

LAW ENFORCEMENT MANAGEMENT INSTITUTE

A Proposal To Develop A Decision-Making  
Approach For The Houston Police Department's  
Call Management

A LEARNING CONTRACT  
SUBMITTED IN PARTIAL FULFILLMENT  
OF THE REQUIREMENT FOR MODULE I

BY  
ROBERT E. WOODS  
HOUSTON POLICE DEPARTMENT  
HOUSTON, TEXAS 77002

JANUARY 1990

# 230

## Table of Contents

	Page
Introduction . . . . .	1
The Problem . . . . .	2
Why a new approach is needed? . . . . .	3
Literature Review . . . . .	4
Conceptual Framework . . . . .	9
Questions and Hypotheses . . . . .	11
Conclusion . . . . .	12

## **Introduction**

In 1989, the Houston Police Department conducted a study of its call management system. As a result of the study of the department's call management system, a decision was made to have field supervisors assume full responsibility for managing calls-for-service. Part of the department's call restructuring process included a move to improve the department's overall response time for high priority calls as well as the relationship between dispatched personnel and field personnel.

The purpose of this proposal is to gain departmental approval for the development of a decision-making approach to be used by first-line field supervisors in the Houston Police Department, an approach which may be useful in managing calls-for-service and in the disposition of patrol units. A new approach may provide a methodology field supervisors could use to discriminate between calls during those peak periods where service demands outweigh the number of available units. The adoption of a decision-making approach could expedite delivery of services within assigned areas.

The department's differentiated police response strategy and priority codes system could make up the

basic framework.

### **The Problem**

A departmental committee conducted an overview of the department's policies and procedures as they related to the call management system. It was necessary for the department to review its call management system in light of the implementation of the department's "Neighborhood Oriented Policing" (NOP) philosophy.<sup>1</sup>

The department's committee report addressed the reclassification and restructuring of call typology and priorities. It was necessary to develop a better understanding about the difference between the six priority codes of the call management system. A great deal of confusion existed about the rationale behind each priority code. The committee set out to narrow the scope of meaning behind each priority code.

While restructuring the priority codes, it became obvious that field supervisors needed to be more responsible for the expedient delivery of services within their assigned areas. Supervisors must evaluate their deployment strategies in order to ensure that staffing levels properly reflect work demands.<sup>2</sup>

**Why a new approach is needed?**

The department implemented its current procedures with no formal training and little sharing of the philosophy behind the decision. No tools or approaches were offered to field supervisors to aid them in accomplishing their new responsibility.

A different approach should be developed to ensure that the department's mission and philosophy are considered in the decision-making process. Any design adopted should seek to ensure the best possible preservation of life and protection of property as an inherent part of the final decision-making process.<sup>3</sup>

For field supervisors to effectively and efficiently manage calls-for-service within their areas, supervisors require understanding in operational terms of the type of calls or requests for police service occurring in their areas. Operational analysis could be used to provide the general focus needed by the supervisors. Operational analysis can aid decision-making relative to the allocation of personnel, patrol strategies and in making tactical decisions. First-line supervisors are responsible for the accomplishment of management's goals and objectives. Therefore, a

field supervisor who is not provided with good analysis may find it difficult to accomplish their responsibility. Some of the operational concerns for a field supervisor may be:

Determining the number of patrol units need to respond to calls-for-service within a geographic area.

Scheduling of personnel to match the demand for service within each beat.

Selecting the appropriate unit(s) needed to respond to identified emergencies during peak periods for police services.<sup>4</sup>

#### **Literature Review**

Various studies have been conducted across the country to determine the best methods for managing patrol operations. The research conducted by various agencies provides valuable information to other departments that aids in developing systems for decision-making and managing calls-for-service. As a result, some departments have developed a differential police response system. As an example, in 1989 the Eugene, Oregon Police Department completed an evaluation of that department's structure and function.

The most significant finding was the committee's view that the department's decision-making and planning

process were not consistent with its published management philosophy, which stresses a belief in the delegation of operational authority and joint policy decision-making, and organizational values that emphasize teamwork, acceptance of responsibility, mutual respect, constructive employee relations and innovative thinking.<sup>5</sup>

The Eugene Police Department's participatory decision-making model attempts to disperse decision-making throughout the department and to involve more employees in decision-making activities. The design of the department's model shows more reliability for long range planning than emergency situations, such as field supervisors' decisions. The model does permit decision-making at both ends of the spectrum.<sup>6</sup>

Neither research nor literature on decision-making approaches used by field supervisors for managing calls-for-service has not been very extensive. For the most part, the literature is devoted to the application of the decision-making process. There are three basic models that have been developed from the decision-making theories in literature: the rational model,

incremental model and the heuristic model.<sup>7</sup>

The development of a decision-making approach for managing police calls from the field will not be an easy task since all decisions are influenced by numerous factors. The type of calls are often unclear and ambiguous so that it is difficult to conceive of every logical and available alternative to successfully resolve the problems faced in the field. The lack of time to gather, review, and analyze data is an inherent part of policing. "Virtually all decision making is at best subjectively rational in that it maximizes attainment to the actual knowledge of the subject".<sup>8</sup> The rational model of decision-making alone would not provide the answer for the Houston Police Department's new procedure for managing calls during peak periods, since it calls for the decision-maker having complete knowledge of all alternatives, ability to order preferences accordingly to his or her own hierarchy of values and ability to choose the best alternative for him or her.

The incremental model goes through a series of steps and leads to an effective, if incremental, solution. Charles F. Lindblom contends in his



examination of the incremental model that administrators and police managers would muddle-through the process taking every step slowly, as if to play it safe. Unfortunately, the management of calls-for-service in an urban area will not always allow time to use an incremental approach. Many decisions must be made quickly and decisively in order to be effective. Often the calls will require an quick response by street level officers and supervisors.<sup>9</sup>

The heuristic model, or "gut level approach," offers little help to first-line field supervisors in managing calls-for-service. This model is sometimes known as "moxie," the ability to be street wise. Knowledge of the area where the decision-maker is assigned is an important part to success or failure in providing effective and efficient service. However, intuition alone will not always effectively resolve field problems. Any new decision-making approach must allow for uniformity in the application of department's goals and objectives. The heuristic model does not provide a way to measure results to assure that such goals and objectives are being met.<sup>10</sup>

Other decision-making alternatives continue to be

developed, some of which have application in police departments. Operations research is one such approach which has developed within some police departments. In operations research, data is collected, analyzed, and applied in making policing decisions. Managers then attempt to calculate the probability of consequences for selected alternatives.<sup>11</sup>

Techniques of operations research could be used to help the field supervisor gather the pool of data needed to render a decision. The data collected could then be applied to deployment strategies or to alternate approaches of addressing the department's problems.

Various studies have been conducted approaching different aspects of call management. The National Institute of Justice (NIJ) has funded many field tests for the evaluation of differential police response (DPR) as a part of on-going research.. Various DPR tests were conducted in the cities of Garden Grove, California; Greensboro, North Carolina; and Toledo, Ohio; according to NIJ, the overall purposes of the DPR tests were to (1) develop information on the effectiveness of specific criminal justice practices;

- (2) add to the knowledge base of law enforcement; and
- (3) contribute to improved policy decisionmaking."<sup>12</sup>

The Houston Police Department uses a response priority method consisting of six codes as a guide for its differential police responses. An improvement in the department's ability to render services to the public occurs as a result of the department providing a mechanism to differentiate between calls and type of responses. The department's desire to provide an efficient and effective police response to citizens' needs led to the establishment of a new policing philosophy.

#### **Conceptual Framework**

Under Houston Police Department's Neighborhood Oriented Policing philosophy, a decision was made to assign officers to specific beats on a regular basis. This decision was an important part of the success of the department's policing philosophy.<sup>13</sup> The department believed a regular beat assignment would enhance the officer's ability to efficiently respond to police service request. A requirement that units remain in their specific beats was initiated through a beat integrity policy.<sup>14</sup>

Originally, dispatchers were given enough latitude to move officers from beat to beat in response to peak demand periods. At times, dispatchers acted without regard to potential demands for service in the unit's regular beat or re-assignments to other beats. The decisions were made in the dispatcher's office without considering the concern of field supervisors for resolving those incidents which they deemed important to the delivery of police services and furthering NOP.

The development of a decision-making approach for field supervisors must be concerned with the overall delivery of police services to the community. Services should be delivered in a way that will assure continuation of the department's mission and philosophy. The approach should provide for logical and equitable solutions to problems without hampering individual initiative and creativity. A decision-making approach should be concerned with continuous citizen satisfaction and an understanding of the department's procedures. Finally, the approach should provide a method for evaluating the effectiveness and efficiency of decisions.<sup>15</sup>

### Questions and Hypotheses

The Houston Police Department has made the decision to have first-line field supervisors manage the calls for police services during periods of high demand periods from the field. The transfer of responsibility to field supervisors provides greater flexibility to those primarily responsible for the delivery of services within a police district.

The next step toward developing a decision-making approach should be to provide the field supervisors with the necessary tools to efficiently and effectively manage units within their districts in response to calls-for-service. Tools such as the information about call demand in their areas, training on deployment strategies, identification of what alternatives are available and information on the department's views about the type of decisions are expected. A new approach should provide a process for making sound deployment decisions from various alternative actions that can contribute to a successful completion of calls. The supervisor must be able to differentiate between the types of priority calls which provide the highest probability for successful results, and those

priority calls which historically have not been as successful.<sup>16</sup> At times, field supervisors will have to choose between types of priority calls. A decision-making approach should help with this selection.

### **Conclusion**

The development of a decision-making approach as a tool, requires the consideration of certain questions: What method will the field supervisor use in deciding which call a single available unit will handle? What are the factors used in making those decisions? Are there different responses required for different districts, beats or shift? Within what parameters were the selections made between alternatives available to the field supervisor?

The development of an approach for field supervisors to implement during peak periods will be an important step for the department to undertake. Such an approach should provide the department with some additional assurances that both the department's and community's concern are being considered in the daily decision-making posture.

How will a field supervisor make a decision when faced sending the only available unit on one of two

calls, a burglary-in-progress or robbery-in-progress? A decision-making approach offers a tool to help field supervisors better prepare themselves for making those decisions. A new approach could provide the supervisor with a systematic way of making a selection between alternatives available and which will help the department to support its mission and philosophy. Therefore, it is recommended that the Houston Police Department consider the development of a decision-making approach which will help field supervisors accomplish their new responsibility of call management.

## NOTES

1. Houston Police Department, "Computer Aided Dispatch / Neighborhood Oriented Policing Interim Report," August 29, 1989 (Houston, Texas: The Houston Police Department), 3.
2. Ibid., 3-7.
3. Houston Police Department, "Departmental Goals and Objectives," February 1987 General Order no. 100-6, Houston Police Department General Orders.
4. Robert Sheehan and Gary W. Cordner, Introduction to Police Administration (Cincinnati, Ohio: Anderson Publishing Company, 1989), 428.
5. Bill L. Deforrest, "Developing a Participatory Decision-Making Model," The Police Chief - The Professional voice of Law Enforcement, April 1989, 110.
6. Ibid., 111.
7. Charles R. Swanson, Leonard Territo, and Robert W. Taylor, Police Administration Structures, Process, and Behavior (New York: Macmillan Publishing Company, 1988), 415.
8. Herbert A. Simon, Administrative Behavior (New York: The Free Press, 1976), 76.
9. Swanson, Police Administration Structures, Process, and Behavior, 417.
10. Ibid., 418.
11. Ibid., 419.
12. U.S. Department of Justice, National Institute of Justice, Evaluation of the Differential Police Response Field Test - Executive Summary, by the Research Management Associates, Inc. [Alexandria, Virginia]. September 1984.



13. T.N. Oettmeir and W.H. Bieck, "Developing A Policing Style For Neighborhood Oriented Policing: Executive Session #1" (Houston, Texas: The Houston Police Department, 1987), 5-8, Photocopy.

14. Houston Police Department, Beat Integrity," September 1987 General Order no 600-2, Houston Police Department General Orders.

15. Michael W. O'Neill, Jerome A. Needle, and Raymond T. Gavin, "Appraising the Performance of Police Agencies: The PPPM System," Journal of Police Science and Administration 8, No.3: (1980) 254-255.

16. Sheehan, Introduction to Police Administration, 411.