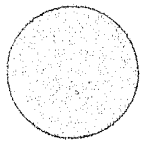

SOLVING COMMUNITY PROBLEMS THROUGH POLICE DIRECTED PATROL

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(2500-word Summary)

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(Approximately 2500 words)

INTRODUCTION

Although problem-oriented policing has been discussed for more than ten years, few studies have been conducted. Recently, the Baltimore County, Maryland, Police Department introduced problem-oriented policing to about 350 officers in three patrol precincts. Under a grant from the National Institute of Justice, the Institute for Law and Justice (ILJ) and the Police Executive Research Forum (the Forum) evaluated this effort.

Problem-oriented policing has been closely linked to community policing because of mutual goals to increase citizen/patrol officer interactions. The problem-solving process begins by encouraging officers to view related incidents as symptoms of larger problems. Officers--often working closely with community members--systematically identify, analyze, and resolve problems and evaluate results (Eck and Spelman, 1977).

Programs developed under the community policing banner include foot patrols, neighborhood police offices, and a variety of special units that work closely with residents. These programs may or may not incorporate the problem-solving process.

Many departments are now concerned about making patrol officers *department-wide* more responsive to community and business problems. They are interested in what Houston Police Chief Lee Brown calls "Phase II" of community policing: taking it beyond the province of a few special units and making it "the dominant philosophy throughout the department (Brown, 1989)."

Baltimore County provides an excellent example of a department making such a transition. The department began problem-solving with the Citizen Oriented Police Enforcement (COPE) unit, which handles fear of crime problems; and has tried other community-oriented programs over the years. With the current experiment, department administrators began their move to incorporate problem-solving into the patrol function throughout the department.

This experiment was designed to link several patrol management practices needed to support department-wide problem-oriented policing. These include using differential police response (DPR) methods (McEwen, et. al., 1986), expanding the crime analysis function, and managing directed patrol time. The project results also suggest the importance of other factors--especially leadership and organizational culture--which the study was not designed to measure, but which should be considered in future research and implementation.

PROJECT OBJECTIVES AND EVALUATION DESIGN

Background

Baltimore County police handle a mix of urban, suburban, and rural policing problems. In 1988, the police department had 1,513 sworn and 483 civilian employees serving 677,600 residents. The Area I patrol district, which includes Woodlawn, Garrison, and Wilkens precincts, participated in the study. The Area commander is a major and the three precinct commanders are captains. The department has a central crime analysis unit, and a crime analyst is assigned to each precinct.

Project Objectives and Major Tasks

Area I command personnel developed three major objectives for implementing the project. These objectives and the major tasks undertaken to achieve them are explained below:

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

This objective was accomplished by employing and training four police service officers (PSOs) to handle minor, non-emergency calls and other duties that do not require sworn authority.

In addition, the department already had a well established Telephone Report Unit (TRU). During a six month period in 1988, the TRU handled more than 3,000 calls that might otherwise have been dispatched to Area I officers.

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

Developing analytical tools for patrol included determining repeat call locations; developing forms to monitor problem-solving efforts; training Area I supervisors, crime analysts, and patrol officers in the problem-solving process; and encouraging an expanded role for crime analysts as "problem analysts."

- **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. Department administrators and Area I command staff were responsible for promoting the problem-solving approach and providing overall direction. Shift lieutenants and sergeants had daily responsibility for managing officer time and problem-solving projects.

Hypotheses Tested

The study in Area I tested the following three hypotheses with respect to the influence of patrol management on problem-solving:

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.

It was 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 agency.

Project Interventions

Two interventions were common to all three Area I precincts: training for all officers and supervisors in problem-solving, and direction from the command staff to solve problems while on directed patrol.

To test the time-effectiveness hypothesis, all four PSOs were assigned to Woodlawn precinct. 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.

PSOs were not assigned to Garrison precinct, but Garrison supervisors did have the authority to set up cars for problem-solving activities. This enabled the evaluators to assess the impact of patrol management on problem-solving.

No PSOs were assigned to Wilkens precinct, and supervisors were not authorized to set up cars for directed patrol problem-solving. 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.

MAJOR FINDINGS

Time for Problem-Solving on Directed Patrol

One of the main questions of interest was whether patrol officers have time to solve problems and still respond to calls. To address this question, we first analyzed Computer Aided Dispatch (CAD) data to determine 1) the percentage of time patrol units spend on calls 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 CAD system did not capture information on assists, precinct command personnel provided estimates. 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.
- Enough *blocks of time* (for example, 30 to 45 minutes) were available to handle problem-solving assignments.
- Non-call for service time is not always available for problem-solving. Competing interests for officers' time must be considered.

It is important to note that in most departments, as in Baltimore County, the CAD system does not capture information on all patrol activities. In Baltimore County, the CAD data did not reflect time spent on 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 will be productive for problem-solving; however, with workloads comparable to those in Area I, many problem-solving activities can be performed.

Police Service Officers.

All three Area I precincts had time freed up because of DPR (primarily the Telephone Report Unit), 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 540 hours per month to the officers.
- Surveys showed that more than 80 percent of Area I personnel 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.

Despite these and other benefits derived from employing PSOs, a considerable amount of the time they freed up at Woodlawn was not channeled into problem-solving.

In addition, about three-fourths of Area I personnel reported on surveys that their workloads did not allow enough time for problem-solving. Since call workloads were not extremely high, we needed to explore other reasons for reports of insufficient time. During interviews, more than half the supervisors said it was possible to block officer time for worthwhile projects. While officers expressed few concerns about time to complete current projects, some were not sure time would be available after the study ended.

Problem-Solving Activity

Despite concerns about time, a total of 40 problem-solving projects were undertaken from May 1987 through June 30, 1988. There were 14 projects in Woodlawn precinct, 14 in Wilkens, and 12 in Garrison. Problem-solving began slowly at Garrison because of two changes in precinct command. Once a permanent captain was assigned, problem-solving increased and continued steadily.

Of the 40 problem-solving projects, 10 dealt with public disturbances such as drinking in public and vagrants loitering. Six projects involved reducing calls for false and faulty alarms. Crime problems were the focus of five projects; of these, two dealt with suspected drug activity, two with thefts, and one with burglary.

Five projects dealt with conflicts between agency practices and community needs. For example, one of these concerned a group home that waited too long to report runaways; another involved a hospital's emergency psychological evaluation procedures, which sometimes kept officers out of service for several hours.

Four additional projects dealt with family and neighbor conflicts. Seven projects were related to traffic and parking problems, and three dealt with police administrative matters.

Identifying Problems. Although there are probably more than 20 different information sources officers could use to identify problems, most relied on their own experiences and observations, 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 the types of problems addressed and in the methods used to analyze and solve these problems. Problems related to agency practices and family disputes were concentrated in Woodlawn and Garrison precincts. Both Woodlawn and Garrison officers tended to analyze these and other problems by drawing on sources outside the police department (e.g., other agencies, business and resident surveys). In contrast, Wilkens officers focused on disturbance and crime problems, and their analyses relied almost exclusively on traditional resources (e.g., police department records, complainant interviews).

With a few exceptions, the responses at Wilkens were also largely traditional, centering on selective enforcement and high visibility patrol. Solutions to Garrison and Woodlawn problems, in contrast, were more likely to involve joint community/police efforts. Officers held community meetings;

negotiated changes in business practices; and for some problems, combined traditional enforcement tactics with action by citizen groups, businesses, and other agencies.

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.

Instead, success was determined by using 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. Of course, several projects will require further assessment over time.

Among the most cost effective projects were those that reduced commercial false alarms. On average, each repeat false alarm problem took less than two hours of one officer's time to resolve. The officer simply paid a special visit to the business owner to discuss the problem. In each instance, the owner cooperated, the alarm was repaired, and false alarm calls were reduced or eliminated. Previously, two cars responded to dozens of false alarm calls at these addresses.

Many of the problem-solving projects illustrated a high level of resourcefulness by patrol officers. One of these involved late night business at a 24-hour self-service car wash in Garrison. The activity did not 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. To solve the

problem, three officers surveyed the residents, researched legal issues, and held a community meeting. The problem was resolved when the car wash owners erected a tall, soundproof fence.

Juvenile skateboard contests sponsored by another Garrison business bothered nearby merchants and created traffic hazards. To solve the problem, two officers met with the business owner and county recreation officials, identified a new site for the contests, wrote and presented a proposal, and organized youth to clean up the new 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.

Leadership and Organizational Culture

Although this study was not designed to measure leadership, there are several indications that leadership is important for promoting problem-solving. First, there was an apparent lack of a strong relationship between time and problem-solving activities. Second, there were systematic differences in the way officers in each precinct approached problems, suggesting precinct leadership and organizational culture as plausible explanations. Finally, personnel changes in key positions seem to have influenced the dates problem-solving began and the amount of problem-solving work undertaken.

A strong organizational culture tends to support traditional police work (Skolnick, 1966; Rubinstein, 1973; Sanders, 1977) even when new approaches can save time and solve 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 always supportive, suggests that leaders with insight into this culture were encouraging problem-solving.

It is important to remember that in police agencies, as in other organizations, leadership is not the sole province of top administrators. Some shift lieutenants were strong leaders of problem-solving efforts, with Garrison lieutenants the most consistently supportive. In Wilkens precinct, the crime analyst was especially active in identifying and analyzing problems.

Finally, individual officers were catalysts for community action on many problem-solving projects. Working within a problem-oriented *system* may be new to most officers, but many already have problem-solving experience and skills. The first Area I project, for example, involved groups of juveniles drinking at a privately owned quarry. Woodlawn officers resolved the problem by working with community relations, COPE, and the traffic unit, meeting with residents and the quarry owner; and increasing enforcement measures.

IMPLICATIONS FOR FUTURE PROBLEM-SOLVING

The Baltimore County experiment demonstrated that problem-oriented policing can produce many significant benefits for the police department and the community. At the same time, it confirmed that the philosophy is much simpler to understand than it is to organize and implement on a large scale.

As a first step, other departments interested in agency-wide problem-solving must ensure that officers have blocks of time available. This may mean not only

diverting and managing calls, but also relieving officers of administrative work (e.g., extensive report-writing, servicing vehicles, and similar tasks) that competes with problem-solving for directed patrol time.

If sufficient time is available, the problem-solving process has considerable potential for helping supervisors manage directed patrol time. This may be especially true in departments with a community policing emphasis. Many police executives are concerned that community policing may undermine officer accountability (Kelling, et. al., 1988). A problem-solving system can help manage the increased officer discretion that is necessarily part of any community policing effort.

At the end of the study, Baltimore County police administrators reaffirmed their intention to implement patrol problem-solving department-wide, with a continued focus on "quality of life" problems. Although some officers and supervisors may resist directed patrol problem-solving, others can be expected to be enthusiastic. In Area I, 27 percent of patrol officers and supervisors reported they would like more opportunities to *lead* problem-solving projects. The study suggests that identifying and supporting leaders--at all levels--may be just as important as developing management controls if the philosophy is to succeed in the long term.

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