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## ☉ EFFECTIVE COMMUNITY POLICING PERFORMANCE MEASURES

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### ☉ Abstract

As the philosophy of policing moves from a traditional to a community-oriented approach, performance measures must shift as well. Unlike the typical police performance measures of arrest and crime rates found in traditional police philosophies, community-oriented policing performance measures are more general and tend to measure the extent to which police affect the quality of life in the communities they serve as well as the problems they solve. This manuscript begins the process of developing effective community policing performance measures and presents three case studies through which objectives and performance measures are conceptualized.

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Policing in the United States has gone through several iterations or paradigm changes, but the current, popular philosophies of policing share a great deal with those of the past. During the reform era of policing (roughly 1920–1960), the police expanded on the military style of organization and administration, improved response technology, and attempted to instill uniformity in police practice through policies, training, and supervision. The reform era sought to build a foundation for policing and to raise the status of the police from political operatives or hacks to professionals (Greene, 2000, p. 306). Unfortunately, this “professionalization” movement took a toll on police-community relations. In the early 1970s, policing philosophies began to experiment with ways that would put the police into closer interaction with the public. Beginning with community and problem-solving policing (Flynn, 1998; Goldstein, 1979), the police sought public support, while at the same time playing a more preventive role in community public safety (Greene, 2000), a policing philosophy much like that of the early 19<sup>th</sup> century America.

As the standard for policing moves from the traditional model to focus on community and problem-solving, the measurement and evaluation of police performance must change accordingly. Factors used to measure and evaluate the way police departments accomplish their mission are evolving from traditional measurements of police productivity to complex measures of the extent to which the police affect quality of life in the communities they serve (Langworthy, 1998), and the extent to which they solve problems (Goldstein, 1990). This article will give a brief overview of the measurement of policing and will explain how measuring the proper activities can help improve policing. Because there are no uniform parameters for developing performance measures for all situations, examples of problem-solving techniques and their performance measures will be presented.

### ☒ Measuring Police Activities

Traditional police departments measure their performance only in terms of *productivity* by counting number of arrests, number of citations, the amount of contraband they seize, number of calls for police service, average response times, etc. While those types of measures are simple and straightforward and are legitimate to measure specific police activities, there is no clear consensus that a cause-and-effect relationship links this type of police productivity to the reduction in crime or the improvement of public safety (see O’Brien, 1996). Traditional police departments may be efficient in apprehending criminals, but not necessarily effective at accomplishing the police mission of reducing crime and improving the quality of life (Alpert & Moore, 1993).

Agencies that focus on community policing take a far different approach to performance measurement than agencies that are more traditional. In theory, the different approaches are designed to produce different results (Bayley, 1994). It is beyond the scope of this paper to identify or discuss the several variants of community policing. Suffice it to say that agencies that practice community policing may report some of the traditional measures of arrests and response times, but focus on measuring police performance in terms of *quality* rather than *productivity*. Quality, in simple terms, is conformance to *customer* needs, a fundamental component of community policing wherein the customer or consumer is the community. Quality, in this context, translates to “quality of life,” which involves a multitude of conditions and factors that affect daily life in a community (Wilson & Kelling, 1982). Quality of life is as much a subjective state of well-being in the collective mind of community as it is a measure of police performance. Nebulous as that may sound, community policing hypothesizes a cause-and-effect relationship between police performance and quality of life (Trojanowicz & Bucqueroux, 1990).

There are fundamental differences between the way traditional policing and community policing agencies view police performance. Community policing minimizes the position that by arresting criminals, recovering stolen property, and seizing contraband, among other tactics, the police can effect lasting reductions in crime rates (Mastrofski, Worden, & Snipes, 1995). Instead, community policing proponents profess that if the police solve problems of disorder, (i.e., breakdowns in social controls and deterioration in environmental conditions), lower rates of crime will follow. Therefore, while the mission of the police remains the same in community policing as in traditional policing, community policing measures performance in terms of improvement in quality of life and involvement in problem-solving activities (e.g., Greene, 2000, pp. 358–360). In particular, a major concern for police administrators is the new role that supervisors will have to take in monitoring their officers’ performance (see Weisburd, McElroy, & Hardyman, 1988).

While community policing employs a methodical *problem-solving* process, the eventual solution of identified problems is not all that is important. The ancillary components of the problem-solving effort—factors such as improved communication among community members and between community members and the police, enhanced community trust and confidence in the police, and the involvement of community members in solving problems that affect their quality of life—are as important as the number of arrests in the traditional model. Thus, community policing officers are encouraged to develop their own performance measures in concert with their community partners and to keep track of their problem-solving efforts and results. This responsibility requires that good com-

munity policing officers be more resourceful and creative than those practicing the traditional model of policing (Alpert, Kenney, & Oettemier, 2000).

One of the more significant issues confronting community and problem-oriented policing is the need to develop and implement performance standards that will reinforce the shift from traditional policing to these newer policing philosophies (Greene, 2000, pp. 358–359). Unfortunately, the literature on performance measures for policing in general and community policing in particular is scarce. It is clear, however, that such a shift in performance measurement would require a significant change in the duties and responsibilities of the first-line supervisors. These managers would have to identify the limits of discretion, create specific performance measures, and ensure that the measures are met (Alpert et al., 2000).

### ☒ The SARA Model

Many years after ideas about community policing were generated, a set of problem-solving strategies were produced and a model called SARA (Scanning, Analysis, Response, Assessment) was developed (Eck & Spelman, 1987). The model involves four cumulative and reciprocal steps. In the scanning stage, officers identify an issue that is worthy of problem-solving. In the analysis stage, officers collect information from sources both within and outside of their agency. In the response stage, the information gathered in the analysis stage is used to develop and implement solutions. With the goal of solving the problem, the response must include a series of objectives (i.e., actions which if accomplished will contribute to solving the problem). The key at this point in the process is to establish each objective so that if it is accomplished, it will improve quality of life in some way while working to solve the problem. In the assessment stage, officers evaluate the effectiveness of the response. Using the results from the assessment stage, officers may revise the response, collect more data, or redefine the problem. In sum, when community policing officers and their community partners engage in a problem-solving strategy, they must keep in mind their two-dimensional goal: solve the problem and improve quality of life.

Objectives established in the problem-solving process vary depending upon the nature of each problem, encouraging officers and their community partners to be resourceful, creative, and even unconventional in developing solutions to problems. There likely will be no standard formula for measuring objectives or the actions tailored to reduce, minimize, or solve a specific and observed problem.

If each of several objectives directed toward the goal of solving a problem is effective in improving quality of life by some small measure, there will likely be

an improvement in the quality of life. It is important to view each objective as both a contributing factor toward solving the problem, as well as an independent means of improving quality of life in the community.

Some work has been done in the area of police performance research (see Ostrom et al., 1978, and Alpert & Moore, 1993), and sets of performance indicators have been developed (Bayley, 1994, p. 97). Our approach, however, focuses directly on problem-solving techniques. Three examples that show how to develop and implement valid performance measures for problem-solving initiatives follow.

### ☒ Example 1: The Burglary Problem

Suppose there is a high rate of residential burglaries in a community policing area and a community policing officer and his/her community partners identify it as a problem they will attempt to solve. Analysis shows that most of the burglaries occur during the day, methods of entry are crude, suggesting that they are not professional burglaries, and graffiti and criminal mischief inside some victim residences suggest that the perpetrators are likely to be juveniles. Some articles of property taken in recent burglaries have surfaced in local pawn shops.

Operating on the hypothesis that the perpetrators are juveniles, the officer investigates further and finds a high truancy rate at both a local middle school and high school. The officer and community conclude that one likely burglary scenario is that juveniles who are truant from school are roaming the neighborhood during school hours and committing burglaries of opportunity.

One of the tactics established to combat the problem is to gather up truant youths and deliver them to school. While this particular tactic may not, by itself, solve the burglary problem, to the extent that it is accomplished, there will be several important and measurable activities that can be reinforced by a partnership between the police and the schools:

1. Rather than roaming the neighborhood, youths will be returned to school.
2. Community members will anonymously call the police if they see school-age children out of school.
3. Police will return the youths to school.
4. Youths will learn that they cannot disobey school rules without being discovered.
5. Principals and parents will be told about the truant youths and will attempt to make school a more desirable place to be.
6. The police will learn, for investigative purposes, the identity of youths who are potentially involved in burglaries or other crimes during the day.

7. The outcome of the investigations will improve.
8. The number of burglaries will be reduced.

### *Proposed Solution*

The officer and community have established a goal of reducing the burglary rate in the neighborhood. Together, they established the following activities to reach their goal:

1. Officers will initiate a series of truancy sweeps by cruising the target neighborhood and adjacent areas during school hours. Community members will participate by anonymously calling the police to advise whenever they see school-age children in the neighborhood during school hours. The police will stop youths of school age and those found to be truant will be returned to school.
2. Officers will have latent fingerprints recovered from burglarized residences in the target neighborhood compared with available standard fingerprints of youths who have been found to be truant.
3. Officers will compile lists of stolen property from burglaries in the target area and visit local pawn shops and second-hand dealers looking for the stolen property.
4. The community policing officer will arrange for a burglary prevention presentation for the community group and watch group.
5. The community policing officer will arrange for a time and location where area residents may bring valuable household items to have them etched with identifying numbers by police officers.
6. The community policing officer will compile a list of individuals residing in the vicinity of the target area who are on parole, probation, or community control and will compare their fingerprints with latent prints retrieved from burglary scenes in the area. In addition, he/she will make contact with all of the parole, probation, and community control supervisors, advise them of the burglary problem, and collaborate with them on monitoring the activities of those individuals.
7. The community group will establish a Neighborhood Watch group. The officer will instruct them and they will call the police to report all suspicious incidents and persons in the neighborhood.
8. The community group and officer will jointly design a flyer warning local residents about the burglary problem, suggesting ways they can target-harden their homes, and urging them to report suspicious incidents and activities to the police. Community group members will distribute copies of the flyer.
9. Police officials will work with school officials to determine “why” the

youths are not attending schools and, in turn, develop methods by which they can make the schools a more desirable place to be.

10. A public survey will be created to determine if citizens notice and approve changes, as well as if the changes had an impact on their perceived quality of life. This survey could be citizen interviews and/or objective indicators of quality of life in the neighborhood (i.e., signs of deterioration). This process will encourage citizen feedback to the police.

Beyond the dimension of quality of life, the tactics in Example 1 are designed to have a measurable cause-and-effect impact on the problem. For example, the second objective provides for officers to compare the standard fingerprints of truants to latent fingerprints lifted from the burglary scenes. It is possible to measure the number of comparisons conducted, the number of positive identifications, the ratio of positive identifications to comparisons, and the number of arrests resulting from the positive identifications. Presumably several of the burglaries will be solved, and court and community control actions will prevent the burglars from committing further burglaries. In this scenario, the objective is likely to have a positive (deterrent) impact on the problem.

In order to measure performance relative to the quality dimension of an objective, it is necessary to quantify *expected outcomes*. To measure the cause-and-effect dimension, it is necessary to measure the number of *tasks* performed to accomplish the objective. The final evaluation of the effectiveness of the problem-solving strategy is an evaluation of a composite of task measurement and expected outcomes.

### *Expected Outcomes*

When police/community partners establish an objective, they expect that if it is accomplished, there will be a positive outcome (i.e., an event(s) that will contribute to solving the intended problem and public approval of it). To be effective, the expectations must be feasible, achievable, and documented so it is possible to evaluate performance later. In the spirit of conforming to subjective customer requirements, it is possible to measure the extent to which expectations have been accomplished by simply making a written list of them in advance. The list can later be evaluated by comparing whatever outcomes have actually occurred with the original list of expectations.

It is helpful when developing lists of expected outcomes to determine ranges of acceptability. If police/community partners determine in advance for each objective both what the lowest expected outcome (referred to as the *lower control limit*) and highest expected outcome (referred to as the *upper control limit*) will be, it will be simple to determine later if an outcome is within the acceptable range (i.e., between the lower and upper control limits).

While the process of listing and later comparing outcomes may seem somewhat unscientific, it is likely to provide a reasonable measure of quality. Keeping in mind that *quality is conformance to customer expectations*, the original list of expected outcomes is a list of customer preferences for that objective. The extent to which the requirements are met, therefore, is the measure of quality. Moreover, since members of the community are involved in setting and evaluating accomplishment of the objectives, they are more likely to develop realistic expectations of the police.

### *Tasks*

Measures of quality focus primarily on outcomes. If, however, expected outcomes are not achieved at an acceptable level, it is necessary to pinpoint specific reasons why they were not achieved. Measuring the *effectiveness* of each objective is different than measuring the quality. Whereas measuring quality focuses on the process itself, measuring effectiveness focuses on the extent to which each objective achieves the goal or solves the problem. In order to measure effectiveness, it is important to develop measures that are truly valid (i.e., measure what they are intended to measure), and reliable (i.e., provide consistent measurement under varying conditions and locations). In addition, to be ethical, the measures must also be designed to capture the essence of a sincere effort to solve the problem at hand. A useful way to measure the effectiveness of an objective is to break it down into the series of individual tasks and count the number of times the officer and/or community partners perform each task. Once the raw numbers are available, the number of tasks to outcomes should be determined, and ratios and/or averages should be used to express the level of effectiveness. For example, using the burglary example, if the raw number of standard fingerprints taken from truants shows a high ratio of positive identifications to latent fingerprints lifted at the burglary scenes, the task of comparing that group of standard prints to the latent prints can be considered highly effective. If the ratio is zero or very low, that particular task can be considered ineffective.

### ☒ Example 2: Prostitution Problem

A community policing officer, local residents, and business operators have established that street-level prostitution and all of its associated criminal activity in a given area is a problem. An analysis of the problem reveals that although individual prostitutes have been arrested and deterred from returning to the area in the past, the area is widely known as a place where prostitutes can be found; in

essence, the area has become an illicit marketplace. Customers (johns) continually return to the area looking for prostitutes, and because prostitutes throughout the region are aware of the johns, different prostitutes use the area and the cycle becomes self-perpetuating.

### *Proposed Solution*

The officer and community members have determined that the solution to the prostitution problem is to eliminate the area's reputation as a market for prostitution. They have established the following tactics to reach the goal:

1. Officers will conduct enforcement operations to arrest prostitutes and their customers.
2. Officers will interview all arrestees and advise them that the police will be seeking enhanced penalties and fines for repeat offenders found in this particular area.
3. Officers will appear in court when repeat offenders from this area appear, advise the judge of the problem and community concerns, and request enhanced penalties.
4. Officers will cause inspections and code enforcement on any establishments in the area that appear to be used for prostitution.
5. Officers will, whenever legally possible, confiscate vehicles used by johns in the transaction of prostitution activities.
6. Community members will establish a neighborhood watch group and will call the police each time their members see activity they believe is a prostitute stopping cars or pedestrians, or engaging in sex acts in cars in the area. Also, officers will investigate each call related to prostitution.
7. Community members will be present and join with the police in announcing to the news media that they will no longer tolerate prostitution in the neighborhood and they will conduct pertinent media interviews.

### *Performance Measures*

Table 1 lists different tactics and their respective performance measures for the prostitution problem. The effectiveness of some types of tactics and outcomes is best expressed and measured in terms of averages (e.g., average speed, age, average rate of expenditure, average offender, etc.). Although averages can be expressed in a number of different ways, any one of the three types of averages (mean, median, mode) can be used, depending upon the type of task to be measured for evaluation. The next example illustrates the use of averages as performance measures by themselves and in combination with the other forms of measurement.

☒ Table 1

Example of Performance Measures for Prostitution

Strategy	Performance Measures
Enforcement operations	Number of operations Number of prostitutes arrested Number of customers arrested Ratio of convictions to arrests
Interviews of arrestees	Number of interviews Ratio of interviewees who return to area
Court appearances	Number of appearances Ratio of convictions to enhanced penalties
Form Neighborhood Watch	Yes/No
Neighborhood Watch calls*	Number of calls per week Ratio of investigations to total calls Ratio of arrests to investigations
Media release	Yes/No Number of interviews Number of persons providing feedback
Code enforcement	Number of inspections Ratio of citations to inspections Ratio of violations corrected to inspections
Vehicle confiscations	Number of confiscations Ratio of confiscations to arrests Median value of vehicles confiscated

\*Although not employed by most agencies, linking calls for service to performance measurement is important because such data may more accurately reflect community concerns about crime and disorder or other things that disturb the social fabric of the community (Greene, 2000, p. 359).

### 📌 Example 3: Speeding Problem

In an area served by a community policing officer, a tragic accident has occurred. A small child crossing a street in a school speed zone adjacent to his school was struck and critically injured by a speeding automobile. Local parents and residents are outraged and they have made it clear to the community policing officer serving their neighborhood that speeding and other traffic violations in local school zones is a serious problem and that children are endangered by it daily. The officer concurs and together the officer and members of the community resolve to solve the problem.

After engaging in data collection with the departmental traffic unit, the community policing officer learns that research concerning past traffic problems showed that a high percentage of the drivers who travel through a given area or intersection violate the speed limit during the same hours daily. The officer reasons that by conducting intense traffic enforcement at a given location for a two-week period, it is possible to reduce the average number of violations in the area for a period of up to six months.

#### *Solution*

The officer and community partners have established a goal of reducing the average speed of vehicles through school speed zones in the area to the posted speed limit. They have agreed to focus an intervention on what they consider to be the school zone with the worst continual violations, and when they arrive at a strategy that is effective, they will extrapolate it to the other school zones. Together they have established the following objectives to reach their goal (i.e., solve the problem):

1. The community policing officer will discretely deploy a speed measurement device in the target school zone for one week to determine the average vehicle speed through the zone with no enforcement present. If the average speed is above the posted limit, the solution will proceed to the following objectives.
2. Once the average speed is determined, officers will conduct intensive traffic enforcement in the target school zone for a two-week period. The officers will use their own discretion as to whether to issue citations or warnings, but all traffic stops and the outcomes (warnings and citations) will be documented.
3. The community group will design a flyer describing the recent accident and the extent of the overall speeding problem, and it will ask drivers to cooperate by complying with speed zones while traveling through the area, particularly during school hours. The police will distribute copies of the

flyers to all violators who are stopped, and copies will be distributed to students at the school for their parents.

4. After the enforcement period has been concluded, the officer will repeat the first objective. If the average speed has not been sufficiently reduced, additional enforcement and preventative measures will be implemented. If the average speed has been significantly reduced, the officer will deploy a speed measurement device to measure the average speed one week a month for the remainder of the school year. The officer will share the results with the community group.

*Performance Measures*

Table 2 lists different objectives and their respective performance measures for the speeding problem. The overall objective is to reduce crashes, a rarer event than speeding. Thus the ultimate or final measure is number of crashes; however, the intermediate measures listed in the table should have a significant impact on the number of crashes.

☒ Table 2

Example of Performance Measures for Speeding

Strategy	Performance Measures
Determine median speed baseline	Number of days of measurement Number of vehicles per day High speed/Low speed Median speed
Enforce speed limit	Number of vehicles stopped per day Speed of vehicles stopped Number of citations issued Number of warnings issued
Design and distribute fliers	Number of fliers distributed To violators To students
Follow up speed measurements	Number of days of measurement Number of vehicles per day High speed/Low speed Median speed

## 🔍 Conclusion

The development and evaluation of community-oriented policing and problem-solving strategies can be enhanced by identifying and measuring appropriate performance objectives. Creating appropriate measures is important because they enable managers to give officers routine feedback about how well they are doing, and to convey to the department, and to the general public, the reality of the agency's values and expectations (Skogan & Hartnett, 1997, p.109). At the same time, it is important not to abandon some of the traditional policing performance measures. Rather, creative measures should be supplemented with the outcomes that community and problem-solving philosophies advocate. In addition to reducing crime, other community policing performance measures should focus on improvement in the quality of life, as well as the solving of a pressing community problem.

The process for measuring the performance of a community policing initiative begins with establishing goals and objectives during the initial problem-solving stages. For each problem, a unique action plan is developed with a series of strategies and objectives designed to solve the problem. For each objective, a list of expected outcomes is developed and tasks required to accomplish the objective are outlined. The action plan is then implemented, outcomes are tracked, and the number of times that all tasks are performed during the initial implementation period are measured.

At the conclusion of the initial implementation period, the accomplishment of each objective is measured in two ways. First, the actual outcomes are compared with the advance list of expected outcomes to determine the level of quality of the output. Second, the number of times each task was performed is compared to the outcomes relevant to the task, and the comparisons are expressed in terms of ratios and/or averages. The first result will be a measure of quality, while the second result will be a measure of effectiveness. A summary of the quality and effectiveness of the accomplishment of each objective can then be combined to provide performance measures of the problem-solving effort.

This type of approach moves police performance measures beyond the usual arrest/crime rate outcomes associated with traditional policing. In addition, it fosters cooperation between police managers and researchers who can evaluate performance indicators on policing crime, the quality of life, and problem solving. Clearly there are limitations to the type of measurement suggested above. First, our examples are for specific problems and not general community concerns. Second, no individual officer measures have been identified or discussed. Third, we have not addressed the comparison of measures within tasks. However, our approach can begin the difficult transition into the measurement of

appropriate performance indicators during the problem-solving process and not just at its culmination. Finally, the role of the supervisor must be expanded to measure the quality of officer performance.

The intent of this paper has been to outline several examples of objectively based police performance measures at the organizational level and to show how these measures can be supported by the citizens who are served by the police. As Bayley (1994, p. 95) suggests, citizen monitoring of police performance should revolve around: (1) public satisfaction with police service, (2) adequacy of patrol coverage for the volume of calls for service, (3) satisfaction of crime victims with the handling of their cases, (4) ratios of crimes detected to crimes committed, (5) promptness in answering telephone calls, (6) caller satisfaction with actions taken, (7) speed of emergency responses, (8) satisfaction of all people having contact with the police, and (9) criticism of police. Use of citizen feedback is important within the context of police performance indicators because public perceptions incur behavioral consequences that affect quality of life. In sum, police performance needs to be separated and measured at several levels.

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