, connotes a structured approach to police decisionmaking. With its emphasis on operational decisionmaking at all levels of the department, the ICAP approach is distinctly different from the traditional planning and research function. The latter is required to handle a variety of other important supportive and evaluative activities. Rather, ICAP planning requires that the police adopt a more structured, formalized management model for making police service delivery decisions that rely on information inputs from a variety of sources. In effect, managers assume an active role in the planning process, rather than focusing their attention primarily on direct supervision.

Under the ICAP concept, the term *police service delivery* includes all activities performed in a department that ultimately result in some form of police service provided to the community. Thus, although the department's patrol function provides direct, 24-hour services, other departmental functions and activities -- investigations, traffic, crime prevention, and community services -- also provide services either directly (such as in crime prevention) or indirectly (such as investigations). The key issue addressed by the ICAP concept is that police service delivery activities, although performed by various departmental units, are all interrelated and their integration into the police decisionmaking process is necessary if overall departmental goals and objectives are to be achieved. In addition, those personnel responsible for making day-to-day decisions must be given a sense of overall departmental priorities, with crime-related services placed at the top of the list.
The foregoing discussion of the ICAP program and service delivery model has provided the background for introduction of the various ICAP concepts, methods, and techniques addressed in other ICAP manuals. These have covered such topics as crime analysis, patrol operations analysis, a model records system, and training. This particular manual addresses the subject of communications, specifically the role of the communications process in managing patrol operations. Subsequent sections of this chapter provide an overview of traditional versus current perspectives on managing patrol operations with special emphasis on the critical support role of the communication function in ICAP program development.

Chapter 2 describes the ICAP implementation process and the resulting departmentwide effects, especially those impacting on the communications process. Chapter 3 details the various concepts and methods that can be implemented as part of the overall department effort to manage the demand for patrol service. Chapter 4 outlines the policy, system, and personnel development considerations necessary to implement the ICAP communications process.

1.3 Introduction to the ICAP Communications Process

Throughout this manual, repeated reference will be made to the ICAP communications process. While considerably more detail will be provided in later chapters concerning the background, techniques, and implementation requirements involved in adopting the process to departmental operations, a brief overview of the material follows.

For purposes of this immediate discussion, the ICAP communications
process refers to the various policies, concepts, and techniques employed by communications center personnel -- in conjunction with patrol commanders and supervisors -- to assist in managing the calls-for-service workload. It is more the rule rather than the exception to find that police departments throughout the nation have been plagued by an ever-increasing demand for police services. The burden has been especially felt by communications center and patrol personnel in their attempt to orchestrate the field resources of a department towards meeting the calls-for-service demand.

Police departments have found that repeated attempts to manage the calls-for-service demand and develop innovative patrol strategies have been continuously stifled by the fact that dispatch and patrol effectiveness have been measured principally by response time. This reliance on response time has as its foundation the view that citizen satisfaction with police service can be achieved through a rapid response to all calls-for-service. Moreover, it has been the view of many police administrators and planners that, in the case of crime-related calls-for-service, a rapid response by patrol units will significantly increase the likelihood of apprehension.

Recent studies have shown that rapid response to only a small portion of crime- and emergency-related calls-for-service are likely to result in apprehensions. Studies also have shown that citizens will accept reasonable delays in the dispatch of service calls. Moreover, these studies have demonstrated that delayed service call responses can be accomplished
while still maintaining a high level of citizen satisfaction with police services. What this suggests is that police departments can develop alternative response methods and realistic response time goals and, at the same time, create an environment that supports the management of calls-for-service and the development of effective patrol strategies to address field problems.

Alternative methods involved in the management of the calls-for-service workload, and ones that have been incorporated into the ICAP communications process include such techniques as call-for-service screening and prioritization, as well as alternative service-call handling techniques such as: Call stacking and the use of civilian patrol aides; referrals to other agencies; and the administrative handling of low-priority calls through telephone, mail-in, and walk-in reports.

The process of screening and prioritization calls-for-service requires that those personnel in the communications center exercise discretion and assume responsibility for screening incoming calls-for-service to elicit the necessary information about the call so that a priority ranking can be established. This ranking can be used subsequently to determine an appropriate department response.

The screening and prioritization of calls facilitates management of the calls-for-service workload. The process identifies those calls that either require an immediate dispatch, delayed response, or referral to another unit in the department for administrative handling.

For those service calls that can be delayed, the dispatcher has the
option of using a technique called stacking, which means that lower priority calls are held by the dispatcher until the patrol unit normally assigned the call returns to service from a previous call or completes a preplanned patrol activity such as directed patrol. Stacking enables departments to free-up blocks of time for uninterrupted, directed activities.

The process of calls-for-service referral, both within the agency for administrative handling and outside for social-service-agency-type problems, usually is handled by communications center call-takers.

The use of civilian patrol aides consists of assigning low-priority, routine, nonemergency calls to civilians who perform limited mobile patrol functions in the field. The overall objective of the methods described above is to create sufficient amounts of patrol noncommitted time for accomplishment of directed patrol activities.

1.4 Definition of Terms

Each of the methods for managing the calls-for-service demand is discussed in more detail in Chapter 3. To clarify the discussions, a brief glossary of fundamental terms follows. In addition, Figure 1-2 shows a layout of a typical police department communications center. This illustration establishes a visual perspective of the relationships between the key personnel definitions provided in the following text and the proper location in the communications center. Finally, Figure 1-3 provides a graphic illustration of the various policies, methods, and techniques incorporated into the ICAP communications process.
Figure 1-2, Functional Layout -- Communications Center
Call for Service

Police Communications Center

Call-Taker

Call Prioritization/Screening Process

- Requests Information from Caller
- Checks Against Priority Policy
- Considers Patrol Unit Availability
- Considers Patrol Commander's Plan for Directed Patrol
- Time of Day/Night, Weather
- Weighs Factors (Analysis)
- Decides

Supervisor

Patrol Commander

Problem

Decision: Referral

- Officer or Civilian Takes Telephone Report
- Caller is Advised to Come to Station to Report
- Caller is Advised to Mail-Report
- Notifies Caller of Delay & Expected ETA

Decision: Dispatch Mobile Unit

- Immediate
- Cross District Dispatch
- Delay
  - Calls Stacked
  - Time Blocked
- Number of Units
- Sworn/Non-Sworn Officers/Unit
- One-Two Officer Unit

Dispatcher

Transmits Radio Message(s) or Hold as Appropriate

Patrol Commander Monitors Traffic

Figure 1-3. ICAP Communications Process
• **Screening and Prioritization** -- The process of eliciting necessary information concerning an incoming request for police service so that a priority ranking can be established and subsequently used to determine the appropriate department response. The overall process facilitates management of the calls-for-service workload by identifying those calls that may be immediately dispatched, delayed for subsequent response, or referred to another organizational element for administrative handling.

• **Stacking** -- A Technique used by dispatchers to control the calls-for-service response of patrol units. Low-priority service calls can be stacked or held in queue by the dispatcher until a unit normally assigned to the call returns to service. Calls-for-service stacking normally is accomplished during peak activity periods when sufficient mobile units are not available to handle the influx of service calls. Stacking can also be used by dispatchers to hold low-priority calls for purposes of releasing sufficient blocks of time for structured patrol activities.

• **Call-for-Service Referral** -- A mechanism or process
in which calls-for-service are screened for content and either a mobile unit dispatched or the caller is referred to another organizational element responsible for making nonmobile responses to the citizen's particular need.

- **Phone-In, Walk-In, Mail-In Reports -- Nonmobile responses to referred calls-for-service in accordance with procedures that permit trained personnel to screen referred calls, take incident reports from the caller over the telephone, request the caller to proceed to a designated police station to file a report, or send the caller the proper reporting form and request that he mail it in after completion.**

- **Use of Nonsworn Personnel for Certain Types of Calls-for-Service -- A policy by which civilian police aides can respond to those calls-for-service where the authority and capability of the sworn officer to use force are not a requirement of the response. Response to calls on found stolen vehicles, traffic incidents where no injuries have occurred, reports of malicious mischief, or reports of larcenies are examples.**

- **Communications -- The means by which command and**
control of police resources is exercised. Communications command and control systems are typically composed of two basic parts: First, a status, requirements (calls-for-service), and reporting subsystem; second, a planning and direction (response to calls-for-service) subsystem. Communications is simply the means by which requirements (calls-for-service) are fed to command/control and response is fed to resources (patrol, etc.). Command is the authority and responsibility vested in certain department individuals to utilize department resources, initiate planning and deployment, and direct and coordinate resources for accomplishment of department goals and objectives. Control is the authority that may be less than full command exercised by someone (communications center or patrol supervisor, call-takers, dispatchers) over part of the activities of other elements in the organization.

- **Call-Takers** -- Communications center personnel assigned the responsibility for receiving incoming calls-for-service over the telephone. When not in a combined call-takerdispatcher function, they perform screening and prioritization of calls-for-
service to determine appropriate departmental response (i.e., dispatch of patrol unit, administrative handling, etc.).

• **Dispatchers** -- Communications center personnel assigned the responsibility for communicating calls-for-service from the communications center to appropriate field units for handling. The term *dispatch* refers to that aspect of the communications center operations that control the activities and response of departmental field units.
2. **IMPLICATIONS OF ICAP IMPLEMENTATION**

2.1 **ICAP Program Components**

ICAP attempts to establish links between analysis, structured decisionmaking, and service delivery. To achieve this, ICAP activities focus on the development of four key components: Analysis functions; patrol management; investigations management; and emphasis on the apprehension and prosecution of the serious, habitual offender.

Three analysis functions are associated with and support ICAP. Crime analysis, intelligence analysis, and operations analysis. Although crime analysis can serve the police department in many ways, it primarily is oriented towards assisting the department in meeting the basic objectives of crime prevention and suppression, apprehension, and recovery of stolen property. A crime analysis unit (CAU) performs this function by identifying, assembling, and disseminating information concerning crime patterns and trends. Crime analysis information can be used by either patrol or investigative personnel to guide deployment and assist in continued investigations. Thus, crime analysis information can support decisionmaking in a number of key areas, including: Patrol deployment, patrol investigations, investigator case screening, special operations deployment, and strategic crime targeting. In conjunction with ICAP objectives, crime analysis provides an excellent resource for identifying, apprehending, and successfully prosecuting serious, habitual offenders. Crime analysis establishes an organizational framework for applying the ICAP model. Since the primary objective of crime analysis is to provide information for (and
thus support) operational planning and patrol deployment, the function serves to operationalize the structured decisionmaking framework for police service delivery. In addition, crime analysis units can have a positive influence in the improvement of operational information flow through the department, as well as the improvement of field reporting, and central records processing of field reports.

Virtually all police agencies become involved in the process of intelligence gathering, usually to support an ongoing tactical operation or to assist some other outside law enforcement agency. The intelligence analysis function can be performed either by an intelligence unit assisted by a computer data bank in a large department or by a single officer assigned to the investigative division or patrolman in a smaller agency. Despite the range of intelligence analysis capacities available in police departments, most focus their activities on the gathering of information relating to criminals, their activities and associations. Intelligence information then is used to guide ongoing investigations and to develop operational strategies and tactics.

The important point to keep in mind about the use of intelligence analysis in the ICAP process is that the responsibility of information gathering rests with a number of key functions within the department. The fact that the patrol officer is in an excellent position to gather intelligence information often is overlooked.

Within the ICAP program, operations analysis involves the continuous collection and analysis of information related to police service delivery.
Ideally, operations analysis provides information support to commanders and managers at all levels of the department so they can make informed decisions concerning the allocation, distribution, and deployment of department resources. Whereas crime and intelligence analysis focus on criminals and criminal activity, operations analysis focuses on the support of strategic and tactical decisionmaking by collecting and ordering information concerning criminal activity, service demand, and available resources. At the strategic level, operations analysis information supports decisions concerning the entire field operations staffing function. Moreover, this information provides the structural framework for deployment decisionmaking. These types of decisions are long-term in nature and are based upon a careful consideration of the total demand for police service delivery in a community. At the tactical level, operations analysis supports management decisionmaking concerning the deployment of available resources by location and activity. This is undertaken in response to service delivery problems related to crime, crisis intervention, and order maintenance activities. Thus, at the tactical level, operations analysis information is combined with information derived from crime analysis. This enables the patrol manager to effectively deploy his resources for meeting all contingencies.

_Patrol management_ is essential since the greatest expenditure of police efforts in response to citizen demands for service is reflected in the patrol response. In addition to a number of general considerations why this occurs, there are operational imperatives for management of the patrol effort by all concerned.
Discussions of patrol objectives generally center on crime prevention and apprehension of the offender. These generalities do not account for the complexity of the patrol operation. More importantly, developing more effective patrol strategies require the patrol supervisor to examine the full scope of patrol activities and responsibilities so that there will be enough time at the right time for crime-directed activities.

On the other hand, an examination of the full range of patrol responsibilities enables the patrol supervisor to identify duties for which he is responsible that are not strictly related to crime control. Such responsibilities reflect the realities of the police mission and mandate that the patrol supervisor's crime control planning must be closely integrated with his planning and implementation of tactics designed to address these parallel responsibilities.

Patrol is both the chief user and principal supplier of analysis information. As a user group, patrol should receive information both from the crime analysis and operations analysis units. Crime pattern bulletins, operations reports, or patrol area activity summaries should be routinely available to patrol decisionmakers. This information then is used by patrol commanders and supervisors to deploy their resources according to various tactics based on the analysis data. As the principal responder to calls-for-service, patrol's record of time consumed on various activities becomes the major information input to operations analysis. The results of operations analysis, in the form of activity breakdowns and potential time utilization, becomes an essential ingredient in decisions regarding patrol time utilization.
The analysis process and products serve the patrol supervisor by defining the crime and service problems that exist in his time and geographic area of responsibility. Analysis provides information to aid him in making decisions about when, where, and against what types of crime targets he should deploy his personnel.

The patrol supervisor must address overlapping crime, service, traffic, and community relations issues simultaneously. Effective implementation of patrol plans requires that the tactic designed to attack any single problem must be effectively integrated with all other tactics being implemented within the supervisor's patrol area. Similarly, the response and directed-patrol assignments of individual patrol officers in the supervisor's command must be clearly defined and integrated so that all responsibilities are properly met in the most efficient and effective manner.

The purpose of operations analysis is generally considered to be a determination of overall patrol manpower needs and then distributing the resultant workforce in proportion to the workload. As noted previously, this clearly should be accomplished according to time (that is, into shifts in such a way that the manpower available during a given hour relates reasonably to the total work requirements during that hour) and by area (that is, that the individual patrol sectors are assigned patrol officers in some reasonable relation to the geographic distribution of service demands). Before a supervisor undertakes the task of deploying available manpower according to problems identified by crime analysis, he first must be assured that the expected level of calls-for-service demand in his area is properly and effectively managed.
The demand for patrol services has been commonly assessed in terms of raw counts of incidents. This approach is essential for an understanding of what the patrol division (or patrol supervisor) confronts. However, for operations analysis, it is not how many but rather how much time and resources are demanded for various levels of service.

The management of the patrol workload requires careful consideration of a number of time-related issues:

- Establishing a clear definition of how patrol time is currently expended.
- Identifying that portion of the calls-for-service workload that might be effectively handled by some means other than dispatching a patrol officer.
- Controlling the dispatch response to calls-for-service so that blocks of time are available for officers to execute problem-directed patrol tactics.
- Expanding the role of the patrol officer in preliminary investigation.
- A broadened concept or workloads, to include the workload requirements of directed patrol activities, as well as calls-for-service and administrative requirements.
- The matching of resources to workload demands.
Investigations management concentrates on the enhancement of the investigative activity of the patrol force, and the development of investigative case management techniques, through six key components: Patrol's role in the initial investigations, case screening, management of continuing investigations, police/prosecution relationships, monitoring of the investigative system, and police agency organization and allocation decisions. The objectives of a managed investigation process are:

- Assigning case investigations more effectively.
- Improving on the quality of case investigation and preparation.
- Monitoring the progress of case investigation, and making decisions concerning continuation.

The overall management of investigations should result in an increase in arrests for serious crimes that are prosecutable, ultimately leading to an increased number of convictions.

Emphasis in the ICAP program on the serious, habitual offender has stemmed from a recognition that a major portion of all crime is committed by a relatively small number of habitual offenders. In addition, it has become apparent that law enforcement agencies and prosecutors must combine their efforts to direct additional attention to this segment of offender population. The integration of police objectives in ICAP and prosecutorial emphasis in the Career Criminal Program serves to identify and highlight the common links between the programs and enhances the police and prosecutorial functions as they relate to the common objectives.
of identification, apprehension, conviction, and incarceration of the serious, habitual offender.

The basis for linking these efforts stems specifically from the mutual interest of the police and prosecution in quality case development and from the common functions of early identification and priority processing of the serious, habitual offender. These elements are essential to the proper investigation and preparation of these cases. The highlighting of the police/prosecutor functions serves to establish a systematic link and focus to ensure continued attention to these cases from the identification of the offender as a career criminal through case adjudication and sentencing. Coordination of police and prosecutor efforts directed at the career criminal is crucial for full case development and successful prosecution.

Literature developed in support of ICAP refers to the program as either a model or a method, depending upon the context in which the terms are used. In reality, ICAP is both. As a model, ICAP stresses the overall application of systematic analysis and operations planning for providing insight into the consequences of police service delivery decisions. As a method, ICAP suggests a simplified technique or process for step-by-step decisionmaking that should occur at all levels of the police department. Both in the context of a model and a method, ICAP introduces a structured approach to police service delivery problemsolving, enabling the police manager or policymaker to make an informed decision based upon analysis of available information and an assessment of available, reasonable alternatives.
In terms of local implementation, it is important to draw the distinction between the ICAP program and ICAP project. As a program, ICAP represents an overall plan or system under which action may be taken towards a goal. The overall goals of the ICAP program, the ICAP model, and the program components all become the foundation upon which local law enforcement agencies may develop an ICAP project. Thus, a police department can implement an ICAP project by identifying a set of interrelated tasks that satisfy some objectives. Clearly, the establishment of departmental ICAP objectives is critical to successful project planning and implementation.

2.2 Concepts and Methods in Patrol Operations

Traditional views of police patrol operations have been molded by the introduction of two relatively simple concepts -- mobility and communications. The advent of the patrol car and radio communications have resulted in better patrol coverage, quicker response to calls-for-service and greater flexibility in providing essential police services to the community. Overall, the end result has been an increased ability to achieve the basic police patrol goals of crime prevention and deterrence, apprehension of criminals, provision of non-crime-related services, provision of a citizen sense of security and satisfaction with the police, and recovery of stolen property.

During the 1960's and early 1970's, an alarming rise in crime rates coupled with an ever increasing demand for additional police services resulted in the expansion of police manpower levels and the purchase of
highly expensive and sophisticated equipment. In terms of patrol operations alone, the addition of manpower and equipment was seen as the most effective way to maintain an acceptable level of service and sustain the following three patrol strategies:

- A patrol unit will respond to all calls-for-service as quickly as possible.
- Random patrol will be performed during uncommitted time.
- Self-initiated activities also will be performed during uncommitted time.*

Thus, the primary emphasis was placed upon three elements:

- Crime prevention and deterrence through increased visibility and presence.
- Greater likelihood of apprehension through decreased response time.
- Increased citizen satisfaction by responding to all non-crime-related requests for patrol services in a timely manner.

Recently, this traditional basis for structuring and managing patrol operations has come under serious attack as a result of research and related patrol experiments. These studies have raised questions concerning the use of response time as indications and determinants of patrol effectiveness. Moreover, the recent emphasis placed upon the need for police departments systematically to analyze the amount of time being spent on various patrol activities has resulted in doubts concerning the overriding need to

manage patrol operations based upon calls-for-service response.

2.2.1 Patrol Time Analysis

Since the major questions raised concerning ICAP patrol operations have dealt with time-related issues, it is best to begin the discussion of new concepts in patrol by briefly describing what an analysis of ICAP patrol operations might indicate. To begin with, most police department communications (dispatch) centers capture workload information using a police dispatch or run card indicating the time of receipt, dispatch, arrival, and clearing of all calls. Although not always available, information for purposes of analysis would need to be broken down into the amount of time consumed by four separate categories of patrol activity: calls-for-service, patrol-initiated activity, administrative activity, and noncommitted time. Table 2-1 presents a brief description of each patrol activity, together with the corresponding approximate time consumption figures.

The first category, calls-for-service, includes those activities assigned to patrol officers as a result of citizens' requests for service. Generally, these are broken down into either crime- and non-crime-related calls. They can be broken down further into Part I crimes, Part II crimes, miscellaneous activities, emergency medical service, and traffic activities. Generally, calls-for-service or radio dispatches to patrol cars from the communications center take precedence over all other types of patrol activities. Thus, a call-for-service will, in most cases, preempt another activity in which an officer might be engaged such as a routine traffic
### TABLE 2-1

Approximate Time Consumption Figures for Patrol Activities

<table>
<thead>
<tr>
<th>Category of Patrol Activity</th>
<th>Approximate Percentage of Patrol Time</th>
<th>Types of Activities Performed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calls-for-Service</td>
<td>30</td>
<td>Includes all activities assigned to patrol officers as a result of citizen's request-for-service. Can be further broken down into Part I and Part II crimes, miscellaneous activities, other emergency services, and traffic activities.</td>
</tr>
<tr>
<td>Patrol or Self Initiated Activities</td>
<td>15</td>
<td>Patrol activities actually initiated by the patrol officer. Includes such activities as routine stops, vehicle checks, building checks and (in some cases) followup investigations and patrol-initiated arrests.</td>
</tr>
<tr>
<td>Administrative Activities</td>
<td>20</td>
<td>Includes accounting of time spent eating meals, running errands, or other activities such as equipment servicing or court time.</td>
</tr>
<tr>
<td>Preventive Patrol</td>
<td>35</td>
<td>Patrol time not committed to other activities. Generally referred to as noncommitted time that is consumed by random patrol.</td>
</tr>
</tbody>
</table>
stop or building check.

Typically, calls-for-service (including both crime- and non-crime-related activities) constitute from 20 to 40 percent of the available patrol time. Normally, the calls-for-service ratio is around 35 percent, which indicates that responding to citizens' demands for service constitutes approximately one-third of all patrol time. The remaining time is taken up by self-initiated activities, administrative tasks and, finally, preventive patrol activities.

The point to be made is that calls-for-service typically constitute a relatively small fraction to total police patrol activity, yet most department's patrol systems are driven and evaluated by rapid response to service calls. As a result, other areas of patrol activity have not been developed sufficiently to obtain maximum benefit from the periods when patrol officers are not responding to calls-for-service. These other patrol time factors are discussed in the paragraphs below.

Self-initiated activities constitute the second category of patrol time consumed. This category includes those activities actually initiated by the patrol office during the normal tour of duty and which are directly related to the patrol function. Included in this category are routine vehicle checks, followup investigations and, in some cases, arrests generated by the patrol officer not as a result of answering a service call.

The percentage or fraction of time consumed by self-initiated activities will vary considerably from department to department. Normally, however, this category of activity constitutes from 10 to 20 percent of patrol time.

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What makes this category so difficult to gauge is the fact that, although it consumes a relatively small portion of total patrol time available, considerable variance usually is evident when self-initiated activities of individual officers and within specific patrol beats are examined.

Although most departments encourage their patrol officers to engage in self-initiated activities while patrolling, usually they are either deemphasized or avoided altogether because of the necessity of maintaining an ability to respond rapidly to service calls. Another factor is that, although officers may be engaging in self-initiated activities, many departments are unable to reflect this category in the total patrol workload since communications centers either have not been notified or have not recorded the types of activities or period of time consumed by officers in categories other than calls-for-service.

The third category of patrol activity that would be reflected in a patrol time study is personal and administrative tasks. This includes an accounting of total time spent eating meals, servicing equipment, or engaging in other activities such as writing reports and running errands. Usually, this category of activity consumes 15 to 25 percent of patrol time and occurs in sporadic patterns. Efforts to monitor these activities indicate that the time can be effectively monitored and managed to reduce the impact on patrol operations.

The final category for patrol activity analysis is generally referred to as preventive patrol time, or that portion of total patrol time that is not committed to such other activities as calls-for-service, self-initiated activities, and administrative tasks. Thus, when officers are not engaged
in any one of these three other activities, they usually are engaged in preventive patrol. Traditionally, this has taken the form of random patrol through an assigned beat. Depending upon a number of factors (such as calls-for-service workload, number of available officers, and deployment strategies), preventive patrol activity usually consumes 20 to 40 percent of total patrol time.

Although, at first glance, such a large portion of uncommitted time would seem to offer unlimited possibilities for developing structured patrol strategies, in actuality this time is continuously interrupted and fragmented by calls-for-service and other patrol tasks. In fact, further analysis of uncommitted time in most police departments would probably indicate that only a small fraction of that time is available during the evening hours, when it is most needed. A much larger portion is available in the early morning hours, when the use of noncommitted time for structured patrol activities is least needed.

One other aspect of the preventive patrol category usually not emphasized is the fact that a significant relationship exists between preventive patrol (or noncommitted time) and self-initiated activities. If one were to combine the noncommitted patrol times with those of the self-initiated activities, the resulting figure would be the amount of time devoted to preventive patrol. This assumes that self-initiated activities can be included within the framework and performed within the time frames for preventive patrol.

This perspective offers a number of advantages. First, the two time
consumption figures can be used to reflect the *actual* amount of preventive patrol time and, second, relationships can be drawn between them, such as the type and location of preventive patrol activities as determined by self-initiated activities.

As suggested above, the analysis of patrol workload and uncommitted time represents only the initial step an ICAP department can take to managing the calls-for-service workload. At a minimum, the information should provide a sound basis for adjusting temporal and geographic assignment of officers to daily changes in the calls-for-service workload. This means that ICAP departments must conduct ongoing operations analysis to address the following issues.

- **Workload**, or the demands made for patrol service.
- **Manpower**, available to meet those demands.
- **Assignment** of manpower to shifts in proportions with the occurrence of service demands.
- **Distribution** of manpower to each shift in such a way as to relate rationally to the geographic distribution of service demands.
- **Identification** of the best times for each watch to begin.

Departments participating in ICAP place considerable emphasis upon crime analysis unit development to support day-to-day operations. The overall goals of the program are to match patrol deployment to workload conditions and, thus, to manage the calls-for-service demand so that ICAP
departments will be able to identify and release significant amounts of uncommitted time. This will result in more effective use of available patrol activities, based upon crime and operations analysis. Implementation of the ICAP program requires participating agencies to manage the calls-for-service demand and address crime and service problems through increased patrol operations planning at the line level (i.e., sergeants and patrolmen).

The move from traditional to current thinking concerning the management of patrol operations has been influenced primarily through the conduct of several patrol experiments. These are summarized in the following paragraphs and highlight the need for a structured approach to managing calls-for-service and developing proactive patrol strategies, as well as highlighting the need to provide more structure and direction to preventive patrol activities.

2.2.2 Recent Experiments in Patrol Operations

Perhaps one of the most significant patrol experiments conducted during the last decade has been the Kansas City Preventive Patrol Experiment. Although recently criticized, this experiment has provided valuable insight into the current and potential uses of uncommitted patrol time. The most important conclusion to be drawn from the experiment is that it may be possible for police departments to make substantial changes in the conduct of preventive patrol without seriously jeopardizing community security and citizen satisfaction with police services.

The experiment centered on one specific area of the city covering 15
beats. These beats were divided into three groups according to the level of preventive patrol provided. Reactive beats received no preventive patrol as they did prior to the study while proactive beats received increased preventive patrol activity.

The results of the experiment reported that the levels of police service and citizen feeling of security were not significantly affected by varying levels of preventive patrol. This indicates that departments may adjust patrol operations without damaging community security. Considerable gains can be achieved when one reflects upon noncommitted time and improved ways in which this time can be used to enhance patrol operations.

While the Kansas City Patrol Experiment focused on preventive patrol and the potential for directing noncommitted time, another more recent series of experiments have focused on the need for a rapid response to all citizen requests for service. One study recently conducted in Kansas City suggests that response time needs to be examined very carefully. The results of this second study have suggested that rapid response is only critical to a limited number of calls-for-service, especially those that involve a crime in progress or emergency medical service. The most interesting finding of the study was that the time between an event's occurrence and notification of the police often exceeds the police response time, in some cases by factors ranging from two (commercial robberies) to five (residential/street robberies).

Thus, recent response time studies suggest that the importance hitherto placed upon rapid response times may only apply in a small number of
felony cases, and even then only when they are reported to the police while in progress. More importantly, these studies also indicate that departments can reasonably adjust their response strategies to reflect the reality of citizen/police notification patterns. Thus, efforts that encourage citizens to report crimes as quickly as possible may enhance the ability of a department to respond more effectively to citizens demands.

Rather than focusing on response time reductions by enhancing communications equipment and ensuring the availability of response units, these studies suggest that departments would be well advised to concentrate on the development of dispatch capabilities for better management of the calls-for-service workload. This would involve an initial screening of calls to determine the priority and, therefore, necessity for and type of police response. This approach has been bolstered by yet another study of response times which suggests that it is possible for the police to control and, in fact, delay service call responses and still maintain a high level of citizen satisfaction. The critical factor in citizen satisfaction is not that a unit be dispatched immediately but rather that an officer arrive on scene at a time previously designated and agreed upon between the citizen and dispatcher.

The experiments noted above have developed information which suggests that other departments could and probably should consider alternative dispatch policies to the customary rapid response and availability of patrol units to answer calls-for-service. To replace and augment previously
developed dispatch strategies, departments should consider the following strategies.

- Call-for-service screening and prioritization.
- Call-for-service stacking.
- Call-for-service blocking.
- Call-for-service referral.
- Call-in (telephone), walk-in, and mail-in reports.
- Use of nonsworn personnel to answer certain types of calls.

The overall purpose of such a strategy is to manage calls for service before they are given to patrol units in the streets. This will ensure maximum response effectiveness for certain high-priority calls. Moreover, it will result in the release of large blocks of uncommitted time for use in developing proactive patrol strategies, such as directed patrol.

In summary, the overriding importance placed upon calls-for-service and reduction of response times has impeded attempts by patrol supervisors and officers to design and implement effective proactive patrol strategies. In most cases, the emphasis has been upon patrol officers' responding to service calls as quickly as possible so that their clearing the scene as fast as possible will allow them to be in service to answer the next call.

Even in cases where proactive patrol strategies have been developed, their implementation has been seriously hampered by the overriding policy to keep as many cars as possible available for calls-for-service. As a consequence, meaningful proactive patrol strategies can be implemented only
after existing response time strategies have been examined carefully and call-for-service priorities and dispatch alternatives have been established.
3. **FUNCTIONS OF THE ICAP COMMUNICATIONS PROCESS**

Through directed patrol strategies and improved preliminary investigations, ICAP can accomplish more effective and efficient crime control and order maintenance within the scope of presently available police resources. The extent to which ICAP can be operationalized and its ambitious goals achieved is directly determined by the degree to which a department's communications center positively establishes and maintains an ICAP-supportive patrol environment.

Preplanned patrol strategies cannot be effectively operationalized where the dispatch process functions in the traditional mode. Under such arrangements, calls-for-service drive the patrol force or, more exactly, push and pull patrol units from pillar to post each time the telephone rings. Traditionally, prevention and interception activities have been relegated a secondary status to be accomplished in that unpredictable amount of time between calls-for-service.

While highly motivated officers will mount patrol tactics on an ad hoc basis during uncommitted time between calls-for-service, many define their role as being reactive to the radio and wander aimlessly during this uncommitted time. Such operations deliver low payoff in detection and deterrence at extremely high manpower costs. Not infrequently under the traditional dispatch mode, the pressure to clear from a scene to be available for the next call may cause an officer to rush preliminary investigations. This may result in the loss of information, witnesses, or physical evidence, which can adversely affect the success of followup investigation and prosecution.
Implementing ICAP patrol strategies establishes new requirements for the management and information systems of a department. Patrol managers must be given the authority and be held accountable for the planning and implementation of patrol strategies that deploy their personnel efficiently and effectively. Crime and operations analysis capabilities must provide timely and competent information on offense patterns and projected workload demands.

These patrol management activities will have little impact in the real world of field operations unless the communications center provides the time and resource coordination necessary for effective implementation of proactive patrol strategies. This requires that communications effectively:

- Assist in managing the demand for patrol services.
- Monitor the dispatch process.
- Communicate directives for patrol activities.
- Generate competent workload data.
- Provide support functions for field operations.

The dynamic communications screening and diversion process required to support ICAP places far greater responsibilities on the communications center supervisor and his personnel. Effective execution of these responsibilities is a necessary condition for more effective response and prevention services to the community.

3.1 Managing the Demand for Patrol Service

Almost two decades ago, the chief police executive of one of the
Nation's largest cities outlined his policy regarding response to citizen calls-for-service in one sentence. "For a dime," he noted, "a citizen can have a policeman there in five minutes." Calls for police service have escalated dramatically in recent decades to the point where such demands, if managed ineffectively, preclude systematic implementation of prevention and interception tactics by field personnel.

Current knowledge clearly demonstrates that rapid response to all calls-for-service is neither appropriate nor necessary. Such response undermines competent efforts to control serious crime and to maintain order and a feeling of security in a community. Nevertheless, such generalized dispatch and patrol response policies still dominate the operations of many police agencies across the Nation.

Implementation of proactive patrol strategies and an emphasis on quality preliminary investigations by patrol personnel will require that the amount of available time be maximized and that such time be effectively managed so as to permit completion of directed activities once initiated. Maximization of patrol time cannot be accomplished unless the demands for patrol service are strictly managed. Such management is the reverse of the historic mode of rapid dispatch of sworn patrol personnel to all citizen calls-for-service. It places significant responsibility on communications center personnel to accurately screen reported incidents.

Today, communications center personnel must assume the responsibility for determining whether a field response by a mobile patrol unit is necessary or whether an alternative nonresponse mode of processing would be more efficient and equally effective. If a field unit is to be dispatched, the communications center personnel must be trained to decide
whether the presence of a sworn officer is necessary or whether the requested service can be delivered satisfactorily by paraprofessional field personnel. The call-taker must generate a decision if immediate or delayed response is appropriate. When the dispatch of a field unit is to be delayed, the caller must be apprised of the estimated delay before the arrival of the field unit. Subsequently, the call must be stacked by the dispatcher in accordance with established priorities for handling call-for-service.

This process is clearly more complicated than the traditional mode of call receipt, identification of the closest inservice unit, and immediate dispatch. It establishes the call-taker and the dispatcher as important decisionmakers. Together, they must ensure that emergency response requirements are effectively met. At the same time, they must minimize unnecessary demands for patrol time and control the noncritical service demands so that citizen requests for police service are met without continuously fragmenting the available time of the patrol force. Such management of the call-for-service demand is accomplished by:

- Reducing the call-for-service demands on the patrol system.
- Screening incoming calls and prioritizing the field response of sworn patrol personnel.
- Diverting call-for-service demands from sworn personnel.

The paragraphs that follow address ways of operationalizing each of these steps. The various approaches referenced have been used
successfully by police departments to effectively manage their workload and to reverse the historic pattern of patrol being driven by calls-for-service. Proposed changes in any community should be based upon a careful analysis of both the call-for-service demand and of community expectations for police service. The types of change discussed require police leadership willing to make some difficult policy decisions and capable of effectively selling those changes to the general public and elected and appointed officials.

Given the local custom and community expectations, a police executive may encounter resistance in selling some aspects of his demand management system. This is particularly true for proposals to relieve the police agency of certain traditional functions, such as funeral escorts. In some cases, a chief may have to persist for several years before fully achieving desired changes in workload management. Nonetheless, the experience of other communities clearly indicates the general willingness of the public and their elected and appointed officials to support programs to manage the workload demands of calls-for-service to achieve greater productivity and more effective patrol operations.

It is not unlikely that attempts to implement the various techniques described in this chapter will be met with internal department resistance. Communications center personnel may view the implementation process as creating an unnecessary burden on an already overtaxed system. This situation will likely occur only if inadequate planning, policy development, and training occur.

Only by proper planning, clear policy development, and sufficient training will the recommended techniques be properly implemented.
Likewise, then they are properly implemented, the dispatchers will find that prior screening will filter out many of the unnecessary calls handled previously, thereby reducing the dispatch and calls-for-service workload to only those calls that do require some form of mobile response.

3.1.1 Reducing the Calls-for-Service Demand

Because of their 24-hour availability, investigative ability, and authority to use force lawfully, police agencies have been tasked with accomplishing a wide variety of tasks. Over a period of years, a department may have assumed responsibility for a variety of services that are only distantly related to the central functions of the police to maintain order and control serious crime, to sustain a feeling of security in the community, to facilitate the movement of people and vehicles, and to provide emergency response services. Examples of such peripheral services are such practices as delivering government mail and council agendas; providing funeral escorts and performing such tasks as censustaking, animal control, report taking on lost animals, and rubbish complaints.

In every discussion of reducing the scope of police services, questions arise as to what the remaining role of the police properly should be. Such questions can lead to long and heated disagreement between police professionals as well as the public, particularly when discussion touches on areas of emergency service delivery and conflict management. Acknowledging that such disagreement exists about the central role of the police should not deter the police executive from seeking to relieve his agency to the greatest extent possible from responsibility for these peripheral types of services.
Through operations analysis, the police executive should identify the extent and costs of such services and the drains they make on his patrol resources. Subsequently, he should establish policy or recommend changes to the appropriate authority to eliminate such demands. Such decisions or proposals might entail stopping particular services after a prescribed date or transferring responsibility for their performance to some other group equipped to handle them. If eliminating certain categories of services proves impossible, the department should consider diverting their performance from sworn officers to paraprofessional aides.

Police agencies also should carefully examine patrol workload demands to determine what basic services might be curtailed or their level of demand reduced without detriment to public safety. For example, traffic accident reports drain enormous amounts of officer time; some police agencies have effected significant manpower savings by stopping the practice of taking noninjury accident reports when only minor property damage is involved or when the accident occurred on private property.

Responses to burglar alarms consume enormous amounts of patrol manpower. Consistently, research indicates that approximately 95 percent of such calls are false alarms. On the other hand, alarm calls are responsible for some of the best inprogress arrests officers make. However, certain businesses repeatedly are responsible for false alarms due to faulty systems or human error. A police executive seriously interested in managing patrol workload demands must aggressively pursue a program designed to reduce the frequency of repeated false alarms. This may require that local governing bodies pass ordinances establishing fines for businesses.
that have more than a specified number of false alarms in a given period of time. Departmental policy might also be established directing that businesses with frequent false alarms be advised that their alarms will be given low-priority response status until they demonstrate that system improvements or employee training have corrected the cause of the repeated false reports.

The case with which patrol resources can be misused by internally generated demands for service presents another area to be carefully examined and strictly controlled. Administrative and support personnel frequently consider patrol officers as readily available errand boys and cab drivers. Given historic patterns in an agency, rank and file personnel may use patrol units to greater or lesser degrees to accomplish transfers between department facilities or for transportation to and from work.

Some level of administrative use of patrol is inescapable. The lack of vehicles or alternative transportation may, on occasion, require transfers or deliveries by patrol personnel. Departmental policy must be established and enforced that prohibits the use of patrol resources to accomplish personal errands or transfers and that, moreover, requires administrative uses of patrol be kept to a minimum. All internally generated demands for patrol services should be strictly screened. To the greatest extent possible, these demands should be given low-priority status for compliance and should be performed by paraprofessional patrol aides.
Much of the initial effort to reduce the calls-for-service demand on patrol must occur at the top management levels of the police agency. However, once policy changes have been effected, communication center personnel play a vital role in screening certain calls-for-service out of the dispatch system. After accurately defining the requested service, they must politely advise the caller that such services are no longer provided by the department. As is appropriate, the caller may be referred to other agencies that can assist him or he may be advised of other means for achieving resolution of his problem.

3.1.2 Prioritizing Field Response

Most police agencies have not attempted to manage patrol workload demands. Frequently, top command personnel have articulated a policy that requires immediate dispatch of the nearest available patrol and prohibits any intentional screening and prioritization by communications center (dispatch) personnel. Such policies have been maintained for years even though they destroy the integrity of beat assignments, preclude the effective mounting of prevention and interception strategies and, quite frequently, exhaust the emergency response capability of the organization.

The tradition orientation to generalized rapid response to calls-for-service was reflected in the 1973 report on the Police by the U.S. National Advisory Commission on Criminal Justice Standards and Goals. The Commission recommended that the time from call receipt to dispatch transmission not exceed 2 minutes for emergencies and 6 minutes in the case of non-emergency calls.
The importance of rapid response to emergency incidents is self-evident. Police agencies must make every effort to reduce the dispatch and travel times to such situations to the lowest possible. In even the busiest urban areas, emergency demands for police service are not likely to comprise more than ten percent of the calls-for-service workload. Indeed, one urban police department that has experimented with formalized call stacking has found that less than five percent of its calls for service fell under the "critical" heading and, therefore, required the immediate dispatch of a police officer.

The 6-minute standard recommended for the dispatch of nonemergency calls for police service is a purely arbitrary figure. Formalized call stacking has been operationalized by some police agencies to level the peaks and valleys of the calls-for-service workload so that planned patrol activities can be accomplished. The experience of these agencies indicates that nonemergency calls-for-service can be held for substantial periods of time (e.g., 30 to 45 minutes, or longer) without a loss in citizen satisfaction with police service.

An effective system of call prioritization requires that a department allocate its patrol manpower in space and time proportional to its workload demands. Traditional patterns of equal manpower deployment around the clock routinely provide excessive manpower on the streets at certain hours and insufficient response capabilities at others. Biting the difficult bullet of manpower reallocation is an essential step that must be accomplished by any department serious about managing its workload demands and implementing focused patrol strategies.
Similarly, an effective system of call prioritization requires clearly articulated policy that guides decisionmaking by communications center staff concerning:

- The types of incidents to which a police officer will be dispatched immediately and those that may be delayed.
- The various levels of prioritization to be used.
- The allowable delays for each level of prioritization.

A department's policy for prioritizing calls-for-service can establish guidelines for and enumerate what calls can be diverted for handling by paraprofessionals or through the nonresponse modes outlined above. Additionally, that policy can indicate the speed of the organizationally desired response to specific categories of incidents. Several priority schedules by incident types have been field-tested by police agencies and are now available to the interested reader. For certain types of incidents (e.g., burglary, pursesnatch), specific factors such as time of occurrence, the presence of a perpetrator, reporting delays, or victim injury will play major roles determining the need for immediate response or the appropriateness of call stacking.

Policy regarding call prioritization should state the factors to be used by the call-taker in assigning the appropriate priority level. An example of such guidelines from a department that utilizes a three-level
prioritization is as follows:*

**Urgent:**

- Any bona fide threat to life or great danger of any serious physical injury or major property damage.

- Any active felony, violent misdemeanor, or active incident that may result in either.

- Any felony or violent misdemeanor that recently occurred and the logical probability exists that a suspect near the scene or in the area may be apprehended.

- Any serious injury or illness that may result in substantial personal harm (including personal injury motor vehicle accidents).

- Any incident involving exigent or unique circumstances that demands an immediate response, such as snipers, threat of explosive device, and chlorine gas leaks.

**Expedite:**

- Any active incident that does not represent a significant threat to life or property, such as a minor domestic dispute.

- Any nonactive felony, violent misdemeanor, or other incident that does not require immediate investigation, such as burglary that was not recently committed.

- Any active incident that could be classified as a possible crime, such as a report of a suspicious vehicle or person.

- Any property damage motor vehicle accident that, from information received, does not

*Adapted from "Assignment of Calls for Police Services - Priority Dispatch," policy statement of the Hartford, Connecticut, Police Department.*
represent a significant hazard to the free flow of traffic.

- Any other serious incident that does not qualify under the guidelines of urgent.

- **Routine:**

  - Any nonactive incident that involves a minor violation or offense, such as noise complaints or loitering.

  - Any incident that involves noncriminal services, such as heat complaints, parking violations, traffic services.

  - Any incident involving nonpolice services, such as requests for transportation from headquarters, vehicle repairs.

  - Any nonviolent misdemeanor that is not active and, because of its nature, cannot be referred by telephone to another in-house unit, such as a vehicle property damage complaints.

The call prioritization policy should articulate the amount of time communications center personnel may delay calls in each nonemergency class of response. Similarly, it should designate availability and the order in which other beat and sector units, supervisory personnel, and directed patrol units are to be assigned for calls in each response level designation.

Call prioritization places significant responsibility on call-takers. They thus become important decisionmakers who must screen all incoming calls to:

- Quickly and accurately determine the nature of the incident reported.
• Promptly decide the appropriate response priority in which the call belongs.

• Politely inform the complainant of the estimated delay in service delivery for all calls that are to be stacked.

Competently executing the first two steps is essential so that incidents that require immediate on-the-scene presence of an officer are not misclassified. The last step is essential for maintaining citizen satisfaction with police service. The available research on citizen satisfaction clearly indicates that the public will tolerate delayed responses to request for service and still rate police performance highly if:

• They have been effectively advised of the delays they may realistically expect.

• Police response is accomplished in the same or a shorter time than the delay expectation conveyed to the caller.

Call prioritization also places increased responsibilities on the dispatcher. Unlike the communications mode, where rapid dispatch is the norm for all calls, the dispatcher's goal is not merely to "clear the board" as quickly as possible by a transmission to the nearest or next available unit. He must manage effectively the stacked calls-for-service to ensure that departmental policy and the service expectations conveyed to citizens are met. This must be accomplished while striving to ensure that beat-sector integrity is maintained, to the greatest extent possible,
and that units assigned to structured patrol tactics are called off those assignments as little as possible.

3.1.3 Diverting Calls-for Service Demands from Sworn Patrol Personnel

Establishing mechanisms to divert service demands from sworn field personnel into alternative modes of processing offers the quickest and easiest way for freeing up substantial amounts of patrol officer time. These alternative modes provide more cost-effective means of delivering a wide array of patrol services. Two distinct diversion approaches currently being utilized by police agencies to manage successfully the demands on their patrol force are addressed separately below. However, tandem use of both methods offers the maximum time savings and operating efficiency. See Figure 3-1 for a graphic depiction of the calls-for-service process.

3.1.3.1 Nonresponse Processing

A substantial segment of the calls-for-service received at the police communications center does not require the response of a field unit. Instead, several police agencies have instituted (telephone) call-in, mail-in, or walk-in procedures to handle selected classes of incidents. Calls for service diverted to these forms of processing are screened to ensure that:

- An offense is not in progress.
- No offender is at the scene who presents either a continued threat to persons or property or the opportunity for an apprehension if a field unit were dispatched.
Figure 3-1. Calls-for-Service Diversion -- Flow Diagram
- The incident is not a type of offense or in combination with other offenses for which department policy specifies on-the-scene investigation.
- There is no physical evidence to be collected nor witnesses to be interviewed at the crime scene.
- There are no other circumstances present (e.g., injuries) that would lead the call-taker to believe it would be appropriate for a policeman to respond to the scene.

Calls diverted to these alternative forms of handling involve a large percentage of incidents being reported for insurance purpose. The absence of a perpetrator and physical evidence usually make it readily apparent to the reporting party that nothing will be gained by the dispatch of a patrol unit. The alternative forms of processing, in most cases, offer the citizen a quicker or more convenient mode of incident reporting than waiting around for a patrol car to arrive. Once the call-taker has screened a request for service and determined its eligibility for diversion from the dispatch process, he will advise the caller of the available alternative for processing. Citizen acceptance of these alternatives is quite likely. However, departmental policy will dictate whether a citizen can refuse one of these alternative modes and insist on the field response of an officer.

Telephone call-in report processing is the most widely used of these methods for diverting calls from the field force. It has been used
successfully for several years by many departments to process such types of incidents as:

- Larceny of auto accessories.
- Larceny from auto.
- Bicycle theft.
- Petty larconies (except shoplifting, pursesnatch, and embezzlement).
- Found property (except explosives, firearms, or drugs).
- Animal bites.
- Auto thefts.
- Destruction of property.
- Indecent acts.
- Annoying telephone calls.
- Tampering with autos.
- Lost property.
- Missing persons (except children and the infirm).
- Missing person returns.
- Supplements to an original report.

Eligible calls of the above types, together with routine requests for information, are routed to a telephone report-taker. Some departments have set up formal units to provide such service. Others simply route calls to communications center desk personnel who have sufficient uncommitted
time to process them. If the report-taker is tied up at the time the call is received, the complainant's name and telephone number can be taken for callback within a specified time.

Experience has demonstrated that telephone report taking can be completed in a fraction of the time it would take a patrol officer to respond to the scene and complete the same report. Some departments utilizing this alternative report that 40 to 50 percent of all reports are now being taken by this mode. Evaluation results indicate that citizens are quite satisfied with call-in report-taking procedures.

In addition to diverting a large workload segment from the field officers, telephone processing systems have, in several instances, made more productive use of desk-bound personnel. Less costly civilian call-takers have been used with success in telephone processing systems. However, some departments have found such positions to be productive assignments for officers on light duty status or for those preparing to go undercover.

Mail-in reports have been used by a small number of police departments as an alternative to dispatching a patrol unit. In thefts, destruction of property reports, or minor accidents where the dispatch of a car is not necessary, the name and address of the complainant is taken over the telephone. Subsequently, a mail-in report form and a self-addressed envelope are sent to the calling party upon completion and return. Mail-in reports primarily are used for reports that must be taken for insurance purposes only. Such reports have been used for some time by one city which attracts a large number of tourists and experiences a
large influx of commuters from nearby suburban communities. Often, these individuals do not call the police about incidents until they return home. Figure 3-2 shows an example of a mail-in report form used by one large city department.

Walk-in reports have been used only to a very limited degree. For the types of incidents listed above, the caller may be asked to respond to the police station to make the report directly to desk personnel. Such requests usually are made only when there will be a long time before a field unit can respond to the caller's location and it is quicker and reasonably convenient for the citizen to come to the station. One city, which also uses telephone report processing, urges its dispatchers to direct a caller to the police station for (a) all noninjury accidents in which the vehicles are driveable, and (b) hit-and-run accidents to parked cars that occurred more than 10 minutes earlier and where no physical evidence is available except damage to the vehicle. During rush hours and foul weather, dispatchers must direct all such accidents to the nearest station where appropriate reports will be prepared by desk personnel.

3.1.3.2 Referrals

Many calls-for-service can be processed over the telephone by call-takers simply by referring the citizen to some other public or private agency, such as a social service agency. A good example of such a situation is a welfare complaint that has been addressed to the police department simply because the citizen knows the police will attempt to satisfy his or her interest.
Dear Citizen,

when this form is completed, it will serve as a basis for a San Francisco Police
Incident Report which will document the occurrence and assist in its investigation.

Please print or type the below information

GIVE ADDRESS OR LOCATION WHERE INCIDENT OCCURRED

DAY OF INCIDENT

DATE OF INCIDENT

YEAR

TIME

AM

PM

HOW ENTRY WAS MADE OR HOW DAMAGE OCCURRED

LAST NAME

FIRST NAME

MIDDLE NAME

RACE

SEX

AGE

GIVE ADDRESS OR LOCATION WHERE INCIDENT OCCURRED

CITY

STATE

ZIP

ADDRESS

BUSINESS ADDRESS OR SCHOOL ATTENDED

CITY

STATE

ZIP

ADDRESS

Do you know who is responsible for this theft or damage? NAME

YES

NO

If yes, please describe

METHOD, TOOL, INSTRUMENT OR WEAPON USED

VICTIM'S VEHICLE

SUSPECT'S VEHICLE

GIVE A BRIEF SUMMARY OF THE INCIDENT BELOW:

VICTIM'S VEHICLE

LICENSE NUMBER

STATE

DATE

PLEASE SIGN YOUR NAME HERE

Figure 3-2. Mail-In Report
In other cases, people call the police merely because the citizen does not know who else to call concerning a particular problem that the police are not equipped to deal with. In the case of welfare complaints, it is not uncommon for city agencies such as the welfare office to have trained investigators or call-takers to handle such complaints.

In developing a referral response mechanism, departments should endeavor to handle the caller efficiently and informatively. The accumulation and update of information describing the local social service resources permits rapid response to such calls and also creates a sense of satisfaction on the part of the citizen. Knowing that he or she has received a prompt, courteous, and informative reply to a particular request or need instills a sense of satisfaction with police service delivery.

Referral mechanisms occasionally operate best when the police initiate callback procedures to determine if the citizen has received the desired service. This callback mechanism also acts as a buffer to allow departments to continuously monitor the feasibility of calls-for-service referrals, as well as determining if the social service agency resources are living up to preconceived expectations.

3.1.3.3. Paraprofessional Patrol Aides

In addition to those demands which may be diverted from the dispatch system by means discussed in Section 3.1.3.2, there is another segment workload that requires a field response but not the presence or the authority of a sworn officer. The use of meter maids and crossing guards, for example, is widely accepted in police circles. These less expensive civilian employees have relieved sworn personnel from specific standing
demands for police service. The use of civilian paraprofessionals (such as patrol aides, community service officer, cadets) to shoulder certain response aspects of the field workload has, however, been employed only in a limited number of departments.

Where utilized effectively, civilian patrol aides have demonstrated themselves to be:

- A more cost-effective means for delivering routine services and accomplishing administrative errands.
- An effective means of reducing the dispatch workload of sworn personnel.
- Readily accepted by their citizens who express the same levels of satisfaction as if the services were delivered by sworn personnel.
- Readily accepted by sworn personnel who appreciate being relieved of many unattractive and mundane service activities.

Paraprofessional aides can be used to accomplish the same basic information provision and report-taking functions outlined above. Instead of diverting an eligible call to handling via call-in, walk-in, or mail-in alternatives, the communications center can dispatch a civilian aide to the scene in the place of a sworn officer. As noted, police agencies using this alternative have experienced no deterioration in the quality of services delivered, nor have they experienced a loss in citizen satisfaction with the department. While less costly than the dispatch of a sworn officer,
field response of a patrol aide is more costly and time-consuming than the nonresponse alternatives outlined above.

Patrol aides can execute a range of services not addressed by station-based processing alternatives. For example, the aides have been used successfully to accomplish a broad range of field services, including:

- Motorist assistance.
- Parking violations.
- Notifications.
- Pickup of found/recovered property.
- Precautionary standbys (defective streets, wires, etc.).
- Transfers of personnel, supplies, and papers.
- Traffic direction.
- Transportation of sick or injured persons.
- Standby for vehicle towing.
- Noise disturbances.
- Animal complaints.
- Rubbish complaints.
- Children disturbing (playing in the street).
- Recovered automobiles.
- Nonemergency ambulance/sick person assistance.
- Abandoned vehicles.
- Transfer of vehicles and equipment for maintenance and repair.
Diverting such activities to handling by paraprofessionals releases substantial amounts of patrol time for more productive crime control activities. Because such services usually do not require immediate handling, they can be strictly managed and stacked so that a large volume of activity can be handled by a relatively small number of paraprofessionals.

In establishing a paraprofessional program, a department must articulate its policy concerning the types of services to be handled by these aides. Where there is a high volume of activities, a department may determine that the most efficient and cost-effective arrangement is to install nonresponse alternatives (such as telephone processing) which complement the field work of the paraprofessional aide. A department also should decide if the program is to provide entrance level positions for individuals aspiring to be police officers. If this is the case, selection criteria (including physical requirements and background screening) must be established that parallel those of sworn officers.

Like the nonresponse processing alternatives, the effectiveness of a patrol aide program hinges on effective call screening. Call-takers must define accurately the nature of the service demand and determine the eligibility of the call for handling by a paraprofessional. If dispatch of the aide will be delayed, the caller must be informed of the estimated time until service delivery. Subsequently, dispatch personnel must oversee the call-for-service stacking process to ensure that all such services are accomplished in the projected service time.

3.2 Monitoring the Dispatch Process

Effective monitoring of the status of field units and calls-for-service
demands is a first necessary ingredient of a competent command and control system. Such monitoring must:

- Closely monitor transmissions and maintain an accurate accounting of the status, activity, and location of each patrol unit.
- Maintain an accurate overview of active and holding demands for police service.
- Provide the field supervisor with a real-time overview of current demands and resources.

The first of these functions has long been done for officer safety and to track the availability of patrol units for calls-for-service. However, directed-patrol strategies result in the fielding of patrol units with specific duties to be performed apart from call-answering and the traditional preventive patrol of marked units. For the safety of all officers, the communications center must know the status, assignment, and location of all directed patrol units, particularly those on plainsclothes/stakeout types of activities.

The communications center also must know the availability of each directed patrol unit to handle calls-for-service and the order in which they may be called back into call-answering status for emergencies or workload demands backlogged beyond the acceptable limits of department policy. For example, units on directed tactical patrol can be more readily returned to call-answering status than officers who may be on stakeouts or roof-top surveillances, or in meetings with community groups.
In determining resources available for directed patrol activities, the patrol supervisor must estimate the probable calls-for-service workload during the various segments of his shift and project the level of manning necessary to accommodate that workload. Of necessity, such projections are based upon the historical workload averages for the same day and time. As with all averages, the actual workload may be higher or lower on a particular day or at a particular time. Communications center personnel continuously must monitor the demand level to ensure that acceptable emergency response capabilities are available and that prioritized calls are being serviced within the limits of defined policy.

ICAP emphasizes patrol management and supervision. Field supervisors are expected to maintain a dynamic overview of their officers and the workload demands upon them. This is necessary so that more productive use can be made of those portions of patrol time previously referred to as unstructured or uncommitted. To do this effectively, the field supervisor must know what units are in or out of service. For those on calls, he must know the type of the call and the time each unit has been out of service. Similarly, he must be cognizant of the types and length of times messages have been holding. Armed with such information, the field supervisor must make real-time decisions regarding what units should be released for, or called back from, directed patrol assignments. To minimize the chain reaction consequences of cross-district dispatching, the supervisor must, at times, direct the dispatch center to hold a specific call or reassign it to a closer unit that may be about to clear. Effective monitoring via the dispatch process is the only means by which the patrol supervisor can
maintain this necessary oversight of the patrol environment for which he is responsible. Figure 3-3 illustrates the monitoring process.

To greatly facilitate patrol management at the field level, some departments with computer-aided dispatch systems have placed mobile terminals in the vehicles of patrol supervisors. These terminals enable them to call up on a screen the status of units and the pending workload in their area of responsibility. In the absence of such automated capabilities, the field supervisor must obtain such information via the radio or landline.

3.3 Communicating Directives for Patrol Activities

When the monitoring process indicates emergency conditions or dangerous situations in the field, the communications center supervisor must respond quickly and effectively to communicate directives for patrol activities to address these circumstances. Such directives might entail the recall of structured patrol units into call-answering status when emergency response capabilities have reached dangerously low levels. Similarly, he may direct the geographic redistribution of patrol units to cover areas of the city that may have been stripped of police units by assorted demands for service.

Effective response by patrol units to inprogress incidents also hinges upon competent direction at the dispatch level. Sufficient units must be dispatched to a scene to ensure officer safety and to control the situation. It is equally important that the communications center coordinate the response of units to certain types of inprogress events and emergencies.
Figure 3-3. Monitoring the Workload -- Flow Diagram
In robbery-in-progress calls, for example, there is a tendency for all available patrol units to respond directly to the scene. It is not unlikely that, while speeding to the scene, these units pass the perpetrator who is leaving.

Effective response strategy would dictate that a limited number of units respond to the actual scene of an in-progress incident to determine the status of the event and perpetrator information. Other available patrol units should cordon off and commence a search of an area whose perimeter is determined by the elapsed time since the suspects left the scene. Implementing such controlled responses to inprogress incidents depends upon dispatch personnel who can anticipate the requirements in the field and direct patrol units to accomplish specific functions in predefined response plans. Likewise, the effectiveness of such controlled responses in a majority of cases is determined by the call-taker who must obtain critical information (suspect description) for immediate passage to field units.

The communications center supervisor must exercise strong initial control and direction of the patrol force in major emergencies such as disorders, disasters, or barricaded subject situations until a field supervisor or commander can arrive on the scene and establish a command post. Early directives in such instances may involve the establishment of necessary perimeters and the mobilization of special support personnel. Similarly, under certain emergency operating conditions, the communications center supervisor must exercise strong direction to control the response of patrol units. In high-speed pursuit situations, for example,
the supervisor must strictly limit the number of police vehicles directly involved in the pursuit and effectively direct any attempts to block or intercept the fleeing vehicle.

The nature of a department's directed patrol program will determine the extent to which the dispatch process must communicate directives for patrol activities. In highly structured modes of directed patrol, such as that of the Directed Deterrent Patrol Program of the New Haven Police Department, the communications function has a primary role in initiating the conduct of planned patrol tactics. In that program's highly centralized planning mode, detailed directed patrol tactics (D-runs) are preplanned to address problems in specific areas of the city. On defined days and at defined times, the communications center will dispatch patrol units to accomplish those specific tactics.

Under more decentralized modes of directed patrol, the responsibility for planning and directing proactive patrol tactics rests primarily with field supervisors and their personnel. Nonetheless, communications center supervisors may be tasked with responsibility to direct specific patrol activities at the first indication that certain events have occurred or that specific conditions may exist in the field. For example, the report of a stolen auto in an area experiencing a rash of such thefts may be a sign to direct field units to intensify patrols in these areas where the joyriding is believed to occur or where the vehicles are being dropped. Such arrangements require that communications center personnel be knowledgeable of problem patterns in the community and that they be alert to those conditions that may require them to communicate directions for proactive patrol tactics.
3.4 Generating Competent Workload Data

Successful implementation of ICAP depends upon the efficient allocation of resources in response to demands for service and the requirements to accomplish planned tactics against suppressible incidents. Specifying the optimal schedule for patrol manning depends on competent operational analysis of workload demands. That analysis must be repeated at regular intervals to ensure that reallocation adjustments are made as demand conditions change. *

Operations analysis is dependent upon competent data on calls-for-service, patrol-initiated activities, and personal/administrative workload. As a natural byproduct of receiving citizen requests for service and monitoring the activities of the patrol force, the communications center generates such workload data. In anticipation of the vital role that workload information plays in accomplishing resource allocation and deployment planning, it is essential that the data collected be complete and accurate. It must define correctly: The nature and location of the incident; the four benchmark times of call receipt, dispatch, arrival and clearance; and the disposition code.

Crime analysis plays a central role by providing the information on current crime series to the patrol commander for strategic planning. The crime analysis process is dependent upon accurate and complete information.

*A companion manual, A Preliminary Guideline Manual for Patrol Operations Analysis, outlines the procedures for accomplishing such analysis.
on crime incidents gathered through the department's offense reporting system. The incident record prepared by the communications center initiates the audit trail which ensures that all offense reports are submitted in a complete and timely manner.

3.5 Support Functions for Field Activities

The communications process provides vital access for the patrol officer to needed emergency and support capabilities such as fire, ambulance, and wreckers. Similarly, the communications process provides an important necessary link between field personnel and stolen property and wanted-person files.

A change to proportional scheduling can substantially alter the flow of such support service demands on the communications center. The increased volume of personnel on the streets at certain hours will generate greater volumes of self-initiated activities, such as car stops and pedestrian checks. These increase radio traffic and give rise to more name and property checks during those very hours when calls-for-service are at their highest point. Such increases in workload demand on the communications process must be anticipated in the shift to proportional scheduling. As the volume of activity dictates, differential manning levels also must be established for communications center personnel.

The implementation of certain forms of directed patrol activities can generate exceptionally high demands upon the communications center for support functions. Aggressive tactical patrol in a high-crime-rate area, for example, may trigger an unusually large number of warrant checks in connection with field interviews. A concentrated patrol sweep of an area

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experiencing a high volume of bicycle thefts will generate a high volume of inquiries for the stolen property and bicycle registration files. Non-crime-oriented patrol strategies, such as intensified efforts to remove abandoned vehicles from a neighborhood, can require significantly increased contacts with wrecker services.

Such unusual demands cannot be anticipated in the regular staffing of the communications center: When such patrol tactics are planned, the communications center supervisor should be fully informed in sufficient time to permit any necessary staffing arrangements to be made to handle these exceptional demands.

3.6 Summary

ICAP stresses a thinking patrol force that intelligently manages its resources and flexibly implements strategies shaped by a competent assessment of current problems in various neighborhoods. The Program places significantly greater demands on patrol managers and supervisors. It generates parallel demands for communications center personnel of a department. It necessitates that the dispatch process abandon the historic mode of operation in which calls-for-service drive the patrol force. Successful implementation of ICAP depends upon a communications function that can effectively operationalize the various methods of managing calls-for-service outlined in this chapter. It is easy to identify problems that will make these changes difficult for all concerned. However, such changes are not impossible, as other jurisdictions have demonstrated. Departmental commanders and, most particularly, the communications center
supervisor must accept the necessity of establishing a communications environment supportive of proactive patrol and, then, assuming a positive stance towards overcoming any obstacles that may stand in the way of such implementation.
4. **IMPLEMENTATION OF THE ICAP COMMUNICATIONS PROCESS**

The ICAP communications process is concerned primarily with providing the operating environment to allow for the short- and long-range planning of patrol workload levels and with providing the real-time function of maximizing available resources through specific operating criteria. The essence of this process is the establishment of the altered role of the communications dispatcher.

Dispatch personnel must reassess communications operations in light of the need for patrol workload management, with more emphasis on day-to-day planning and real-time operations, rather than long-range performance criteria such as calls-for-service volume and response times. The dispatch center then becomes a true command and control center, with a highly interactive relationship between communications and patrol.

Understanding and achieving this somewhat altered perspective of the function each individual or division performs, whether communications or patrol, will greatly assist in establishing the cooperative environment necessary for the successful implementation of the ICAP communications process. This chapter examines the communications functions with respect to policy development, system development, and personnel development.

4.1 **Policy and Procedure Development**

To achieve the goal of implementing the ICAP communications process, effective policies and procedures must be developed, disseminated, and
maintained. In the development of this documentation, a clear statement of policy complemented by a concise set of implementing procedures will be necessary.

4.1.1 Evaluating and Prioritizing Calls-for-Service

The evaluation and prioritization of calls-for-service requires that the communications center dispatcher be given a considerably enhanced degree of discretion and responsibility. The policy and procedure documentation for this function should cover the following major factors:

- **Levels of Calls-for-Service Priority** -- There generally are three distinct levels of calls priority that may be established within the department:
  - **Priority 1** -- Time critical; immediate mobile response.
  - **Priority 2** -- Time not critical; delayed mobile response.
  - **Priority 3** -- Time not critical; mobile response not necessary.

- **Telephone Techniques** -- In the ICAP communications process, there may be as many as three general areas that pertain to the call-taker's telephone techniques as follows:
Telephone Questioning -- For efficient telephone questioning techniques, uniform procedures must be developed to guide the dispatcher in eliciting the necessary information clearly and logically. This includes the "who," "what," and "when" of an incident. This will enable the dispatcher to quickly determine the priority ranking to be assigned to the call so that the appropriate response may be initiated.

Citizen Level of Expectation -- If the call-for-service is determined to be of such a priority that mobile response will be delayed, the dispatcher should have procedures to guide him in advising the caller when he can expect a response unit. This establishing of the citizen's level of expectation is extremely important from the public acceptance aspect of program success.

Department Policy Statement -- For those calls-for-service that do not require an immediate response by a patrol unit, the dispatcher must inform the caller of the department's policy for the alternative
processing and handling of calls-for-service. This procedure should augment an efficient public information program of community education via the news media and community and business meetings.

4.1.2 Determination of Appropriate Response

After the call-for-service has been screened and prioritized by the dispatcher, specific procedures should guide him in processing the incident. These procedures must establish clear guidelines for the determination of the appropriate action to be taken by the dispatcher, based upon his evaluation and prioritization of the calls-for-service.

As described in Chapter 3, the levels of response for the ICAP communications process are:

- Immediate response by a patrol unit.
- Delayed response by a patrol unit.
- Call referral to another agency or division.
- Request that the citizen file the appropriate call-in, walk-in, or mail-in report.

4.1.3 Operational and Administrative Interface between Patrol and Communications

The policies and procedures developed to define the working relationships between patrol and communications are most important and likely to be the most difficult to formulate. Because the enhanced interface between patrol and communications under the ICAP communications process
is not traditionally defined, the development of many of the necessary policies and procedures probably will be performed by a committee comprised of senior communications, patrol, and administrative personnel. Committee action is recommended for a number of reasons. Among these are the availability of different viewpoints by individual specialists on the committee, and the joint interactions of committee members and the program motivation that is developed through participation in the decisionmaking activity. However, the committee chairman should be strong and impartial to avoid a common danger of committee action -- compromise and indecision.

The documentation of policies and procedures for this function should encompass, at the minimum, the following factors:

- Who is responsible for processing calls-for-service, including evaluation, prioritization, and determination of appropriate response.
- Who is responsible for ensuring that program requirements are being met.
- Who is responsible for phone-in, walk-in, and/or mail-in report processing.
- What documentation, records, and reports are to be developed and interchanged.
- Who is responsible for establishing and maintaining radio and telephone discipline.
- Who is responsible for hiring, training, and disciplining personnel, and for evaluating personnel performance.
• What procedures and forms must be developed for handling intradivision complaints, disputes, and controversy. Any form content and processing criteria must be identified.

Once developed by the designated committee(s) and individuals, the policies and their implementing procedures should be thoroughly screened and evaluated by a small committee of three to five agency specialists in communications, patrol, and administration to verify that the total documentation package meets the requirements of the ICAP communications process in the support of managing patrol operations.

4.2 Communications System Development

If the existing communications system meets the present needs of the department, it is highly likely that no additional systems or equipment will be required to implement and support the ICAP communications process.

The existing communications system must meet the needs of the department in terms of: The required type and quantity of equipment and its capabilities; adequate radio propagation coverage over the geographic area of responsibility, with little or no signal interference or channel congestion; and the necessary security, redundancy, and emergency power provisions. If any of the system components or parameters are significantly lacking, steps should be taken to correct the deficiencies before attempting to implement this program.
4.2.1 Radio Dispatch Level and Channel Congestion

An analysis of the calls-for-service data in several departments indicates that an average of 30 percent of the calls would not require a mobile response. These represent the Priority 3 calls (identified in Section 4.1.1) where time is not critical, a mobile response is not necessary, and the call is either referred to another agency or department or is handled by phone-in, walk-in, or mail-in procedures. Examination of these factors leads to the conclusion that fewer dispatches will be required under the ICAP process because of the elimination of Priority 3 calls from the dispatch function. This frees the dispatcher from handling these relatively minor incidents and provides more time for closer coordination and interaction with patrol units for Priority 1 and 2 calls. The St. Louis, Missouri, Police Department, which has implemented a communications process to enhance patrol workload management, reports that it has reduced the number of dispatches by 10 percent by this method.

Implementation of the process described herein suggests an overall reduction in radio traffic and a resultant decrease in radio channel congestion. This is particularly important for those agencies that are experiencing overcrowded channels.

4.2.2 Communications Equipment Considerations

Although there are many different types of communications equipment available over and above that required for a basic communications system, this discussion addresses only those types of equipment that may directly enhance or benefit the ICAP communications process:
CONTINUED

1 OF 3
- **Portable Radio** -- The portable radio permits the field officer to be more flexible with respect to preventive patrol activities (such as community relations, citizen contact, building checks), because he is no longer confined to the close proximity of his mobile radio.

- **Logging Tape Recorder** -- The 24-hour logging tape recorder/reproducer unit should have the channel capacity to record all radio channels and emergency telephone lines. It can be used in recovering the facts associated with a controversy between dispatch and patrol. It also can be used for training sessions by extracting examples of correct and incorrect procedures during actual incidents.

- **Instant Playback Recorder** -- The instant playback recorder can assist the complaint operator in recovering additional information from a disconnected caller to enable improved call screening.

- **Telephone Patch** -- The telephone patch unit on the dispatch console permits the interconnection of a telephone line and a radio channel. This equipment enables the patrol officer to converse with a citizen involved in an emergency incident, or with any person who has access to a telephone...
and may be able to provide real-time, direct assistance to the officer.

• **Cross-Channel/Cross-Band Repeater** -- The cross-repeat feature on the dispatch console permits the interconnection of any two radio channels that are controlled at the console. This feature enables the patrol officer to communicate with other fire, emergency medical service, or other municipal units to coordinate multiagency response to emergency scenes.

• **Telephone Call Transfer** -- The telephone call transfer feature, which is usually included in 911 installations, enables the call-taker to transfer a citizen caller to the appropriate division or agency, avoiding the necessity of having the citizen call another number.

### 4.2.3 Advanced Communications Equipment

This section discusses the features of some of the more advanced or sophisticated types of communications equipment now available for law enforcement agencies. The discussion focuses on those features that are appropriate to the ICAP communications process. The types of equipment in this category are computer-assisted dispatch (CAD), automatic vehicle location (AVL) or monitoring (AVM), mobile digital terminals (MDT), and 911 emergency telephone number systems.
Computer-Assisted Dispatch (CAD) -- The basic CAD system facilitates the flow of information from the call-taker to the dispatcher. In its intended use, CAD facilitates the ICAP communications process by normally performing the following automated functions of resource and records management:

- Insert time of day.
- Insert case number.
- Insert incident priority.
- Select appropriate zone dispatcher (if geocode files are available).
- Verify address validity (if address files are available).
- Select patrol unit (if geocode files are available).
- Maintain patrol unit status and alert dispatcher if patrol unit is detained for an extended period of time.

CAD also may provide management reports and statistical data on a real-time basis for instantaneous analysis of data and personnel deployment to meet changing needs.
• **Automatic Vehicle Location (AVL)** -- The AVL system enables the dispatcher to monitor the location of patrol units when direct verification is desired or when a patrol unit fails to respond to a call. In support of the ICAP communications process, AVL facilitates the fastest response to Priority 1 calls by identifying the unassigned patrol vehicle nearest to the scene, thereby improving the management of patrol unit resources.

• **Mobile Digital Terminals (MDT)** -- Utilizing digital transmission techniques, the MDT enables the two-way transmission and reception of lengthy messages in a short span of time. In the patrol vehicle, the message is displayed on a screen for viewing, and the information storage capabilities of these units permits data to be stored for later recall. In the ICAP communications process, this is especially suited for transmission of such information as crime analysis bulletins. The MDT unit's primary importance is the capability for the patrol unit to directly access computer files and obtain quick response, with no manual intervention required by the dispatcher.
• **911 Features:**

  - **Call Transfer** -- For those Priority 3 calls where the caller is to be referred to another division or agency, the call transfer feature directly connects the caller with the proper agency. This will be beneficial from the citizen's perspective of satisfaction and convenience since he or she is relieved of the need to hang up and redial another number. Since this feature requires a dedicated telephone line to each remote agency, the cost/benefit ratio must be examined with respect to anticipated call volume.

  - **Automatic Call Distributer (ACD)** -- This feature is appropriate where a large number of answering positions are required to handle a large call volume. The equipment automatically distributes calls to operators who are not busy, ensuring that only one operator will answer the call and that no call will go unanswered. In the ICAP communications process, call-taker workload may increase because of the increased interaction with callers to
elicit detailed information and the
direct handling of some types of low-
priority calls by the call-takers.
The workload also may increase during
the initial phases of ICAP implementation
because of the citizen education announce-
ments that the operators may be required
to make.

The foregoing discussion focuses on possible communications system
enhancements. However, as stated earlier, if the existing communica-
tions system meets the present needs of the department, it is highly
likely that no additional systems or equipment will be required to im-
plement and support the ICAP communications process.

4.3 Personnel Development and Training

In the ICAP communications process, the personnel development and
training of both supervisory and nonsupervisory personnel is at the
same level of importance as the development of the enabling policies
and procedures. Within the overall concept of patrol workload manage-
ment, the major changes required for implementation occur in the roles
and responsibilities of the communications center personnel. These
personnel will have to significantly reassess their traditional opera-
tions in light of the changing patrol workload distribution. They must
gain the understanding that calls-for-service should not take immediate
priority over all other patrol functions and that some calls could be
delayed or handled by alternative methods.

The dispatcher and the supervisory and command personnel above
him or her will experience a significant increase in responsibility
that will require a high degree of professionalism. These changes will
require high standards of training and personnel development to trans­
form the communications center into an operational command and control
center that is capable of supporting the enhanced management of the
patrol workload under ICAP.

4.3.1 Personnel Training

Throughout this general discussion of the major considerations
pertinent to ICAP communications process training, it is assumed that
the reader is familiar with general or traditional communications prac­
tices and doctrines in dispatcher training, personnel selection, and
similar assignment and development functions of the supervisor or
manager.

Especially with respect to the ICAP communications process, the
importance of personnel development and training cannot be understated.
The effectiveness and success of the patrol workload management process
will depend to a large degree upon the professionalism of the communica­
tions center personnel.

A discussion of the major considerations pertinent to the ICAP
communications process includes the following:
• **Screening and Prioritizing Calls-for-Service** --

Based upon the procedures developed for the implementation of this process, the dispatcher will be responsible for screening many types of calls and prioritizing them generally into three categories as follows:

<table>
<thead>
<tr>
<th>Type of Call</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>A, B, C...</td>
<td>1</td>
</tr>
<tr>
<td>Q, R, S...</td>
<td>2</td>
</tr>
<tr>
<td>X, Y, Z...</td>
<td>3</td>
</tr>
</tbody>
</table>

• **Determination of Appropriate Response** -- From the type of call and the priority assigned, the dispatcher then must determine the appropriate response. This is the locus of the dispatcher's procedural training and his decisionmaking ability, in that the alternative courses of action now become significantly more complex, as depicted below:

<table>
<thead>
<tr>
<th>Priority</th>
<th>Appropriate Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>- Immediate response by nearest (Time-Critical) unassigned unit.</td>
</tr>
<tr>
<td></td>
<td>- Reassign a unit on a low-priority assignment.</td>
</tr>
<tr>
<td></td>
<td>- Assign two-man unit.</td>
</tr>
<tr>
<td></td>
<td>- Assign unit with specialized equipment.</td>
</tr>
<tr>
<td>Priority</td>
<td>Appropriate Responses</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------</td>
</tr>
</tbody>
</table>
| 2       | - Delayed mobile response.  
          | (Not Time-Critical) - Determination of appropriate delay time.  
          | - Unit assigned as above. |
| 3       | - Mobile response not necessary.  
          | (Not Time-Critical) - Refer/transfer call to another division.*  
          | - Refer/transfer call to another agency.*  
          | - Recommend phone-in/walk-in/mail-in report. |

- **Telephone Procedures** -- There are two telephone procedures that may be instituted to support the ICAP communications process, which have been discussed previously:
  - Establishing citizen expectation level.
  - Providing a department policy statement.

Training in the courteous use of these techniques and especially the method prescribed for determining

*To make the proper determination with regard to referring calls-for-service, the dispatcher must be knowledgeable of the services provided within the referral agency and the social services delivery system in the jurisdictional area. A directory of such services should be provided to the dispatcher for this function.
the elapsed time for delayed mobile response (citizen expectation) is a necessity from the public relations viewpoint.

- **Legal Procedures** -- Because of the close interaction that will be established between the dispatcher and the patrol officer, the dispatcher should be knowledgeable of the laws and statutes pertinent to patrol activities. With this training provision, the dispatcher can assist the patrol officer in determining the appropriate legal or statutory procedures that may be involved in resolving an incident.*

- **Crime Analysis Unit** -- To establish the perspective of the total ICAP Program, communications center personnel should be familiarized with the department's crime analysis unit, and be put on the distribution list for crime analysis bulletins, crime incident maps, and similar products. This information will enhance the dispatcher's ability to assist the patrol officer and will help

*It must be recognized that the dispatcher is not a patrolman. The dispatcher needs knowledge of and familiarity with the legal implications of the enhanced role described in this manual, but he or she may be either a sworn officer or civilian.*
develop a greater sense of involvement in
achieving departmental objectives.

4 3.2 ICAP Communications Process Management

As in the previous section, it is assumed that the reader is
familiar with general or traditional communications management functions. Thus, this section also is limited to considerations affected by the ICAP communications process. To effectively manage the communications center personnel under this program, it is obvious that the supervisor should be intimately familiar with the essential disciplines, policies, and procedures discussed throughout this manual:

- General or traditional communications center functions.
- Patrol workload management criteria.
- Screening and prioritizing calls-for-service.
- Determination of appropriate responses.
- Telephone procedures.
- Legal procedures.
- Crime analysis unit operation and products.

In meeting his responsibilities for directing the communications center operations within the framework of the ICAP communications process, the communications supervisor/manager also should emphasize the following managerial functions:

- Motivation of himself and his personnel towards establishing and maintaining a high level of professionalism.
- Establishment and maintenance of the necessary formal and informal interfaces with the patrol, administration, and support divisions and with the municipal agencies responsible for social and emergency services.

- Evaluation of personnel performance by monitoring day-to-day activities, correcting deficiencies, and praising efficiencies.

- Stimulation of the high level of cooperation between communications and patrol that is necessary for program success. There are two convenient opportunities for enhancing such cooperation through role integration:
  - Allowing dispatch personnel to accompany patrol officers during patrol activities to acquaint the dispatcher(s) with the patrol environment.
  - Including dispatch personnel in shift change briefings, which will foster interest in patrol problems and activities and establish closer interpersonal relationships between dispatch and patrol personnel.
4.3.3 Communications Center Organizational Structure

In many departments, dispatchers perform their job with little direction from or interface with patrol. They control and direct the patrol officer workload by dispatching all calls-for-service, with the result that patrol officers have little time for other, perhaps equally important, functions such as routine patrol, directed patrol, and special operations. In this environment, the organizational structure provides small opportunity for correcting operational interdivision deficiencies.

In implementing the ICAP communications process, with its necessity for close interaction between patrol and communications, there are three major alternatives for the organizational structure as it affects the functions of communications and patrol:

- **Retain Existing Organization** -- The existing structure of the organization is retained, with separate lines of command and control for communications and for patrol. Within this structure, the written policies and procedures provide the vehicle for effective operation.

- **Retain Existing Organization, with Supervisory Personnel Transferred from Patrol** -- The organization is structured as before, but with patrol-oriented supervision. Some of the disadvantages to this alternative are:
- Displacement of existing communications supervisors.
- Nonacceptance of patrol supervisor by communications center personnel.
- Possible unwillingness of the communications supervisor-designate to transfer from patrol.
- The patrol-oriented supervisor probably will require extensive communications training.

Transfer the Communications Function to the Patrol Division -- Proponents of this alternative view the dispatch function as playing such a significant role in directing patrol activities that it should be under the direct control of patrol commanders and not classified as a support function (along with such auxiliary services as records, personnel, data processing, jailkeeping, and the motor pool).

Until these organizational alternatives are tried, tested, and evaluated with respect to their advantages and disadvantages, the optimum organizational structure will be indeterminate. When considering a modification to the organizational structure, the manager should proceed with caution, performing extensive research and preparation before committing to a change that has a major impact on existing roles, responsibilities, and authorities.
One of the most prevalent reasons behind poor or equivocal program results is failure to implement. Evaluation literature abounds with inconclusive findings; these, in turn, have resulted in considerable skepticism regarding the implementation of new concepts. Confidence in trying new ideas and methods -- even practical ones -- has been diminished by the poor performance of many programs and their evaluations. More often than not, the failure is due to poor or improper implementation, although the evaluation process usually is blamed.

Two important, practical realities have to be accepted before an administrator or planner rationally can approach the implementation of a new concept, method, or technique. First, evaluation -- no matter how sophisticated -- is only as good as the decisions and planning that went into the program implementation. Second, as a practical matter, elaborate evaluations are not really necessary when one is demonstrating a carefully and logically planned project or method -- one in which the activities, requirements, and outcome performance at each stage are specifically charted in advance.

The importance of proper preimplementation planning cannot overshadow the necessity for pilot testing as a way of locating and correcting any errors in the implementation plans, particularly in medium-sized to large agencies where the logistics of training and familiarization of personnel with something new presents obstacles. However, this does not preclude the necessity (and virtual requirement
for ultimate implementation success) for laying out both the short-term and long-term objectives of a program and its organizational implications. This must be done to allow for the gradual familiarization and personal identification with program objectives. Concern over resistance to change has, at times, resulted in a failure to let everyone know what a new program really means to an organization and what the strategy is for bringing it about.

A pilot test should be considered as the first step in the implementation of the ICAP communications process concepts presented in this manual. At a minimum, the pilot test can be an informal procedure (based on specific plans), where key personnel attempt to simulate the conditions of the new communications process; this approach is appropriate for the smaller departments. It can range to a complete test conducted in only one or two dispatch districts or sections in a very large agency. Once the faults are identified and dealt with, the affected commanders, patrol personnel, and dispatchers will become a creditable resource for the training and indoctrination of personnel in the remainder of the organization.

The main objectives of the pilot test should include, at the minimum:

- Assessment of the adequacy of the implementation policy.
- Assessment of the adequacy of the implementation procedures.
• Determination of the effect on overall operations.
• Determination of the effect on personnel performance.

The basic steps that should be considered in developing a pilot test plan should be:

• Define the test objectives.
• Define the boundaries of the test (geographic, time).
• Define the evaluation/assessment criteria.
• Identify and establish measurement entities:
  - Numbers of Priority 1, 2, and 3 calls.
  - Number of dispatches.
  - Radio channel occupancy.
  - Time consumption by type of event.
  - Manpower requirements (increase/decrease, type).
  - Citizen acceptance level.
  - Personnel acceptance level.
  - Performance (service delivery).

An important point to be considered in attempting a pilot test is to avoid the normal tendency to select the "best" sector or one that has the least problems. Conversely, the "worst" sector or the one with the most problems also would not be the proper place for the pilot test. In the former case, the "best" sector will not provide a reasonable
approximation of the average implementation faults, whereas implementing the test in the "worst" sector may end up creating the impression of better than anticipated results. The latter occurs simply because things probably would have improved anyway with any reasonable management change. Whether this rubric applies totally to every organization does not matter. The best place to pilot test is probably in an "average" sector or beat, one which experiences the broad gamut of problems and situation that will confront the overall organization.

Almost every police organization can benefit from the improvement of workload management through the ICAP communications process. It also is clear from the assessments of ICAP activities in each city that the practical skills and capability exist to properly plan, pilot test and, ultimately, implement these improved management concepts. Whereas the sophistication of the implementation planning and evaluation may vary widely, based on interest and circumstances, the key is to adhere to a simple, yet structured, logic flow and process for making these important decisions.
APPENDIX A

The Communications Process
A Perspective on the State-of-the-Art

by

James Evans
Public Administration Services
1. Introduction

The implementation of a process requires a plan or procedure to ensure the fulfillment of that process. The communications process involves the formation of a plan or design to successfully transfer a citizen's call to the proper law enforcement officer in the minimum amount of time.

The communications planning process should provide, at a minimum, adequate procedures for policy, system, and personnel development. Those detailed procedures are discussed in this appendix. Figure 1 is a flow chart illustrating the major steps for implementing a communications process.

2. Policy Development

To reach the desired goal of providing an effective communications system, policy must be developed in several areas, including:

- Planning (short- and long-range).
- Administration.
- Operations.
  - Interface between patrol and communications supervisors.
  - Disagreements between communications and patrol.
  - Problem resolution.
  - Procedures for taking complaints.
  - Dispatch policies relative to call stacking and/or priority of calls
  - Standard operating procedures.
  - Interface with citizens regarding complaints about calls-for-service (CFS).

2.1 Planning

Planning for communications can be defined as an analytic process that includes an assessment of future needs, targeting towards desired objectives, development of alternatives to the objectives, and selection of an implementation plan that coincides with both objectives and budget. Figure 2 illustrates the major communications planning steps.
Figure 1. Implementing a Communications Process
Figure 2. Event Flow Chart for Communications Planning
The department or agency should develop a planning policy that provides guidelines for implementing the communications process. The policy should cover the detailed requirements of identifying the problem, establishing goals and objectives that will provide an absolute answer to the problem, and developing, designing, purchasing and implementing the system. The policy clearly should define the duties of all involved personnel and the expectations of the design. It also should identify the funding source to determine: The amount of funds required and the amount available; restrictions, if any, that may be placed upon the use of the money; and how payment will be made. If Federal funding is involved, the policy will set forth all requirements that must be met to comply with Federal policies.

Communications planning must consider both short- and long-range goals.

2.1.1 Short-Range Planning

Short-range planning includes obtaining necessary licenses (e.g., Federal Communications Commission licenses, building permits), purchasing property, and taking other preliminary steps that facilitate long-range planning.

Short-range plans should establish objectives and requirements. These plans normally are project-oriented rather than broad system concepts. For example, short-range planning policies may be designed to complete limited projects such as the addition of one or more accessories to a communications center. These projects normally require budget consideration, but can be implemented without affecting the entire communications process.

Short-range plans should establish planning assumptions that will cover situations where long-range plans suddenly develop into immediate action plans. Alternatives also are needed, as in long-range planning, so that changes necessitated by rising costs or budget adjustments can be made.

The short-range plan requires selection of a system concept, implementation, testing, and acceptance. Evaluation of the project against the objectives is sometimes provided informally in this planning area.

2.1.2 Long-Range Planning

Long-range planning policy is more structured than short-range planning. The long-range planning process can be classified into definite steps:

- Identify the problem.
- Establish goals and objectives.
- Establish system requirement.
- Determine budget requirements.
- Establish alternatives.
- Develop specifications.
- Purchase and implementations.
- Test and acceptance.
- Evaluation of program in terms of goals and objectives.

Planners first must identify the problem and, in the case of the communications process, this may be a need to upgrade the communications design, to reduce response time, or to automate an existing dispatching system.

The goals and objectives that are established during the planning function usually are quite broad and may change during implementation. Multiyear implementation during periods of budget change sometimes necessitates a change in objectives. System requirements either may be controlled by the size of the budget available or they may determine a budget allotment.

Alternatives are always necessary in the planning process. Solutions will develop during the various phases, based on feedback from previous decisions. Each alternative will be evaluated against the system requirements to establish a minimum number of solutions meeting the goals and objectives.

After the final selection is made and the system design is determined, the planner should address the following areas:

- System Engineering.
- Facilities:
  - Operating space.
  - Supervisory space.
  - Equipment space.
  - New building or enlargement of existing facilities.
Radio transmitter building.

- Personnel:
  - Requirements.
  - Selection process.
  - Salaries.
  - Training.

Long-range planning for communications has become a more difficult task in the past decade because technology is moving at such a rapid pace. Deliveries and installations take longer periods, and rising costs of hardware and software create additional problems for the planner.

2.2 **Administration**

Administrative policy must completely define specific requirements in the following areas:

- Interface between police command personnel and communications personnel.
- Continuing operation of the center in the face of budget constraints.
- Hiring, staffing, and training.
- System maintenance.
- Guidelines for all future improvements.
- Interface with citizens regarding complaints about control center call handling.

2.3 **Operations**

Operational personnel require policy guidelines that are of sufficient detail to guide them on day-to-day problems that occur in the communications center.

A policy governing the interface of the communications supervisors with patrol officers is of prime importance, since daily problems occur between officers in the field and dispatch personnel. These problems frequently amount to a dispute over what the dispatcher said, or thought he said, and how it was interpreted by the patrol officer. An "airing" of daily problems will help to eliminate friction between the communications center and the field.
A policy concerning shifts also is necessary. The normal structure is 8 a.m. to 4 p.m., 4 p.m. to midnight, and midnight to 8 a.m. However, if these periods coincide with the patrol shifts, they should be adjusted by one hour to provide for continuity of calls and workload with minor confusion.

A policy relative to continuing problems and their resolution is crucial. Further operational procedures that must be controlled by policy are:

- Message priorities and message stacking:
  - To patrol units.
  - To other agencies.
  - To data banks.
- Network discipline.
- Procedural codes.
- Message security.
- Radio log requirements and retention.
- Taped telephone and radio information and retention.
- Reports to bureaus, divisions, and other agencies.
- Equipment maintenance.
- Telephone courtesy.
- Answering alarms.

3. System Development

System planning and organization is the first important step in the development of a communications system. This planning will vary considerably, depending upon the departmental need. A small department probably will use ideas provided by a vendor or a neighboring community. The medium-sized city will require more defined planning, including subsystems and alternatives. This will require a higher level of technical expertise than the small department.
In the large city, system development will require a systematic approach, with alternatives and probably with assistance from outside sources (such as consulting firms, communications design engineers, telephone engineers, and data personnel), as well as multiple frequency assignments from the FCC.

The main goal of the department during this stage is to receive the citizens' calls-for-service and dispatch the calls to the area patrol officer for response within a minimum amount of time and with a predetermined degree of system reliability.

Some of the parameters of system engineering required in medium-sized and large departments involve detailed engineering planning to determine proper radio coverage for mobile and portable equipment over the entire area of jurisdiction. This involves decisions about transmitter power for base stations, power requirements for mobile and portable units, antenna heights and locations of radio towers for effective radiation and, in many cases, precise propagation measurements. Engineering also involves telephone studies to ensure that sufficient trunk lines are available to serve the community, together with control center console design to ensure efficiency and minimum fatigue of operating personnel. Subsystems must be engineered into the communications concept with one major objective -- to transfer information in a minimum amount of time with minimum effort.

System development in a broad sense will require a discussion of the following areas:

- Equipment (system hardware).
- System procurement and implementation.
- Subsystems in communications.
- System alternatives.
- Organizational alternatives.

3.1 Equipment

As defined in the communications area, equipment includes both hardware and software items. When properly connected, they operate according to the objectives of the project -- primarily receiving an emergency message or call for assistance and transferring (transmitting) it to the responding officer for execution. The integrated components of the system are functional and responsive to this objective only when properly engineered and connected. Beyond the simple objective of receiving and transmitting a citizen's call for help, there are many equipment options that make the police officer more flexible during his tour of duty.
The system components or hardware items normally used in communications include telephone equipment. This will vary in its flexibility, capability, and size from the small department desk-type installation to the large department, where a separate equipment room is necessary. The instruments may be dial or touch-tone, with incoming trunks and substation button calling. The dispatch office should be provided with single button and direct line calling to other agencies or departments. This function greatly increases the calling speed.

The dispatch control console(s) in the communications center are the second major hardware item. A small department may have a single console for transmitting to and receiving from mobile and portable units, while the medium-sized to large departments may require several multiple frequency control consoles, depending upon the patrol area configurations and the number of police units requiring contact. At a minimum, the large console will have the following features:

- Transmit switch with foot controls.
- Frequency switches or control modules.
- Microphone (panel-mounted and/or lip-type).
- Headset jack.
- Clock.
- Alert tone for important transmissions.
- Receiver muting function.
- Volume controls.
- Simultaneous selection of transmitting channels.
- Accessory switch panels.

The control console is connected to the base station transmitter and receiver by means of direct or leased telephone lines, or microwave or other radio-controlled equipment. Associated with the base station is the radio tower for supporting the antenna. The remote base stations vary in output power from a few watts to several hundred, depending upon the range required of the radio system.

Other electronic items used in the control center include:

- Logging tape recorders for telephone and radio channels.
• Instant-recall telephone recorders for each complaint taker position.

• Phone-patch unit for interfacing the telephone and radio equipment.

• Speech scramblers for certain radio channels.

• Direct line telephones to other agencies or departments.

• Status indicators for mobile status.

• Maps of jurisdictions and patrol areas.

• Alarms from business places.

• TV monitors from jail areas, parking lots, and other critical areas.

• Paging frequency for command personnel.

• Other departmental frequencies (such as fire, ambulance, public works, adjacent cities, counties, State) to be used during emergency situations or interdepartmental contacts.

• Data terminals for computer-aided dispatch (CAD), city, regional, State or Federal records.

• Printers terminals for computers.

• Teletype terminals for weather information.

3.2 System Procurement and Implementation

The planner will be responsible for system procurement and implementation, with the assistance of the system design engineer, the purchasing agent, and the communications supervisor. Figure 3 presents guidelines for this process. The implementation process begins with the selected alternative and includes the preparation of specifications and the purchase, installation, and system acceptance. The specifications may be functional, technical, or a combination of both.

During the bid procedure, the purchasing agent may hold a vendors conference to ensure complete agreement and understanding of the proposed system parameters. On large system installations, it is well to consider the use of a project supervisor, who will be responsible for coordinating deliveries, installations, work problems, permits, and testing.
Figure 3. System Procurement and Implementation Guidelines

*Note: If the delivery and installation involves extremely complicated radio system design, tower or building construction, or computer hardware and software, add more time. Vendors and contractors will provide estimates.
procedures. The final step in the process is system acceptance, after testing has indicated that the project meets the original goals and objectives.

### 3.3 Subsystems in Communications

During system development or after a system is installed, a department may find it desirable to add subsystems to the basic communications operation. A communications subsystem is a secondary or subordinate operation that is not required to receive and transmit emergency information but that enhances the communications operation. A few of the major subsystems include:

- Computer-aided dispatch (CAD).
- Automatic vehicle location (AVL).
- Mobile digital data devices (MD).
- 911 emergency telephone number (911).

Each of the above systems has advantages and disadvantages that are discussed in the following sections.

#### 3.3.1 Computer-Aided Dispatch

Computer-aided dispatch is becoming an important subsystem in the communications centers of medium-sized and large departments. A CAD system provides an easier, less complicated, and improved organizational approach to dispatching. Technical advances in the hardware and software areas are producing mini- and micro-computers that are smaller, more reliable, less costly, and much more powerful than earlier, full-sized computers. The programming (software) has become more sophisticated and specialized, and many preprogrammed (canned) systems are available. Figure 4 illustrates a basic CAD subsystem integrated with the communications control center.

The CAD system components include a digital computer, a terminal device with a cathode ray tube (CRT) display and a keyboard (these are used rather than a Teletype machine because of the higher operating speed), and magnetic-medium storage devices, employing drums, discs, and tape. The CAD system assists the dispatcher with the assignment of vehicles, since it can store and display immediately the status of every departmental vehicle. The special tactical patrol units of a department that carry two officers and extra equipment also can be displayed immediately; therefore, the dispatcher can organize the available units for any action in any major crime area. In assessing the incident, the dispatcher considers the location of the incident, the time required to respond to the incident,
Numerous Base Repeaters to all units

911 Circuits from
Public Number to be
Determined

Logging Recorders

Instant Recall Recorders

Paging

Data from
Mobiles

Referral calls

Dispersal Panel

D-1 Dispatch 1
D-2 Dispatch 2
S-1 Supervisor 1
S-2 supervisor 2
CJ - Criminal Justice
CAD - Central Automated Dispatch
EMS - Emergency Medical Services

Figure 4. Communications Control Center with CAD
the location of the various surrounding police vehicles, the importance of this incident relative to other incidents occurring in the surrounding area, how many units should be dispatched, and whether special tactical or officer capability is required from other precincts or districts. This CAD system capability has greatly enhanced the dispatcher's role as a strategic planner.

Other system benefits include the automatic assignment of event or incident numbers by the computer and the management information available from the computer storage bank. Many report tasks in the communications center can be streamlined by using the computer memory and storage facilities. For example, CAD can provide terminals in the department's record section for entry of information from the officers' reports that is necessary for the monthly Uniform Crime Reporting (UCR) submission. Additional management information becomes available from these entries.

The implementation of CAD systems in public safety departments is increasing rapidly where a need can be justified, as new technology in hardware and lower costs in software prevail. A major disadvantage has been the system implementation and maintenance costs.

3.3.2 Automatic Vehicle Location

Another trend towards automation in the police communications area is the development of the automatic vehicle location (AVL) or monitoring (AVM) system. The system concepts have been in existence for over a decade, but the advent of the microcomputer has resulted in improved technology that makes the application a feasible reality.

There is a growing interest in AVL systems for improving both the management of mobile operations and police responses to community needs. AVL enhances the patrolman's safety and provides data for evaluation of operational strategies.

Several technologies are available for selection. The types can be divided into three broad categories: Proximity types, dead reckoning, and radio frequency positioning. Each category has specific advantages and disadvantages, and the selection of a system to meet the departmental needs and budget is dependent upon a significant number of technical and nontechnical factors. During the selection process, characteristics of the overall communications operation, the layout of the city, and the topographical parameters should be considered. A comparison of the various AVL systems was made in a paper presented at the IEEE Vehicular Conference in Denver, Colorado, by Geoffrey D. Wilson of the Aerospace Corporation. Mr. Wilson's paper identifies a variety of applications, in

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addition to the dispatching function and officer safety factors.* These are as follows:

- **Tactical Direction** -- Overall control of vehicle deployments can be provided in situations such as major raids, riots, or natural disasters.

- **Emergency Deployment** -- Assistance can be provided to units unfamiliar with the neighborhood.

- **Supervision** -- Vehicle location can be determined when direct verification is desired or when a patrol officer fails to respond.

- **Covert Operations Support** -- Close supervision can be maintained in "trailing" operations with unmarked cars and without apparent officer communication.

- **Resource Use Analysis** -- Patrol operations can be analyzed to document the number and allocation of resources.

- **Patrol Strategy Development** -- Vehicle assignments and instructions can be evaluated and improved through analysis and correlation of beat patterns and crime events.

- **Training** -- Real situations can be reenacted for training purposes.

- **Legal Evidence** -- Substantiating time and location information can be provided for incidents when legal implications subsequently arise.

- **Disciplinary Action** -- Objective data can be provided in situations where vehicle location at a given time is in question.

- **Prorating of Billing Costs** -- Billing charges to individual communities can be calculated where

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the agency is providing police services to several communities under contractual arrangements.

AVL systems under consideration should be compared with existing system parameters, and the cost-effectiveness of this subsystem weighed in comparison to other improvements that might be made in the communications area.

3.3.3 Mobile Digital Communications

Mobile digital communications for use in police and other public safety departments is another subsystem that utilizes the computer as the focal point for storage and for switching to State and Federal files.

The term mobile digital communications identifies a specific electronic system that allows messages to be transmitted to and from the police vehicle by data bits rather than using the standard voice communications.

Historically, it has been possible to send digital messages from a mobile unit to a base station operator since the mid-1920's when police departments first started to use radio transmission from the dispatcher to the police car. Early Teletype transmissions from mobile to base used data bits. However, it was not until the age of computers that criminal data centers were implemented and extremely fast answers could be obtained by police departments from the data storage bank. Recent electronics technology has allowed such miniaturization of components that a mobile terminal, including storage capabilities, easily can be fitted into a small area in a police car.

Data transmission is many times faster than voice transmission.* Therefore, a message that would require several minutes by voice can now be sent and received in digital form in a few seconds. In addition to the advantage of increased transmission speed, a mobile digital unit provides automatic vehicle identification and privacy of communications.

Information requests from computer files account for a significant portion of the present mobile communications. This activity contributes to the present channel congestion.

The officer equipped with a mobile digital unit simply pushes the transmit key on his terminal and the message is sent automatically. Depending on the format used on the mobile terminal, a message may be sent

*Digital transmission of messages is 10 to 20 times faster than voice, with virtually no chance of error.
to the local dispatcher or relayed to another mobile unit or to the State and Federal data banks.

If there are no delays, the response from the computer file is received on the mobile terminal almost instantly, since there is no manual operation at the dispatch center. Delays in the system usually are caused by use of the assigned frequency for other messages (in the case of shared use of the radio channel) or delays in accessing the data bank.

The system provides the officer in the field with direct and rapid access to the computerized data files. One system disadvantage is the system cost versus total advantages (see Figure 5 for a basic mobile digital diagram).

3.3.4 911 Telephone Number

Another subsystem that is being implemented across the Nation in increasing numbers is the 911 emergency telephone number. The implementation of 911 has grown to over 700 installations since the first major system was installed in New York City in 1968. The major advantage of 911 is a reduction in response time for the citizen in his call for help, since valuable time is not lost in looking up a 7-digit number for the police, fire, or ambulance service. Figure 6 indicates the estimated saving of time during the emergency response cycle. One disadvantage is the high conversion cost for the telephone companies. Some major utilities foresaw the future requirement and have made progress towards central office conversion to electronic switching and computerization.

Some of the problems involved in implementing 911 are:

- Frequent noncongruent boundaries of the police, fire, and ambulance services in relation to the telephone central office jurisdictions.

- Switching between different telephone companies, different area codes, and boundaries to be established.

Establishment of a 911 subsystem usually occurs through the action of a committee representing the users and the utilities involved. This committee establishes boundaries, answering points, and estimated system costs, as well as selecting the desired operational features. Some of these features include:

- **Direct Dispatch** -- The point of reception and dispatch.

- **Relay** -- The relay of the received 911 call information to the proper agency for emergency action.
Figure 5. Mobile Digital System
RESPONSE CYCLE DEFINITION

EVENT DETECTION NOTIFICATION DISPATCH

RESPONSE CYCLE TIMING WITHOUT 911

Event Detection Notification Dispatch

\[ t_1 \rightarrow t_2 \rightarrow t_3 \rightarrow t_R \]

TIMING WITH CENTRAL DISPATCH AND 911

Event Detection Notification Dispatch

\[ t_1 \rightarrow t_2 \rightarrow t_3 \rightarrow t_R \rightarrow t_n \]

Note: From report of Franklin Institute Research Laboratories on Single Emergency Telephone Number, March 1970.

Figure 6. Emergency Response Cycle
• **Transfer** -- The transfer of the call to the proper responding agency.

• **Referral** -- The 911 call is referred to a central receiving point which determines the proper agency to respond. (This may require giving the caller a 7-digit number for reinitiation of his call.)

• **Called Party Hold** -- The capacity to hold the connection of a 911 call for confirming or tracing.

• **Distinct Tone** -- Indicates to the answering operator if the 911 calling party has incorrectly called and subsequently hung up. This usually requires dedicated trunk lines.

• **Forced Disconnect** -- Allows the answering operator to force release of the 911 line and avoid jamming of incoming calls.

• **Call Recording** -- Provides the opportunity to evaluate citizens' complaints, and serves as a training guide.

• **Ring Back** -- Allows the answering operator to ring back the 911 caller who has hung up his phone.

• **Selective Routing** -- Allows a 911 call to be automatically routed to a predetermined answering point, regardless of the telephone boundaries. This option is not available in all telephone jurisdictions since it requires some degree of computerization and/or electronic switching.

• **Automatic Number Identification** -- Automatically displays the telephone number of the calling party.

• **Automatic Location Identification** -- Displays the street address of the caller.

• **Coin-free Dialing** -- Allows the 911 caller to place an emergency call to the public safety department without insertion of a coin.

Some of these options are generally available, some are still in the experimental stage, and others are available at additional cost. The usual responsibility of the 911 committees is to analyze the needs of the agency
or community, cost factors, availability of options, volume of calls, proposed boundaries and other critical factors. This information then is weighed against the desired features.

3.4 System Alternatives

During the system development stage, it is customary to select system alternatives that are necessitated by cost or other system parameters. These alternatives can include:

- Multiple base stations throughout the service area versus one powerful station at a central point.
- Base-repeater stations versus operator-controlled base stations.
- Mobile-repeater units versus base-repeater units.
- Satellite receiver locations versus higher towers and gain antennas.
- Microwave radio for base station control versus leased land-line control.

Other problems will require technical expertise in reaching decisions and making proper selections.

3.5 Organizational Alternatives

The planner also must select alternatives in considering the organization structure. These usually are determined by such factors as departmental requirements, cost-effectiveness, urgency, and the improved use of man-hours. Some organizational alternatives are as follows:

- Hand printed or written reports versus typed reports. The report may not require typing for data entry if the legibility is sufficient for both entry and microfilming.

- Mail-in reports versus an officer on the scene. The mail-in type of report is a method used to reduce officer and dispatcher workload when personnel budgets impose it.

- Telephone-processing is a method of report handling that has two distinct advantages. First,
it allows information to be entered into the data bank immediately after crime investigation and, second, the report is made while factors are fresh in the officer's mind.

- Consolidation of city or county communications versus agency-operated systems. The major advantage of consolidation is saving of manpower in the telephone and dispatch area. A major disadvantage is the loss of local departmental control over communications personnel. Both of these factors must be considered carefully prior to selection of an alternative.

4. Personnel Development

4.1 Personnel Selection

The screening and hiring of communications personnel is one of the major elements in the planning and execution process. Figure 7 indicates the major steps for personnel selection.

It is extremely important to have capable and experienced personnel in the telephone and dispatch positions, since these persons represent the entire department to the public. The professionalism and effectiveness of communications system operations depends as much upon its personnel as upon its hardware, software, and other equipment.

A telecommunications center may contain the latest and most sophisticated hardware but, if the operating personnel lack the necessary professional qualities, the center will be substandard. This high degree of professionalism must be assessed during the application and screening process. It will be dependent upon individual loyalty, dedication, initiative, and a sense of responsibility. Other objective desirable qualities are the ability to spell accurately, type, write legibly, utilize basic arithmetic, and maintain personal cleanliness and grooming. He or she should have excellent physical, emotional, and mental health. Effective functioning and a high level of stability in all three areas determines a good operator. The operator who loses control of his emotions while handling difficult situations will probably lose his self-esteem and effectiveness. Allowing operators to spend off-duty hours riding in the patrol car will tend to alleviate some of the emotional stress and to acquaint the operator with some of the problems experienced by patrol officers.

Some departments select operating personnel from within the organization. This has certain advantages, including the fact that it eliminates some element of the screening process because the person's capabilities
Figure 7. Communications Personnel Selection Process
are already known. In addition, it represents an opportunity to advance a good employee into a more responsible position. The selection and screening of all new employees should be carried out with some vision and objectivity and should be a part of the objectives of the planning personnel in their long-range missions.

The recruiting and screening process for communications operators will, of course, depend upon the existing civil service examinations and qualifications. However, the department should have input to the selection guidelines to maintain a high standard of operation.

The modern communications center is many times more sophisticated and complicated in its operation than those of just a decade ago. A modern control console may have multiple-frequency operation, with switches for mute receivers, tone alert, simulcast, intercom, and other functions. Computer terminals require fast and intelligent operation to access formats in a matter of seconds while telephone calls are being answered or vehicles dispatched. Requests for information from patrol officers must be handled with accuracy and speed or the entire service delivery function will deteriorate with time.

The prospective candidates should be in excellent health and physical condition and should be required to take a physical examination prior to hiring, including a hearing test. Young or middle-aged persons can perform more efficiently in a dispatch position due to the consistent frequency response of their hearing ability. Older persons may have frequency problems at the low or high portions of the audible spectrum, thus creating problems in a work assignment of this nature.

If the civil service examination does not address the needs specific to the selection of communications personnel, the department should request the addition of at least the following items to assist them in the selection:

- **Intelligibility** -- Does the candidate have voice defects, does he choose his words carefully when answering questions; is his pronunciation correct; does he slur words, speak incoherently, or have other speech problems?

- **Fluency** -- Is his vocabulary adequate; is his sentence structure good; does he use words properly, pronounce words correctly, use slang expressions, pronounce words too rapidly?

- **Understanding or Coherence** -- Does he speak coherently; does he understand questions and listen intently?
• Attitude -- Does he have an enthusiastic attitude; is he friendly in answering questions; is he quiet or talkative; does he take over conversation; is he discourteous, argumentative, confident, or confused?

• Stability -- Does the candidate appear tense or nervous and seem to get upset easily; is he slow to understand questions; does he display unsound judgment?

The answer to some of these questions should provide the examining officer with a better understanding of the applicant's qualities.

4.2 Personnel Retention

Turnover in the communications section and the long-range retention of operating personnel will depend largely upon proper staff selection, promotion opportunities, and the pay scale relative to comparable jobs in the area. Pay scales should be researched by the planner to arrive at a standard that will attract capable personnel. Many departments have a scale fixed by civil service. It always is advisable to hire personnel who have a previous background in law enforcement communications if possible. Candidates from outside the State or general area will not know street names and addresses; therefore, some value should be placed upon local personnel with desired qualifications.

4.3 Determining Position Descriptions

After the department communications planner has defined the requirements for personnel selection, it will be necessary to prepare position descriptions for each of the related tasks in the communications center. Many departments will find adequate position descriptions on file at the local civil service department of the city, county, or State, especially in the medium-sized and large jurisdictions. Another excellent source is the use of material from other departments that have established communications control centers.

The positions selected will depend upon the size of the operation. For instance, a small department may require only one person to take the emergency calls and dispatch to the patrol cars, while medium-sized and large departments with more sophisticated control centers will require several complaint-takers (telephone operators for emergency calls) and a number of dispatchers along with shift supervisors. The large consolidated control centers for public safety dispatching usually require a center director, shift supervisors, complaint-takers, dispatchers, and, probably, maintenance personnel.
Each communications control center will have a specific requirement, and the planner will be responsible for determining the size of the staff required. This can be based upon the number of emergency telephone calls received daily and the number of messages dispatched, the number of police or public safety vehicles that are radio-equipped, subsystem equipment (such as computer terminals, television monitors, alarm systems, and tape recorders), number of radio frequencies to be monitored, walk-in traffic (if applicable), and other duties. Figure 8 estimates the staffing required to answer calls within 10 seconds.

The center usually will be staffed to meet normal requirements and, therefore, must have some arrangement for answering calls during major incidents. Many departments use the center supervisor and/or the dispatching staff to answer the overflow calls. Staffing for the dispatch operation will vary according to workload requirements in the control room. As an average, one dispatcher should be able to handle 50 radio-equipped units during normal operation. Patrol officers need procedural training as rookies in the area of communications to ensure that messages are kept short and concise, 10-codes are used whenever possible, and other methods are used to conserve air time.

The following are sample position descriptions that are generally applicable to communications center needs and may be adjusted to meet specific requirements.

4.3.1 Control Center Director

The control center director should be a sworn officer of a police department, usually with the rank of captain. He may report to a senior manager (such as the Division Commander of Staff Services) or directly to the executive.

The control center director will be responsible for direct control of the center, the operators, supervisors, and technical personnel. He will have direct interface with the patrol commanders and division and bureau commanders. He also will be required to interface with outside departmental personnel. He will be responsible for carrying out all departmental policy and implementing new policies for improvement in his area of responsibility. He must have had an extensive background in law enforcement or public safety operations. He should have a comprehensive and successful background in supervising personnel.

4.3.2 Communications Supervisor

The communications supervisor (in consolidated or centralized systems) is responsible for scheduling of communications personnel, including all shift assignments and changes required for optimum utilization of personnel. He will be required to cooperate with other agencies and organizations to ensure maximum public safety effectiveness. He must comply,
Figure 8. Estimated Staffing Required to Answer Calls within 10 Seconds
and be assured that all of his employees comply with the policies, regulations, procedures, and recordkeeping assignments of the communications center. He should have a comprehensive background in public safety communications and in the supervision of personnel. He may be either a sworn officer, usually with the rank of lieutenant, or a civilian.

4.3.3 Complaint-taker and/or Dispatcher

The complaint-taker and/or dispatcher should be thoroughly screened and a carefully selected applicant. (These assumptions are made on a basis that these two positions are interchangeable or are combined into a single position.) He must be willing to accept the necessary responsibility to fulfill his position. He must be prompt and accurate and have a capability in handling all communications tasks in a professional manner, resulting in courteous, accurate, coordinated, and unemotional dispatch effort. He will be responsible for receiving emergency telephone calls and entering all required information on the event sheet, card, or data terminal, transmitting the information to the proper patrol unit, and recording all followup information, while simultaneously prioritizing and stacking calls in sequential order by time of receipt and seriousness. He must be capable of handling all Teletype and data entries and keeping all information confidential.

All positions in the communications center have standard civil service qualifications, and also should include the following:

- Graduation from high school.
- Excellent health, good physical condition.
- Good emotional stability.
- Eyesight corrected to 20-20.
- Good hearing (relatively flat response from 500 to 3000 cycles).
- General maturity for sound judgment.
- Good personal habits.
- Good command of the English language.
- Legible handwriting or printing.
- Ability to type (speed to be determined).
• Willingness to work irregular shift assignments or overtime, if required.
• Must agree to undergo a personal security background examination before acceptance.

Salaries for each position in the communications center will be determined from like positions in similar positions in the general area. Fringe benefits and step raises will also be determined at a comparable level to attract desirable and dependable employees.

4.4 Personnel Training

The training needs of the communications personnel for a control center will vary considerably among small, medium-sized, or large departments. The small department usually trains new telephone and radio operators by the onsite observation method for a few days to a week. This method is used because of limited budgets and the lack of capable training personnel. While effective to an extent, the department would find funds well spent to send the prospective employee to a communications course for intensive training. Formal training generally is used by medium-sized and large departments. Depending upon the circumstances, the formal training may be furnished inhouse or outside.

There are few positions in the police department subject to more scrutiny than that of the communications dispatcher or operator. It is a position where an even disposition and qualified performance must be the rule rather than the exception. Performance in this position usually is in direct relation to his training, his ability to cope with any and all situations, and his devotion to his position.

Accepting the responsibility of the position for which the employee applies must be one of the hiring requirements. He must be prompt, accurate, and courteous to the public and to police officers. Carelessness, a poor attitude, and disregard for supervision or policy cannot be tolerated.

The development of professional training courses for communications operators is relatively new, and several colleges and community colleges have instituted programs that fulfill this need. The Associated Public Safety Communications Officers, Inc. (APCO), has promoted training in communications in an effort to increase professionalism in police and public safety departments.

The technicians who are hired by departments for maintenance of equipment must have prior training in electronic trade schools or in college engineering courses. Usually, these courses provide the training necessary to obtain the required FCC license. A Second-Class Radiotelephone license is required to repair police-type radio transmitters.
Figure 9 indicates the steps that the planner must take to provide guidance if the department is to provide the training. As stated previously, the depth of training will depend upon the size of the department and the sophistication of the control center equipment.

After the requirements are defined, a decision is necessary as to the type and location of the training. If trained at a college, the employee moves directly to the departmental communications center for hands-on training for a prescheduled period prior to being assigned to a shift.

If inhouse training is chosen, it will be necessary to select appropriate personnel to provide the training. These may be chosen from various departments within the department and/or outside, depending upon the exact requirements. Training personnel can include:

- A police training officer to provide law enforcement instruction.
- A command officer for police policy and regulations.
- A data processing representative to provide training on data terminals such as Teletypes or CRT displays and the various formats used for all accessible data banks.
- A communications director or supervisor to provide training on the telephone and dispatch functions, including center operating procedure, 10-codes, etc.
- A telephone company representative to discuss the proper use of the equipment, available resources, etc.
- A radio technician to provide a broad overview of the equipment, subsystems, and their operation, as well as whom to call for maintenance, and such matters as FCC rules and regulations.
- A representative from the local emergency services office of the city or county to provide information on procedures during any extreme emergency.

The training site usually will be at the existing police or public safety training area or academy. The advantage to this is that equipment is already available (e.g., chairs, tables, projectors, screens, blackboards).
Figure 9. Communications Training Guidelines
The course guidelines are one of the more important parts of the training preparation. Generally a meeting with the proposed instructor will indicate their material content and the time to be allocated to the subject matter. Some references for material for instruction include:

- Copies of departmental rules and regulations.
- Data terminal guidelines for Federal, State, regional, local, and CAD systems.
- Telephone company training guidelines.
- Vendor assistance and equipment usage guidelines.
- FCC rules and regulations.
- APCO Public Safety training manuals, available from the national office of APCO, New Smyrna Beach, Florida.

The training course should include a minimum of 40 hours of class instruction and some period of time in the control center for hands-on instruction.

Whether departmental employees or outside personnel, the instructors should be carefully selected based upon their ability to express themselves and past success in the training area, in addition to being knowledgeable in their field. The time to be devoted to each subject or topic should be carefully evaluated relevant to the subject and its subsequent value to the student.

The course topics will vary to some extent depending upon the subsystems that are to be used. A standard list of topics are suggested below:

- Student orientation.
- Law enforcement and public safety basics.
- Communications procedures and techniques.
- Departmental records.
- Data systems.
- FCC Rules and regulations.
- Equipment and subsystems.
• Telephone systems.

Some detailed explanation of the topic areas follows to guide instructors in the proper content of topics, since the selected instructor may not be oriented towards the exacting requirements and duties of the public safety communications center.

4.4.1 Student Orientation

This should include rules of conduct for the employee, course objectives, necessary outside class study materials (such as formats, signals used, street locations and names) formats and policies governing the center, the course outline and a list of the proposed instructors, a brief review of the course materials, records used in the center and their importance, and the role of the student in relation to the communications director, supervisor, complaint-taker, dispatcher, and technician. The interface of center personnel with police officers, patrol supervisors, command personnel and citizens outside of the department also should be covered. These relationships vary depending on whether the center serves the police department only or is a consolidated public safety communications center. The class supervisor will normally be in charge of the orientation and will introduce each class instructor.

4.4.2 Basics of Law Enforcement and Public Safety

The instructor for law enforcement should have a police background and be able to provide a basic understanding of the police officer's role as it relates to the dispatch office. Material to be covered includes: Basic statutes, warrant information, court procedures, jail procedures, problems on the street that create problems for patrol officers, patrol deployment, management reaction to crime patterns, departmental shift management, the use of tactical and special units, how detective and investigative units assist patrol officers on the crime scene, the role of the police department during disasters, and interface with civil defense, State police, and other public safety departments.

4.4.3 Communications Procedures and Techniques

The instructor for this unit must have a good background in communications center operation. Specific areas of instruction should include: Preparation of messages, proper terminology, the art of command and control, standard communication procedures, abbreviations used, 10-codes (their purpose and need), and the use and value of the phonetic alphabet, proper procedure for talking into a microphone, what calls-for-service are to be dispatched and which are transferred, prioritization of messages, stacking of nonemergency messages, the need to dispatch crime-in-action messages without delay, handling information requests from the public and from the patrol officer, point-to-point message handling, paging of command
personnel, and emergency or civil defense message handling. The details of all communications center records, such as event cards, logging recorders, instant playback recorders, retention of tapes, normal and special case retention, filing, and permission to release any center information, also should be covered in this part of the training.

This section of instruction covers the actual communications center requirements and, if available, a mock-center control unit is of great assistance to the student in understanding the material. A field trip to the civil defense center also is important in this area of instruction.

4.4.4 Departmental Records

The instructor for this unit will normally be an employee of the department records section and will provide basic information on all records in the department, including how they are received, stored, and accessed, together with who may receive information. Fingerprint files, mug files, Part I and Part II crimes (UCR), arrest reports, criminal and noncriminal reports, property and evidence (receipt, storage, and disposal), jail records, and data access to other local, regional, State, and Federal record files are areas to be discussed. It is important for the communications center personnel to have a complete understanding of the records system. This will emphasize the importance of properly recording information received from a citizen regarding a crime.

4.4.5 Data Systems

If such a system is implemented, the data systems instructor will normally spend a considerable part of his instruction period on the CAD concept, what storage files are available, size of files, formats to be used, types and number of terminals and their capability and speed, terminal switching to other data banks in use in the department (such as city, county, regional, State, and Federal). A basic computer theory orientation should be provided, together with instruction in the use of other terminals and formats that may be used in the center. The instructor also will discuss security relative to law enforcement computers.

4.4.6 FCC Rules and Regulations

This important element of instruction can be handled either by the communications procedures instructor or the equipment and subsystems instructor. Each student should receive a copy of Part 89 of the FCC rules and regulations. Class instruction should be provided on all of the operating portions.

4.4.7 Equipment and Subsystems

This portion of the training program should be handled by a competent radio technician or, if not available, by a communications supervisor with
a technical background. Instruction should cover the console equipment, tape recorders, status board operation, transmitting and receiving base station equipment, system design (i.e., how the dispatch message gets to the mobile, portable, and pager units), expected range of the units, who to call for maintenance on a 24-hour basis, and other system factors.

4.4.8 Telephone Systems

This phase of the training can best be handled by a representative from the local telephone company, if available. If not, the communications procedures instructor should accept this responsibility. The telephone instruction will include proper use of instrument, proper method of answering, courtesy to callers, 911 emergency number (if in use), call switching, available accessories, and who to call for maintenance.
APPENDIX B

Departmental Policy for Managing Calls-For-Service
Within the Communications Center

Wilmington, Delaware, Bureau of Police
GENERAL ORDER NO. 78-5

TO: All Personnel
FROM: Harry F. Manelski
Chief of Police
SUBJECT: Procedural Guide for Managing the Police Demand
DATE: 28 June 1978

I. INTRODUCTION

The Wilmington Bureau of Police has received a grant from the Law Enforcement Assistance Administration for the purpose of studying more productive ways of responding to, and dealing with, calls-for-service. This project is entitled "Managing the Police Demand", and will be in operation from July 1, 1978 through June 30, 1979.

In order to implement this project, certain changes will be made in various units of the department, mainly: Communications, Basic Patrol, Structured Patrol, and Crime Analysis. This order will detail the revised procedures and will serve as an operational manual for all personnel involved.

II. ORGANIZATIONAL CHANGES

The following changes in the structure of the Wilmington Bureau of Police will become effective July 1, 1978:

A. The name of the Crime Analysis Division will be changed to the Resource Management Division.

B. The Resource Management Division shall have within it the following units:
   1. The Crime Analysis Unit;
   2. The Complaint Service Unit.

III. COMMUNICATIONS UNIT

A. Introduction

Under Managing the Police Demand, the Communications Unit will take on the responsibility of diverting a portion of in-coming complaints out of the dispatching system. This means that not all complaints received by the Bureau of Police will require the dispatch of a patrol unit to handle the complaint. The intent here is to minimize the workload that is placed on Basic Patrol Units.
B. Classification of Complaints

Personnel assigned to the Communications Unit who answer the incoming police service lines, hereafter referred to as complaint-takers, will have two basic responsibilities:

1. To determine the status of the complaint;
2. To determine the mode in which the complaint should be serviced.

1. Complaint Status:

By complaint status we mean such things as:

a. Type of incident being reported;
b. Whether or not the offense is in progress;
c. Whether there is an on-scene potential for physical injury, property damage, etc.

Calls-for-service received by the Bureau of Police will have a status of either critical or non-critical:

a. A CRITICAL complaint is one which requires the immediate intervention of a police officer. Complaints involving a serious offense that is in progress or has just occurred, ones where a suspect is still on the scene or is fleeing, or where any life threatening condition exists would all be classified as critical complaints. Examples of critical complaints would be: a shooting, a robbery or burglary alarm, or a personal injury accident.

b. A NON-CRITICAL complaint is one which does not require the immediate intervention of a police officer. Most of the calls-for-service received by the Bureau will fall into this category. Examples of non-critical complaints are: property damage accidents, burglary reports, reports of harassing phone calls, etc.

A table of complaint priority designations will be provided to Communications Personnel. It should be noted, however, that as the circumstances associated with a complaint change, its priority designation may also change. For example, while a report of a "LB" would normally be a non-critical complaint, such an incident would become critical if it involved a 4 year old child who suffers from a serious disease. The key point to remember in determining whether a complaint is critical or non-critical is whether or not the immediate, on-scene presence of a police officer is required.
2. Modes of Complaint Services:
   a. Critical Complaints.

   All calls of a critical nature will be referred immediately to the police dispatcher for dispatch to a patrol unit. (The dispatching priorities to be used will be detailed later in this order.)

   b. Non-Critical Complaints.

   Non-critical complaints may be handled in a number of ways, which shall be listed below. Again, the intent of the complaint taker should be to divert as many appropriate calls as possible out of the dispatch system. In other words, for those complaints that can be handled through one of the alternatives listed below, the dispatch of a police unit to handle the incident should be the last alternative considered. In no case, however, will a complainant be denied a response by a patrol unit if he or she demands it.

   1. Dispatch Required:

      Certain non-critical calls will always require the dispatch of a patrol unit. In the following circumstances, a patrol unit will be dispatched:

      1. The complainant demands a patrol car.
      2. There is a potential for further violence or property damage at the scene of the incident.
      3. A suspect is present on the scene, or there is a potential for a timely apprehension of a suspect if a unit is dispatched.
      4. Important physical evidence is present at the scene, and the evidence will be lost if not retrieved within a short period of time.
      5. There exists any condition requiring the presence of a police officer.

      These complaints will be referred for dispatch, whether immediately or on a delayed basis, depending on the nature of the complaint. When the red delay light is on, the complaint taker will advise the complainant that he should expect a 30 minute delay in the police response.

   2. Walk-In:

      If the complaint being received does not meet the criteria for dispatch of a police unit, and if the complainant does not demand such a response, the complaint taker should endeavor to have the complainant
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respond to Central for assistance. Dependent on the type of complaint, the person may be referred the Detective Division, the Youth Aid Division, or the House Sergeant. In these cases a complaint card will be completed, but no complaint number will be stamped on it.

3. Call-Back;

These cases will be referred to the Complaint Service Unit, whose officers will then contact the complainant by phone. Types of complaints that may be referred to CSU include: thefts, criminal mischief, auto thefts, harassment by phone, etc. It is important that the complaint taker obtain the complainant's name, address, and phone number where he can be contacted, and times when he will be available for a call back. This information will be recorded on the complaint card. This card will be stamped with a complaint number.

4. Outside Referrals:

Some complaints that are received in the Communications Center may be adjusted by the complaint taker by referring the caller to another agency. In these cases, the complaint taker will complete a complaint card listing the complainant, nature of complaint, and disposition. A complaint number will be stamped on the card.

5. Other Adjustment

Some calls that are received in the Communications Center may be resolved by the complaint taker without referring it to either the Complaint Service Unit or to the dispatcher. In cases where a complaint is so adjusted, the complaint taker will complete a complaint card, which will be assigned a complaint number. In the "remarks" section, he will also briefly note the nature of the adjustment. Most of the "adjustments" will actually be outside referrals. In-coming "crank" calls, requests for information (such as the location of Family Court), or any call that does not actually constitute a request for police service, should not be recorded on a complaint card when they are handled within the Communications Unit. In all cases, the complaint taker must take care not to unnecessarily tie up emergency phone lines. If a complaint cannot be adjusted in 1 or 2 minutes, it should be referred to either CSU or dispatched to a patrol unit.
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C. Dispatching Procedures

1. Prioritized Dispatch:

As with the Split Force Project, calls will be dispatched to patrol units in order of their priority, with calls within each priority being dispatched on a first-come, first-served basis. This means that all critical calls will be dispatched before any non-critical calls, and non-critical calls will be dispatched in the order that they are received in the radio room. Again, special circumstances may dictate a change in the first-come, first-served dispatching procedure, and this decision shall be left up to the discretion of the Communications Supervisor.

2. Use of Basic and Structured Patrol Units:

As with the Split Force Project, departmental policy shall be that Structured Units will not normally be used to answer complaints. Structured Units will be dispatched to complaints only under the following circumstances:

Critical Calls: Structured Units may be used to respond to, or assist on, the following critical calls within their assigned sectors or within close proximity to their sector boundaries, if sufficient Basic Units are not available:

a.) Suspicious car
b.) Suspicious person
c.) Assault (in progress)
d.) Cutting (in progress)
e.) Shooting (in progress)
f.) Rape (in progress)
g.) Larceny (in progress)
h.) Robbery (in progress or immediately after)
i.) Burglary (in progress or immediately after)
j.) Trespasser outside
k.) Trespasser inside
l.) Riot
m.) Robbery or burglary alarm
n.) Officer in trouble
o.) Send assistance to scene.

Structured Units will not actually handle the complaint unless they make an arrest or take other police action requiring them to be the handling unit.

Non-Critical Calls: Structured Units will not be utilized to handle non-critical calls.

In the event that a structured unit (including the Basic Specialist Unit) is used under other circumstances, a deviation report will be submitted to the Resource Management Division. This deviation report will originate with the Communications Supervisor on duty at the time of the incident.
3. Use of Other Units:

In the event that no Basic Patrol Units are available to answer a complaint which cannot be delayed any further, such as when the 30 minute delay on a complaint has expired, other units will be utilized in the following order:

- Evidence Detective Unit;
- Traffic Division Unit (Units on top-priority WIARP assignments will not be used except in emergencies);
- Patrol Supervisors;
- Other Specialized Units (e.g. Detectives, Youth Aid);
- Structured Patrol Units (the Basic Specialist Unit will be considered a Structured Patrol Unit for purposes of being dispatched).

An exception to this procedure will be in the case of traffic accidents. A complaint of a traffic accident will be dispatched first to a traffic unit, if a WIARP (not on a priority assignment) unit is available, then to a Basic Patrol Unit, and so on.

If a two-man unit is in service, this unit should be reserved, whenever possible, for complaints that will require two officers, such as fights, domestic disputes, etc. Dispatches involving report taking or other incidents that can safely be handled by a single officer should be given to a one-man unit.

4. Thirty Minute Delay:

The use of the thirty minute delay in responding to non-critical calls will be continued. This delay should not be used only when no Basic Patrol Units are available for complaints. Whenever the majority of units are already involved in servicing complaints, and it appears that more units will soon be so involved, the delay process should be implemented. This is to assure that at least one or two Basic units are kept clear to respond to emergencies. Any complaint that is delayed through the use of this process will have its card stamped with the red delay stamp.

D. New Complaint Card and Associated Procedures

For the purposes of this project, a new complaint card has been designed. The card is printed on both sides; side 1 is for the use of the Communications Unit, while side 2 is for the use of the Complaint Service Unit. Most of the information blocks on the card are self-explanatory, or ask for the same information as the card previously used. The below listed items, however, must be handled differently than previously:

- PRIORITY - The complaint taker or dispatcher will mark whether the call is critical or non-critical.
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UNIT SENT, CALL BACK, WALK-IN, ADJUSTED - The appropriate block will be checked here by the complaint taker. If the call is referred to the Complaint Service Unit for call-back, the complaint taker will list the time at which the call should be made, and the phone number to be used in contacting the complainant, if it is different from that listed under Complainant Information.

TIME STAMPING - The block for time received will be stamped to show the time at which the call is received in the Radio Room. The block for time sent will be used to indicate when a patrol unit is dispatched. If the call is referred to the Complaint Service Unit, this and the following time stamp blocks will be left blank. Only when a card is returned from CSU for dispatch to a patrol unit will these blocks be used. If a complaint is adjusted within the Communications Unit, all four blocks will be stamped with one time.

REASON UNIT SENT - If the dispatch of a patrol unit is required by the nature of the complaint, the block M.O.D. Procedure will be checked by the complaint taker. If dispatch is made because of a citizen demand, this block will be checked, etc.

RECEIVED BY - The important information here pertains to walk-in complaints. Whenever an officer calls the Radio Room for a case number relative to a report taken at Central, the Communication officer issuing the case number shall determine from the reporting officer whether or not the complainant was earlier asked to respond to Central to make the report. The appropriate block on the complaint card shall then be checked.

DISPOSITION - When a complaint is referred to the Complaint Service Unit, the Disposition blocks will be left blank.

All incoming complaints will be recorded on a complaint card and issued a case number. The only exception will be those complaints in which the complainant agreed to respond to Central to report the incident. In this case, a complaint card will be completed, but no case number will be stamped on it. In all other respects this card shall be treated as a complaint card and will be filed with the other complaint cards.

E. Service Cards vs Complaint Cards

All requests by citizens for police service will be recorded on a complaint card, as per the above listed procedures. Self-initiated activities, such as traffic stops, suspicious persons checks, etc., should be logged on a service card. If this self-initiated activity results in the submission of a report, the service card must be destroyed, and a complaint card completed. Administrative and maintenance activities, such as 10-55's, 10-17's, or Code 71's will be recorded on a service card.
IV. RESOURCE MANAGEMENT DIVISION

A. Complaint Service Unit

The Complaint Service Unit will be that unit responsible for handling the bulk of complaints that are not dispatched to patrol units. It will be in operation from 0800-2400 hours, seven days a week.

1. OPERATING PROCEDURES:

The CSU Officer shall check in the Radio Room on a regular basis, at intervals of no more than thirty minutes, for complaint cards that have been referred to his unit. Upon receiving a complaint card from the Communications Center, the officer receiving it shall stamp the time received in the appropriate block on the rear of the card. He shall also initial the space "received by." The officer will then stamp the CSU number in the space provided at the top of the card. This will be a sequential number, beginning with the number 1 and continuing up indefinitely for the life of the project.

The officer will then contact the complainant by phone. If a specific time for the call back is listed on the front of the card, the officer will be guided by this information. After speaking with the complainant concerning the nature of the incident, the CSU officer will take one of the below actions, whichever is appropriate. The appropriate block under CSU Disposition will then be checked.

Refer to Outside Agency

In the case of a complaint which can best be serviced by other agencies, such as the Department of Social Services or Family Court, the officer will so advise the complainant. This disposition will be recorded on the rear of the card in the space for "remarks."

Phone Report

If the incident requires a report, and the report can be taken by phone, the officer will do so. Examples of this type of incident would be: most thefts, auto theft reports, criminal mischief, property damage, etc. The report will bear the case number listed on the front of the complaint card.

Phone Adjustment

If the complaint can be satisfactorily resolved over the phone without the submission of a report, the complaint will be considered adjusted. The nature of the adjustment will be recorded in the remarks section.

Dispatch Required

If, after speaking to the complainant, the CSU officer decides that a unit should respond to the incident either
immediately or within the thirty minute delay limit, he will return the card to the Communications Center for dispatch.

Schedule Specialist Unit
If the personal response of a unit seems necessary, but the need is not immediate, the CSU officer may schedule an appointment with the Specialist Unit. This unit will be totally devoted to servicing complaints on a scheduled basis, and will operate during the hours of 0800-2000. This disposition will be marked on the card, and the date and time of the appointment noted.

A schedule sheet will be made up by the CSU Unit in triplicate, one copy of which will be forwarded to the Communications Center and one given to the Specialist Unit. This sheet shall list: the complainant's name, address, phone number, nature of the complaint, case number and appointment time. At the completion of his tour, the Specialist Officer will sign the sheet and return it to the CSU Unit, where it will be retained and filed. If a scheduled appointment is to be made for the same day, the CSU officer shall add this to the schedule sheet for that day. This information shall be relayed to the Specialist Unit via the Communications Center.

Each card that is brought into the Complaint Service Unit will be time stamped when received, when the call-back is made, and when it is cleared. In the event of unsuccessful calls, the officer will list the times of these calls in the remarks section.

No card will be retained in the Complaint Service Unit past 2400 hours of the day in question. If attempts at contacting the complainant prove unsuccessful, a miscellaneous report will be submitted, under the appropriate case number, detailing this. The Communications Supervisor will be advised of this inability to contact a complainant. At his discretion, a unit will be sent to the location involved to check on the complainant. The CSU officer working the next scheduled shift shall again attempt to contact the complainant, and shall submit an added report to the original miscellaneous report detailing his actions.

When a complaint is referred to the Basic Specialist Unit, the CSU officer will, in addition to making an entry in the Specialist log, arrange the original complaint cards in the sequence of their scheduled appointment. These cards will be returned to the Communications Unit along with the log. The dispatcher shall then use the original complaint card to record the arrival and clearance times, etc., of the Specialist Unit.
GENERAL ORDER NO. 78-5

In the event that the Specialist Unit cannot make a scheduled appointment, he shall notify both the dispatcher and the Complaint Service Unit. The CSU will be responsible for notifying the complainants of this, and for re-scheduling the appointment.

CSU personnel should endeavor to schedule their call-backs so that they are evenly busy throughout their shift. Most of the call-backs that must be made can be delayed for a period of time without ill-effect. One obvious exception would be the taking of a stolen car report. This call should be made as soon as possible so that information for a general broadcast can be obtained.

2. MONITORING PROCEDURES:

Personnel from the Complaint Service Unit will, on a bi-weekly basis, obtain a representative sample of the complaint cards for the preceding two weeks. They will examine these cards to determine what volume of complaints are being handled through each of the alternative response modes.

B. CRIME ANALYSIS UNIT

The Crime Analysis Unit, in addition to its present duties, will also be responsible for monitoring various aspects of the project of Managing the Police Demand. This will involve a close coordination between the Crime Analysis and Complaint Service Units.

A. Monitoring Activities

The Crime Analysis Unit shall be responsible for running the Patrol Car Allocation Model and the Hypercube Queuing Model for the Basic Patrol Force on at least a quarterly basis. The Crime Analysis Unit, in conjunction with the Complaint Service Unit, will examine the results, and determine if adjustments are needed in either the staffing of patrol units, or the volume of complaints referred out by the Communications Unit. Based on this information, the proper recommendations will be made to the commanders involved as to necessary remedial action.

B. Other Duties of the Crime Analysis Unit

The Crime Analysis Unit shall be responsible for performing the other duties listed below:

1. Mapping of Crime Trend Areas. The Crime Analysis Unit shall maintain records and maps of current crime trend areas as per present procedures.

2. Investigative Packages. The Crime Analysis Unit will continue to formulate investigative packs, when requested by investigative officers, and whenever a trend area becomes apparent which merits investigation.
3. **Structured Patrol Areas.** The Crime Analysis Unit will continue to make recommendations to the Patrol Commander as to the deployment of Structured Patrol Units. These recommendations will be based on current crime trend information.

4. **10-77 Assignments.** The Crime Analysis Unit will also continue to make recommendations to the Patrol Commander on locations for 10-77 assignments for Basic Patrol Units. These recommendations will be based on a knowledge of current crime trends and problem areas.

Y. **PATROL DIVISION**

The duties of the Patrol Division will not be drastically different from those it presently carries out. The Patrol Division will continue to be split into Basic and Structured Patrol Forces, and will operate under the procedures developed through the Split-Force Project.

A. **BASIC PATROL FORCE**

1. **1077 Assignments**

Officers assigned to the Basic Patrol Force are primarily responsible for responding to calls for service. During those times that they are not involved with handling a complaint, Basic Patrol Officers will assume a fixed post assignment, or 1077.

The locations for these 1077's are selected by the Patrol Commander, acting in conjunction with the Crime Analysis Unit. These locations are then placed on a master list. These are locations where a special event is occurring (such as a high school dance) or where a specific problem has been discovered to exist (such as AB'S). The placing of a Patrol Unit at these locations is intended to alleviate the problem before it results in further complaints. If an officer feels that another location not already listed merits a 1077, he may assume a fixed post there after notifying his Supervisor.

Officers should allow no more than twenty minutes to lapse between complaints and 1077's. Once having assumed the fixed post assignment, the officer should remain there no more than thirty minutes, unless specific circumstances dictate otherwise.

2. **Sector Configurations**

Effective July 1, the number of Basic Patrol Units that must be staffed will be as follows:

<table>
<thead>
<tr>
<th>HOURS</th>
<th>NUMBER OF BASIC UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000-0400</td>
<td>8</td>
</tr>
<tr>
<td>0400-0800</td>
<td>5</td>
</tr>
<tr>
<td>0800-1200</td>
<td>7</td>
</tr>
<tr>
<td>1200-1600</td>
<td>10</td>
</tr>
<tr>
<td>1600-2000</td>
<td>10</td>
</tr>
<tr>
<td>2000-2400</td>
<td>10</td>
</tr>
</tbody>
</table>
GENERAL ORDER NO. 78-5

Basic Patrol Commanders will continue to use push-pull scheduling to man these assignments. These Commanders will be provided with specific instructions on how to carry this out. All Patrol personnel will be provided with sector maps.

Officers assigned to the Basic Patrol Force are not bound to their sectors. They will be, and should expect to be, dispatched to complaints outside of their sector. In addition, officers may assume fixed post assignments outside their sector. It is the officer's responsibility to notify Communications of his movements, however, so that the dispatcher may monitor the location of available units. The dispatcher may order the unit to remain on his sector, in which case the officer must do so.

3. Radio Procedures

Officers will make every effort to place themselves in service as soon as possible after leaving roll call. If an officer must remain at Central for some reason, however, he will not place himself in service until he is actually available to answer complaints on the street. He will notify the Communications Unit of his business at Central. The unit will be carried on a service card while at Central.

B. STRUCTURED PATROL FORCE (SPF)

The Structured Patrol Force is the proactive arm of the Patrol Division. Their main responsibility is to carry out preventive patrol in predetermined areas which have been selected because of their high potential for criminal activity. Officers assigned to SPF work a permanent structured patrol, and their hours of work will vary depending on the crime trend to be combatted. The method of operation to be used in each instance will also vary, and will be determined by the SPF Supervisor based on information supplied by Crime Analysis.

1. STANDARD OPERATING PROCEDURES

During the hours when SPF is not working, the on-duty Patrol Lieutenant will assign officers to the Structured Patrol assignments. These assignments will be determined by the Crime Analysis Unit, which shall provide a list of priorities to the Patrol Division daily. The lists will designate assignments in terms of their priority. The Patrol Commander will make every effort possible to fill the top three priorities. If the Platoon Commander determines that he does not have the manpower to fill these top priorities, or he determines that the first or second priority requires more manpower (making it impossible to fill all three) he will submit a deviation report.

Structured Units will not leave their assigned sectors without first receiving permission from either their Supervisor or the Radio Sergeant. Structured Units will not be used to respond to complaints except for those that have been listed in this order under the Communications section. Any other use of a Structured Unit will require the submission of a deviation report.
GENERAL ORDER NO. 78-5

If a Structured Patrol Unit comes in contact with a person who is to be arrested, such as an arrest on a warrant, or comes across any other complaint, and the SPF Officer is not essential to the complaint, he will turn the incident over to a Basic Patrol Unit. SPF Units will not handle any complaint that will take them away from their assignment, unless a Basic Patrol Unit is not available, or the SPF Officer has already taken action requiring him to be the handling unit.

The Structured Patrol Force will not be responsible for conducting follow-up investigations. All follow-up investigations will be handled by the Detective Division. Only in two instances will SPF take on investigative responsibilities:

1. During those hours when Detectives are not working;
2. At the request of the Detective Division, when they are working but unable to respond.

The decision to use SPF in the place of Detectives will be made by the Detective Commander or, in his absence, the on-duty Patrol Commander. In all such cases, the SPF Officers will closely coordinate their activities with those of the Detectives and will keep them notified of all progress on the case.

The Structured Patrol Unit will also be responsible for staffing the Basic Specialist Unit.

VI. RESPONSIBILITIES OF OTHER UNITS

The alternative responses to calls for service that have been detailed in this order will result in some complaints being referred directly to other units in the Bureau, for example: the Detective Division, Youth Aid, House Sergeant, etc. Once a complaint has been so referred to another unit, that unit will be responsible for handling the incident. It will not be referred back to Communications for dispatch to a Basic Patrol Unit. Any exception to this procedure must be justified by a deviation report.

VII. USE OF DEVIATION REPORTS

The use of deviation reports has been mentioned throughout this order. The purpose of these reports is not to single any one person out for disciplinary action, but to help point out deficiencies in the system so that they can be corrected where possible. The use of SPF Units to answer non-critical complaints and the use of Basic Patrol Units to answer complaints in the House Sergeant's Office are both examples of deviations that must be reported and justified.

Anytime that a deviation occurs, the Supervisor or Commander initiating the deviation will complete a deviation report and forward it to the Resource Management Division. The Resource Management Division will be responsible for reviewing all deviation reports that are submitted.
GENERAL ORDER NO. 78-5

ORDERED BY:

HARRY MANELSKI
CHIEF OF POLICE
APPENDIX C

Departmental Policy for Managing Calls-For-Service Within the Communications Center

Kansas City, Missouri, Police Department
PRIORITIZATION OF CALLS FOR SERVICE

I. PROGRAM POLICY AND SPECIFICATION

A. Operational Definitions and Objectives

The prioritization of calls involves the screening of calls for service by a zone dispatcher who decides to send a car on the call immediately, delay sending a car on the call, or refer the call to the East Patrol Division for processing.

Objective

To make patrol non-committed time available in usable amounts to perform Directed Patrol programs.

B. Boundary Conditions

The prioritization of calls for service will be implemented with the 310, 320 and 330 Sectors of the East Patrol Division for selected calls for service categories and specific situational criteria.

C. Division of Functions

Dispatchers

When dispatchers receive calls for service from area citizens, they will question the caller to determine the following:

1. Type of incident
2. Is it in progress?
3. Are the perpetrators present in the area?
4. Is there danger to human life?
5. Is evidence in danger of being destroyed?
A yes answer to any question 2 through 5, will require an immediate response to the call by a police officer.

If a dispatcher determines, by using the above criteria, that dispatching a car can be delayed, he will delay dispatching the call.

Some calls for service are of a type where a police officer's presence at the scene will not add to the completeness of the investigation. In other words, if the officer did respond, the only investigation activity would be the taking of an offense report. An example of this would be a window smashing that occurred sometime during the night and the victim wishes to report it the following morning. In a case such as this, when the presence of a police officer is not necessary, the dispatcher will instruct the caller to call 842-6525, extension 466, where patrol division station personnel will process the call. If the incident is a minor vehicular, the dispatcher will determine if it is convenient for the citizens involved to report to the district station to make a vehicular report. Convenience to the citizen will be determined by the appropriate time he may be required to wait if he wishes for a car to respond to the accident scene.

**East Patrol Division Desk Personnel**

All calls received by the desk personnel that are referred from the zone dispatcher will be handled in one of the two following ways:

1. The report will be taken over the telephone.

2. The victim(s) will be requested to respond to the division station where desk personnel will take the report.
Telephone Report

This involves desk personnel filling out an offense report in the same manner as if it were being filled out at the scene except that the words "Phone-in" will appear at the top of the report. Desk personnel will call Ext. 341 to obtain a complaint number. All "Phone-in" reports will be reviewed by the desk sergeant who will forward the reports to Report Review via regular routing methods.

Walk-in Report

When it is convenient for a citizen to respond to the division station to report the incident, either because it may be some time before an officer can respond to his location, or he lives nearby, station desk personnel will fill out the report on arrival of the citizen.

D. Administrative Functions

Policy

Under present department policy, all calls for service are dispatched as soon as possible when received at the Communications Unit. No official priority is given to any call. As a result of this policy, a situation sometimes arises where several cars are out of service answering routine, non-urgent calls when an urgent call, such as hold-up in progress or an injury accident is received. At these times, an officer has to be dispatched from some distance away, delaying response to an incident which should receive as prompt a response as possible. Present policy also does not promote a system of delaying or re-routing
calls for service which could be processed in a manner other than
dispatching a district car immediately.

To help insure sufficient cars are in service to handle urgent
calls for service and to free usable amounts of time to perform Directed
Patrol activities, the East Patrol Division will have the flexibility
of delaying non-urgent calls which do not require the immediate presence
of a police officer and to refer such calls to the division station
where reports will be taken over the telephone or by the caller reporting
to the station where desk personnel will fill out an offense report.

PROCEDURAL INSTRUCTION

I. POLICY

The department has adopted a policy of prioritizing calls
for service. This policy will permit dispatchers to have alternative methods for processing calls for service. A dispatcher can
dispatch a car immediately, delay a non-urgent call, refer a
caller to contact East Patrol Division station desk personnel by
telephone who will process the call for service, or ask the caller
to report to the station in person.

II. PROCEDURES

Dispatchers

Four alternatives are available to the Communications Unit
dispatchers for processing calls for service within the East
Patrol Division.
1. **Immediate Response**

   All calls requiring the response of the officer at the scene will be dispatched immediately. If some cars are manned by two officers and some of them are manned by one officer, the cars with one officer will be dispatched to non-urgent type calls.

   All calls for service which should receive immediate response by a police officer will be dispatched as soon as the call is received. If any of the following conditions exist, an immediate response will be required:

   a. Danger to human life or property
   b. Perpetrator(s) at the scene or in the area
   c. Evidence may be destroyed if response is delayed
   d. The incident is of such a magnitude that it should receive immediate attention. Example: homicide, robbery
   e. Any circumstances other than those listed above which cause the dispatcher to believe an immediate response is necessary. Example: victim fear which might be dangerous to him or others

2. **Delayed Response**

   Some circumstances, while requiring the presence of a police officer, do not necessarily require his service immediately. In other words, a delay in the response of an officer to the scene will not decrease the quality of police service to the citizen. Calls not requiring immediate response will be delayed until additional cars are in service.
Generally, any call that does not fit the circumstances that determines an immediate response can be delayed until additional cars are in service. If additional cars are available, the delayed call(s) will be dispatched.

3. Refer Caller to the East Patrol Division by Phone

Some calls for service only require a police officer's presence to take a report. In calls of this type, the dispatchers will instruct the caller to call 842-6525, extension 466, where the report will be taken over the phone by desk personnel. East Patrol Division desk personnel will fill out offense reports. The following calls for service reports will be referred to the East station to be taken by phone when the dispatcher believes the incident fits the criteria listed below:

Larceny (shoplifting)
Destruction of property
Loss
Attempt to locate auto
Stolen auto
Lost or stolen license tags
Indecent act (suspect has left the scene and there is no injury to the victim)
Fraud or attempted fraud
Supplement to an original report
Non-aggravated assault
Burglary (no force entry)
The above reports will only be referred to East Patrol Division if all the following criteria are met:

a. Suspects have left the scene and their whereabouts are unknown
b. No physical evidence present
c. No need for an investigation at the scene
d. There are no circumstances present other than those listed above which cause the dispatcher to believe it would be appropriate for a policeman to respond.

4. Ask the Victim to Report in Person to the Division Station

There are a small number of circumstances where the citizen can respond to the district station to make the report. This method of service should be suggested to the caller as a convenience that will eliminate his waiting for a police officer to arrive at the scene at a later time. Three instances in which the caller should go to the station are:

a. Vehicular accident in which the vehicles are driveable and there are no injuries

b. Hit and run vehiculars of a parked car where the car is driveable, where the exact time of occurrence is not known or occurred more than ten minutes previously and no physical evidence is present except the damage to the vehicle.

c. It will be the policy of this department that during peak hours of traffic (7-9 and 4-6) and during foul weather, [ice, snow and severe rain storms with high winds], unless the vehicles are not driveable, all of the above accidents will be directed to the nearest police facility where appropriate reports will be taken by desk personnel.
East Patrol Division Desk Personnel

Station desk personnel will be responsible for handling calls for service referred by Communications Unit dispatchers. Only calls that may require a report will be referred. Desk personnel will be responsible for filling out reports over the telephone or requesting the caller to respond to the division station to fill out the report. When the call is received at the East Patrol Division, station desk personnel will fill-in the report and obtain complaint numbers by calling extention 341. Reports on the following calls for service will be taken by East station desk personnel when referred by the dispatchers:

- Larceny
- Destruction of property
- Loss
- Attempt to locate auto
- Stolen auto
- Lost or stolen license tags
- Indecent act
- Fraud or attempted fraud
- Supplement to an original report
- Non-aggravated assault
- Burglary (no force entry)

If personnel taking the report discover that any of the following circumstances apply to the incident, they will call the dispatcher and have a car sent to the caller's location.
a. Suspects at scene
b. Physical evidence present
c. Investigation at scene required

After completing a referred report, the report will be given to the desk sergeant who will approve the report and forward the report through regular channels to Report Review. During peak periods, desk personnel will request that the caller respond to the station to fill out a report. Should compliance with this request be inconvenient for the caller, desk personnel will record the name of the caller, his phone number and address on the Call Back Log (see Attachment #1), and explain that he (the caller) will receive a return call within a short period of time for taking the report.

The following specific criteria will determine the way in which a call is to be handled:

**Hate Station, Other Sex Offense**

*Delay - victim is an adult and incident occurred longer than one hour ago*

**Indecent Act**

*Walk-in - Phone-in - suspect has left scene - no injury to victim*

**Non-Aggravated Assault**

*Walk-in - Phone-in - victim states he will not require medical assistance and*

1. Suspect is not known to the victim or
2. The offense occurred longer than one hour ago
Burglary

**Walk-in - Phone-in** - no force entry/or physical evidence present

Larceny or Attempt

**Delay** - if evidence is present and no danger of being destroyed

**Walk-in - Phone-in** - if no evidence is present

Purse Snatch or Attempt

**Delay** - pick-up information available

**Walk-in - Phone-in** - no pick-up information

Auto: Recovered

**Delay**

Recovered Property

**Delay**

Fraud

**Walk-in** - 1. Physical evidence can be brought to station facility
2. No physical evidence

Noise

**Delay** - or refer to the city prosecutor's office.
Inform the caller that he may get a warrant at the city prosecutor's office.

Traffic (Handle)

**Delay** - whenever no immediate hazard exists or a request is made in advance.
Traffic [speeding car]

Poses immediate threat. A car should be sent as
soon as possible with the officer remaining in service
to be available for more urgent calls.

Traffic Accident - Accident Property Damage

Delay - if cars are not driveable and are not impeding
the flow of traffic.

Walk-in - cars are driveable with minor damage.

Juveniles - Information On

Can over many areas. The dispatcher will have to
evaluate the immediate call criteria and make the
decision.

Walk-in - whenever parents are having problems with
their own children. They will be referred
to the Youth Unit or Juvenile Justice Center. No need for the police to respond or get
involved.

Abandoned Car

Delay - all calls can be delayed if immediate response
criteria does not apply. If car is shown to
have been abandoned and is not reported stolen,
complaint is kept at dispatcher's office until
picked up by city civilian employee who is re-
 sponsible for checking abandoned cars. He picks
up the complaints daily and returns previous
day's complaints with disposition, such as:
towed, owner notified to remove auto, etc.

II. PROGRAM ADMINISTRATION AND MANAGEMENT

A. Decision Making

The decision to implement this program will require a change in
present department policy.
The East Patrol Division commander will assign desk personnel to handle phone-in and walk-in reports. The Communications Unit desk sergeants will decide when their respective personnel are not meeting the designated implementation activities of the program and notify respective superiors.

Communications Unit dispatchers will decide how to process calls for service referred. Their decisions will be based on both the requirements as specified in the procedural instruction that outlines the Prioritization of Calls Program and the Communications Unit Manual. Many calls for service decisions where prioritization is involved will have to be made at the dispatcher's discretion. These decisions will involve "gray areas" where a priority choice has to be made on the basis of the caller's voice, background noises, gut feeling, etc. In circumstances where the priority decision could have gone either way and the decision made was later determined not the best, complaints may occasionally be received. No punitive action will be taken against any dispatcher who makes a wrong decision as long as it is within department policy.

In instances where the Communications Unit sergeants believe the dispatcher made a wrong decision, he will inform the Communications Unit commander of the facts which characterized the decision, by memorandum. The Communications Unit commander will critique the situation to determine if modifications need to be made to prevent a similar error from occurring again.

Desk personnel at the East Patrol Division station will make decisions concerning the disposition of calls for service referred by
East Zone dispatchers. They will decide on the appropriate classification of the report by questioning the caller. They will also assist the caller in decisions regarding the type of police service that is appropriate (i.e., advise the caller to come to the station to make the report or to make the report over the phone).

B. Management Styles

An authoritative management style will be required by the Operations Bureau commander to insure appropriate program implementation. The program as described in the procedural instruction, has guidelines that must be followed by both the Communications Unit dispatchers and East station desk personnel. Management of these personnel and their activities will follow the existing chain of command.

C. Delegation of Authority

The Operations Bureau commander has the final authority regarding when the Prioritization of Calls for Service Program is to be implemented. The Directed Patrol Task Force will guide the initial implementation and have authority to suggest any modifications as necessary.

Commanders of both the Communications Unit and the East Patrol Division will have the authority and responsibility to insure that program implementation activities are being accomplished. The East Patrol Division commander will have the authority to utilize the personnel and uncommitted patrol time to perform Directed Patrol programs.

The authority to oversee division desk personnel and dispatch personnel involved in the prioritization activities will be held by the
watch commanders at the East Patrol Division and Communications Unit sergeants, respectively. Desk sergeants at the East station will ensure that reports taken by desk personnel are completed and in accordance with department guidelines.

Dispatchers will have authority to decide what type of police response is to be given on each call for service by using the procedural guidelines outlined for this program.

East Patrol Division desk personnel have the authority to suggest to callers the type of handling they feel is most appropriate (i.e., come to the station to report or report the incident via the telephone). Desk personnel also have the authority to assign a crime classification to offense reports.

D. Communication

Communication requirements necessary for the Prioritization of Calls for Service Program are limited to referring of some calls for service to the East Patrol Division for alternative processing and informing citizens of changes in department policy relative to the handling of their requests for police service. The present Communications Unit Manual explains how to use the telephone for such referrals, courtesy, etc., and should be followed in the prioritization program when making reporting suggestions to the citizen and when taking the information for the telephone report.

Both Communications dispatchers and desk personnel will occasionally be required to relay a certain amount of information about the program.
to the citizen. This will be done to assure the citizen that a police-
man does not need to respond to the scene to handle the caller's sit-
uation in the most effective and efficient manner. Police officers,
while attending community meetings, answering calls for service or any
other time the opportunity arises, will inform community members and
local businessmen about the Prioritization of Calls for Service Pro-
gram. They will emphasize the reasons a police officer may not respond
to the scene of certain calls when specific criteria are present. An
attempt will also be made by police officers to assist citizens in un-
derstanding that an officer's response to a citizen non-urgent call was
delayed because there are not enough cars in service to handle calls
which are not urgent and that as soon as more cars become available, one
will be sent. In addition to face-to-face explanations of the program,
community newspaper articles which are included in the Directed Patrol
programs will carry information about the prioritization program which
will help the citizen when reporting crime.

E. Operational Relationships

The prioritization program is a necessity to manage time in a way
that will control some of the workload of field police officers so they
will be able to perform Directed Patrol programs. Implementation of
Directed Patrol programs will require that all or part of the prioriti-
zation program will have to be operational. However, the prioritization
program should not be implemented until programs are ready for imple-
mentation so there will be Directed Patrol activities for officers to
participate in to use the time which is made available. The task force
will be responsible for coordinating the implementation of this program
with Directed Patrol activities.
APPENDIX D

Departmental Policy for Managing Calls-For-Service Within the Communications Center

Springfield, Missouri, Police Department
I. INTRODUCTION AND PURPOSE

Telcom is designed by the Springfield Police Department's Crime Analysis Section as a way to increase police productivity. It is felt that a significant portion of the complaints recorded by patrol officers on duty do not necessarily require the actual physical presence of an officer. If these types of calls can be identified and channeled into another system, patrol officers on duty will be available to devote additional time and effort to complaints concerning more serious crimes. It is anticipated that this will make available more time for patrol officers to respond to other calls for service, since these officers will not be "out of service" while working on the routine, less serious complaints. It is felt that the Telcom system will result in better service to the citizens because the Telcom operators will be able to receive the complaint more quickly than a patrol officer can respond in person.

II. POLICY

It will be the policy of the department to investigate certain routine, less serious calls for service by telephone on Monday through Saturday from 3:00 p.m. until 11:00 p.m., utilizing a Telcom unit for a trial period of May and June 1978.

III. PROCEDURES

Section 1. Types of Complaints to be Handled

In order for the system to work as planned, it is necessary to identify the kinds of complaints that can be handled efficiently by telephone, without causing a degradation in the level of service available to citizens. Appendix I lists the offense/complaint categories chosen for processing by Telcom.

Section 2. Communications Center Procedures

This section describes the procedures to be used within the Communications Center for screening calls for and processing complaints by Telcom.

2.1 Receiving Calls

Calls eligible for Telcom are received on the Police Department's telephone number and answered by a PBX operator assigned to that
position. It is the task of these PBX operators to determine if they should be handled by telephone or if a police officer should be dispatched.

The first consideration in this process is the type of offense being reported. If the offense is not among those identified as Telcom categories (see Appendix 1), the call is dispatched for a patrol officer's response. If the complaint does involve an offense in one of the Telcom categories, the call is turned over to an operator unless one or more of the following conditions exist:

2.1.1 The offense is in progress.

2.1.2 An offender is on the scene, or probability exists that an immediate apprehension can be made if a field unit is dispatched.

2.1.3 The offense to be reported is an integral part of, or is in combination with, other offenses which are not reportable via Telcom.

2.1.4 The PBX operator believes that the facts, as related by the caller, warrant the dispatch of a field unit.

2.2 Recording Complaints

2.2.1 Where a patrol car needs to be dispatched, the PBX operator will process and forward the simplex card in the normal manner.

2.2.2 If the PBX operator determines a complaint should be processed by Telcom, the call is transferred to a Telcom operator at extension 201 or 203, whichever is not busy. If the lines are not free or a Telcom operator is not available, the PBX operator determines how long the caller will be available at that telephone number so that the Telcom operator can call back, then terminates the call and delivers the "call back" name and phone number to a Telcom operator.
2.2.3 PBX operators should process the incoming calls quickly and courteously. They will not screen the calls beyond determining if a patrol car should be dispatched immediately (Section 2.1) nor inform any complainant on any call for service that "we will have a car right there."

2.2.4 The Telcom operator will screen the call to determine if a field unit should be dispatched or if the complaint can be taken by telephone. (If the complainant indicates a preference for having a policeman on the scene, a patrol officer is dispatched and the call is not processed by Telcom.) The Telcom operator will further determine if the call requires a written report or can be handled by officer (HEO), based on departmental policy. If a written report is required, he shall complete a simplex card and investigate the complaint by asking the questions required to complete the report. Once this is done, and the complainant has had the opportunity to add any other information which he feels is relevant, the Telcom operator closes the call by informing the complainant of the action, if any, that will be taken on the complaint.

2.2.5 The Telcom operators shall record their contacts with the public via the telephone on the log (Appendix 2) and submit the completed log to Crime Analysis at the end of their tour of duty.

Section 3. Implementation

Telcom began operation on February 1, 1978, without any installation costs other than staff planning time.

3.1 Staffing Requirements

A staffing requirement of one officer per shift is calculated in addition to the assigned desk officer.

3.1.1 The Telcom operators will work at phone extensions 201 and 203.
3.1.2 The Telcom operators will rotate from one extension to the other to allow each the opportunity to record his complaints, which must be done from extension 203.

3.2 Selection of Personnel

Telcom utilizes experienced police officers from the Patrol Division, consisting of a one-month assignment. This system takes advantage of the patrol officers' familiarity with the use of departmental reports and the method for conducting a complaint investigation interview, and ensures citizen satisfaction that complaints are being handled by police officers. Officers assigned shall be those with sufficient experience and discretion to identify those cases not requiring the presence of a police officer on the scene and who have the ability to quickly and efficiently and courteously complete reports by telephone.

3.3 Installation of the Telcom System

In preparation for the implementation of Telcom, the department's Crime Analysis Section prepared this Standard Operating Procedure and current revision, describing the operation of Telcom. This SOP, distributed to the department, outlines the types of cases to be handled, and the screening criteria, as well as procedures to be used by both PBX operators and Telcom operators. PBX and other personnel involved have been instructed in the purpose of Telcom and the procedures to be used in handling calls before the system actually begun.

Gordon Loveland, Chief of Police

STANDARD OPERATING PROCEDURES
CONTINUED

2 OF 3
Appendix 1

Offense/Complaint Categories Eligible for Telcom

1. Grand Larceny, of these four types:
   a. Auto parts or accessories
   b. Grand larceny from a vehicle
   c. Theft of a bicycle
   d. Auto theft
2. All petit thefts, except:
   a. Shoplifting
   b. Purse snatching
3. Telephone Violations
   Incidents of harassing or annoying phone calls directed at the complainant. (Does not include bomb threats or threats to do bodily harm.)
4. Property damage
   All types except resulting from an auto accident or those which involve extensive damage to private property. (Damage to government owned property will require the dispatch of an officer.)
5. Tampering with a vehicle
   All cases, unless the incident is in progress or suspects are in the vicinity.
6. Lost property
   All cases, unless some unusual circumstances dictate the need to dispatch an officer.
7. Vandalism
   All vandalism, except those involving extensive or widespread damage to property, or cases in which the incident is still in progress or suspects are in the vicinity.
8. Traffic complaints
   Includes drag racing, speeding, et cetera, unless the incident requires the immediate attention of a field unit.
APPENDIX E

Evaluation of the Telcom Complaint Processing System

Springfield, Missouri, Police Department
EVALUATION OF TELCOM

Prepared by:

ICAP & Crime Analysis Staff
Springfield Missouri Police Department

April 1978
1. INTRODUCTION

1.1 Purpose

The purpose of this report is to document the development, implementation, and effectiveness of the Telcom complaint processing system, as well as its increased productivity of the Springfield Police Department during the trial period.

1.2 Description of Telcom

The Telcom program, initiated by the Springfield Police Department for a three-month trial period on February 1, 1976, is a system for call screening and for receiving and recording complaints via telephone in order to eliminate the need to dispatch a patrol officer on routine cases. Operating for five hours during the busiest shift, Telcom utilizes sworn police officers to record citizen complaints. The system depends on their experience and discretion to identify those cases not requiring the presence of a police officer on the scene.

The overall goal of Telcom was to increase the productivity of field uniformed officers. Specific objectives were to:

- Reduce the case load of uniformed officers in the field by relieving them of the burden of responding in person to routine complaints; and

- Make available additional time for patrol officers to concentrate their efforts on pro-active patrol techniques in the prevention of crime and apprehension of serious offenders.

Under the Telcom program, calls for certain kinds of non-emergency complaints received by regular PBX operators are switched to a Telcom operator on duty. The PBX operator determines if a call should be switched or dispatched immediately, depending on two types of factors—the type of case and the presence of special circumstances which may require the dispatch of a patrol officer. Upon determining that the call should have Telcom processing, the PBX operator either transfers the call to a Telcom operator or determines how long the caller will be available at that telephone number and delivers a "call back" card to a Telcom operator, depending on the work load.

The following section summarizes the program's results and benefits.

2. SUMMARY OF RESULTS

After two months of trial period operation, February and March 1978, the Telcom program seems to have fulfilled its purpose of reducing the overall case load of the field patrol staff during the hours of 5:00 p.m. to 11:00 p.m., Monday through Friday.

Total logged calls for service for the calendar year 1977 reflected a 12.0% increase over 1976. January 1978 showed an increase of 3.0% over January 1977. The total logged calls for February and March 1978 (9,777), however, was a 2.4% decrease over the same period of 1977 (10,014). By Telcom handling 9.5% of the CFS, the field patrol workload was reduced an estimated 14.6% (254) at the same time (See Table 1). Citizen cooperation with the system has been good and no negative feedback has been received.

It is also significant that the Telcom operators handled 56.1% (2,585) of the total public requests (4,608) during the period. This includes all walk-in and
TABLE 1

SPRINGFIELD MISSOURI POLICE DEPARTMENT
GORDON LOVELAND, CHIEF OF POLICE

PATROL WORKLOAD ANALYSIS
"TELCOM"

<table>
<thead>
<tr>
<th></th>
<th>1978</th>
<th>1977</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total departmental calls for service from the radio log for the period of February and March:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1978</td>
<td>9,777</td>
<td>10,014</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total departmental calls for service from the radio log for the period of February and March, Mondays through Fridays from 5:00 PM to 11:00 PM, and minus the general items:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1978</td>
<td>2,237</td>
<td>2,291</td>
</tr>
<tr>
<td>1977</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. TELCOM
   - 214 (09.5%) 2. FIELD PATROL
   - 1,489 (66.6%) 1,743 (76.1%) 3. FIELD TRAFFIC
   - 534 (23.9%) 548 (23.9%) 2,237 (100.0%) 2,291 (100.0%)

The Telcorn program handled 9.5% of the radio log CFS which reduced the field patrol case load by 254 calls (14.6%), although the total departmental CFS load dropped only 2.4%.

1 The 2,237 CFS in 1978 represented 22.88% of the total 9,777 departmental CFS. The 2,291 for 1977 represents 22.88% of 10,014.

2 The actual figures for 1978 were 9.5% for Telcom and 66.6% for Field Patrol. The 76.1% used for 1977 was derived by adding the two percentages together to arrive at an estimated 1,743 field patrol CFS.

3 The actual figure of 23.9% for 1978 was used to compute the 1977 figures.

- 2 -
telephone inquiries from citizens as well as calls for service. 173 persons were referred to other proper agencies to meet their needs, and 2,198 persons were given directions and other specific information in response to routine inquiries. Another 262 calls for service were screened by Telcom operators before dispatching to field units with no significant loss of response time.

The CFS activity of the department and Telcom during the two-month period is detailed on Tables 2 and 3.

3. ANALYSIS

The impact of Telcom on the department is personnel utilization can be projected by the fact that the Telcom operators processed .829 logged calls per hour of the 258 hours of operation. If Telcom had been staffed during February and March 1978 with two operators for 16 hours per day, six days per week, it would have required the assignment of 4.2 officers to the unit, and would have covered 816 hours of service. Based on the same rate of processing, the unit would have handled 677 logged calls or 7.2% of the department's total case load. The 4.2 officers would have represented only 3.4% of the department's patrol manpower.

Furthermore, the work load of 677 cases projected to have been processed by the Telcom system would have required 225.6 man-hours more if handled by in-person patrol officer response, based on an average time per case of 30 minutes for in-person response and 10 minutes using Telcom. Therefore, Telcom could have made this time available for patrol officers to utilize in additional concentration on pro-active patrol techniques: prevention of crime and apprehension of serious offenders.

This represents over $8,000 of City funds that can be utilized more productively under the Telcom program for the period of one year.
TABLE 2

SPRINGFIELD MISSOURI POLICE DEPARTMENT
GORDON LOVELAND, CHIEF OF POLICE

NUMERICAL EVALUATION
"TELCOM"

PERIOD COVERED: February 1, 1978 through February 28, 1978
26 Days of Telcom operation (20 6-hour shifts)
120 Hours of Telcom operation
3 Operators per shift
360 man-hours of Telcom operation

TABLE 1. HOW CALLS FOR SERVICE WERE HANDLED
A. CFS handled by Telcom Operators (Total = 1,177)
   1. Items by Radio Log = 108 (9.2%)
   2. Referred to Field Units = 121 (10.3%)
   3. Referred to Other Agencies = 81 (6.9%)
   4. Handled by Telephone = 867 (73.6%)

B. All CFS handled by Operations (Total = 1,887)
   1. By Telcom only = 1,056 (56.0%)
   2. By Field Patrol only = *575 (30.5%)
   3. By Field Traffic only = *256 (13.5%)

*Of these 831 field CFS, 12% (14.6%) were screened first by Telcom

TABLE 2. CALLS FOR SERVICE, RADIO LOG ONLY (Total = 939)
A. Field Patrol only = 575 (61.2%)
B. Field Traffic only = 256 (27.3%)
C. Telcom only = 108 (11.5%)

TABLE 3. CALLS FOR SERVICE BY SHIFTS/HOURS/MAN-HOURS OF TELCOM OPERATION
(Total Activity = 1,177)

<table>
<thead>
<tr>
<th></th>
<th>Per Shift</th>
<th>Per Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Items by Radio Log =</td>
<td>5.4</td>
<td>0.9</td>
</tr>
<tr>
<td>B. Referred to Field Units =</td>
<td>6.1</td>
<td>1.0</td>
</tr>
<tr>
<td>C. Referred to Other Agencies =</td>
<td>4.1</td>
<td>0.7</td>
</tr>
<tr>
<td>D. Handled by Telephone =</td>
<td>43.4</td>
<td>7.2</td>
</tr>
<tr>
<td>E. TELCOM ACTIVITY TOTALS =</td>
<td>58.9</td>
<td>9.8</td>
</tr>
<tr>
<td>F. Workload per officer with three (3) operators =</td>
<td>19.6</td>
<td>3.3</td>
</tr>
</tbody>
</table>

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TABLE 3

SPRINGFIELD MISSOURI POLICE DEPARTMENT
GORDON LOVELAND CHIEF OF POLICE

NUMERICAL EVALUATION

"TELCOM"

PERIOD COVERED: March 1, 1978 through March 31, 1978
23 Days of Telcom operation (23 6-hour shifts)
138 Hours of Telcom operation
3 Operators per shift
414 man-hours of Telcom operation

TABLE 1. HOW CALLS FOR SERVICE WERE HANDLED

A. CFS handled by Telcom Operators (Total = 1,670)
   1. Items by Radio Log = 106 (6.3%)
   2. Referred to Field Units = 141 (8.4%)
   3. Referred to Other Agencies = 92 (5.5%)
   4. Handled by Telephone = 1,331 (79.7%)

B. All CFS handled by Operations (Total = 2,721)
   1. By Telcom only = 1,529 (56.2%)
   2. By Field Patrol only = #914 (33.6%)
   3. By Field Traffic only = #278 (10.2%)

*Of these 1,192 field CFS, 141 (11.8%) were screened first by Telcom

TABLE 2. CALLS FOR SERVICE, RADIO LOG ONLY (Total = 1,298)

A. Field Patrol only = 914 (70.4%)
B. Field Traffic only = 278 (21.4%)
C. Telcom only = 106 (8.2%)

TABLE 3. CALLS FOR SERVICE BY SHIFTS/HOURS/MAN-HOURS OF TELCOM OPERATION (Total Activity = 1,670)

<table>
<thead>
<tr>
<th></th>
<th>Per Shift</th>
<th>Per Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Items by Radio Log</td>
<td>4.6</td>
<td>0.8</td>
</tr>
<tr>
<td>B. Referred to Field Units</td>
<td>6.1</td>
<td>1.0</td>
</tr>
<tr>
<td>C. Referred to Other Agencies</td>
<td>4.0</td>
<td>0.7</td>
</tr>
<tr>
<td>D. Handled by Telephone</td>
<td>57.9</td>
<td>9.6</td>
</tr>
<tr>
<td>E. TELCOM ACTIVITY TOTALS</td>
<td>72.6</td>
<td>12.1</td>
</tr>
<tr>
<td>F. Workload per officer with three (3) operators</td>
<td>24.2</td>
<td>4.0</td>
</tr>
</tbody>
</table>

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