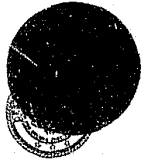


U.S. Department of Justice  
National Institute of Justice



National Institute  
of Justice

*Research Report*

Improving the Use  
of Management  
by Objectives  
in Police  
Departments

105669

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**James K. Stewart**

*Director*

U.S. Department of Justice  
National Institute of Justice

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# Improving the Use of Management by Objectives in Police Departments

Harry P. Hatry and  
John M. Greiner

1986

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# Scope and methodology

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## Introduction

This report examines the practical issues that police departments face when deciding about the adoption, design, and implementation of management-by-objectives (MBO) programs. The report discusses the major issues involved, the conditions that appear to be associated with successful implementation of such programs, and the impacts these programs have had thus far in police departments.

The information currently available on MBO and other police management programs has rarely been examined from the standpoint of its effectiveness in motivating police personnel to improve agency performance and productivity. Texts on police administration consider motivational issues but often only indirectly (e.g., within the context of leadership styles, personnel management practices, and the like).<sup>1</sup> What is more important, consideration of these issues has often emphasized negative incentives (such as internal inspection procedures and disciplinary actions) rather than positive motivators for police personnel.

This report focuses on one particular "positive" motivational approach: management-by-objectives. MBO is aimed primarily at motivating managerial personnel.<sup>2</sup> It represents one of the most promising motivational techniques now being tried by police departments in the United States. The technique also represents a substantial departure from traditional police practices.

## What is MBO?

MBO is a process in which individual managers identify specific objectives for the coming performance period (usually for the coming year). The managers and their supervisors then periodically review the extent to which the managers have met their objectives.

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MBO was first promulgated in the United States nearly 30 years ago in private, for-profit firms by such well-known management experts as Peter Drucker. Government use of MBO received a strong boost during the 1960's when the Nixon administration pressed for its use in Federal agencies, and a number of local governments also adopted it.

Police department use of MBO is now receiving additional encouragement from the manual, Standards for Law Enforcement Agencies, issued by the Commission on Accreditation for Law Enforcement Agencies. These standards call for written directives and evaluations involving input from all levels within the agency concerning (1) the agency's goals and objectives, and (2) progress toward the attainment of those objectives by each organizational component.<sup>3</sup>

### Methodology

The main objective of this report is to identify and illuminate key issues that can help police departments use MBO more effectively. To do this, we took the following steps during 1983 and 1984:

1. A review of the literature on MBO, particularly as it pertains to governments and police departments. Unfortunately, however, although such literature is widely available on applications to the private sector, there are few reports on MBO activities in governments, and very little material specifically related to police departments. (See the bibliography.)

2. A mail survey of police departments in all cities with populations of 50,000 or more and in all counties with populations of 100,000 or more. The survey identified the degree to which police departments use a variety of motivational approaches (including MBO). It also provided candidates for more indepth examination. The survey was conducted for The Urban Institute (UI) by the International City Management Association (ICMA), which received a total of 300 usable responses (211 from cities and 89 from counties), for a 37-percent response rate.

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3. Telephone interviews with department personnel responsible for MBO programs in 12 police departments. Each of these interviews lasted approximately 45 minutes to an hour.

4. Review of materials provided by many police departments in response to the ICMA-UI survey and our telephone interviews. Materials from 26 of these departments were particularly helpful in delineating MBO procedures.

5. Onsite fieldwork on MBO activities in four locations: Newport News, Virginia; Hampton, Virginia; Dallas, Texas; and Orlando, Florida. In addition, we drew on fieldwork that we had previously undertaken between 1979 and 1980 on police MBO systems in Charlotte, North Carolina; Dayton, Ohio; and Montebello, California.<sup>4</sup>

Our procedures for site visits included three major data collection efforts:

1. In-person interviews of approximately 1 hour each with police personnel at various levels of the organization to obtain their experiences and perceptions concerning the MBO program and its pros and cons. Interviews were generally conducted with the police chief, one or more majors or assistant chiefs, several captains, several lieutenants, and a few sergeants. These interviews were semi-structured—while the general topics were specified in advance, the detailed questions were not.

2. A self-administered questionnaire for all police department personnel who had participated in the MBO program. The questionnaire solicited perceptions about the extent of any improvements in the work unit's effectiveness, efficiency, morale, interpersonal relationships, and innovativeness. Program participants were also questioned about their perceptions of selected aspects of the MBO program, such as the training received, the way objectives were established, and the feedback received on achievement of objectives. Completion rates were high (over 90 percent).

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3. An examination of available documents and data regarding the programs (including statements of objectives and target achievement reports), and information, when available, on performance indicators for the department for periods before and after implementation of the program.

It is difficult to provide definitive evidence on the impacts of an MBO program. Inevitably, after implementation of MBO, many other changes will take place in the department that can also affect performance. Nevertheless, we were able to obtain some indications of program impacts from department performance data and from the in-person interviews and self-administered surveys. Participants were asked in both the interviews and the self-administered questionnaire about the level of, and changes in, service quality, efficiency, morale, and interpersonal relationships for their work groups since the MBO program was implemented. We also asked program participants for their judgments on the specific effects of the MBO program and for examples of work changes that resulted from the MBO effort. In addition, we examined existing data on department performance to explore the possibility that changes in that performance could be related to the MBO objectives that had been established and the reported progress toward meeting those objectives.

# The use of management by objectives in police departments

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Management by objectives (MBO) is a process for motivating management personnel to improve their performance. It is the principal form of a general motivational technique sometimes called "performance targeting" that is being widely used by police departments in the United States.<sup>5</sup> Of the 300 police agencies responding to the ICMA-UI survey, 141 (47 percent) reported using some form of MBO over the previous 3 years, making MBO one of the most popular motivational techniques currently used by police departments (see Exhibit 1). About 60 percent of these MBO plans began after 1979, suggesting a recent surge in interest in MBO among local police departments. Only six of these departments reported that they had terminated their MBO effort.

MBO is commonly defined as a process in which management employees identify specific, measurable objectives for themselves before the beginning of a given performance period. Subsequently, supervisors measure actual progress in meeting those objectives and provide feedback on objective achievement to the manager responsible for each objective.

An "objective" is a precisely stated condition or end product to be achieved. Each objective should be clearly defined as to what specifically constitutes its achievement, such as a specific performance level, percentage improvement, or due date.

Typically the objectives for a given manager are established by that manager with some degree of participation by the manager's supervisor. MBO proponents strongly encourage interim feedback during the performance period to let managers know how they are doing on their objectives and to identify whether remedial actions are needed to increase the likelihood of achieving the objectives during the remainder of the performance period. Other key activities often suggested for MBO systems are (1) periodic person-to-person discussions between the manager and the supervisor

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Exhibit 1

**Reported use of motivational programs by police agencies  
in the United States, 1981-84 (N=300)**

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<u>Program</u>	<u>Number</u>	<u>Percentage reporting use of the program</u>
Task forces/Special problemsolving teams	185	62
Educational incentives	160	53
Generalist officers	142	47
Management by objectives	141	47
Labor-management committees	112	37
Formal job rotation programs	92	31
Miscellaneous formal programs to increase employee participation	87	29
Suggestion awards	77	26
Career development programs	76	25
Attendance incentives	74	25
Pay-for-performance plans	72	24
Safety awards	63	21
Neighborhood team policing	49	16
Quality circles	48	16
Exceptional service awards	22	7

(continued)

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(Exhibit I continued)

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**Reported use of motivational programs by police agencies  
in the United States, 1981-84 (N = 300)**

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Public safety officers	15	5
Other programs	36	12

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Source: These findings are from a mail survey conducted by the International City Management Association in early 1984. It covered police agencies in cities with populations of 50,000 or more and counties with populations of 100,000 or more.

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on the manager's achievements to date, perhaps quarterly and at the end of the performance year; and (2) preparation by the manager of formal action plans containing specific steps designed to achieve the objectives and a schedule for completion of those steps.

Thus, MBO systems encourage planning for the next performance period and require a process for tracking achievements and for providing periodic, reliable feedback on each manager's progress toward each objective. Police departments usually have ongoing data collection procedures that can be readily adapted to track some objectives, such as objectives on the number of arrests, clearances, response times, and reported crimes of various types. For certain other objectives, new or revised data collection procedures are likely to be necessary, as, for instance, when objectives are selected which relate to citizens' feelings of security (which might require a survey of citizens) or when data are needed in more detail than the current data collection procedures provide (e.g., if objectives are established for individual watches and beats for which data are not currently broken out).

MBO is based on the premise that having managers establish their own objectives and subsequently receive periodic feedback on their progress toward the objectives will provide a substantial additional stimulus for the managers to plan and act in ways that will lead to successful achievement of the objectives. If the objectives are appropriate and important for the department, the MBO process should lead to improved performance with regard to department objectives and public purposes. However, if the objectives and targets are inappropriate, then the MBO process will not be useful and may even be counterproductive.

An MBO system necessarily requires the commitment of some department resources. Some time is needed to undertake the MBO process, and extra paperwork is likely to be entailed. Modifying the department's information systems to obtain information about progress toward the objectives is also likely to be needed and will require additional time and expense.



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In examining current police applications of MBO, we identified a number of issues that police departments need to consider in implementing and using MBO systems successfully. Exhibit 2 summarizes these issues. Each is discussed in the following chapters.

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Exhibit 2

**Management-by-objectives issues**

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1. What personnel should participate?
  2. What objectives should be used?
  3. Should objectives be established for individual watches and geographic areas?
  4. What form of performance targets should be used?
  5. Should objectives represent minimum, average, or high levels of performance?
  6. Should there be interim targets during the year?
  7. Should there be a provision for interim revision of objectives?
  8. How should coordination be handled when an objective is affected by the activity of more than one unit?
  9. Should the department require action plans to support objectives?
  10. What type of feedback on achievement of objectives should be provided to managers?
  11. What should be the extent of central review, oversight, and support?
  12. What type of training (and how much) is desirable?
  13. What benefits should be expected from police MBO efforts?
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# Issue one: What personnel should participate?

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Police departments designing an MBO program need to determine how broadly it will be applied in the department: which organizational units and which types and levels of employees--civilian as well as sworn personnel--will be included in the program? In theory, all units and all management personnel can be involved in an MBO effort. In this chapter, we first discuss the organizational units and then the types and levels of employees that should be included.

### Organizational coverage

Of the police departments that reported using MBO in the 1984 ICMA-UI survey, 70 percent reported that the program covered all units within the department, 16 percent excluded patrol units, 19 percent excluded traffic (or had no traffic division), and 25 percent excluded various other units (crime prevention, records, dispatching). Most departments appeared to use their organizational charts as the basis for defining program coverage. For instance, Montgomery County, Maryland, included each unit formally identified in its organization chart (a total of 50 to 60) in its MBO effort. Virginia Beach, which linked MBO to zero-base budgeting, focused on the department's 8 to 12 budget units.

### Types and levels of employees covered

Of the 141 police and sheriff departments that reported use of MBO in our 1984 survey, 82 percent reported that middle-level or top management (lieutenants and above), or both, participated in the program. Seventy-two percent reported participation by sergeants, and 57 percent reported participation by civilian personnel. More than 70 percent of the reported programs covered all supervisory and management personnel.<sup>6</sup>

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In Hampton, Virginia, the target-setting effort included lieutenants and, in some cases, sergeants. Some patrol officers and most investigators were also assigned MBO targets (although their targets were established by their supervisors, using shift--or national--averages). In Newport News, Virginia, program coverage extended to lieutenants and some sergeants; efforts were under way in some divisions (especially patrol) to extend the coverage to line officers. In governments where MBO played a major role in the budgetary process (e.g., Orlando, Florida, and Virginia Beach, Virginia), the program primarily covered personnel responsible for units that were explicitly identified in the budget. Thus, in Orlando the program included captains and lieutenants who served as section heads, but not the watch commanders. In Virginia Beach, only 8 to 12 top department managers (with line budget responsibility) were covered by the MBO effort. San Jose, California, focused its MBO effort on program and sub-program managers, usually captains, lieutenants, and some sergeants. The MBO effort in Dallas was limited to seven top managers serving at the pleasure of the city manager: the police chief, the executive assistant chief, and the five assistant chiefs.

Several factors can limit MBO coverage in a police department:

- Employee unionization. If the MBO program involves monetary incentives for performance achievements, as has been the case in Dayton, Ohio, and Montebello, California, police departments may choose to restrict the coverage of their MBO efforts to nonunion managers. In Dayton, this policy limited the program to the top 13 sworn and civilian managers within the department.

- Rotating shifts. Rotation of managers from one shift to another, especially when that rotation is fairly frequent (e.g., monthly), can make it difficult to maintain the accountability needed for an MBO effort. Fixed shifts and stable responsibilities (as in Newport News and Hampton) facilitate the MBO process. Even with fixed shifts, there may be a few "floating" managers who fill in on several shifts. Assignment of distinct objectives for

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these managers may be especially difficult. Among the respondents to our 1984 survey, 44 percent of the police departments reported that they had shifts that did not rotate. Another 16 percent reported that they had rotating shifts in which all personnel, both supervisory and non-supervisory, rotated as a unit.

• Status of sergeants. The question of whether to include sergeants in the MBO effort was handled differently in different departments. In many of the departments we examined, we found that sergeants who were responsible for a distinct program or unit had their own MBO objectives. In Orlando, however, sergeants were not considered managers and were therefore excluded from coverage under MBO. Other departments noted that the frequency with which they transfer sergeants makes it difficult to assign and hold them accountable for the annual targets that form the basis of their MBO systems.

MBO procedures provide an opportunity for drawing middle-level and top managers--and even line personnel--into the planning and decisionmaking process. Even if some personnel, such as nonsupervisory employees, do not have their own individual performance targets, they can still help identify objectives, examine progress, and suggest changes for their unit to meet their supervisor's objectives. Such opportunities, however, have not always been taken advantage of. In most of the programs we examined, managers down through the level of lieutenant were actively involved in specifying objectives for the next year, but participation by lower level personnel varied. In Newport News, however, an intensive effort was being made at the time of our examination to actively involve line personnel--patrol officers and investigators--in the specification of objectives under the department's MBO system.

In most cases, participants appeared to have wide flexibility in developing objectives. Upper level managers usually reviewed the objectives, but they seldom intruded in the process of developing objectives. At most, a superior officer would specify one or two objectives for inclusion in a subordinate's goals and objectives for the year. In our surveys of police personnel covered by MBO

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programs in Hampton and Newport News, only about 15 percent of the respondents indicated that their objectives were selected primarily by their supervisors; most (72 percent) reported that the selection process was a cooperative effort between themselves and their supervisors. In a few places (for instance, Dallas), many of the police chief's objectives were subsequently assigned to lower level managers. In San Jose, program managers had an additional opportunity to participate. When their performance during a given 4-month period fell below the targeted level, they were expected to propose one or more suggestions for overcoming the problem. Although such a requirement may complicate the administration of the program, it is likely to pay off in improved motivation and productivity.

It is less clear whether watch commanders and beat supervisors should have their own objectives. At present, they rarely do. The key issue here is whether it is possible to hold such persons accountable for appropriate beat and watch objectives. This problem is discussed in more detail under Issue 2.

Recommendation: Managers and supervisors of all units--whether sworn or civilian personnel, and regardless of their rank--should be included in the MBO effort, even though it may be difficult to specify objectives for some units. Such comprehensive coverage can forestall resentment on the part of supervisory personnel who would feel singled out for attention, and it can maximize the benefits realized from the application of MBO within the department. The department should also encourage each manager responsible for a set of objectives to enlist the participation of that manager's staff (whether the staff are supervisory or nonsupervisory personnel) in helping to define the unit's objectives and the action plan for achieving those objectives (as is discussed later). Because we believe it is possible to establish reasonable objectives for individual watches and beats, we recommend that departments attempt to include watch and beat supervisors in the MBO process.

### Issue two: What objectives should be used?

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The types of objectives established for the MBO effort play a vital role in the effectiveness of the program. Each objective should involve a measurable, precisely stated condition or end product to be achieved by a certain time. Each objective should contain a "target" precisely specifying the service level, percentage improvement, due date, or whatever else constitutes achievement of the objective. We found a number of units in some departments with objectives worded in such general terms that it would be virtually impossible to ascertain whether the objective had been met or to what extent. Consider, for example: "Begin organizing businesses into organizations similar to neighborhood watch groups" (what do "begin" and "similar" mean?) and "Improve quality and quantity of police records information available to investigators" (how would anyone know whether this had been done?).

Many departments also specified "goals." Usually these goals were broad, general statements of a unit's mission. The unit's goal statement usually was subsequently translated into one or more objectives.

#### Which type of objectives should be used?

Police departments must decide whether their managers should focus on process objectives, outcome objectives, efficiency objectives, or some combination of these.

Process objectives. Process objectives focus on the means to an end, that is, an action or activity to be undertaken rather than a result (outcome) to be achieved. These objectives are usually specified in terms of the workload to be completed or activities to be undertaken, for example, "Conduct at least eight major studies impacting procedural, operational, or managerial decision-making policy," or "Continue inspections of bars, liquor

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stores, adult book stores, and cardrooms, making approximately 1,500 inspections."

Process objectives may focus on maintaining current activities, or on stimulating new efforts and initiatives, such as the accomplishment of special projects. We found that after several years' experience with MBO, some police departments began to include fewer objectives focusing on current activities and to stress instead objectives that focus on new projects. For instance, in recent years, the department in Hampton, Virginia, has directed managers to emphasize new projects in specifying goals and objectives while deemphasizing objectives relating to "routine" activities. New activities are likely to be more eye-catching and stimulate innovation in a department. The danger is that too much emphasis on new projects can divert efforts from vital day-to-day operations.

We also found some process objectives that focused on activities explicitly intended to improve service outcomes, such as the identification and implementation of actions to improve productivity. This type of process objective appears to offer particular promise. For example, patrol units employing the directed patrol approach can be given the objective of identifying and ameliorating a certain number of problems within their beat during the next quarter. In Montebello, California, an objective was to "Identify four improvements in operation effectiveness or efficiency during the year." A similar objective was used for patrol units in Newport News: "District patrol officers will identify two problem areas in their districts from weekly administrative analysis reports and develop a plan to address the problems." Both jurisdictions found that these particular objectives stimulated innovative projects and were likely to improve service outcomes.

Outcome objectives. Outcome objectives focus on the results of an activity rather than the means used to achieve it. Examples include these: "Maintain a clearance rate for index crimes 4 percent above the State average for cities of comparable size," "Maintain an average response time of 8 minutes or less for priority calls," "Reduce burglaries in District A by 2 percent," and "Decrease the



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number of vehicles in violation of speeding laws by 5 percent at identified locations with a history of numerous speeding violations."

Cost and efficiency objectives. These objectives focus on containing or reducing department expenditures and can be expressed as specific expenditure reductions, decreases in the cost per unit of output for certain activities (e.g., patrol car operating cost per vehicle-mile), or as reductions in certain activities that affect costs (e.g., reductions in absenteeism).

Few of the objectives used by the police departments we examined focused on cost or efficiency issues. For instance, in 1984, only one of the 46 performance objectives used by the police department in Pompano Beach, Florida, addressed efficiency; the comparable figures for objectives used by the department in Mansfield, Ohio, were 2 of 33, and for the police department in Rockford, Illinois, 3 of 36. The police department in Lakewood, Colorado, included numerous efficiency measures among the indicators of police performance it prepared for the city budget document (e.g., cost per patrol hour, cost per traffic accident response, cost per month for communications services), but such objectives were not included in the managers' MBO objectives.

The police department in Compton, California, placed more emphasis on cost and efficiency objectives in its MBO effort than did the other departments we examined. Five of this department's thirteen major objectives addressed cost and efficiency issues. Examples included these: "Reduce the previous year's expenditure on fuel and major utilities by 10 percent," "Reduce sick and injury time by 20 percent," "Provide those services and efforts that will translate into a 6- to 9-percent return on the general fund portion of the department's budget," "Maintain an operative minimum 'downtime' fleet of department vehicles," and "Make expenditures as projected." As noted previously, the Montebello Police Department included a process objective that emphasized efficiency (and effectiveness) improvement: "Identify four improvements in operation effectiveness or efficiency annually, two improvements to be approved and implemented annually."

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## Process versus outcome versus efficiency objectives

The degree of emphasis on process, outcome, or efficiency objectives is a controversial issue for police departments, as it has been elsewhere in the public sector. Some departments provide a balance among these types of objectives, while others tend to prefer one type or the other.

The interest in outcome objectives arises from the concern for results, which are the primary interest of citizens and elected officials. In addition, some recent findings indicate that productivity improvements are more likely to be associated with the use of outcome-oriented objectives than with process objectives in an MBO effort.<sup>7</sup> These findings suggest that the MBO objectives most likely to foster improved productivity are those that focus specifically and explicitly on productivity--that is, measures employing effectiveness or efficiency targets.

By far the greatest proportion of objectives in the police MBO programs we examined were process objectives. In some departments virtually all the objectives were process oriented; in most of the others, the proportion of process-oriented objectives ranged between 50 percent and 70 percent. And in a number of cases, the proportion of process objectives appeared to be increasing over time. Nevertheless, most departments had at least a few outcome objectives, especially those relating to criminal apprehension and crime reduction. Only one department (Compton, California) placed heavy emphasis on efficiency and cost savings targets (5 of its 13 objectives focused on cost control).

The following factors appear to account, in part, for the emphasis on process measures in police MBO programs:

• Ease of measurement. Respondents in several cities observed that their selection of objectives was strongly influenced by the requirement that those objectives be readily measurable. The absence of a good data base in several police departments greatly hampered the use of outcome-oriented objectives. Process-oriented objectives,

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however, could usually be readily measured from existing workload data or self-reports of individual accomplishments.

● Simplification of management control and oversight.

Process measures simplify the management process by clearly specifying the actions to be taken and holding a manager accountable for those actions. Such actions can usually be readily verified by supervisors.

● Preferences of top management. Police chiefs and other high-level officials in several of the police departments we examined expressed strong personal preferences for process as opposed to outcome measures. Outcome measures were often characterized as an "overemphasis on the numbers" and were linked to overzealous efforts to rate police officers on the number of arrests or the number of summons issued. In addition, police in both Hampton and Newport News stressed the reorientation of their departments toward the provision of non-crime-related services to citizens in response to citizen requests and other public needs. They expressed the view that this emphasis was more compatible with process than with outcome objectives. (Outcome measures can, however, also cover non-crime-related services. For instance, measures such as response times to calls for service, perhaps as compared with the promised time, and citizen satisfaction with the police response can be used as a basis for outcome objectives. However, such objectives were not often used, even in departments stressing non-crime-related services.)

● Controllability. Outcome objectives were frequently condemned as uncontrollable. Confounding factors make it hard to determine with confidence whether a manager should be credited with meeting crime reduction or criminal apprehension targets. Managers usually can offer a variety of credible excuses to explain their failure to fully achieve their outcome objectives, so it can be difficult to hold managers responsible for not achieving them. Some managers reported that they felt threatened by outcome objectives because they lacked control over the outcomes used as a basis for judging their performance.

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Process-oriented objectives are also imperfect. They have problems such as the following:

- Controllability. Some process objectives, especially those focusing on the workload to be processed, are just as uncontrollable as outcome-oriented objectives.

- Distortion of work activities. Process-oriented objectives can distort the emphasis and activities of managers in undesirable ways. For instance, they may lead managers to run up large tallies of certain types of activities (e.g., inspections, field interviews, traffic tickets) without any thought to whether those activities are being done effectively or whether they are consistent with overall departmental objectives.

- Inflexibility. A process focus can lead to less management flexibility than does an emphasis on outcomes. Once managers have chosen a process objective for the performance period, they are somewhat locked into that particular strategy. An outcome-oriented objective has the advantage of permitting managers to alter their strategy during the performance period without having to formally change their objectives.

- Imperfect linkage between process and outcomes. Perhaps most important, the linkage between process and outcomes is usually uncertain and imperfect, especially in a complex activity such as police work. In most cases, the contribution of process objectives to improved productivity--efficiency and effectiveness--remains questionable. Thus, in the majority of cases, it is difficult to justify an emphasis on process objectives as being anything more than expedient. (Of course, in those cases where it is clear that the process objective is closely related to outcomes, this criticism does not apply.)

Among the reasons police department officials cited for not making greater use of cost and efficiency objectives were the following:

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- Little pressure to reduce resources. Officials of several departments said that the primary reason they did not place more emphasis on cost and efficiency objectives was that they were under little pressure to reduce costs.
  - Inappropriateness. Some police agencies consciously emphasized effectiveness and delivery of services rather than efficiency in the provision of those services because they believed it more appropriate to target improvements in service quality than to focus on service efficiency.
  - Inadequate accounting information. The absence of adequate accounting information was widely cited as hampering the introduction of cost and efficiency measures. Most departments reported that they lacked the ability to isolate the expenditures associated with specific police functions.
  - Lack of demand. Other departments argued that because many police services are driven by demand, management must handle whatever demand they encounter with the staff and other resources available. Hence, productivity and unit costs fluctuate over the short term as a result of changes in demand that are beyond the control of the agency.
  - Tangled lines of responsibility. In the provision of some services (e.g., traffic control), the lines of responsibility in police departments become tangled. Multiple units become involved in the provision of such services at any given time, complicating the ability of the department to provide meaningful measures of the unit costs associated with the production of such services.

What particular types of outcome objectives are most appropriate?

If outcome objectives are to be included, which ones should be used and in what form? This question was the root of many police managers' concerns about outcome objectives. On the surface, it seems appropriate for police departments to focus on several traditional, important outcome measures that are regularly collected by most departments: crime rates, clearance and arrest rates, and response times.

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Many departments, however, have been reluctant to include these in their MBO objectives.

On the other hand, some departments have begun to use certain less traditional outcome measurements. The San Jose Police Department employs in its objectives several indexes designed to capture trends in the quality of service, including a crime enforcement index (arrests plus citations, divided by the number of crime-related calls for service) and a traffic enforcement index (number of citations per injury or fatal accident) to monitor trends in traffic safety. Indexes of this type have also been used by other departments.

In the following paragraphs, we discuss some of the options for using various outcome indicators as MBO objectives.

Crime rates. Some police departments include objectives focusing on the number or rate of reported crimes. Examples include "Reduce the incidence of commercial robbery in Division 2 by 5 percent" (Dayton), "Prevent any increase in incidents of burglary over the 1983 rate of 1,556 incidents" (Hayward, California), and "Reduce the crimes of robbery, burglary, aggravated assault, larceny, and auto theft by an aggregate 10 percent overall" (Compton, California). Some jurisdictions have linked crime reduction objectives to specific programs such as the use of directed patrol: In each precinct using directed patrol, "identify two subdivisions in which burglaries will be reduced by 25 percent" (Virginia Beach).

These examples illustrate some important practical considerations in the current use of crime rate objectives. Whenever such objectives are used, they are generally applied to specific, relatively preventable crimes in given locations, perhaps as related to specific crime deterrence activities. This practice avoids the use of highly aggregated crime figures (such as overall city crime totals) with their attendant controllability and accountability problems.

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However, we found that some departments that once used crime-related objectives subsequently deemphasized such objectives. Other departments included no crime reduction targets in their objectives for patrol units. A number of factors apparently contributed to the decisions of police officials to deemphasize crime rate objectives in their MBO efforts, including the following:

- Lack of controllability. The level of reported crime exhibits a very uncertain relationship to police activities. Moreover, crime levels and crime rates frequently show inexplicable monthly and quarterly fluctuations of several percentage points. This fluctuation makes it difficult to hold police managers accountable for performance. Many managers object to being held responsible for such objectives unless the latter are associated with an action plan (e.g., directed patrol) in whose effectiveness the manager has considerable confidence.
- The shift in emphasis to providing other services to the public. Some departments are now emphasizing how well they serve the community and its needs in areas other than crime control.
- Association of crime rate targets with previous unsuccessful MBO programs. The use of crime rates in earlier, discredited MBO efforts also appeared to have biased some officials against their use, even though the problems associated with those programs often had nothing to do with the inclusion of crime control objectives.

Nonetheless, police departments such as Dallas included crime reduction among their objectives while recognizing their potential deficiencies. Dallas police officials have observed that such targets must be included to satisfy city hall and the public, even though their inclusion can be risky for the managers involved.

Arrest and clearance rates. Police managers perceive objectives involving arrest and clearance rates to be more controllable than crimecount-related objectives. Arrest-related objectives are common for investigative units. Examples include these: "Increase auto theft arrests by 5

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percent" (Montgomery County, Maryland), "Obtain a clearance rate of 10 percent on all burglary cases with low solvability factors during FY 84 in the Rockville District" (Montgomery County), "Increase narcotics arrests" (Lakewood, Colorado), and "Achieve a 42-percent clearance rate on Part I crimes investigated by the investigative services bureau" (Dayton).

Nevertheless, some police officials have expressed reluctance toward using arrests and clearances in connection with MBO objectives. They cite the following reasons:

- o Encouragement of poor-quality arrests. An emphasis on increasing the number of arrests may encourage police personnel to make inappropriate arrests. This temptation can be reduced if the objective is expressed in terms of producing "quality" arrests (where "quality" is clearly defined). Unfortunately, most departments do not track the number of "quality" arrests, for instance, the number of arrests that are not subsequently dropped for police-related reasons such as lack of evidence. However, the new accreditation program for law enforcement agencies may stimulate the improved availability of quality-of-arrest information.<sup>8</sup>

- o Distortions due to exceptional clearances. Multiple and exceptional clearances, a situation especially common with regard to burglaries, can create inequities and "windfalls" for investigators, thus diminishing the value of clearances and clearance rates as a measure of performance.

- o Inequities due to differences in case difficulty. Unless arrest and clearance objectives are adjusted to compensate for differences or changes in the difficulty of the incoming cases (for instance, the amount and quality of evidence available when the case is opened), a department may face serious inequities in assessing the performance of different squads or individuals. For instance, undeserved blame may be placed on an investigation unit when its incoming case mix contains a large proportion of difficult cases. However, if objectives focus on the rate of clearances for cases of given difficulty levels, this problem can be reduced or eliminated.



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• Arrests as means versus ends. A few police chiefs have questioned whether arrest levels actually constitute an outcome measure. They argue that arrests represent a type of process measure and should not be viewed as an end in themselves. These officials argue that too often an arrest is merely an intermediate response; the outcome should better be viewed as the solution of a particular social problem.

Response times. Some police departments use response times as objectives in their MBO systems. Examples include these: "Maintain an average response time of 3 minutes or less for all priority I emergency calls" (Hayward), "Reduce first district response time to 14 minutes" (Dayton), "Improve response time to calls for services by a 5-percent reduction" (Compton). Other agencies, however, have avoided or vacillated with respect to the inclusion of response time objectives. For instance, Lakewood avoids response time objectives for patrol units, although they are used for other police functions. Newport News once used response time objectives but no longer does so.

Police departments cited a number of reasons for their reluctance to use response times in their objectives:

• Absence of necessary information. Departments that lack computer-aided dispatch and rely instead on manual dispatcher records would have to conduct special manual analyses of those records to monitor average response times. And some departments that have computer-aided dispatching do not aggregate response time data in ways appropriate for monitoring performance, for example, by call priority.

• The meaningfulness of response time information. Some department officials believe that the introduction of call prioritization has made response time measures less useful for assessing performance. Top-priority calls almost always receive expedited treatment, with the result that the average response time for such calls varies little from one period to the next. On the other hand, delays of low-priority calls for 45 minutes or more can be acceptable in many instances.

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• Response times as process (intermediate) measures. Some department officials argue that response times represent process rather than outcome measures and that their relationship to arrests and the effectiveness of crime control is tenuous.

• Alternatives to emphasizing rapid response times. Some department officials suggest that if callers are treated properly, it is possible to maintain public satisfaction with police services without providing a rapid response. They report that the public will be satisfied if told in advance when to expect a police officer (assuming the officer in fact appears at that time or earlier), even if the officer's response involves a substantial delay following the citizen's call. (This argument suggests the need for an objective on the extent to which the department meets its promised arrival times.)

In contrast, many police officials argue that response times represent, in the eyes of the public, an important aspect of service quality and indicate the responsiveness of a police agency. The views of the Dallas Police Department are perhaps typical of this argument. Police officials there maintain that despite the foregoing problems, response times must be highlighted as part of an agency's objectives. Moreover, continuing efforts to reduce or maintain low response times are important from the standpoint of identifying witnesses, rendering aid to those who need it, and living up to citizen expectations.

Feedback from citizens. The departments we examined included few objectives based on feedback from citizens in the community--such as "percentage of the population feeling secure walking in their neighborhoods at night," "percentage reporting no victimizations," victimization rates (which include unreported as well as reported crimes), or citizen satisfaction with other police services. A few agencies, however, did include objectives concerning citizen complaints about the way their requests for service were handled.

Some citizen feedback objectives could be based on information obtained as part of periodic victimization surveys

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such as those undertaken regularly by the Federal Government. Although many communities are expressing increasing interest in such surveys, few currently conduct them regularly. Until they do, objectives focusing on victimization and feeling of security in neighborhoods will not usually be practical.

Objectives regarding the number of "legitimate" or "valid" citizen complaints about police services (by topic), however, can usually be measured using available data. Many police departments already prepare such data periodically, but some officials are reluctant to use the data because of concern about the legitimacy of the complaints received and the potential sensitivity of such information.

Measures of citizen satisfaction with police service (e.g., the handling of crime or other calls) require mail or telephone contacts with all, or a random sample, of the citizens who requested such assistance. Such service followups would need to be done systematically (with set procedures) and regularly. Such surveys would serve not only as the basis for tracking MBO objectives, but they can also provide other useful information to police managers for reviewing and improving services (e.g., by identifying service problems). Although such procedures would probably not be costly (they could be conducted by nonuniformed personnel), they are currently foreign to most police departments.

Recommendation: Police departments should use a combination of process, outcome, and cost savings/efficiency objectives. We recommend that the process objectives not be workload objectives of the form "Process 139 citizen complaints"; instead, process objectives should call for satisfactory completion of special efforts or initiation of new projects explicitly aimed at improving some aspect of performance. A more appropriate place for emphasizing process goals would probably be in the unit's workplans, rather than in its overall objectives.

Despite the problems often associated with outcome objectives, at least some outcome objectives should be included as part of a unit's MBO submission. To avoid encouraging

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undesired behavior, objectives such as those relating to arrests should consider quality as well as quantity. Efforts should be made to improve the controllability of the outcome objectives by disaggregating the objectives by district, by specific type of crime, and by deterrability or solvability--and by relating them to specific crime control efforts (such as directed patrol). By considering case difficulty and other factors, outcome objectives can be made to focus on the controllable aspects of concern (e.g., repressible crimes).

Finally, police departments should incorporate in their overall set of objectives some that relate to expenditures, including selective attempts to identify and reduce unnecessary or marginal costs. The lack of attention to cost and efficiency objectives on the part of most police MBO systems means that an important aspect of the agency's performance is not considered, an aspect that is becoming increasingly important for departments in a time when resources are becoming increasingly tight.

### Issue three: Should objectives be established for individual watches and geographic areas?

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If separate objectives can be developed for individual watch and district commanders, police departments can get more supervisors involved in the MBO process and tailor the performance targets to the characteristics of a specific watch and geographic area (e.g., each area's mix of crimes, population characteristics, and service needs). For instance, the objectives of an early morning watch might focus on the identification and prevention of business break-ins, whereas day watch objectives might emphasize prevention of home burglaries and the effective movement of traffic.

A prerequisite for setting objectives for supervisors responsible for particular watches or geographic areas is some stability in the shifts or areas to which police officers are assigned. Thus, departments that do not employ fixed watches, or those whose watches rotate quarterly or more often, will have more difficulty setting objectives by watch or geographic area. Officers with such varying assignments may not be sufficiently accountable for a given time period or area to make the specification of such objectives practical.

We found few examples of police departments that had established different performance targets for different watches or geographic areas. In most cases, all patrol units were jointly responsible for the same aggregate objectives. A few departments, however, have specified separate patrol objectives for different shifts or geographic areas. For example, the police department in Pompano Beach, Florida, included an objective focusing on the reduction of daytime burglaries. Departments in Largo, Florida, and Mansfield, Ohio, prepared separate objectives for each shift. For instance, the objectives for Mansfield's first watch included reductions in the number of commercial burglaries and the number of motor vehicle accidents; the targets for the second watch emphasized reductions in overall crime and accident rates; and the targets for the third watch focused on reduction of traffic accidents and increases in the num-

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ber of arrests for driving under the influence of alcohol or drugs. Although each watch had an objective concerning reduction of traffic accidents, the specific targets (percentage decreases) reflected the different traffic patterns associated with the various watches.

Several police departments, in fact, employ basically the same objective for different geographic areas but with different performance targets for each. For instance, the department in Charlotte, North Carolina, developed different performance targets for each of its police teams. (Each team was responsible for a different geographic area.) The police department in Montgomery County, Maryland, employed different patrol and investigation targets for each of its five districts, for example, "Successfully clear 35 percent of assigned robbery cases reported in the Wheaton District," "Reduce burglary in the Bethesda District by 2 percent for FY 84 over FY 83."

The police department in Hampton, Virginia, used a single set of objectives covering all watches; however, certain of the patrol objectives were clearly more relevant to some watches than others. The aggregate set of objectives incorporated the different expectations for each watch. For example, an objective focusing on the identification of business burglaries applied primarily to the early morning watches, whereas a crime prevention objective that involved the distribution of literature was more relevant to the day watch. The watch commanders were aware of the differing applicability of these objectives.

Some police administrators have argued against efforts to specify targets by watch or geographic area. In addition to being concerned about the extra complexities that such a procedure entails, administrators worried about the potential of such targets for introducing divisive competition among watches, especially if the process stresses comparisons between watches. In one city where a watch commander emphasized the comparison of achievements between watches, we were told that the resulting greater output by the watch in question had been offset by considerable resentment from other watch commanders. It can also be argued, of course, that if officials handle the process properly (such as by

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emphasizing each watch's own target achievement rather than the differences among watches and districts), such competition can either be avoided completely or can be made constructive rather than destructive.

Recommendation: If their watches or beats are reasonably stable, police departments should include watch and beat commanders in the MBO process by encouraging them to develop objectives that are relevant to their own time and geographic coverages. In establishing specific performance targets for these objectives, the managers should give explicit consideration to the service demand characteristics of their own particular shifts or areas.

### Issue four: What form of performance targets should be used?

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Each objective should contain a performance target--a specific, measurable criterion that indicates exactly what will constitute achievement of the given objective. Such targets can be expressed as:

- o A level ("35 percent or more of the citizens surveyed will report that they are satisfied with police department performance"),
- o A percentage change from a previous level ("a 10 percent reduction from the previous year in repressible Part I crimes"),
- o A percentage difference from some "norm" or standard ("a burglary clearance rate 5 percentage points higher than last year's figure for other cities in the same population group"), or
- o A due date for a specific activity ("the completion and acceptance of a given task on or before its due date").

Without explicit targets, an objective is usually meaningless, and the manager's progress in meeting such an objective cannot be tracked. Several of the police MBO programs we examined incorporated many objectives that had no performance targets. For instance, about three-quarters of one police department's objectives had no specific targets or due dates. The department is then left with only vague objectives such as "Administer the financial and manpower resources of the department" or "Dispatch police responses and coordinate communications on all calls for service." In some cases, the absence of explicit performance targets apparently reflected the police chief's distaste for "using a lot of numbers." Nevertheless, the lack of explicit performance targets can greatly hamper the application and motivational effectiveness of an MBO program.

Recommendation: All objectives included in police MBO programs should be stated in specific terms so that the



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manager and manager's supervisor can track progress and clearly determine the extent to which each objective was met. Any or all of the four types of targets listed above can be used.

### Issue five: What level of performance should objectives represent?

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The specification of precise quantitative performance levels or due dates for a target can be difficult and controversial for police departments. The department and its individual managers can employ objectives that:

- Emphasize minimum levels of performance. Performance below the targeted level, therefore, represents unsatisfactory performance.
- Use a group "norm" as the performance target. This practice corresponds to using average past performance as the standard for judging performance in the next assessment period. Departments that base their performance targets on the previous year's average performance, on national averages, or, perhaps, on a statistical regression analysis of prior performance (as in the case of San Jose, California), are using a group norm as the standard of comparison.
- Emphasize targets that press for performance that is above the average historical performance level. This means setting standards of excellence.

The choice of specific targets for a given performance period obviously will affect the motivational value of the corresponding objectives. Minimum levels of performance will probably have more motivational value for units having performance problems. High levels will probably be more effective for units perceived to be already performing well. Group norms may not distinguish individual circumstances, but they can usefully highlight units with relatively high and low performance if such units have reasonably similar situations.

Regardless of the target-setting strategy chosen, there is a danger that some people may consider targets to be quotas. Certain types of objectives, such as those with targets that focus on the number of traffic tickets or arrests, are particularly prone to problems of this type. The result could be an excess of zeal that overrides the

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discretion and judgment that officers normally need to exercise in their work. Criticism of such "quotas" by politicians or the press can sharply undermine support for an MBO system. Such problems are especially likely to occur when the target for the unit is translated into specific targets for individual first-line patrol officers.

Recommendation: Each police department and each manager will need to decide on the levels at which objectives should be targeted to ensure that they are motivationally effective. For work units that have had performance problems, the objectives might initially be set at relatively low levels. Managers of work units that are already perceived to be performing well probably need to have objectives that push more toward excellence. Departments should probably avoid objectives that specify numbers of tickets or arrests unless the quality of ticket-giving or arrests is controlled as part of the objective (see Issue 2), or parallel objectives are established on controlling excessive police activity.

### Issue six: Should there be interim targets during the year?

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Objectives in MBO systems are usually specified in terms of a 12-month period, but intermediate targets can also be used to provide short-term goals and thus permit more meaningful interim performance reviews. Objectives expressed in the form of counts of various actions or events (such as the number of arrests) could be split into, say, quarterly targets that take account of seasonal differences. Objectives expressed as percentages can often remain the same for all quarters; however, if seasonal differences exist, different percentages could be specified for each quarter. Objectives expressed as project due dates could be represented each quarter by some intermediate step planned to be accomplished in the given quarter.

Only a few of the police MBO programs we examined explicitly employed intermediate targets.<sup>9</sup> Although managers generally received regular feedback on at least some of their objectives as part of the department's reporting process, those reports usually did not compare actual performance for the period with a target for the same period. In San Jose, however, managers of each police program specified annual targets, and intermediate targets were then developed for the first 4 and first 8 months of the year. Actual performance was compared against these intermediate targets 4 and 8 months into the performance period. In Charlotte, North Carolina, each police team and each special unit set quarterly as well as annual targets under the department's MBO system. The Honolulu Police Department reported the development of a new MBO system that provided for intermediate targets at 3- and 6-month intervals.

Recommendation: Departments should require interim targets, probably for each 3- or 4-month period during the year. The interim targets should be selected after seasonal factors have been considered. Actual performance should be reviewed against targeted performance after each period. By so doing, police departments will take advantage of an important motivational feature available in an MBO system--the encouragement of managers to make midcourse

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corrections if they find their achievements in a given period to be less than those planned for the year.

### Issue seven: Should there be provision for interim revision of objectives?

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Some police department achievements can be greatly affected by external factors that change during the year, such as economic conditions (which might increase or reduce criminal activity or, for efficiency objectives, affect the prices of supplies and materials used by the department) and the particular mix of types and difficulties of the various calls and cases. Revision of a manager's objectives can be a sensitive issue, especially if performance appraisals or rewards are linked to the degree of achievement. How a police department handles such adjustments can be important in shaping employee attitudes toward, and acceptance of, the MBO effort, especially its perceived fairness.

Virtually all the police MBO programs we examined allowed managers to adjust their objectives after the performance period had begun. The only exceptions were San Jose and Virginia Beach. In San Jose, those objectives that were published in the city budget were viewed as a commitment to the city council for the fiscal year and could not be altered during that period. In Virginia Beach, objectives were closely linked to the city's zero-base budgeting (ZBB) system. Because the police department's objectives (each of which corresponded to a particular ZBB package) were closely linked to the funds budgeted for the department for a given year, a change in objectives would have necessitated a change in the department's budget. Consequently, revision of the objectives during a fiscal year was not allowed.

In most places where revisions were allowed, all that was necessary was a discussion of the reasons with higher level management, possibly including the police chief. An exception was San Jose, where managers were required to spell out their reasons for requesting a change in objectives

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(those not published in the city budget) in the police department's quarterly management report on objective achievement. (This report was circulated to all program managers.) The need for such changes was also sometimes discussed in periodic review meetings between top department management and lower level program managers.

Most departments we examined, however, apparently had no formal procedures or ground rules for revising objectives. Targets and objectives were often revised on the basis of little more than a manager's plea to his supervisor that the existing target could not be achieved. Such casual, routine revisions (and in particular--relaxations) of MBO targets can greatly hamper the motivational effectiveness of an MBO program, in effect signaling that managers need not take specified targets very seriously. (Officials from several departments, however, reported that they could not recall an instance when there had been a need to revise an objective during the performance period.)

There are, in fact, procedures other than changing the objective midway through the performance period that can be used to help compensate for the effects of external factors. For example, the department can establish clearance rate targets for each crime category and for each solvability level, rather than a target for the total number of clearances. If this is done, the year's targets need not be altered when the proportions of various crimes, and their solvability levels, vary from the proportions that were anticipated at the beginning of the year.

Another strategy is to use the variable target approach. When performance targets are first selected, the manager and the manager's supervisor identify key external factors that can have a major impact on performance. The final target for the year will then depend on the actual values of the various external factors for that year. For instance, a mathematical formula or a table of adjustments, based on statistical analysis or professional management judgment, can be used to adjust the original "nominal" target to compensate for the effects of deviations from the expected levels due to such factors as unemployment rates, the difficulty of incoming cases, or a local price index.

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To avoid charges that the objectives have been manipulated, this relationship should be determined at the beginning of the year, not during it. Unfortunately, these techniques (especially the use of statistical procedures to establish the relationship between performance and external factors) have not been widely used in connection with MBO programs. Some personnel may find them hard to understand, and the techniques may require technical skills that are not available in some police departments.

Transfers of personnel--managerial and otherwise--can also create a need for target revision. A few departments cited the frequency of transfers for sergeants as a reason for excluding them from the MBO effort. We found that three principal procedures were used for dealing with frequent transfers:

1. Specify objectives for relatively short periods of time, consistent with supervisory rotation periods. We encountered one police department--Montebello--that provided for the development of new work objectives each quarter.
2. Apply the existing objectives for a given unit to whatever manager is supervising the unit. In such cases, the objectives for a unit were not revised when a transfer occurred; new managers adopted the objectives of their predecessors. Although this practice is expedient, it seems likely that the objectives will be motivationally less effective than would be the case if new managers establish their own objectives. (A new manager who has not participated in the establishment of the objectives will have less sense of "ownership" of them.)
3. Allow incoming managers to develop their own objectives for the remaining portion of the performance year. This approach is probably most consistent with the motivational underpinnings of MBO. In many cases, however, a brand-new manager will have difficulty selecting appropriate objectives (unless the manager has had previous direct experience with the work of the new unit). In such cases, the first year in the new position will probably be more of



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an experiment in setting objectives for the manager than a full-fledged attempt at accountability.

Recommendation: Where possible, establish targets for specific types of circumstances rather than only in aggregate. For example, establish clearance rate targets for each crime category and each solvability level. Similarly, when important external factors and their relation to performance levels can be at least roughly identified before the performance year begins, variable targets should be considered. In most cases, changes in objectives should be permitted only when major changes in circumstances have occurred. And even when a new target is set during the year because the initial one has been determined to be no longer appropriate, the initial targeted performance level should continue to be recorded in performance reports for the year. If managers find it too easy to revise their targets or objectives, the motivational effectiveness of those targets will be diluted.

### Issue eight: How should activity in multiple units be coordinated?

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Sometimes the objectives specified by one unit will depend on the actions and resources of other units. Most of the departments we examined did not provide formal procedures for coordination between several units that undertook activities affecting a single objective. In some cases, coordination was conducted informally whenever a need was present. For example, in one instance, the investigations bureau worked with the patrol bureau to establish patrol objectives designed to improve burglary reports. This objective also required coordination between the patrol bureau and the training bureau.

Other departments employed more formal procedures for coordinating objectives that were affected by the activity of other units. A primary purpose of this emphasis on coordination was to ensure that a unit could not use lack of cooperation on the part of other units to excuse itself for failure to achieve an objective. The police department in Montgomery County, Maryland, formally addressed the need for coordination when objectives for the year were being established. The action plan prepared for each proposed objective had to identify any coordination with other units that was needed. The police department in Newport News called a meeting of its management committee (which included the chief and managers of all major units) to review all objectives proposed for the coming year and agree on any coordination between units needed to fulfill those objectives.

Recommendation: To maximize the likelihood of coordination on objectives that involve more than one organizational unit, police departments should require that coordination needs be identified as part of their action plans for each objective (see Issue 9) and hold management meetings to work out coordination issues that are identified. In some instances, more than one work unit might have to be held jointly responsible for a particular objective.

### Issue nine: Should the department require action plans to support objectives?

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In theory, the specification of a performance objective should be enough to stimulate management action. Many MBO experts, however, believe that the effectiveness of MBO is greatly enhanced if the process includes identification of the steps by which the objectives will be achieved. In other words, an "action plan" should be prepared for the accomplishment of each objective. The plan should identify the specific activities to be undertaken to meet the objectives and specify the dates by which each activity will occur.

Most of the police MBO programs we examined did not have formal provisions for the preparation of action plans. However, the departments that did require action plans often appeared to be stressing the use of their MBO program to motivate managers, and their programs appeared to have been especially successful in stimulating actions to improve productivity.

Among the police departments that emphasized the preparation of action plans were those in Montgomery County, Maryland, and Hampton, Virginia. The police department in Montgomery County required that an action plan be prepared for each objective. The plan had to list the activities to be undertaken to achieve the given objective, identify the person responsible for each activity, identify any persons or units with which coordination would be necessary in undertaking the proposed activities, specify a completion date for each activity, and estimate the resources needed to carry out the action plan. Hampton required action plans for most objectives in the form of milestones that had to be achieved for implementing each objective. Other police departments that required the inclusion of action plans with MBO submissions were Newport News, San Jose, and Compton.

Preparation of action plans can require considerable work, but the process has its rewards. The manager must care-

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fully think through in advance the strategies and activities to be used to achieve each objective. In the process of preparing an action plan, the manager must translate each objective, whether it focuses on processes or outcomes, into a set of explicit management actions that can be observed and evaluated. Thus, a requirement that action plans be prepared can counteract one of the objections to the use of outcome objectives: that outcomes may not be related to feasible police actions. Moreover, a requirement that the resources needed to achieve the objective be identified in the action plan encourages managers to be realistic in setting their targets. Should resources be cut during the year, the action plan will protect managers against being held accountable for objectives that are no longer realistic.

Recommendation: Action plans spelling out specific steps and milestones for each step should be required as part of the objective-setting process and can contribute significantly to increasing the effectiveness of police MBO efforts. Reviews of progress with regard to these action steps should be part of the department's periodic interim assessments of progress in achieving objectives.

### Issue ten: What feedback on achievement of objectives should managers receive?

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Two types of feedback are generally suggested for MBO managers: regular formal reports on achievements to date and in-person reviews of progress between managers and their supervisors. Each of these feedback techniques is discussed below.

#### Reports on achievements

The provision of regular feedback on objective and target achievement is an essential element of MBO and has been shown to be a motivator in and of itself.<sup>10</sup> We found that in some police departments (e.g., Newport News, Hampton, and San Jose), the regular preparation and circulation of reports on objective achievement every 3 or 4 months played a central role in the MBO effort.

Program managers in the San Jose Police Department prepared extensive reports on objective achievement every 4 months. These reports were compiled by the police chief's office and circulated to all managers within the department. Each manager's report had to include, for each objective, a re-statement of the objective, measurement data indicating progress in meeting the objective, highlights of activities and problems during the previous 4-month reporting period, comments and explanations by the manager with regard to the unit's performance, the authorized and actual staffing of the unit, and a report on the fiscal status of the unit as compared with budgeted expenditure levels. The measurement data on target achievement included, for each objective: the target for the full year, the cumulative level of achievement through the reporting period, the targeted level of achievement through that period, the percentage by which actual achievement exceeded or fell below the targeted level, and the achievement level for the previous year. Other departments with extensive reports on target achievement were Newport News and Montgomery County. In

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contrast, a number of police departments provided little or no formal feedback on target achievement before the end of the fiscal year.

Police departments developing an MBO effort need to resolve a number of questions on providing feedback: the frequency of feedback, the content of the report, the sources of the data on target achievement, and the recipients of feedback on target achievement. These questions are discussed in the following paragraphs.

a. Frequency of feedback. Nearly all the police MBO programs we examined used a 3-month period for reporting target achievement, although there were a few exceptions. For instance, the Honolulu Police Department provided feedback at 6-month intervals. San Jose required reports on target achievement every 4 months. Montebello initially required monthly reports, but when the paperwork proved onerous, the reporting schedule was reduced to quarterly. Charlotte police had to cope with several different reporting periods at the same time. The city's budget office required submissions on objective achievement at intervals of 5, 8, and 12 months; the police department required monthly reports on target achievement by its police teams (these reports focused on the achievement of targeted reductions in specific crimes and traffic offenses); and the department required quarterly reports on objective achievement from other managers within the department.

b. Content of the report. We found considerable variation in the formats used by police departments for reporting on achievement of objectives. The preparation of extensive quarterly program management reports has been a central feature of the San Jose Police Department's MBO effort. As indicated earlier, these reports were quite extensive. They included objective statements, measurement data, highlights of activities and problems, additional comments on the objectives and the reasons for achieving or failing to fully achieve them, staffing available, and resources available and consumed. As noted previously, each report also included annual targets and cumulative interim targets for each objective, as well as cumulative achievement levels and the percentage of achievement relative to

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the interim target. When a target was not achieved in San Jose, the manager responsible also had to suggest corrective procedures. Each report often presented considerable additional information on workload and other achievements. The complete report with all 40 programs and subprograms approached 200 pages.

The quarterly reports prepared by police managers in the Montgomery County Police Department also provided considerable information but in a more concise format. A one-page report was issued on each objective. The report included a statement of the objective, the relevant department goal, an indication of whether the objective had been achieved, a brief explanation of the achievement or nonachievement of the objective, statistical information on the relevant performance indicators during the current performance period, a comparison with the previous year (usually for the same months 1 year earlier), an indication as to whether the objective would be modified and why, and a section for any other remarks concerning the unit's performance during the given period.

As noted previously, provision of such feedback has been found to have intrinsic motivational benefits. Hence, it seems important to design the feedback material so that managers can readily discern their performance relative to their objectives. As noted in Issue 6, many police departments reported during the year on objective achievement without indicating targeted levels or without explicitly comparing performance to targets (e.g., the percentage over or under the target). In some cases, current levels of performance were compared to annual targets but not with appropriate interim targets for the year to date. Several managers reported to us that in order to find out how they were doing, they had to take the additional step of mentally prorating the annual target. Managers who did not do this had little explicit information on where they stood relative to their target until the end of the fiscal year. In other cases, information on target achievement was submerged beneath a great deal of information on activity levels, so the feedback read more like a monthly activity report than part of an MBO system.

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c. Sources of data on target achievement. For many objectives, especially process objectives, information on target achievement was obtained from reports compiled and provided by the relevant managers themselves. Most departments also made use of existing sources of statistical information: complaint files, crime data, and arrest counts--data often readily available from the departments' monthly statistical reports. The Hampton Police Department modified its monthly statistical reporting system to ensure that the information needed for assessing target achievement was routinely included. This practice enabled managers to obtain interim readings during a performance period on where they stood relative to their objectives. Police teams in Charlotte used a similar approach: the first page of the monthly report prepared by each team summarized the actual and targeted levels of the five suppressible Part I offenses that were the focus of the teams' crime control objectives.

A reliance on self-reporting raises questions concerning possible biases or misrepresentation of the performance data. Such distortion is minimized when progress is reported in terms of the achievement of objectively identifiable milestones or when the information is derived from records and other statistical sources such as monthly activity reports (e.g., crime, arrest, case closure, and accident data). In Virginia Beach, the city manager's office had recently begun to conduct periodic audits of department reports of MBO achievements. These audits, which were not conducted by the agencies themselves, covered all city departments, not just the police department. Other cities (e.g., Charlotte) also periodically audited agency performance reports as part of the city's MBO effort.

d. Recipients of feedback on target achievement. The extent to which information on target achievement was circulated varied among departments. In Orlando, these reports were not circulated within the department but were compiled and forwarded directly to the assistant city manager. In Newport News, the quarterly progress report on MBO achievement for the police department was also sent to the assistant city manager, but the report was widely distributed within the department as well, with copies going



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scoring the interest and concern of higher level management for the MBO effort and provide an opportunity for managers to receive guidance and credit concerning the achievement of their goals.

We found that police departments seldom used formal meetings to review MBO results. The only instances in which we found regular one-on-one reviews of target achievement were those in which MBO was used primarily for management performance appraisal. An example is Dallas, where formal reviews of target achievements were conducted annually with each covered manager. In a few other departments, e.g., Newport News and Charlotte, individual managers often made it a practice to review target achievements with the managers who reported to them. In these instances, however, there was no agencywide policy requiring periodic one-on-one reviews.

A much more common approach was the use of informal reviews between managers and their superiors. Many managers reported considerable daily contact with their supervisors. They noted that as part of this interaction, their supervisors would from time to time ask them how they were doing with regard to specific performance objectives. This interaction reportedly provided a periodic stimulus (although at no fixed frequency) to achieve the objectives. (In some departments, the police chief's widely acknowledged interest in and emphasis on achievement of objectives served as a major source of pressure on lower level managers and supervisors to achieve their objectives.)

By far the most common approach to providing management review of target achievement in the police departments we examined was the use of group meetings, though not necessarily meetings scheduled solely for the purpose of MBO reviews. Frequently, a review of target achievement by a unit or division was included as part of regularly scheduled staff meetings--squad meetings, meetings between the police chief and his top managers, etc. The frequency of such meetings ranged from weekly to quarterly. In some investigative units, we found weekly review and discussion of the degree to which each squad (burglary, crimes against persons, etc.) had achieved its targeted clearance rate.

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to all lieutenants (including the watch commanders). In Dallas, the reports on police executive performance received limited circulation, being confined primarily to the police chief, the assistant city manager, and the city's office of management and budget.

Several of the managers we interviewed reported that the knowledge that others, including their peers, would see how well they had performed was a powerful motivational stimulus in and of itself. Wide circulation of information on achievement of objectives appears to be important if the MBO process is to achieve its full motivational potential. Hence, all managers should receive a copy of the target achievement reports for the entire department. This means including some, and perhaps all, sergeants in the distribution, especially if target achievement levels are disaggregated to highlight the performance of individual units commanded by sergeants.

We also suspect that having nonsupervisory personnel review achievements against targets--either by holding formal discussions or by circulating copies of written reports--could help many police supervisors motivate their personnel to improve performance.

In most cases, the work required of individual units in reporting on their progress toward target achievement is small (each unit usually has no more than five or six objectives on which to report). Extensive reports such as those required in San Jose, however, can require considerable managerial time. Ideally, most of the data required for the target achievement reports should be available from central police department data bases (using computers, where possible, to reduce manual labor) and therefore should require little additional effort by operating personnel.

### In-person reviews of target achievement

The second major form of feedback in an MBO system is the use of periodic meetings between managers and their supervisors to review progress toward achieving the manager's objectives. Such meetings have the advantage of under-

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The department's quarterly report on MBO results was also often discussed at staff meetings, which provided an opportunity for recognition of high achievers as well as remedial suggestions in cases of underachievement. Although discussions concerning achievement of objectives in such meetings do not involve one-on-one reviews, they generally occur much more frequently than the one-on-one meetings we encountered (which usually were held only annually).

The San Jose Police Department used a variation of the group meeting approach. Immediately after the reports on target achievement were issued (every 4 months), the police chief held formal "management report review meetings" to discuss the results. The participants included the police chief and other managers. A formal agenda was prepared for the meeting. Managers who had achieved their objectives were praised; managers who had encountered problems in achieving their objectives explained those problems. The group then discussed and authorized appropriate corrective actions. (Because the meeting usually lasted only about 2 hours, the group could focus on only a few problem areas.)

A few departments reported no reviews of target achievements whatsoever. Complete omission of such reviews was especially common when the MBO process was mandated by city hall and appeared to be executed primarily with the objective of satisfying city hall requirements. These departments appeared to make no real effort to take advantage of the time spent selecting and reporting on agency objectives or to draw on these results to manage and motivate police employees. (However, in a few cases lower level managers did attempt to make use of the objectives that had been established.)

Recommendations: Police departments should include both regular reports on progress toward accomplishment of objectives and regular one-on-one meetings between managers and their supervisors to review that progress. The reports and meetings should probably be held three or four times during the year to permit timely feedback and to encourage corrective action when needed.

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The reports should explicitly compare actual performance, both for the period and for the year to date, to the performance targeted for these same periods. Significant under- and overachievements should be highlighted in the reports. For objectives with substantial underachievement, the responsible manager should provide a discussion of reasons for the problem and the steps proposed to correct it. Information on other unit activities should be left for other monthly progress reports and not included in feedback on MBO target achievement. In general, the report should be kept as brief as possible to encourage its use, but it should include essential information such as reasons for over- or underachievement of targeted levels (and actions planned to get back on schedule). The achievement reports should be widely circulated to managers throughout the department to encourage consideration and use of the findings. Managers may also want to hold "How Are We Doing?" reviews with their nonsupervisory personnel based on the reports.

The one-on-one reviews should be constructive, with credit given for significant accomplishments. Supervisors should focus on ways to correct performance problems and generally not take a punitive approach. Because of the importance of the one-on-one reviews and the difficulty of making constructive suggestions, supervisors may need special training. (See Issue 12.)

In some cases, a group meeting, such as that used in San Jose, can serve as a substitute for the one-on-one review sessions. However, despite the advantages of allowing frequent reviews and providing a valuable opportunity for receiving group input when corrective actions are needed, such groups should not replace the one-on-one review as a means for giving more careful attention to a specific manager's achievements. Rather, they should supplement the one-on-one reviews.

### Issue eleven: What should be the extent of central review, oversight, and support?

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Police departments have used varying degrees of "infrastructure" in administering their MBO programs. Some police departments (such as those in Orlando, Dallas, and Virginia Beach) have had minimal administrative structure for coordinating and assisting in the preparation and review of agency objectives. Objectives in these cities were prepared relatively independently by the various managers. In Orlando, which had a citywide objective-setting process, the police captain responsible for the department's budget submissions collected the objectives prepared by the various units, completed the necessary forms, and forwarded them to city hall. Although he helped prepare objectives if so requested by a unit, there was virtually no central review or coordination of the department's objectives except what emerged as a result of budgetary reviews.

San Jose's MBO effort also functioned with minimal administrative structure. Program managers prepared their objectives and progress reports largely without central coordination. After the objectives had been prepared, staff from the office of the police chief and the assistant chief examined the submissions from the program managers with regard to the achievements reported for the previous 4 months and prepared the agenda for the department's management report review meeting. The latter meeting, held every 4 months, was designed in part to review instances in which managers had been unable to achieve their objectives and to develop strategies for remedying those deficiencies.

Police departments in Montgomery County, Hampton, and Newport News illustrate the use of a moderate degree of central coordination, support, and review of the MBO effort. In Montgomery County, each bureau commander reviewed and approved the objectives of the units under him for compatibility. The planning and research division also reviewed the objectives (e.g., for their measurability).

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In Hampton, the planning unit (situated within the department's administrative services division) reviewed with the appropriate managers the measurability and achievability of all the goals and objectives proposed for a given year. Help was provided to any managers who asked for it. The review process was designed to provide some central direction to the objective-setting efforts of the various units (e.g., by directing the units to emphasize new project initiatives in the coming year). The administrative services division also served as a central point for preparing the quarterly reports on objective achievement.

In Newport News, the administrative services division played a more peripheral role in administering the MBO effort. The individual units prepared the quarterly reports, and staff from administrative services then compiled the unit reports for circulation. The primary focus for coordination and review of objectives in Newport News was the police chief's management review committee, which included most top and middle-level managers. This group reviewed all proposed goals and objectives for a given year and explored the need for coordination of resources among units to help ensure achievement of various objectives. The chief provided additional personal review and coordination of the submissions.

MBO efforts in Dayton and Charlotte exemplified strong central (citywide) administrative control of the department's MBO effort. In both cases, city budget offices (and in Dayton, the assistant city manager) closely examined the objectives prepared by police department units. The objective-setting and achievement-reporting processes were part of strong, citywide MBO efforts in both municipalities. In Charlotte, a management analyst from the department's planning bureau was assigned to coordinate police MBO submissions. (Charlotte's budget office has encouraged, and provided funds for, each agency to hire an analyst to provide support and assistance for that agency's MBO effort.) In Dayton, considerable central coordination and direction came from the office of management and budget and the assistant city manager's office. Staff from both of these offices worked closely with the police chief to provide overall coordination and quality control for the

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objectives and to ensure the quarterly reporting of objective achievements.

In most cases, administrators of police department MBO efforts had to consider and coordinate with officials in the mayor's or city manager's office. The need to coordinate the MBO effort with city hall, and the role of city hall in that effort, appears to affect different police departments in different ways. For some, the strong emphasis by city hall on MBO and the strong influence of city officials on the department's MBO efforts have improved the quality of the police department's MBO program and helped ensure that the department's managers took the program seriously. In some police agencies, however, city hall seemed to have had a negative influence. By imposing its own requirements on the MBO effort, the central office took the initiative away from the police department, with the result that police emphasis on and support for the MBO effort were undermined. In such cases, the department's MBO effort became merely an exercise designed to satisfy city hall rather than a tool for managing police activities and motivating police personnel.

Recommendations: Departments should assign a single organizational unit with responsibility for overseeing the administration of its MBO effort--to provide assistance, training, and retraining as needed and to provide regular review of all objectives to ensure consistency among units in terms of target difficulty and the quality of the objectives established. Without such central attention and review, the quality of the objectives is likely to deteriorate over time, as managers move toward process-oriented, easier-to-achieve objectives. Although objective-setting should take place at the lower levels, and managers should have considerable autonomy in establishing their own goals, we found in several agencies that complete decentralization of the objective-setting process resulted in less challenging and effective objectives.

A balance should be maintained between decentralized origination of objectives and some central oversight and coordination of the entire MBO process, but no extensive administrative structure should be necessary. In most depart-

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ments, a single person with the authority and expertise to review and advise managers concerning their submissions of objectives should be adequate. A mechanism such as the extensive review provided for all objectives in Newport News' management committee meeting also seems to be a useful approach for ensuring the equity and feasibility of the proposed objectives.

Finally, city hall should have a relatively unobtrusive role; police departments should be allowed to use their MBO effort for their own purposes. Operation of dual MBO efforts is counterproductive, especially when it is difficult to translate from one system to the other.



### Issue twelve: What type of training (and how much) is desirable?

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Three types of training should be considered in connection with the introduction and operation of an MBO program:

1. The initial introduction and orientation of the department's managers to MBO procedures,
2. Subsequent refresher training for department managers, and
3. Orientation and training in MBO procedures for new managers.

Police department efforts to provide these types of training appear sparse. Between 1977 and 1980, the Hampton Police Department emphasized initial introductory training in MBO. Police officers there adapted training manuals prepared by professional consultants to meet the needs of the police MBO effort. Subsequently, however, training tended to be limited to a few inservice meetings and some suggestions and feedback provided to managers by the planning and analysis unit when the latter met with department managers to review the objectives for the next year. Most of the younger officers we interviewed reported that they had received little or no training in connection with the MBO effort other than what they learned on the job. Nevertheless, 80 percent of the managers responding to our survey in Hampton rated the training they had received as good or excellent.

One department that had undertaken a major effort to recast and rejuvenate its MBO program nevertheless provided little MBO training to police managers in connection with the effort. Managers received various forms and instructions for filling them out but no formal training. In fact, a number of top and middle-level managers whom we interviewed in the department questioned the need for formal training in MBO. Some had already been exposed to the process in connection with college-level management courses they had taken. Others thought that the procedure was relatively straight-

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forward and that the police chief had clearly communicated what he wanted. According to a survey of police department managers who participated in the MBO effort, however, 46 percent of the respondents rated the amount and quality of their training as fair or poor.

Other cities reported similar experiences. Police officials in Virginia Beach indicated that little training had been provided, especially recently; most of their training was on the job. Dallas relied on a set of instructions and a brief introductory meeting to train top managers in the preparation of their executive performance plans. Management training for MBO in Orlando was quite similar: a set of written instructions coupled with a 2-hour introductory meeting with representatives from the city's office of management and budget.

Even fewer departments reported much of an effort to provide refresher training or training for new managers. In Hampton, the annual meetings with the planning and analysis unit to review the objectives for the next year served to provide some refresher guidance to management personnel. However, top department officials in Hampton expressed concern that training for new managers in MBO procedures tended to "fall through the cracks" and needed improvement.

Although the police officials we interviewed did not attribute any problems to the lack of training, we observed a number of difficulties potentially attributable to the absence of adequate training. For instance, managers often selected vague rather than concrete objectives and demonstrated a lack of awareness of practical ways to measure and obtain data for assessing target achievements. In addition, managers and their supervisors often failed to regularly review and discuss progress toward achievement of targets.

Recommendations: Police departments undertaking MBO should provide adequate time and resources for initial training in MBO procedures for all managers, using materials adapted to the needs of police MBO programs. They should also provide periodic refresher training for sea-

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soned managers (probably at least every other year) and a complete orientation to, and instruction in, MBO techniques for new management personnel. This training should include information and practice in identifying objectives, establishing targets and action plans for each objective (including ways to obtain participation from the manager's own staff in establishing these targets and action plans), identifying valid data collection procedures for tracking progress on the objectives, and identifying ways to provide constructive feedback to subordinate managers during periodic (e.g., quarterly) reviews of progress toward objectives.

The training need not be elaborate because the basic principles involved in MBO procedures are reasonably straightforward. We have noted, however, that police personnel often find it difficult to identify and sort out the various types of objectives and targets available to them and to come up with practical ways to measure their performance in meeting those objectives (especially in the case of outcome objectives). In addition, they often need practice in making constructive, face-to-face suggestions to staff members who have not met their objectives.

### Issue thirteen: What benefits should be expected from police MBO efforts?

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The literature on management by objectives suggests a variety of potential benefits associated with the use of MBO programs: improved productivity, greater individual accountability, better morale and job satisfaction, enhanced management ability to plan and control operations, better budgeting and resource management, and improved labor-management relations. Unfortunately, hard information on the actual impacts of police and other MBO efforts is scarce. In many instances, municipal managers have had little information beyond the testimony of consultants and users of MBO (many of them from the private sector) in deciding whether to adopt such an approach for their own agency. In this section, we review the information we were able to obtain on the actual impacts of MBO programs on police--and a few other public sector--departments.

#### Changes in work procedures

For an MBO program to affect service productivity, it must either stimulate managers (and through them, line personnel) to apply more effort or encourage greater ingenuity in the completion of work assignments. The most immediate manifestation of such a result is a change in the way work is done, that is, in the practices and procedures used to complete day-to-day assignments.

Our examination suggests that MBO programs can be and have been responsible for changes in the way work is done, at least in police departments with well-designed MBO efforts--that is, those with clearly defined objectives, at least some of which are outcome oriented; specific targets; regular feedback on target achievement; and reviews of target achievement with supervising officers. In our survey of police managers in Hampton, 60 percent reported that because of the MBO program, their unit had made either "two or more small changes" or "at least one major change" in

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the way it did its work. Only 16 percent of the respondents in Hampton reported no changes in work procedures attributable to the MBO effort. In our survey of police managers in Newport News, 72 percent reported two or more small changes or at least one major change in the way work was done because of the MBO program. Only 12 percent reported no effect at all on work procedures or methods in response to the MBO effort.

In Newport News, specific procedural changes made in response to the MBO program included the following: increased attendance at crime watch meetings and other efforts to enhance community involvement, more defensive driving on the part of patrol officers, the establishment of K-9 sectors in the city with priority given to areas with higher crime, additional operational training efforts, more followups of investigations by supervising officers (resulting in an improvement in the quality and quantity of evidence recovered and in the reports prepared), changes to improve the efficiency and convenience of recordkeeping (e.g., color-coding systems), and increased emphasis by patrol officers on identifying and solving problems. Similar changes in response to the MBO program were reported by respondents in our Hampton survey. Among the reported changes there were increased operational training of police officers, greater emphasis on keeping adequate records (and improvements in the recordkeeping process), allocation of more time to complete activities properly, and a focus on identifying and resolving problems in a timely and orderly fashion.

In both sites (and in other police departments we examined), many of the changes in response to the MBO effort were closely linked to the department's directed-patrol activity. The objectives were frequently transmitted to sergeants and line personnel involved in directed-patrol efforts and served to guide these personnel in identifying problems and carrying out other activities suitable for directed patrol. Directed-patrol efforts appear to be quite compatible with--and to benefit from--an MBO approach, serving as an appropriate mechanism for translating unit objectives into specific actions.

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In contrast, respondents from several other departments felt that little was being done differently because of the MBO effort. Many noted that their managers always strove to do the best job possible, and that the MBO program had not had--and could not have--an effect on their activities or the way they did their work. Many of the police departments that reported little impact on work procedures, however, provided little or no followup on objective achievements as part of their MBO process. In departments where progress toward target achievement was regularly reported and efforts were made to review progress with managers, procedural changes in response to the MBO effort appear to have been common.

### Service productivity

Do changes such as those identified in the previous section lead to increased productivity? Evidence concerning the impacts of MBO programs on police productivity is extremely scarce. This information is highly confounded by the effects of innovations and programs other than the MBO effort (e.g., directed-patrol initiatives unrelated to the MBO effort, special programs, and external factors).

Nevertheless, there are indications that well-designed MBO efforts have been responsible for modest improvements in the efficiency and quality of police services. We found this, for example, to be the case in connection with MBO efforts in Charlotte, Dayton, and Montebello.<sup>11</sup> In Orlando, several police managers who had made intensive use of the MBO approach reported substantial improvements in the efficiency and effectiveness of their units. For instance, one unit exhibited more efficient use of officer time (18 percent of patrol time was spent on "productive" activities prior to the use of MBO, 53 percent after the introduction of MBO) and a reduction in crime-related calls for service.

In Newport News, 94 percent of the respondents to our survey reported that the MBO program had made their work unit "somewhat" or "much more" efficient, while 90 percent of the respondents reported improved quality of service as a result of the MBO effort. None of the Newport News re-

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spondents reported a decrease in efficiency or quality of service as a result of the MBO program. Interviews with managers in Newport News indicated that the MBO program had achieved its major impact through the city's directed-patrol efforts. In particular, the objective of identifying and addressing two problem areas on each beat had had a number of beneficial effects. Although the relationship between the MBO effort and crime was unclear to many police respondents in Newport News (some believed that MBO had had a positive impact, others that it had had little or no impact), there was widespread agreement that services had improved and that complaints against police officers had decreased in the wake of the department's rejuvenated MBO effort.

Hampton's MBO effort also appears to have had positive effects on service productivity. Eighty-four percent of the respondents to our survey of Hampton police officials reported that their unit was somewhat or much more efficient as a result of the MBO program; 80 percent reported that the quality of service provided by their unit had improved because of the MBO effort. Among the improvements reported as a result of the MBO effort were higher clearance rates, improved arrest rates, and fewer complaints--especially by businesses (because of objectives designed to increase the number of burglaries discovered by patrol officers rather than by the businesses themselves).

Not all departments reported improved service efficiency or effectiveness as a result of the MBO effort. One department that established the reduction of energy costs as a prime objective achieved only limited success during the next 12 months. And several managers in departments where target achievement was linked to salary increases reported no effect on service productivity as a result of the MBO effort.

#### Impacts on morale and job satisfaction

In theory, the increased participation of managers (and their personnel) that is possible with MBO--in establishing their own objectives and subsequently in constructively reviewing their achievements--should improve employee morale

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and job satisfaction. Alternatively, if MBO is badly implemented, morale and job satisfaction could deteriorate.

Although the evidence is sparse, the indications are that well-designed MBO programs do not hurt--and can help--morale and job satisfaction. This result was found in prior studies of police MBO efforts in Charlotte, Dayton, and Montebello.<sup>12</sup> Similar findings emerged from our surveys of employees covered by MBO in the Hampton and Newport News police departments. In Hampton, 56 percent of the respondents reported that the department's MBO program had improved morale and 60 percent reported improvements in their own job satisfaction as a result of the MBO effort. In Newport News, where the MBO effort was beginning to include extensive participation by line employees at the patrol and investigator level, 68 percent of the managers reported that the MBO program had improved the morale of the people in their work group; 60 percent reported improvements in personal job satisfaction. In both cities, very few managers reported a worsening of morale or job satisfaction in connection with the MBO effort.

Among the reasons given for the increase in morale and job satisfaction were the greater involvement of personnel in decisionmaking and the increased pride they felt for their job as a result of their participation in the MBO process. In another department, officials reported that their officers especially appreciated being given additional responsibility for solving the problems they encountered in the course of their work.

It appears that police MBO programs can enhance morale and job satisfaction, especially when participation at all levels is encouraged. The ramifications of morale improvements may be wide-reaching; they can lead to better personal performance and savings from reduced turnover.

#### Impacts on relations among managers

It is sometimes suggested that an MBO program can improve communication and relationships among managers. This appears to have been the case in Hampton and Newport News, where 60 and 80 percent, respectively, of the respondents



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to our surveys of MBO participants reported that the MBO program had improved relations among individuals in their work group. Very few respondents reported a worsening of relations as a result of the MBO effort. Among the reported benefits were greater teamwork and cooperation within a unit, improved communication, and better coordination and relations between patrol officers and detectives. Similarly, officials in San Jose reported improved communication among department personnel as a result of their MBO effort.

### Relationships between supervisors and line employees

Because the MBO approach requires dialog between managers and supervisors, MBO can affect the relationship between such persons. In Newport News, 66 percent of the respondents reported improved relations with their supervisors as a result of the MBO program (while 34 percent reported no change). In Hampton, 36 percent of the respondents reported improved relations with supervisors, while 60 percent reported no change. There were no reports in either department of a worsening in relations as a result of the MBO effort. The primary source of the reported improvement in relations with supervisors was apparently the enhancement of communication between top and middle-level management.

### Program costs

We found few out-of-pocket costs in connection with the MBO efforts we examined. The primary expense for these programs was for the special activities undertaken at the initiative of department managers and line officers in response to objectives set in connection with the MBO effort. There were also some small expenses for training and program administration. In most of the departments we examined, MBO in one form or another had been used for several years, and any training costs associated with the introduction of the MBO effort had occurred several years in the past. In those cases where the MBO program was part of a citywide effort, training costs were borne by the city manager's office.

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MBO programs do, however, require a commitment of time on the part of agency managers. In Orlando, managers reported that the MBO effort required them to commit about 1 hour per year per person supervised. They also noted that it was important for managers to keep current on their MBO administrative chores or the time requirements became onerous. In Dallas, managers reported spending approximately 8 hours per year in connection with the MBO program. Planning and research staff in Dallas, who were responsible for drafting objectives and reporting achievements for several top department managers, required additional time. In Newport News, Virginia, managers generally reported that the MBO effort required several days per year.

In most departments we examined, however, managers did not begrudge the time associated with the MBO effort. They felt that such time was well used and would have been applied to similar activities in the absence of a formal MBO program. It was just part of their basic responsibilities as a manager.

Another cost associated with MBO is the paperwork required. Here, the assessments were mixed. In our surveys of managers in Hampton and Newport News, paperwork was rarely cited as a problem. Both cities required extensive quarterly reports on target achievement, but managers generally reported that the preparation of such reports was not in itself a burden. Because managers were usually able to use information from their monthly activity reports in preparing information on quarterly MBO target achievement, the MBO program did not require much additional effort in these two cities.

Other departments, however, offered a different perspective. In Orlando, police officials reported that although some police managers accepted the paperwork associated with the MBO effort (which in Orlando is imposed by city hall), others disliked and resisted the program. Concerns in connection with paperwork were also reported to us by Montgomery County and Dallas.

On the whole, police departments have incurred little additional cost as a result of their MBO efforts. In fact,

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we suspect that the expenditures may have been too little! The need to provide training for new managers and refresher training for current managers (see Issue 12) and the probable need to revise police information systems (e.g., to obtain feedback on citizen satisfaction with "other police services") suggest that departments will probably need to incur some additional costs (though probably still small) for a fully developed MBO effort.

### Miscellaneous problems

Several problems not previously discussed were reported in connection with MBO efforts. Some managers reported a lack of consistency between management decisions and the results and information developed in the MBO program. In both Orlando and Montgomery County, there was some discontent over the fact that important decisions by department managers (concerning reorganizations, rewards, etc.) were sometimes inconsistent with the results documented in the MBO effort. For instance, some decisions on the consolidation and elimination of units were reported to ignore the achievements of those units documented under the MBO program. Such decisions tended to undermine the confidence in, and credibility of, the departments' MBO programs.

Other problems reported to us included inadequate personnel to meet prescribed objectives, the difficulty of specifying objectives for very small (e.g., one-person) units, and, in some cases, a lack of "closure" with regard to the objective-setting process (managers sometimes reported that they felt as though they never completed their objectives; they merely carried them over to the next year).

### Miscellaneous benefits

The following additional benefits were reported by managers we interviewed:

- o Improved creativity and innovativeness on the part of management and line personnel (e.g., in Newport News).
- o Improved information on department and unit performance for all agency managers. For instance, in Newport News

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the quarterly report on objective achievement was provided to all managers within the department; each manager, therefore, knew how well other managers in the department were doing with regard to their established objectives.

• Better knowledge of what is expected. Several departments reported that the MBO effort served to remind managers of the expectations of higher level management. As a result, managers were reported to be more aware of their own responsibilities and of program objectives.

• Increased consensus. The MBO effort--and in particular, the increased participation of lower level and line personnel in the establishment of agency goals and objectives--was reported in some cases to have improved the degree of consensus on decisions by top department managers. Lower level management personnel were reported to be more receptive to such decisions when they had participated in the decision process.

• Problem identification. San Jose police officials reported that the MBO process had greatly helped them to identify problems and develop timely strategies to address the issues identified. Other agencies (e.g., Orlando) reported that the MBO program had helped them identify and document the extent to which they were limited by the resources provided by the city.

• Improved management. Several police departments indicated that their MBO program had improved the management of their activities. In the words of one manager, MBO "concentrates the mind" and encourages a manager to stay with a problem. In Orlando, MBO efforts within the department were credited with helping some sergeants "learn to manage." A related benefit in some cases was the development of a long-range outlook toward the activities of the department.

• Increased recognition. In San Jose, California, the department's MBO process was credited with allowing managers to highlight areas of success and to document their units' progress. In Hampton, several managers expressed

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gratitude for the opportunity that MBO gave them to demonstrate their ability to manage effectively.

• Improved relations with other agencies. A number of respondents to our survey of MBO participants in Hampton reported better working relations with other agencies as a major additional benefit to the MBO effort. Examples included improved relations with the commonwealth's attorney and the social service bureau.

• Improved public relations. Officials of several departments credited their MBO effort with showing the public clearly where their departments had been and where they planned to go. The officials expressed the view that MBO had demonstrated to the public that the departments were serious about change and improvement. As a result, the police department in each community had gained respect as a more professional organization.

• Improved ability to justify department budgets. One department reported an instance in which it had been able to demonstrate from data developed in connection with its MBO program that a division could not take on a special project requested by the city council without an increase in personnel or cutbacks in certain other services.

# Summary of findings and recommendations on police MBO systems

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### Summary of major findings

MBO systems appear to have considerable potential for helping police departments motivate management personnel to improve both service outcomes and service delivery efficiency. A properly designed MBO effort incorporates a number of motivational strategies, each of which has been shown to be an effective motivator in its own right:

- The setting of objectives and performance targets,
- Feedback of results, and
- Increased participation by middle- and lower level managers (and perhaps line personnel as well), with a corresponding enrichment of the jobs of those employees.

Taken in combination, such procedures could potentially constitute an important motivational tool for police management.

Some of the police departments we examined preserved the basic motivational elements just noted and have begun to achieve the hoped-for benefits. Most departments using MBO, however, did not appear to take advantage of the motivational potential associated with such programs. Police department MBO practices exhibited the following major problems:

1. Objectives were often vague and immeasurable. Frequently there was too much emphasis on process objectives, especially process objectives focused on workload counts or on a specific task that lacked a clear link to desired results. Departments used too few outcome and efficiency improvement objectives, probably in part because where outcome objectives have been used, they have tended to be so

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highly aggregated that individual managers often have little control over the results.

2. Lower level supervisors sometimes were not included in the process. If the types of objectives recommended later in this chapter are used, coverage could be expanded to include most, if not all, personnel with supervisory duties, including watch, district, and beat commanders.

3. Reporting systems sometimes did not explicitly and regularly (e.g., quarterly) compare actual performance with targets. This is a basic element of MBO systems but, surprisingly, it was often neglected in police department MBO procedures.

4. Specific action steps constituting a plan for achieving each objective (with milestones for each step) generally were not required.

5. Often lacking were regular one-on-one performance reviews between managers and their supervisors to discuss (in a constructive way) the manager's progress toward the objectives for the most recent performance period.

6. Usually lacking were training for new managers and periodic refresher training for existing managers. The apparent simplicity of the MBO process is somewhat misleading; the tasks are more difficult than they appear. Most police managers (and probably, most public sector managers from other departments) need help with these tasks.

#### Summary of major recommendations

Under each issue discussed in Chapters 3 through 14, we have made recommendations pertaining to that issue. Here we summarize our major recommendations.

In general, police departments need to make better use of the motivational potential inherent in a well-designed MBO effort, whether they are establishing a new MBO program or modifying their existing program. We recommend that police departments include the following elements in their MBO programs:

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1. Sergeants and other first-level supervisors should be included to the extent possible. Significant involvement by first-level supervisors and even line personnel in the establishment of objectives and action plans should be encouraged. (Issue 1.)

2. Individual objectives should reflect a balance between outcome, process, and efficiency objectives. Departments should make greater use of objectives relating to crime solution and crime deterrence by focusing on specific crimes at specific locations and specific times during the week, so they can be used by individual watch, district, and even beat commanders. These objectives should include performance targets that more explicitly take into account the deterrability and solvability of specific types of crimes. The objectives should be linked to specific action steps, such as directed patrol activities, to make the objectives more controllable, more relevant to assigned responsibilities, and therefore more acceptable to police managers. The department's set of objectives should also include objectives that focus on citizen satisfaction, especially for other non-crime-related police services to the public, and on the achievement of selected cost savings and efficiency improvements. (Issues 2, 3, and 7.)

3. Managers should receive periodic (e.g., quarterly) information on their progress toward achieving their objectives. For each objective, such feedback should explicitly indicate the target for the year, the interim target for the given period, and the target for the year to date; these targets should be compared with the actual level of achievement for the period and for the year to date. (Issues 6 and 10.)

4. An action plan should be developed for each objective, specifying strategies and activities designed to achieve the objective and giving the time schedule and resources required for the relevant steps. (Issue 9.)

5. Each manager and his or her supervisor should review achievements for the previous reporting period in formal, periodic, one-on-one discussions. These discussions should be constructive (and, generally, nonpunitive) and should



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address the need for remedial actions where targets are not being achieved. Supervisors should use staff meetings to review target achievements, but they should not be used as substitutes for one-on-one reviews. (Issue 10.)

6. Objective-setting should take place at the lower level, and managers should have considerable autonomy in establishing their own goals in order to maximize the motivational value of the process. However, at the same time, a central departmental unit should oversee the MBO activity. In particular, to assure consistency and validity, this unit should be responsible for assessing the adequacy, appropriateness, and compatibility of objectives, the targets for each objective, and the procedures for collecting data on target achievement. (Issues 1 and 11.)

7. Departments should provide training in the elements of MBO for new managers and refresher training for others. The training should cover the following subjects: the identification of objectives and specific targets; appropriate data collection procedures; the development of action plans relating to each objective; methods of encouraging participation by a manager's own staff in the development of objectives and action plans; and, for those managers who have other managers reporting to them, methods of conducting constructive one-on-one feedback meetings with their subordinates on progress in achieving objectives. (Issue 12.)

8. Finally, no MBO effort can work unless it is taken seriously by management personnel at all levels. Top managers, especially the police chief, need to convey clearly their support for, and use of, the MBO effort by requiring and reviewing periodic reports on MBO results; by signaling that such reports and remedial actions are being reviewed (e.g., by commenting on achievements at staff meetings, or, as is done in one department, by sending letters to all managers after each reporting period commenting on their target achievements for the period); and where appropriate, by basing decisions (e.g., budget decisions, promotions, program expansion, rewards and citations) clearly and consistently at least in part on information developed on the basis of the MBO effort. If the top police officials

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demonstrate that they consider the department's MBO program important, regardless of whether it was originally imposed by sources outside the department, they will have taken a large step toward encouraging their personnel to take the program seriously.

MBO concepts appear to correspond to basic management principles, regardless of the acronym used for the process. Furthermore, the MBO approach appears to require little added expenditure. Managers need some time to develop their objectives and action plans and to participate in performance reviews, but most of the tasks should be considered part of their basic management duties. If police departments follow the recommendations given here, however, they will probably incur some added costs for new or modified data collection procedures and for additional training of managerial personnel.

Though many MBO systems have thus far fallen far short of their potential for improving police department performance, interest in using these procedures in police work appears to be growing rapidly. We hope that improvements such as those suggested in this report can be incorporated into many of these MBO-like procedures to help police departments realize the maximum potential of these techniques for motivating managers and improving department performance.

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# Notes

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1. For example, see O.W. Wilson and Roy C. McLaren, Police Administration, 3rd ed. (New York: McGraw-Hill, 1972); Paul M. Whisenand and R. Fred Ferguson, The Managing of Police Organizations (Englewood Cliffs, NJ: Prentice-Hall, 1973); and Bernard L. Garmire, ed., Local Government Police Management, 2nd ed. (Washington, D.C.: International City Management Association, 1982).

2. Another potentially promising "positive" motivational technique--quality circles--is aimed primarily at non-management personnel. This approach is the focus of a companion volume, "Improving the Use of Quality Circles in Police Departments."

3. See Standard 1.1 in Standards for Law Enforcement Agencies, Commission on Accreditation for Law Enforcement Agencies (Fairfax, Virginia, August 1983).

4. See Harry P. Hatry, John M. Greiner, and Richard J. Gollub, "An Assessment of Local Government Management Motivational Programs: Performance Targeting With and Without Monetary Incentives," The Urban Institute (Washington, D.C., 1981).

5. Another form of performance targeting sometimes used by police departments is the establishment of work standards to indicate the specific amount of time that particular tasks should require, with subsequent comparisons to the actual time staff takes to perform those activities. This procedure, however, is usually limited to routine tasks such as fingerprinting, clerical activities, and vehicle repair. Its focus is primarily on efficiency improvement. Such work standards do not appear to be widely applicable to police activities.

6. These survey findings, however, are somewhat ambiguous. We suspect that some respondents interpreted participation to mean being in a unit covered by objectives or contributing to the specification of such objectives, rather than

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being assigned personal responsibility for one's own objectives, an essential characteristic of MBO.

7. Hatry, Greiner, and Gollub, "An Assessment of Local Government Management Motivational Programs," pp. 46-47. Further discussions of performance measures and procedures that could be used in outcome and efficiency objectives are contained in Hatry et al., How Effective Are Your Community Services: Procedures for Monitoring the Effectiveness of Municipal Services (Washington, D.C.: The Urban Institute and the International City Management Association, 1977), chapter 6, and Hatry et al., Efficiency Measurement for Local Government Services--Some Initial Suggestions (Washington, D.C.: The Urban Institute, 1979), chapter 3.

8. Standards for Law Enforcement Agencies, Commission on Accreditation for Law Enforcement Agencies (Fairfax, Virginia, August 1983), p. 5-1. Accreditation Standard 5.1.2. calls for agencies to review all cases that the prosecutor declines to prosecute or dismisses because of mishandling by the law enforcement agency.

9. Intermediate targets should be distinguished from short-term objectives. A few police departments (e.g., Montebello, California) specified objectives that lasted only for a given 3-month period. New objectives had to be specified after that period.

10. See for instance, E.A. Locke, "Toward a Theory of Task Motivation and Incentives," Organizational Behavior and Human Performance, vol. 3 (1968), pp. 157-89; S.J. Carroll and H.L. Tosi, "Relationship of Characteristics of the Review Process to the Success of the MBO Approach," Journal of Business, vol. 44 (1971), pp. 299-305; Gary P. Latham and Gary A. Yukl, "A Review of Research on the Application of Goal-Setting in Organizations," Academy of Management Journal, vol. 18 (December 1975), pp. 824-45 (especially p. 837); Richard M. Steers and Lyman W. Porter, "The Role of Task-Goal Attributes in Employee Performance," Psychological Bulletin, vol. 81 (1974), pp. 434-52; and John C. Aplin, Jr., and Peter P. Schoderbek, "MBO: Requisites

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for Success in the Public Sector," Human Resource Management, vol. 15 (Summer 1976), pp. 30-36.

11. Hatry, Greiner, and Gollub, "An Assessment of Local Government Management Motivational Programs."

12. Ibid.

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## Bibliography

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Aplin, John C., Jr., and Peter P. Schoderbek. "How to Measure MBO." Public Personnel Journal, vol. 5, no. 2 (March/April 1976), pp. 88-95.

\_\_\_\_\_. "MBO: Requisites for Success in the Public Sector." Human Resource Management, vol. 15 (Summer 1976), pp. 30-36.

Bishop, Ronald C. "The Relationship Between Objective Criteria and Subjective Judgments in Performance Appraisal." Academy of Management Journal, vol. 17, no. 3 (September 1974), pp. 558-63.

Botner, Stanley B. "The Use of Budgeting/Management Tools by State Governments." Public Administration Review, vol. 45, no. 5 (September/October 1985), pp. 616-20.

Brady, Rodney H. "MBO Goes to Work in the Public Sector." Harvard Business Review, vol. 51, no. 2 (March/April 1973), pp. 65-74.

Brown, Lee P. "Neighborhood Team Policing and Management by Objectives." The Police Chief, vol. 41, no. 11 (November 1976), pp. 72-76.

Bryan, Judith F. and Edwin A. Locke. "Goal Setting as a Means of Increasing Motivation." Journal of Applied Psychology, vol. 51, no. 3 (1967), pp. 274-77.

Burkhalter, David A. and Jerry B. Coffman. "Charlotte Management by Objectives." Public Management, vol. 56, no. 6 (June 1974), pp. 15-16.

Byrd, Richard E. and John Cowan. "MBO: A Behavioral Science Approach." Personnel, vol. 51, no. 2 (March/April 1974), pp. 42-50.

---

Cahoon, Allan R. and Marc J. Epstein. "Performance Appraisal in Management by Objectives." Studies in Personnel Psychology, vol. 4, no. 2 (October 1972), pp. 35-44.

Carroll, Stephen J. "Administration by Objectives: A Review and Evaluation." Working Paper P-1. College Park, Md.: Center for the Study of Innovation, University of Maryland, 1982.

Carroll, Stephen J. and Henry L. Tosi. Management by Objectives: Applications and Research. New York: Macmillan Publishing Company, 1973.

\_\_\_\_\_. "The Relationship of Characteristics of the Review Process as Moderated by Personality and Situational Factors to the Success of the 'Management by Objectives' Approach." Academy of Management Proceedings, vol. 11 (1969), pp. 139-43.

\_\_\_\_\_. "The Relationship of Characteristics of the Review Process to the Success of the 'Management by Objectives' Approach." Journal of Business, vol. 44, no. 3 (1971), pp. 299-305.

City of Bethlehem. "MBO Statistical Guide Handbook." Bethlehem, Pa.: Bethlehem Police Department, n.d.

\_\_\_\_\_. "Program Analysis for Management by Objectives for the Bethlehem Police Department." Bethlehem, Pa.: Bethlehem Police Department, n.d.

City of Livermore. "Livermore Police Revised Personnel Performance Evaluation System: Evaluation by Objectives." Livermore, Calif.: Livermore Police Department, 1978.

City of Newport News. "Program Activities Reporting System." Newport News, Va.: Management Services Department, 1980.

---

City of Overland Park. "Goals and Objectives for the 80's: A Community-Wide Survey of Public Opinion." Overland Park, Kans.: Overland Park Police Department, March 1980.

Connellan, Thomas K. Management by Objectives in Local Government: A System of Organizational Leadership. Management Information Service Report, vol. 7, no. 2A. Washington, D.C.: International City Management Association, February 1975.

Daley, Dennis. "Monitoring the Use of Appraisal-by-Objectives in Iowa: Research Note." Review of Public Personnel Administration, vol. 3, no. 3 (Summer 1983), pp. 33-44.

Davis, Louis E. "Job Satisfaction Research: The Post-Industrial View." Industrial Relations, vol. 10 (1971), pp. 179-93.

Dillon, C.R. "MBO, Part 1: Setting Objectives." Supervisory Management, vol. 21, no. 4 (April 1976), pp. 18-22.

Downing, M. Scott. "The Virtues and Vices of MBO." Government Executive, vol. 10, no. 4 (April 1978), pp. 39-42.

Drucker, Peter F. "What Results Should You Expect? A Users' Guide to MBO." Public Administration Review, vol. 36, no. 1 (January/February 1976), pp. 12-19.

Duttagupta, D. "An Empirical Evaluation of Management by Objectives." Unpublished master's thesis, Baruch College. New York, 1975.

Eilon, Samuel. "Goals and Constraints." Journal of Management Studies, vol. 8 (October 1971), pp. 292-303.

Eisenberg, Terry; Deborah Ann Kent; and Charles R. Wall. Police Personnel Practices in State and Local Governments. Washington, D.C.: International Association of Chiefs of Police and the Police Foundation, 1973.



---

Fay, Peter P. and David N. Beach. "Management by Objectives Evaluated." Personnel Journal, vol. 53, no. 10 (October 1974), pp. 767-69f.

Frank, E.R. "Motivation by Objectives--A Case Study." Research Management, vol. 12 (November 1969); pp. 391-400.

French, W.L., and R.W. Hollmann. "Management by Objectives: The Team Approach." California Management Review, vol. 17 (Spring 1975), pp. 13-22.

Fri, Robert W. "How to Manage the Government for Results: The Rise of MBO." Organizational Dynamics, vol. 2, no. 4 (1974), pp. 19-33.

Fukuhara, Rackham S. "Productivity Improvement in Cities." 1977 ICMA Yearbook. Washington, D.C.: International City Management Association, 1977, pp. 193-99.

Garmire, Bernard L., ed. Local Government Police Management. Second Edition. Washington, D.C.: International City Management Association, 1982.

Garrett, John and S.D. Walker. Management by Objectives in the Civil Service. CAS Occasional Paper no. 10. London: Her Majesty's Stationery Office, 1969.

Gazell, James A. "MBO in the Public Sector." University of Michigan Business Review, vol. 27 (July 1975), pp. 29-35.

Gloege, William P. "Management Reporting System Helps Keep Brass Informed, Department on Target." Western City, vol. 60, no. 5 (May 1984), pp. 5-13.

\_\_\_\_\_. "Measuring Patrol Productivity in San Jose." The Police Chief, vol. 51, no. 11 (November 1984), pp. 41-43.

\_\_\_\_\_. "San Jose Police Department's Management-by-Objective (MBO) System." San Jose, Calif.: San Jose Police Department, October 1983.

---

Goddard, E.E. "Change--and Management by Objectives--in the Greater London Council." Local Government Studies, vol. 1 (October 1971), pp. 33-39.

Goodwillie, R.B. "MBO Handbook." Hampton, Va.: Hampton Police Department, 1977.

Greiner, John M. "Employee Incentives and Special Fringe Benefits--1984." Baseline Data Reports, vol. 17, no. 2. Washington, D.C.: International City Management Association, February 1985.

\_\_\_\_\_. "Incentives for Municipal Employees: An Update." Urban Data Service Reports, vol. 11, no. 8. Washington, D.C.: International City Management Association, August 1979.

Greiner, John M.; Lynn Bell; and Harry P. Hatry. Employee Incentives to Improve State and Local Government Productivity. Washington, D.C.: National Commission on Productivity and Work Quality, March 1975.

Greiner, John M.; Harry P. Hatry; Margo P. Koss; Annie P. Millar; and Jane P. Woodward. Productivity and Motivation: A Review of State and Local Government Initiatives. Washington, D.C.: The Urban Institute Press, 1981.

Griffin, Gerald R. "Goal Setting for Police Organizations." The Police Chief, vol. 41 (1974), p. 32ff.

Grimes, John A. "The Police, the Union, and the Productivity Imperative." Readings on Productivity in Policing. Joan Wolfle and John Heaphy, eds. Washington, D.C.: The Police Foundation, 1975.

Hatry, Harry P.; Louis H. Blair; Donald M. Fisk; John M. Greiner; John R. Hall, Jr.; and Philip Schaenman. How Effective Are Your Community Services? Procedures for Monitoring the Effectiveness of Municipal Services, Chapter 6, "Crime Control." Washington, D.C.: The Urban Institute, 1977.

---

Hatry, Harry P.; Sumner N. Clarren; Therese van Houten; Jane P. Woodward; and Pasqual A. DonVito. Efficiency Measurement for Local Government Services: Some Initial Suggestions. Washington, D.C.: The Urban Institute, 1979.

Hatry, Harry P.; John M. Greiner; and Richard J. Gollub. "An Assessment of Local Government Management Motivational Programs: Performance Targeting With and Without Monetary Incentives." Washington, D.C.: The Urban Institute, 1981.

Havemann, Joel A. "Administrative Report/OMB Begins Major Program to Identify and Attain Presidential Goals." National Journal Reports, vol. 5 (June 1973), pp. 783-93.

\_\_\_\_\_. "White House Report/OMB's 'Management-by-Objective' Produces Goals of Uneven Quality." National Journal Reports, vol. 5 (August 1973), pp. 1201-10.

Havens, Harry S. "MBO and Program Evaluation, or Whatever Happened to PPBS?" Public Administration Review, vol. 36 (January/February 1976), pp. 40-45.

Hodgson, J.S. "Management by Objectives--the Experience of a Federal Government Department." Canadian Public Administration, vol. 16, no. 3 (Fall 1973), pp. 422-31.

Hollmann, Robert W. "Applying MBO Research to Practice." Human Resource Management, vol. 15, no. 4 (Winter 1976), pp. 28-36.

"How Management by Objectives Works for Government Administrators." State and County Administrator, vol. 1, no. 3 (May/June 1976), pp. 24-29.

Ivancevich, John M. "Changes in Performance in a Management by Objectives Program." Administrative Science Quarterly, vol. 19, no. 4 (December 1974), pp. 563-74.

---

\_\_\_\_\_. "A Longitudinal Assessment of Management by Objectives." Administrative Science Quarterly, vol. 17, no. 1 (March 1972), pp. 126-38.

\_\_\_\_\_. "The Theory and Practice of Management by Objectives." Michigan Business Review, vol. 21 (March 1969), pp. 13-16.

Ivancevich, John M.; James H. Donnelly; and Herbert L. Lyon. "A Study of the Impact of Management by Objectives on Perceived Need Satisfaction." Personnel Psychology, vol. 23 (Summer 1970); pp. 139-51.

Katzell, Raymond A. and Daniel Yankelovich. Work, Productivity, and Job Satisfaction: An Evaluation of Policy-Related Research. New York: The Psychological Corporation, 1975.

Kimmel, Wayne A.; William R. Dougan; and John R. Hall. Municipal Management and Budget Methods: An Evaluation of Policy Related Research. Washington, D.C.: The Urban Institute, 1974.

Kiracofe, John H. "A Systems Approach: Urban Management by Objectives." Michigan Municipal Review, vol. 47, no. 12 (December 1974), pp. 325-27.

Kirchhoff, Bruce A. "A Diagnostic Tool for Management by Objectives." Personnel Psychology, vol. 28 (1975), pp. 351-64.

Kirkpatrick, Donald L. "MBO and Salary Administration." Training and Development Journal, vol. 27 (September 1973), pp. 3-5.

Kleber, Thomas P. "Forty Common Goal-Setting Errors." Human Resource Management, vol. 11 (Fall 1972), pp. 10-13.

Klevickis, A.C. "The Rights and Wrongs of Management by Objectives." Industrial Engineering, vol. 5, no. 7 (July 1973), pp. 16-19.

---

Klinger, Donald E. "What's So Important About Job Satisfaction?" Review of Public Personnel Administration, vol. 4, no. 1 (Fall 1983), pp. 67-77.

Lasagna, John B. "Make Your MBO Pragmatic." Harvard Business Review, vol. 49, no. 6 (November/December 1971), pp. 64-69.

Latham, Gary P. and J. James Baldes. "The 'Practical Significance' of Locke's Theory of Goal Setting." Journal of Applied Psychology, vol. 60, no. 1 (1975), pp. 122-24.

Latham, Gary P. and Sidney B. Kinne, III. "Improving Job Performance Through Training in Goal Setting." Journal of Applied Psychology, vol. 59, no. 2 (1974), pp. 187-91.

Latham, Gary P.; Terence R. Mitchell; and Dennis L. Dossett. "Importance of Participative Goal Setting and Anticipated Rewards on Goal Difficulty and Job Performance." Journal of Applied Psychology, vol. 63, no. 2 (1978), pp. 163-71.

Latham, Gary P. and Gary A. Yukl. "Assigned Versus Participative Goal Setting with Educated and Uneducated Woods Workers." Journal of Applied Psychology, vol. 60, no. 3 (1975), pp. 299-302.

\_\_\_\_\_. "A Review of Research on the Application of Goal-Setting in Organizations." Academy of Management Journal, vol. 18 (1975), pp. 824-45.

Levine, Charles H. "Police Management in the 1980's: From Decrementalism to Strategic Thinking." Public Administration Review, vol. 45, Special Issue (November 1985), pp. 691-99.

Levinson, Harry. "Management by Objectives: A Critique." Training and Development Journal, vol. 26 (April 1972), pp. 3-8.

\_\_\_\_\_. "Management by Whose Objectives?" Harvard Business Review, vol. 48, no. 4 (July/August 1970), pp. 125-34.

---

Likert, Rensis and M. Scott Fisher. "MBGO: Putting Some Team Spirit into MBO." Personnel, vol. 54, no. 1 (January/February 1977), pp. 40-47.

Locke, Edwin A. "Job Satisfaction and Job Performance: A Theoretical Analysis." Organizational Behavior and Human Performance, vol. 5 (September 1970), pp. 484-500.

\_\_\_\_\_. "Motivational Effects of Knowledge of Results: Knowledge or Goal Setting?" Journal of Applied Psychology, vol. 51, no. 4 (1967), pp. 324-29.

\_\_\_\_\_. "The Relationship of Intentions to Level of Performance." Journal of Applied Psychology, vol. 50 (1966), pp. 60-66.

\_\_\_\_\_. "Toward a Theory of Task Motivation and Incentives." Organizational Behavior and Human Performance, vol. 3 (1968), pp. 157-89.

Locke, Edwin A.; Judith F. Bryan; and Lorne M. Kendell. "Goals and Intentions as Mediators of the Effects of Monetary Incentives on Behavior." Journal of Applied Psychology, vol. 52, no. 2 (1968), pp. 104-21.

Locke, Edwin A.; Norman Cartledge; and Claramae S. Knerr. "Studies of the Relationship Between Satisfaction, Goal-Setting, and Performance." Organizational Behavior and Human Performance, vol. 5 (1970), pp. 135-58.

Locke, Edwin A.; Dena B. Feren; Vickie M. McCaleb; Karyll N. Shaw; and Anne T. Denny. "The Relative Effectiveness of Four Methods of Motivating Employee Performance." Paper presented at the NATO International Conference on Changes in the Nature and Quality of Working Life, Thessaloniki, Greece, 1979.

Locke, Edwin A.; K.N. Shaw; L.M. Saari; and G.P. Latham. "Goal Setting and Task Performance: 1969-1980." Psychological Bulletin, vol. 1 (1981), pp. 125-52.

---

Lovrich, Nicholas P., Jr. "The Dangers of Participative Management: A Test of Unexamined Assumptions Concerning Employee Involvement." Review of Public Personnel Administration, vol. 5, no. 3 (Summer 1983), pp. 9-25.

Lubans, V.A. and J.M. Edgar. Policing by Objectives. Hartford, Conn.: Social Development Corporation, 1979.

Luthans, Fred. "How to Apply MBO." Public Personnel Management, vol. 5, no. 2 (March/April 1976), pp. 83-87.

Maiben, Dean H. and Charles J. Schwabe. "Government by Objectives: A Management System." Governmental Finance, vol. 3, no. 1 (February 1974), pp. 2-5.

Malek, Frederick V. "Managing for Results in the Federal Government." Business Horizons, vol. 17 (1974), pp. 23-28.

Mandish, James R. and Laurie S. Frankel. Personnel Practices in Municipal Police Service: 1976. Urban Data Service Reports, vol. 8, no. 12. Washington, D.C.: International City Management Association, 1976.

Martensen, Kai R. and Rebecca Gowen. "State-of-the-Art: Productivity Improvement Strategies." Towson, Md.: Baltimore County Police Department, November 1980.

McCaffery, Jerry. "MBO and the Federal Budgetary Process." Public Administration Review, vol. 36, no. 1 (January/February 1976), pp. 33-39.

McConkey, Dale D. "Applying Management by Objectives to Non-Profit Organizations." SAM Advanced Management Journal, vol. 38, no. 3 (January 1973), pp. 10-20.

\_\_\_\_\_. How to Manage by Results. Rev. ed. New York: American Management Association, 1967.

\_\_\_\_\_. "Twenty Ways to Kill Management by Objectives." Management Review, vol. 61 (October 1972), pp. 4-13.

---

McDonald, T.A. "Productivity Measurement." Memorandum to Productivity Steering Committee. Rockville, Md.: Montgomery County Police Department, July 27, 1981.

McGowan, Robert P. and Theodore H. Poister. "Personnel-Related Management Tools in Municipal Government." Review of Public Personnel Administration, vol. 4, no. 1 (Fall 1983), pp. 78-96.

Miller, Ernest C. Objectives and Standards: An Approach to Planning and Control. AMA Research Study 74. New York: American Management Association, 1966.

Miner, John B. and H. Peter Dachler. "Personnel Attitudes and Motivation." Annual Review of Psychology, vol. 24. Paul H. Mussen and Mark R. Rosenzweig, eds. Palo Alto, Calif.: Annual Reviews, Inc., 1973, pp. 375-401.

Minetti, P.G. "Management by Objectives." Annual Report--1976: An Era of Progress. Hampton, Va.: Hampton Police Department, Office of the Chief of Police, 1977, pp. 18-23.

Mobley, W.H. "The Link Between MBO and Merit Compensation." Personnel Journal, vol. 53, no. 6 (June 1974), pp. 423-27.

Molander, C.F. "Management by Objectives in Perspective." Journal of Management Studies, vol. 9 (February 1972), pp. 74-81.

Morgan, James P., Jr. "Police Productivity." Local Government Police Management. Bernard L. Garmire, ed. Washington, D.C.: International City Management Association, 1982, pp. 96-114.

Morrissey, George L. "MBO Questions and Answers." Public Personnel Management, vol. 5, no. 2 (March/April 1976), pp. 96-102.



---

Murray, William J. "Management by Objectives: A Pilot Project for the Division of Family Services." Division of Family Services, State of Utah. Salt Lake City, December 1977.

Nelson, Mel. "Annual Report--1979." Livermore, Calif.: Livermore Police Department, 1980.

Newland, Chester A.; John D.R. Cole; Elsa A. Porter; Anthony F. Ingrassia; Raymond D. Horton; and Vincent J. Macri. MBO and Productivity Bargaining in the Public Sector. Public Employee Relations Library, no. 45. Chicago: International Personnel Management Association, 1974.

Norton, Steven D. "Management by Results in the Public Sector." Public Productivity Review, vol. 2, no. 1 (Fall 1976), pp. 20-31.

Odiorne, George S. Management by Objectives: A System of Managerial Leadership. New York: Pitman Publishing Corporation, 1969.

\_\_\_\_\_. "MBO in State Government." Public Administration Review, vol. 36 (January/February 1976), pp. 28-33.

\_\_\_\_\_. "The Politics of Implementing MBO." Business Horizons, vol. 17 (June 1974), pp. 13-21.

Patten, Thomas H., Jr. "Linking Financial Rewards to Employee Performance: The Roles of OD and MBO." Human Resource Management, vol. 15, no. 4 (1976), pp. 2-17.

\_\_\_\_\_. "OD, MBO, and the Reward System." OD--Emerging Dimensions and Concepts. Thomas H. Patten, Jr. ed. Madison, Wis.: American Society for Training and Development, 1973, pp. 9-31.

\_\_\_\_\_. "OD, MBO, and the R/P System: A New Dimension in Personnel Administration." Personnel Administration, vol. 35 (March/April 1972), pp. 14-23.

---

Peach, Len. "Personnel Management by Objectives." Personnel Management, vol. 7 (March 1975), pp. 20-23f.

Peart, Leo E. "A Management by Objective Plan for a Municipal Police Department." The Police Chief, vol. 38, no. 6 (June 1971), pp. 34-40.

Poister, Theodore H. and Robert P. McGowan. "The Use of Management Tools in Municipal Government: A National Survey." Public Administration Review, vol. 44, no. 3 (May/June 1984), pp. 215-23.

Pritchard, R.D. and M.I. Curtis. "The Influence of Goal Setting and Financial Incentives on Task Performance." Organizational Behavior and Human Performance, vol. 10 (1973), pp. 175-83.

Pudinski, Walter. "Managing for Results." The Police Chief, vol. 40, no. 1 (January 1973), pp. 38-39f.

Raia, Anthony P. "Goal Setting and Self-Control." Journal of Management Studies, vol. 2 (February 1965), pp. 34-53.

\_\_\_\_\_. Managing by Objectives. Glenview, Ill.: Scott, Foresman and Company, 1974.

\_\_\_\_\_. "A Second Look at Management Goals and Controls." California Management Review, vol. 8 (Summer 1966), pp. 49-58.

Ronan, W.W.; Gary P. Latham; and S.B. Kinne, III. "Effects of Goal Setting and Supervision on Worker Behavior in an Industrial Situation." Journal of Applied Psychology, vol. 58, no. 3 (1973), pp. 302-7.

Ryan, T.A. Intentional Behavior: An Approach to Human Motivation. New York: Ronald, 1970.

Schwab, D.P. and L.L. Cummings. "Theories of Performance and Satisfaction: A Review." Industrial Relations, vol. 9 (October 1970), pp. 408-30.

---

Selberg, Barry. "Management by Objective." North Dakota League of Cities Bulletin (April 1975), pp. 2-4.

Shanahan, Donald T. Patrol Administration: Management by Objectives. Boston: Holbrook Press, 1975.

Sheehan, Richard J. "Policing by Objectives Training Manual." Rockville, Md.: Montgomery County Police Department, Education and Training Division, October 1979.

Sherwood, Frank P. and William J. Page, Jr. "MBO and Public Management." Public Administration Review, vol. 36 (January/February 1976), pp. 5-12.

Stafford, Samuel. "In Interior's BOR, What's Happening Is an MBO Success." Government Executive, vol. 6, no. 4 (April 1974), pp. 42-49.

Standards for Law Enforcement Agencies. Fairfax, Va.: Commission on Accreditation for Law Enforcement Agencies, August 1983.

Stedry, A.C. and E. Kay. The Effects of Goal Difficulty on Performance. Crotonville, N.Y.: Behavioral Research Service, General Electric Company, 1964.

Steers, Richard M. "Task Goals, Individual Need Strengths, and Supervisory Performance." Doctoral Dissertation, University of California, Irvine, 1973.

Steers, Richard M. and Lyman W. Porter. "The Role of Task-Goal Attributes in Employee Performance." Psychological Bulletin, vol. 81 (1974), pp. 434-52.

Stephens, Darrel W. "Establishing Goals and Objectives." Newport News, Va.: Newport News Police Department, May 1983.

\_\_\_\_\_. "Goals and Objectives: Fiscal Year 1985." Newport News, Va.: Newport News Police Department, n.d.

---

\_\_\_\_\_. "A Statement of Goals and Objectives." Newport News, Va.: Newport News Police Department, July 1983 (Rev. January 1984).

Strauss, George. "Management by Objectives: A Critical View." Training and Development Journal, vol. 26 (April 1972), pp. 10-15.

Tosi, Henry L. and Stephen J. Carroll. "Improving Management by Objectives: A Diagnostic Change Program." California Management Review, vol. 16, no. 1 (Fall 1973), pp. 57-66.

\_\_\_\_\_. "Management by Objectives." Personnel Administration, vol. 33 (July/August 1970), pp. 44-48.

\_\_\_\_\_. "Managerial Reaction to Management by Objectives." Academy of Management Journal, vol. 11 (December 1968), pp. 415-26.

\_\_\_\_\_. "Some Factors Affecting the Success of 'Management by Objectives.'" Journal of Management Studies, vol. 7 (May 1970), pp. 209-23.

\_\_\_\_\_. "Some Structural Factors Related to Goal Influence in the Management by Objective Process." MSU Business Topics, vol. 17 (Spring 1969), pp. 45-50.

Umstot, Denis D. "MBO + Job Enrichment: How to Have Your Cake and Eat It Too." Management Review, vol. 66, no. 2 (February 1977), pp. 21-26.

Umstot, Denis D.; Cecil H. Bell, Jr.; and Terence R. Mitchell. "Effects of Job Enrichment and Task Goals on Satisfaction and Productivity: Implications for Job Design." Journal of Applied Psychology, vol. 61, no. 4 (1976), pp. 379-94.

Vaughn, Jerald R. "Police Officer Productivity Assessment Program." Journal of Police Science and Administration, vol. 9, no. 4 (1981), pp. 412-27.

---

Wehrich, Heinz. "Management by Objectives: Does It Really Work?" University of Michigan Business Review, vol. 28 (July 1976), pp. 27-31.

West, George Edward. "Bureaupathology and the Failure of MBO." Human Resource Management, vol. 16, no. 2 (Summer 1977), pp. 33-40.

Whisenand, Paul M. and R. Fred Ferguson. The Managing of Police Organizations. Englewood Cliffs, N.J.: Prentice-Hall, 1973.

Wickens, J.D. "Management by Objectives: An Appraisal." Journal of Management Studies, vol. 5 (October 1968), pp. 365-79.

Widdop, F.R. "Why Performance Standards Don't Work." Personnel, vol. 47, no. 2 (March/April 1970), pp. 14-20.

Wikstrom, Walter S. Managing by--and with--Objectives. Personnel Policy Study no. 212. New York: National Industrial Conference Board, 1968.

Wildavsky, Aaron. "The Strategic Retreat on Objectives." Policy Analysis, vol. 2 (Summer 1976), pp. 499-526.

Wilson, O.W. and Roy C. McLaren. Police Administration. 3rd Ed. New York: McGraw-Hill, 1972.

Winning, Ethan A. "MBO: What's in It for the Individual?" Personnel, vol. 51, no. 2 (March/April 1974), pp. 51-56.

Zander, A. Motives and Goals in Groups. New York: Academic Press, 1971.