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**EVALUATION OF COMMUNITY CRIME/  
PROBLEM RESOLUTION THROUGH  
POLICE DIRECTED PATROL  
EXECUTIVE SUMMARY**

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## EXECUTIVE SUMMARY

### INTRODUCTION

The Baltimore County, Maryland, Police Department in January 1987 introduced problem-oriented policing to about 350 patrol officers and supervisors in the Area I patrol district. Under a grant from the National Institute of Justice (NIJ), the Institute for Law and Justice (ILJ) and the Police Executive Research Forum (the Forum) evaluated this effort. The following executive summary presents the main objectives, tasks, and findings from the study.

Baltimore County police administrators have had a long-standing commitment to the problem-solving approach advocated by Herman Goldstein and others (Eck and Spelman, 1987; Goldstein, 1979). In 1982, the department organized its Citizen Oriented Police Enforcement (COPE) units, which have since received national recognition for handling fear of crime problems and using problem-solving concepts.

The problem-solving project in Area I was based on the same concepts, but differed from COPE in several important ways:

- Rather than creating a selected, specialized unit, the project involved all Area I personnel in problem-solving.
- Area I officers handled problem-solving projects while on directed patrol. Supervisors assisted by making blocks of time available, but Area I patrol officers, unlike COPE officers, were expected to respond to calls for service.
- The Area I project was coordinated with the department's differential police response (DPR) team to explore ways to free up more time for directed patrol and problem-solving.
- Area I officers dealt with crime problems, public disturbances, and other business and community problems, while COPE continued its focus on fear of crime problems.

### *Implications for Community Policing*

The study results are particularly significant for police administrators who want to lead their departments into what Houston Police Chief Lee Brown has called "Phase II" of community policing (Brown, 1989).

In "Phase I" according to Brown, departments establish special programs or units to meet community policing objectives. The types of programs developed under the rubric of community policing include foot patrols, neighborhood police offices, fear of crime units such as COPE, and many others that have objectives to increase citizen/patrol officer interactions (Kelling, Wasserman, and Williams, 1988). These programs may or may not incorporate the problem-solving process of systematically identifying, analyzing, and resolving problems and evaluating results.

In Phase II, as Brown describes it, community policing is expanded to make it "the dominant philosophy throughout the department." (Brown, 1989). Toward this end, some departments have revised their mission statements and increased the number of forums for officer/citizen interactions. Few departments, however, have begun systematic, department-wide problem-solving. The Newport News Police Department was the first to attempt this (Eck and Spelman, 1987) and the Baltimore County Police Department is now following suit.

In a sense, the problem-solving study in Baltimore County's Area I documents one department in transition from "Phase I to Phase II." Operating special community-oriented programs or problem-solving units requires administrative support, but does not necessarily require significant changes throughout the organization. In contrast, many departures from traditional police management practices are required to incorporate problem-solving into a department-wide emphasis on community policing.

The study in Baltimore County's Area I demonstrates that substantial benefits can be derived when officers on directed patrol participate in problem-solving. Addressing problems rather than simply responding to incidents can save time and money. Officers can engage community members in developing unique solutions to problems. And a system can be established to manage the increased police officer discretion that is necessarily part of any community-oriented approach. Perhaps most important, the study contributes to our understanding of the changes in management, organization, and attitudes that department-wide problem-solving will require.

#### PROBLEM STATEMENT

Among the most significant police research findings in the 1970's were that 1) a rapid police response to calls for service is important in only a small percentage of cases, and 2) citizens are satisfied with alternative responses to minor calls as long as they know what to expect (Farmer, 1981; McEwen, Connors, and Cohen, 1986).

In recent years, many departments faced with reduced budgets and increased workloads have developed differential police response (DPR) systems. Rather than having patrol cars respond quickly to all calls, many departments are handling non-emergencies with telephone and delayed mobile responses. They are also increasing their use of civilian personnel and have created police service officer (PSO) or community service officer (CSO) positions to handle minor calls and other patrol duties that do not require sworn powers. Because of these and other ways of managing calls, some departments have reduced the call workload from patrol.

One of the assumptions of modern policing is that this available patrol time is better spent on directed patrol activities than on traditional random patrol. By 1983, nearly three-fourths of departments serving 100,000 or more residents had begun directed patrol programs (Fennessey, 1983). Directed patrol may include split

force programs, special crime units, drunk driving task forces, warrant squads, victim follow-up services, "stop, walk, and talk" programs, officer-initiated activities, and many others.

Among the main benefits of directed patrol are 1) increasing the department's ability to define and resolve short-term crime problems, 2) enabling the department to allocate patrol resources more effectively, and 3) improving supervisors' ability to monitor uncommitted patrol time. The main difficulties are 1) consistently freeing up blocks of patrol time for directed patrol, and 2) a lack of interest in directed patrol by patrol supervisors (Fennessey, 1983).

Although many departments are now managing calls more efficiently and are making directed patrol assignments, most departments are still essentially incident-driven. That is, few police agencies have designed systems that support officers' use of directed patrol time to follow a structured problem-solving process.

In contrast, the problem-oriented approach to policing stresses the need to view related incidents as symptoms of larger problems. Moreover, if departments are to become more community-oriented, officers will need to expand their sources of information about resident and business problems. Many problems the community cares about are crime related. Many others are not, yet they become police matters when the public repeatedly brings them to the department's attention. The knowledge of patrol officers and community members needs to be tapped to identify and define problems, determine their causes, and develop solutions.

This need for new information sources about problems also suggests that the role of crime analysts needs to be examined. Traditionally, crime analysis units focused on crimes such as robbery and burglary. Yet these crimes are only a small portion of the problems that the public expects the police to address. Further, crime analysts rely primarily on official police records such as offense and arrest

reports. They do not routinely supply officers with information about non-crime problems, and may not have the technical support they need to fill special requests for data.

Although it has been discussed for more than ten years, researchers and practitioners have conducted few studies of problem-oriented policing. In 1984, the Newport News Police Department began an effort to make problem-oriented policing its standard police strategy. This was the first attempt to apply problem-oriented policing agency-wide. The problem-solving process refined in Newport News had four stages: scanning, or identifying problem circumstances; gathering and analyzing information about the problem; responding to the problem; and assessing the effectiveness of the response (Eck and Spelman, 1987).

The Forum's study of the Newport News experiment suggested that the process was appropriate for patrol officers and investigators, and that differential police response, directed patrol, and crime analysis could be linked to assist a police agency implement a problem-oriented approach. The experiment in Baltimore County's Area I attempted to strengthen these linkages.

We assumed that 1) differential response methods could lessen officers' call handling workload and provide them time to address problems, 2) crime analysis could assist problem solving if new information sources were developed inside and outside the police agency, and 3) officers could address problems while on directed patrol if directed patrol objectives and tactics were expanded to focus on a broad array of citizen concerns.

We expected to encounter the main problems with directed patrol noted earlier-- difficulty arranging blocks of uncommitted time, and resistance by patrol supervisors. We also expected that the emphasis on dealing with non-crime problems would be resisted by some officers. Thus, training on problem-solving and a clear commitment to the approach by department administrators would be important factors

in implementing the project. As explained later, the study sought to determine the relative importance of time for problem solving, time management by supervisors, and direction from commanders and administrators.

#### BACKGROUND ON THE STUDY SITE

Baltimore County covers 610 square miles and has about 677,600 residents. It borders the City of Baltimore on three sides. In 1988, the police department had 1,513 sworn and 483 civilian personnel. For several reasons, we considered the department an excellent site for the study:

- It handled a mix of urban, suburban, and rural policing problems, making the results relevant to a large number of departments around the country.
- Administrators were strongly committed to applying problem-solving techniques department-wide.
- It had a well-developed DPR system in place, including a telephone report unit, and had recently installed a new CAD system.
- It was amenable to exploring new call-handling alternatives.

Field services includes three patrol areas and nine precincts. A major is in charge of each area, and the precinct commanding officers are captains. Precinct patrol officers are divided into four shifts, which rotate weekly. Each shift has one lieutenant and two or three sergeants, a total of about 20 to 25 officers per shift.

Area I, the study site, is on the western side of the county and is comprised of three precincts, Woodlawn, Garrison, and Wilkens. Woodlawn and Garrison have experienced residential development in recent years, while Wilkens is characterized by older, established neighborhoods. All three precincts share boundaries with Baltimore City. Although Area I represents 35 percent of the county's land area and has about a third of the patrol officers in field services, it has the highest levels of crime and workload in the county. In 1987, 52 percent of all robberies, 42 percent of all burglaries, and 53 percent of all auto thefts occurred in Area I.

The department has a central crime analysis unit at headquarters under the planning and research division. It also assigns a crime analyst to each precinct. These analysts report to the precinct captains through the chain of command. In addition to their crime analysis duties, they perform a variety of administrative tasks that frequently consume as much as 70 percent of their time. Each precinct also has a community relations officer and a crime prevention officer.

#### **PROJECT OBJECTIVES AND MAJOR TASKS**

The evaluators worked closely with Area I command personnel during the study's planning phase to refine three major process or implementation objectives, and to plan the tasks required to achieve them. These objectives and tasks are explained below:

- **Increase the amount of patrol officers' uncommitted time by expanding the department's alternatives for handling calls for service.**

The main task for accomplishing this was the employment and training of four police service officers (PSOs) to handle routine calls and other duties that do not require sworn authority. The PSOs received six weeks training at the police academy and several weeks on-the-job training. The department's DPR task force remained active throughout the study, but did not make any other changes that had a significant impact on patrol workloads.

- **Develop an analytical capability that enables patrol to identify and resolve community and business problems and crimes.**

Developing analytical tools for patrol included obtaining computer runs of repeat calls for service by address; developing forms and procedures to document problem solving efforts; training Area I supervisors, crime analysts, and patrol officers in the problem-solving approach; and encouraging an expanded role for crime analysts as "problem analysts." The evaluators met regularly with project personnel to resolve difficulties and monitor progress.

- Develop a manageable system to direct the use of uncommitted patrol time more efficiently and effectively.

This objective refers to the department's need to maintain a coordinated system for managing all project resources. As discussed earlier, the main resources that needed to operate in tandem were: the DPR task force, including the PSOs; the crime analysis function; and the management of directed patrol activities. The responsibility for promoting the problem-solving approach, ensuring coordination, and providing clear direction fell to headquarters and Area I command staff. Shift lieutenants and sergeants had daily responsibility for managing officer time and problem-solving projects. Additional objectives for directed patrol problem-solving were as follows:

- Increase the productivity of patrol officers when they are not handling calls for service (efficient use of time).
- Increase the number of crime and community problems solved by requiring officers on directed patrol to solve problems in a systematic way (effective use of time).
- Improve patrol management's ability to control and monitor officers' activities and assure that resources are directed toward department objectives.

## EVALUATION DESIGN

The study tested three hypotheses with respect to the influence of patrol management on problem-solving. These hypotheses are stated briefly below:

1. **Time effectiveness.** To solve problems while on directed patrol, officers' call workloads need to allow sufficient time to accomplish the required tasks. If workloads are excessive, little or no problem-solving can take place.

2. **Management effectiveness.** Even if officers generally have sufficient time for problem solving, the available time must be effectively managed and blocked together by supervisors.

3. Direction effectiveness. Top management must stress the importance of patrol officer problem-solving if the philosophy is to succeed. If department executives prioritize patrol problem-solving, it will be implemented.

We realized it was unlikely that only one hypothesis would be correct. Clearly, time is needed and this time needs to be managed. Further, no organization can accomplish much without strong direction from administrators, especially when an activity involves a relatively new approach. It was more likely that all three hypotheses would be true, but to varying degrees. The study was designed to show the relative importance of the three hypotheses within the context of one police agency.

#### *Testing the Time-Effectiveness Hypothesis in Woodlawn*

To test this hypothesis, four police service officers (PSOs) were assigned to Woodlawn precinct on the day and evening shifts. The PSOs were to relieve patrol officer workload in two ways. First, they were to respond to many of the non-emergency calls that patrol officers handled. Second, they were to handle much of the administrative work that had been required of sworn officers. This included serving prisoner meals, staffing the precinct desk, and making mail and car relay runs.

To capitalize on the time freed up by the PSOs, Woodlawn patrol supervisors were also authorized to "set up" cars; that is, they could tell communications that an officer was on a directed patrol assignment and was available only for emergency calls. This directed patrol time was to be used for problem-solving.

In Woodlawn, therefore, time could be both freed up and managed, making it possible to assess the impact of these interventions on problem-solving.

### *Testing the Management-Effectiveness Hypothesis in Garrison*

PSOs were not assigned to Garrison precinct, so officer workload could not be reduced by this alternative; but Garrison supervisors did have the authority to set up cars for problem-solving activities. This enabled the evaluators to measure the impact of patrol management on problem-solving.

### *Testing the Direction-Effectiveness Hypothesis in Wilkens*

No PSOs were assigned to Wilkens precinct, and supervisors were not authorized to set up cars for directed patrol problem-solving assignments. If problem-solving efforts were as significant in Wilkens as in Woodlawn and Garrison, then it could be concluded that direction was more important than time or management.

### *Comparisons*

Comparisons among the three precincts were made to determine whether time, management, or direction had the strongest influence on problem-solving.

The success of the design depended on our ability to measure 1) the degree to which the planned interventions were implemented, and 2) the effectiveness of problem-solving activities in each precinct.

Indicators of the level of problem-solving activity that occurred included:

- Number of problem-solving projects initiated
- Types of problems addressed (e.g. order maintenance, property crimes, traffic problems, personal crimes, administrative problems, etc.)
- Time and type of effort expended to identify, analyze, and respond to individual problems
- Evidence that supervisors assessed the results of officers' problem-solving efforts

To assess the effectiveness of the problem-solving activities, we looked at the follow factors:

- Reductions in or elimination of calls for service
- Increases in calls for service
- Reductions in the seriousness of incidents related to the problem
- Creation of better methods for handling incidents
- Transfer of responsibility to another, more appropriate agency or police unit

- Citizen satisfaction evidenced by surveys, letters, telephone logs, public recognition, etc.
- Observed differences in conditions
- More appropriate use of patrol personnel
- Improvements in officer safety

Data sources used to assess effectiveness were department files on individual problem-solving projects, CAD runs on repeat calls for service, other department records, interviews with officers and supervisors, and observations of conditions.

## MAJOR FINDINGS

### *Time for Problem-Solving on Directed Patrol*

One of the main questions of interest in this study concerns whether patrol units have time to perform problem-solving activities and still respond to citizen calls for service. To address this question we first analyzed CAD system data to determine 1) the percentage of time patrol units spend on calls for service during a shift (or, "unit utilization"), and 2) the chances that units will have *uninterrupted blocks* of time that could be devoted to problem-solving.

CAD data for April 1987, considered an "average" month, were used to determine unit utilization. Since the Baltimore County CAD system does not capture information on assists, we relied on estimates by precinct command personnel and crime analysts. Our calculations assumed that 50 percent of calls had an assist unit for the full duration of the call.

To determine whether blocks of time were likely to be available for problem-solving, we used a queuing theory model frequently used by police departments for patrol allocation. In mathematical terms, the question was posed as "What is the probability of having at least 30 (for example) minutes of uninterrupted time between calls?"

The most significant findings regarding time for problem solving are as follows:

- Unit utilizations (including assists) ranged from a low of 14.5 percent to a high of 34.5 percent.
- At this rate of unit utilization, officers have sufficient time for many other activities.
- Based on a widely accepted queuing theory model, enough *blocks of time* (for example, 30 to 45 minutes) are available to handle problem-solving assignments.
- Although these are accurate representations of unit utilizations, non-call for service time is not always available for problem-solving. Competing interests for officers' time must be considered.

In Baltimore County, many patrol activities were not captured by the CAD system. These included report writing, transporting and processing suspects after arrests, court time, meals, car maintenance runs, and other duties.

Thus, not all of the blocks of time between calls can be expected to be productive for problem-solving; however, with workloads comparable to those in Area I, many problem-solving activities can be performed. Time for these activities was more likely to be available on certain days of the week, such as Monday through Thursday, and on the morning rather than afternoon shifts. Problem-solving assignments should probably emphasize these times and avoid the busiest periods.

#### *Differential Police Response and Police Service Officers*

As noted earlier, the department's DPR system was well established before the study began. The telephone report unit (TRU) is the system's primary means of relieving officer workload. During the first six months of 1988, the TRU handled more than 3,000 calls that might otherwise have been dispatched to Area I patrol officers. All three Area I precincts had time freed up because of DPR, but only Woodlawn had PSOs to handle non-emergency calls and other duties. The time and cost savings from their work was significant:

- The PSOs spent at least 75 percent of their time on tasks that relieved patrol officer workload.

- During the nine months when we analyzed PSO time and activity logs, the PSOs returned a average of about 540 hours per month to the officers.
- Our surveys showed that more than 80 percent of the Area I officers and supervisors thought PSOs could handle many of the calls for service handled by officers.
- More than three-fourths of the Woodlawn officers agreed that the PSOs did in fact reduce their workloads.

PSOs free up officer time, cost less than sworn officers, and have the potential to boost officer morale by relieving them of routine duties that do not require sworn authority. However, in terms of our hypothesis on time, another finding is significant:

- Although PSOs freed up officer time at Woodlawn, the number of problem-solving projects at Woodlawn was not significantly higher than the number at Garrison and Wilkens.

Of course, counting numbers of projects does not speak to the complexity of these efforts, but a considerable amount of time made available by PSOs was not channeled into problem-solving.

#### *Officer Perceptions About Time*

On project surveys of officers and supervisors, Area I personnel reported their workloads did not allow enough time for problem-solving. At Woodlawn, 88 percent of officers (compared to 69 percent at Garrison and 74 percent at Wilkens) reported there was not enough time on the day shift, when much of the work with community members would have to be done. Woodlawn officers on the day shift averaged about 27 percent of their time handling calls, with Garrison and Wilkens spending 22 percent. These call workloads are not extremely high and suggest the need to explore other reasons for reports of insufficient time for problem-solving.

### *Problem-Solving Activity*

A total of 40 problem-solving projects were undertaken in Area I from May 1987 through June 30, 1988. Garrison precinct had 12 projects, compared to 14 in Woodlawn and 14 in Wilkens. Problem-solving began slowly at Garrison because of two changes in precinct command during the early months of the study. Once a permanent captain was assigned, problem-solving increased and continued steadily.

Most problem-solving projects met the study guidelines: they involved a group of similar incidents and were of concern to both the police and the public.

The 40 problem-solving projects fell roughly into the following categories:

- False and faulty alarms (6 projects)
- Crimes (5 projects)
- Public disturbances (10 projects)
- Family and neighborhood conflicts (4 projects)
- Conflicts between agency practices and community needs (5 projects)
- Parking and traffic problems (7 projects)
- Police and administrative problems (3 projects)

Identifying Problems. The Newport News and Baltimore County studies together revealed more than 20 different sources of information officers could use to identify problems. In both studies, however, few projects used sources other than patrol officer knowledge and observation, citizen complaints, and police department records. There were no significant differences among the three Area I precincts regarding problem identification methods.

Analyzing and Responding to Problems. There were differences among the precincts in approaches to analyzing and solving problems. Both Woodlawn and Garrison precincts tended to analyze problems by drawing on sources outside the police department (e.g., other agencies, business and resident surveys). In contrast, Wilkens officers relied almost exclusively on traditional resources (e.g., police department records, complainant interviews).

With a few exceptions, the responses to problems at Wilkens were also largely traditional, centering on selective enforcement and high visibility patrol. Solutions to several Garrison and Woodlawn projects, in contrast, involved joint community/police efforts such as holding community meetings and making changes in business practices.

Evaluating the Success of Problem-Solving Efforts. In theory, a quasi-experimental design could have been used to measure the effectiveness of most individual problem-solving projects. In practice, this would have been cumbersome and intrusive. Further, for fast-breaking problems it would have been difficult to apply before and after measures in the time allowed.

Based on such measures as reductions in calls for service, written evidence of citizen satisfaction, observed differences in conditions, and cost savings, most of the problem-solving projects undertaken were successful in meeting their stated objectives. Several projects will require further assessment over time. It would not be surprising to find a recurrence of such problems as drinking in public, for example, especially where selective enforcement was the only response.

The final report on the study includes case studies of more than 10 problem-solving projects. Among the most cost effective and easiest to resolve were projects to reduce commercial false and faulty alarms. Each repeat false alarm problem took an average of two hours of one officer's time to resolve by discussions and follow-up with the business owner. Previously, two officers may have made dozens of immediate mobile responses to the same address.

Many of the problem-solving projects illustrated a high level of effort and resourcefulness by patrol officers. One of these involved late night business at a 24-hour self-service car wash in Garrison. The disturbance did not technically violate the county's noise ordinance, but it was a problem for nearby residents. Their frequent complaints made it a problem for the police as well. The officers

assigned to the project surveyed the residents, researched legal issues, and held a community meeting. The problem was resolved when the owners erected a tall, soundproof fence.

Juvenile skateboard contests sponsored by another Garrison business bothered nearby merchants and created some traffic hazards, but the larger issue was a need for supervision and a safe area to hold the contests. To solve the problem, two officers met with the business owner and recreation officials, identified a new site, wrote and presented a proposal, and organized the clean up of an alternative site.

One problem in Wilkens precinct concerned a series of burglaries from drop trailers at a construction site. Increased patrols were ordered but the burglaries continued. Finally, the precinct crime analyst advised the business owner to park the trailers with the door ends together. No further incidents were reported after the owner followed this advice.

One question of interest was why the problem-solving approach in Area I was not applied more frequently to robberies, assaults, burglaries, and other serious crimes. More than half of the problem-solving projects in the Newport News study focused on such crimes.

In Baltimore County, trainers and administrators emphasized non-crime problems and building linkages with other agencies, residents, and businesses. In addition, the project planning group was limited to patrol and planning and research personnel, including crime analysts. In contrast, the Newport News problem-solving process was designed by a task force that involved members of specialized units such as investigations, crime scene search, vice, and crime prevention. This may have helped clarify areas of responsibility and encouraged the inclusion of more crime problems in the Newport News experiment.

After the study ended, Baltimore County planned to implement patrol problem-solving department-wide, with a continued focus on "quality of life" problems. A shift in emphasis to major crime problems would require additional training and closer coordination with specialized units. Supervisors and administrators would also need to emphasize crime problems as appropriate for problem-solving projects.

### *Leadership and Problem-Solving*

Leadership holds an important position in management theory because it helps explain how organizations change and develop. There are three characteristics of leaders that seem to dominate the recent literature on this subject: they have a vision (Peters and Austin, 1985; Schein, 1985); they can communicate their vision to the people they work with and who work for them (Kotter, 1982; Schein, 1985); and they seek to motivate others to accomplish their vision (Bennis and Nanus, 1985; Peters and Austin, 1985; Schein, 1985). Further, leadership is not solely an attribute of heads of organizations; anyone in an organization can be a leader (Bennis and Nanus, 1985).

Although this study was not designed to measure leadership, our observations of problem-solving efforts in Area I revealed three sets of evidence suggesting that leadership is important for promoting problem-solving.

The first set derives from the apparent lack of a strong relationship between time and problem-solving activities. This evidence implies that some factor other than time is needed to explain the results.

The second set comes from comparing the different problem-solving approaches used in the three precincts. There were systematic differences in the way officers in each precinct approached problems, suggesting precinct leadership and organizational culture as plausible explanations.

Dates when problem-solving efforts began in each precinct reveal a third body of evidence. The presence and absence of commanders in two precincts seems to have influenced problem-solving work. Further, problem-solving increased after the Area I major clarified his expectations for the project in January 1988.

Clearly, there are workloads that will not permit officers to address problems. In Area I, however, day shift officers seldom spent more than 30 percent of their time handling calls. Sufficient time should have been available for directed patrol problem-solving and officers did, in fact, address problems in all three precincts. Yet a substantial majority of officers indicated on before and after surveys that they did not have enough time to address problems.

Interestingly, interviews with officers seldom revealed the same concerns about time to handle their current problem-solving projects, although some felt that routinely addressing problems might not be feasible. Similarly, more than half of the supervisors interviewed said it was possible to block officer time for worthwhile projects.

It may be that perceptions of a heavy workload can be an impediment to problem-solving, but perceptions of what is appropriate police work may be more important. A strong organizational culture seems to support traditional police work (Skolnick, 1966; Rubinstein, 1973; Sanders, 1977) and traditional responses, even though these responses may be more time consuming than addressing the circumstances that give rise to problems.

Several management theorists suggest that organizational change is unlikely without leaders who understand the culture and are pushing for this change (Deal and Kennedy, 1982; Schein, 1985; Skolnick and Bayley, 1986). That problem-solving was accomplished in Area I, despite an organizational culture that was not supportive, suggests that leaders with insight into this culture were encouraging problem-solving by patrol officers.

There was also some evidence that precinct-specific influences were at work to stimulate problem-solving. Although not a hard and fast rule, in Wilkens precinct intensive patrolling was a principle mode of addressing problems, while Woodlawn and Garrison officers more frequently engaged residents and other agencies in resolving problems.

Differences between Woodlawn and Garrison in the dates problem-solving occurred suggest the importance of consistent leadership and ongoing management at the captain's level. Woodlawn officers, with an enthusiastic captain assigned to the precinct throughout the study, got off to an early start but did not initiate new projects while the captain was on a two-month leave of absence. Garrison got off to a slow start, but soon began and sustained its problem-solving efforts once a captain was permanently assigned in December 1987.

There is also evidence to suggest that some shift lieutenants were much stronger leaders of problem-solving efforts than others. These lieutenants were responsible for managing officers' time and helping them formulate action plans when needed. Garrison lieutenants appeared to most consistently supportive of problem-solving. They did not initiate much problem-solving until a permanent captain was assigned. Once they began, however, all four provided oversight on problem identification and analysis, suggested outside resources when necessary, monitored progress, and stressed the importance of complimenting officers on jobs well done.

#### *Problems Appropriate for Patrol Problem Solving*

Even when managers and executives fully support problem-solving and enough blocks of time are available, other factors must be considered in deciding which problems are appropriately addressed by officers on directed patrol. These factors

can be expected to vary with each department's unique structure, use of specialized units, policies, demographics, and organizational culture. In Baltimore County's Area I, the following were significant:

- The role of specialized units

Although few departments have specialized problem-solving units such as COPE, many have special programs (e.g., in community relations or crime prevention) with objectives to increase community participation in police activities. Patrol problem-solving can change the way officers work with these units. Increased cooperation may be needed to identify problems and avoid duplicating efforts in resolving them. In addition, if a department wants to emphasize patrol problem-solving for handling serious crimes problems, investigative units will need to become involved in planning, establishing referral procedures, training, and other areas.

- Department policies

Existing department policies may discourage or may not permit officers to adopt certain situations as problem-solving projects, even though repeat calls to an address are well known and well documented. Repeat domestic assault calls provide an example. Many departments now have policies such as Baltimore County's that require arrests by patrol, with follow-up by a special domestic assault unit. These procedures (as well as other difficulties and time demands involved in handling these cases) may have discouraged Area I officers from tackling any repeat domestic violence situations as problem-solving projects. We would not conclude, however, that such problems are inappropriate for patrol. Potential responses need not involve patrol officers as mediators or "social workers," but could include, for example, increasing enforcement efforts, improving case tracking and documentation, or improving referral procedures with the domestic assault unit.

- The scope of certain problems within the jurisdiction

When tackling problems involving large organizations (e.g., a hospital, a transit company), problem analysis should include determining whether residents of only one precinct are affected, or whether others in the jurisdiction experience the same problem. In Woodlawn precinct, for example, an officer tried to resolve a problem involving a hospital's procedures for psychological evaluations. The officer learned later that headquarters was also trying to address this county-wide problem. The individual officer was able to play an important role in addressing the problem, but might have experienced fewer frustrations had the effort been coordinated from the beginning.

■ The complexity of the problems

The Area I precinct commanders felt officers should be introduced to problem-solving through relatively simple projects, such as those involving false alarms. There are benefits to proceeding carefully and experiencing early successes. However, based on the Baltimore County and Newport News experiences, we would not advocate setting limits based on how complicated a problem might appear.

Working within a problem-oriented system may be new to most officers, but many officers already have problem-solving experience and skills. The first Area I project, for example, involved groups of juveniles trespassing, drinking, and creating traffic and parking problems at a privately owned quarry. Woodlawn patrol officers worked with community relations, COPE, and the traffic unit; met with residents and the quarry owner; and increased enforcement activities to resolve the problem. The car wash problem in Garrison, another early project, involved resident surveys, a community meeting, and legal research.

■ Officers' attitudes, interests, and special skills

Research on organizational culture and on problem-oriented policing suggests that some officers and supervisors can be expected to resist directed patrol problem-solving. This may be especially true when the emphasis is on non-crime

problems. Yet, we were encouraged that on the follow-up survey in Area I, 27 percent of patrol officers and supervisors said they would like more opportunities to lead a problem-solving project.

Officers who want to lead projects should be encouraged and supported. Over time, most officers could participate in the problem-solving process in a way that uses their strengths. Officers who do not have the skills to facilitate a community meeting, for example, might excel in handling data analysis, selective enforcement, surveillance, or some other aspect of a coordinated effort.

#### RECOMMENDATIONS FOR PATROL PROBLEM-SOLVING

At the end of the study, department administrators reaffirmed their intention to continue problem-solving, and began developing procedures for department-wide implementation. The Area I major expected each of the three precincts to continue, with at least one active problem-solving project per shift.

Area I supervisors offered the following key recommendations to other departments:

- Place a strong emphasis on patrol officer training.
- Develop a logical implementation plan with specific milestones.
- Be prepared for difficulties in coordinating problem-solving projects if the department has rotating shifts.
- Assign a commander, e.g., a captain from patrol headquarters, whose major responsibility is to develop and monitor problem-solving. An individual at this level is needed to "assume ownership" of the effort and ensure accountability.

There are many other operational details that must, of course, be addressed. These include ensuring the credibility and expertise of the trainers; and developing forms that capture essential information, thus allowing supervisors to monitor and assist projects and evaluate results.

Department-wide problem-solving is also likely to require changes in selecting and training new officers. Applicants will need to be made aware of the department's community and problem-solving orientation. Candidates' potential to assist in this regard will need to be weighed accordingly in the selection process. Recruit training should include problem-solving instruction and give recruits a clear understanding of the department's expectations, a point emphasized by many Area I lieutenants.

Finally, executives committed to problem-solving should be prepared to provide incentives for consistent and competent work. Recognition is essential, and rewards, including monetary rewards, will need to be considered. Overall, rewards will need to reflect the value the department says it places on the effort. The department must be aware of how rewards for problem-solving compare to those now given for more traditional police work.

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