STAFFING THE "SMALL" DEPARTMENT: TAKING STOCK OF EXISITING BENCHMARKS AND PROMISING APPROACHES

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Staffing police departments is a continuous challenge and one that has become more complex in recent years. Immediately prior to the onset of the 2008 recession, police agencies had difficulty recruiting officers and responded by implementing a number of creative recruitment incentives. Shortly thereafter, the depressed economy caused police agencies to implement hiring freezes, furloughs, layoffs, salary and benefit cutbacks, and retirement incentives. Such difficulties spurred 7,272 applications to the Community Oriented Policing Services (COPS) Hiring Program, requesting $8.3 billion to support more than 39,000 sworn-officer positions.[1] Altogether, both the supply of and demand for qualified officers are changing in a time of increasing attrition, expanding law enforcement responsibilities, and decreasing resources.[2]

While agencies give much attention to recruitment and retention, they often overlook a more fundamental question: *How many police officers does a particular agency need?* Answering this question is essential to any discussion about managing workforce levels, regardless of whether there is a shortage of qualified officers or an inability to support previous staffing levels. Put another way, what number of officers would help an agency most cost-effectively meet the demands placed on it? This is a fundamentally different question than how many officers does a community want or can a community support. Yet answering the need question effectively frames a discussion about *want and affordability*.

Unfortunately, law enforcement administrators have few resources to guide them in determining the number of officers they need. To be sure, there are multiple approaches to answering this question, ranging from the simple to the complex, each with a range of advantages, disadvantages, and assumptions. Most of the methods developed to help agencies determine the appropriate number of officers that are needed are designed for large communities and are not very well suited for agencies serving small communities. In this article, the authors describe an approach to staffing for small agencies, beginning by reviewing some of the methods currently in use.

The sections that follow highlight common staffing approaches and demonstrate how agencies may develop and use a workload-based assessment of patrol staffing needs that incorporates performance objectives for discretionary time. Where possible, workload-based approaches are superior to others in that they can help provide a better and more objective way to determine staffing needs. Additionally, comprehensive assessments for patrol help to answer a host of critical questions regarding resource allocation and deployment.

Typical Approaches to Staffing Allocation

Traditionally, there have been four basic approaches to determining workforce levels: per capita, minimum staffing, authorized level, and workload-based. Each differs in its assumptions, ease of calculation, usefulness, validity, and efficiency. A fifth approach, based on officer coverage, can help determine staffing needs in communities with low call volumes. Each is reviewed below to provide context for developing an evidence-based approach to police staffing.

The Per-Capita Approach

Many police agencies have used their resident population to estimate the number of officers a community needs. The *per capita* method compares the number of officers with the population of a jurisdiction. To determine an optimum number of officers per population—that is, an optimum officer rate—an agency may compare its rate to that of other regional jurisdictions or to peer agencies of a similar size. Although it is difficult to determine the historical origin of, or justification for, the per capita method, it is clear that substantial variations exist among police departments.

Advantages of the per capita approach include its methodological simplicity and ease of interpretation. The population data required to calculate this metric, such as census figures and estimates, are readily available and regularly updated. Per capita methods that control for factors such as crime rates can permit communities to compare themselves with peer organizations. The disadvantage of this method is that it addresses only the relative quantity of police officers per population and not how officers spend their time; the quality of their efforts; or community conditions, needs, and expectations. Similarly, the per capita approach cannot guide agencies on how to deploy their officers.

Agencies using the per capita method may risk a biased determination of their policing needs. There are several reasons for this. First, a generally accepted benchmark for the optimum-staffing rate does not exist. Rather, there is considerable variation in the police rate depending on community size, region, and agency structure and type. For example, it is generally known that police rates are substantially higher in the northeastern than in the western regions of the United States. When comparing individual jurisdictions, it is not uncommon for similar communities to have per capita rates that are substantially different.

Given the disadvantages noted above as well as others, experts have strongly advised against using population rates for police staffing. The IACP warns, "Ratios, such as officers-per-thousand population, are totally inappropriate as a basis for staffing decisions. . . .Defining patrol staffing allocation and deployment requirements is a complex endeavor which requires consideration of an extensive series of factors and a sizable body of reliable, current data."[3]

The Minimum Staffing Approach

The *minimum staffing* approach requires police supervisors and command staff to estimate a sufficient number of patrol officers that must be deployed at any one time to maintain officer safety and provide an adequate level of protection to the public. The use of minimum staffing approaches is fairly common and is generally reinforced through organizational policy and practice and collective bargaining agreements.

There are two principal reasons a jurisdiction may use a minimum staffing approach. First, policy makers in many communities believe a minimum number of officers are needed to ensure public safety. This may be particularly common in small communities where there are relatively few citizen-generated demands for police service yet residents expect a minimum number of officers to be on duty at all times. Second, police officers themselves may insist (often through collective bargaining) that a minimum number of officers be on duty at all times. In some communities, the minimum staffing level is established by ordinance.

There are no objective standards for setting the minimum staffing level. Agencies may consider population, call load, crime rate, and other variables when establishing a minimum staffing level. Yet many agencies may determine the minimum necessary staff level by *perceived* need without any factual basis in workload, presence of officers, response time, immediate availability, distance to travel, shift schedule, or other performance criteria. This may result in deploying too few officers when workload is high and too many officers when it is low. To be sure, the minimum staffing level is often higher than what would be warranted by the agency workload. Ironically, even when the minimum staffing is not workload based, it is not uncommon to hear police officers

suggest that an increase in the agency's workload should warrant an increase in the minimum staffing level.

Minimum staffing levels are sometimes set so high that it results in increasing demands for police overtime. When staffing falls below the minimum standard, police managers typically must hire back officers on overtime to satisfy the minimum staff requirement. It is not uncommon for some agencies to hire back officers nearly every day due to officers taking time off for sick leave, vacations, or other reasons. Additionally, some agencies use a very narrow definition of available staffing. For example, agencies may hire back to fill a vacancy in patrol, even though there are a number of other officers on the street, including those in traffic, school resource units, and supervisors. Inefficiency increases when there are minimum staffing levels on overlapping shifts, leading to a higher number of officers on duty at a time that may not coincide with workload demand.

Most police officers, given a choice, would prefer to have more officers on the street, lending credence to a minimum-staffing model. Nevertheless, increasing the minimum staffing level will not, by itself, improve agency performance or necessarily increase officer safety. In fact, officers hired back to work extra shifts are likely to be fatigued, increasing the risk of injury to themselves or others.
Minimum staffing can also decrease the extent to which an agency can be nimble and flexibly deploy officers based on changing workload demands.

Finally, in some agencies the minimum staffing level may become, by default, the perceived optimal staffing level. In these situations, agencies often use the minimum level as a method to decide, for example, whether an officer can take a benefit day off. Others build work schedules so as to ensure that the minimum level is on duty. In these situations, staffing decisions are based on meeting the minimum level rather than optimizing the available resources to meet workload demand.

The Authorized Level Approach

The *authorized level* approach uses budget allocations to specify a number of officers that may be allocated. Although the authorized level may be determined through a formal staffing assessment, it is often driven by resource availability and political decision making. The authorized level does not typically reflect any identifiable criteria such as demand for service, community expectations, or efficiency analyses, but may instead reflect an incremental budgeting process.

It can sometimes be difficult to determine what is meant by authorized level. For example, in 2009, the Chicago, Illinois, Police Department simultaneously offered an early retirement plan and reduced hiring of new officers. As a result, at the end of 2009 the department was about 700 officers below its authorized level of 13,500. In addition, there were also more than 1,000 officers unavailable each day because of leave or other limited capacity. This resulted in media reports suggesting that the department was operating nearly 2,000 officers below its authorized level.

The authorized level can become an artificial benchmark for need, creating the misperception among police leadership, line staff, and the community that the agency is understaffed and overworked if the actual number of officers does not meet the authorized level. Additionally, unless an agency staffs above the authorized level, fluctuations in recruitment, selection, training, and attrition may lead to the actual staffing levels falling below authorized levels.

Because the authorized level is often derived independently of workload considerations, an agency may be able to meet workforce demand with fewer officers than authorized. Still, the *perception* of being understaffed, resulting when officials bemoan the department operating below authorized strength, can diminish morale and productivity and make it appear that the community is not adequately funding public safety.

The Workload-based Approach

A more comprehensive attempt to determining appropriate workforce levels considers actual police workload. *Workload-based* approaches derive staffing indicators from demand for service. What differentiates this approach is the requirement to systematically analyze and determine staffing needs based upon actual workload demand while accounting for service-style preferences and other agency features and characteristics. The workload approach estimates future staffing needs of police departments by modeling the level of current activity. Conducting a workload analysis can assist in determining the need for additional resources or relocating existing resources (by time and location), assessing individual and group performance and productivity, and detecting trends in workload that may illustrate changing activity levels and conditions. Furthermore, a workload analysis can be performed at every level of the police department and for all key functions, although it is more difficult to assess workload for some units than others.[4] The importance of the workload-based approach to staffing is evidenced by it being codified as a standard (16.1.2) by the Commission on Accreditation for Law Enforcement Agencies: The agency allocates personnel to, and distributes them within, all organizational components in accordance with documented workload assessments conducted at least once every three years.[5]

Unfortunately, there is no universally accepted standard method for conducting a workload-based assessment. Defining and measuring work varies by agency. Knowing that staff decisions are based upon calls for service and the time required to respond to them, officers may not have an incentive to be efficient in their response to calls or even to engage in activities that reduce calls. Learning how to conduct a workload-based assessment may be challenging for police administrators. Typical workload models are complicated and require intensive calculations. They also require decisions on a wide array of issues that are very difficult for officials and communities to make—such as how frequently streets should be patrolled—and do not uniformly account for discretionary activities, such as time for community policing and other officer-initiated activities.

Software programs may simplify the analytical process, but their methods are not always clear and can be inappropriate for some agencies. The cost of purchasing these software programs can be substantial, as can the training of staff to use them. These programs can be helpful for scheduling purposes, but less so as a tool for optimizing resources. Rather than relying on software, some agencies hire outside assistance to assess their workload. This may be more costly than conducting the analysis in-house, but the analysis will benefit from experience, the results may carry greater weight among decision makers because they are independent, and, in most cases, the cost-savings of creating a more efficient staff allocation more than offsets the costs of the analysis.

Even with shortcomings, allocation models based on actual workload and performance objectives are preferable to other methods that might not account for environmental and agency-specific variables. Agencies could benefit from a more popularized workload-based methodology of staffing analysis that is easy to learn and comprehend; is employed by administrators; and, importantly, helps to effectively manage discretionary time. No single metric or benchmark should be used as a sole basis for determining an agency's staffing level. Rather, agencies should consider metrics in light of professional expertise that can place them in an appropriate practical context.

A step-by-step approach for conducting a workload-based assessment should include the following:[6]

1. *Examining the distribution of calls for service by hour, day, and month.* Calls for service can differ by the hour of the day, the day of the week, and the month of the year. Peak call times can also differ by agency. Knowing when peak call times occur can help agencies determine when they must have their highest levels of staff on duty.

2. *Examining the nature of calls for service*. Reviewing the nature of calls can help better understand the work that an agency's officers are doing. Types of police work required can vary by area within a single jurisdiction and require agencies to staff differing areas accordingly.

3. *Estimating time consumed on calls for service*. Determining how long a call takes, from initial response to final paper work, is key to determining the minimum number of officers needed for a shift. This is most straightforward when a single officer handles the call and completes resulting administrative demands (e.g., reports, arrests) prior to clearing it.

4. *Calculating agency shift-relief factor*. The shift-relief factor shows the relationship between the maximum number of days that an officer can work and *actually* works. Knowing the relief factor is necessary to estimating the number of officers that should be assigned to a shift in order to ensure that the appropriate number of officers is working each day. The shift-relief factor is calculated through division of the total number of hours needed to be staffed in a shift by the number of off-hours to which an officer is entitled.

5. *Establishing performance objectives*. This encompasses determining what fraction of an officer's shift should be devoted to calls for service and what portion to other activities. For example, an agency might build a staffing model in which officers spend 50 percent of their shift on citizen-generated calls and 50 percent on discretionary activities.

6. *Providing staffing estimates*. Staffing needs will, as noted earlier, vary by time of day, day of week, and month of year, among other variables. Agencies should distribute their officers accordingly. For example, a shift with only half the number of calls than another shift will require half the number of officers. These numbers may also vary by the type of calls, and the time and officers they require, in each shift. For example, one large urban agency assigns two officers to each unit in its evening shift, affecting the number of officers needed for units to respond to calls. Another responds to the same type of calls in different ways in different shifts (for example, sending a unit in some shifts, but requesting citizens file a report in person at a station during others).

The Coverage-based Approach

While workload-based staffing methodologies are well suited to medium and large agencies, they do not work as well with smaller agencies. Consider, for example, the case of a small agency serving a 6.8 square mile community of 16,000 persons in suburban Chicago. The agency responds to about 7,000 citizen-generated calls for service per year. For the past 10 years, it has averaged 10 serious violent crimes annually. The staffing model for this department based on the workload methodology described above and assuming officers are to spend about half of their time on discretionary activities and half their time on responding to calls for service estimates two officers should be deployed on the 6:00 a.m.-6:00 p.m. shift and one officer on the 6:00 p.m.-6:00 a.m. shift. Upon accounting for this agency's relief factor, four officers should be allocated to the first shift and three to the second—for a total of seven officers allocated to patrol. A total of ten officers would be required assuming officers spend two-thirds of their time on discretionary activities.

At the time of this analysis, the agency assigned 14 officers and 4 supervisors to the patrol division. Moreover, it maintained a minimum staffing level of 2 officers and 1 supervisor from 2:00 a.m. until 6:00 p.m., and three officers and a supervisor from 6:00 p.m. until 2:00 a.m.

Based on the workload analysis the agency appears to have excess capacity assigned to patrol and appears to maintain a minimum staffing level that is too high. So how can agencies with relatively low rates for calls for service make rational judgments about staffing?

Communities with a relatively low call volume can consider making a subjective judgment about the appropriate level of policing required for deterrence and rapid response and to ensure officer safety. Of course, there are typically varied views about these objectives. One of the strongest factors in this decision is officer safety. Some communities may believe that it is essential that there are enough officers on duty to ensure that there is enough capacity to effectively back up officers when necessary. While this is a critical staffing objective, agencies addressing this goal should examine carefully such factors as the frequency of calls that require backup, the necessity for officers to leave the jurisdiction (e.g., to transport a prisoner) and the availability of assistance from neighboring agencies.

Another important factor is response time. Interestingly, research suggests that as few as 5 percent of police calls for service requires a rapid response,[7] and yet most police departments are organized and staffed to respond as if every call required a rapid response.

One approach to this coverage problem is to treat police response like one would examine a fire department response. That is, each location in the community could be examined to determine the time required to respond to an emergency from a central location. If that time were outside acceptable limits, it would suggest the need to assign additional resources. That is, by making the patrol beats smaller we could ensure quicker response times. Much like a fire department the emphasis is on proximity to the call more so than whether the unit is occupied.

Sometimes the number of officers in a community is a function of citizen willingness to pay for those services. For example, the City of Holland, Michigan, employs about 60 sworn police officers, but Holland Township, which is about the same size and similar in nature, contracts for service with the county sheriff who covers the township with 16 sworn officers.

Finally, the long distances required for response to calls tend to challenge most agencies that provide services in rural areas. Most citizens understand this, and, thus, they have more modest expectations about response time. It is important to consider that, in general, rural communities have lower rates of crime and higher levels of social control. For example, the average quarterly response time from 2008 to 2011 to priority one calls by the Albemarle, Virginia, County Police Department typically varied from about 12 to 14 minutes—the target being a 10-minute average.[8] We can see that response times are considerably greater than one would expect in an urban area.

Conclusion

There are several approaches to estimating an agency's staffing allocation, each with its own advantages and disadvantages. From an efficiency standpoint—that is, from the perspective of optimizing resources to best complete a given agency's work and accomplish its objectives—the preferred method is one that specifically considers workload, performance objectives, and work schedules. While conducting this form of assessment may seem complicated or costly, the approach presented herein is fairly straightforward, applicable to most agencies, and can help identify if and where staffing adjustments can be made to significantly enhance overall efficiency and effectiveness.

Because many small agencies utilize a coverage-based model for staffing they often have significant amounts of officer discretionary time. While some communities may choose to reduce this through reducing the size of the department, most will seek to make better strategic use of that time, thus improving both efficiency and performance. ♦

Notes:

[1]U.S. Department of Justice, Office of Community Oriented Policing Services, "COPS Hiring Recovery Program Update," *Community Policing Dispatch* 2, no. 6 (June 2009), www.cops.usdoj.gov/html/dispatch/June_2009/hiring_recovery.htm (accessed February 5, 2013).

[2]Jeremy M. Wilson, et al., *Police Recruitment and Retention for the New Millennium: The State of Knowledge* (Washington, D.C.: U.S. Department of Justice, Office of Community Oriented Policing Services; Rand, Center on Quality Policing, 2011), cops.usdoj.gov/Publications/101027321_Police-RecruitmentRetention.pdf (accessed February 5, 2013).

[3]International Association of Chiefs of Police, *Patrol Staffing and Deployment Study* (2004), 2, www.theiacp.org/LinkClick.aspx?fileticket=AKL78d4MBw8%3D&tabid=252 (accessed February 5, 2013).

[4]Charles Hale, *Police Patrol: Operations & Management* (Upper Saddle River, N.J.: Prentice Hall, 1994).

[5]Commission on Accreditation for Law Enforcement Agencies, *Standards for Law Enforcement Agencies*, 5th ed. (Fairfax, Va.: Commission on Accreditation for Law Enforcement Agencies, 2006).

[6]For a complete discussion of this methodology and examples of its application, see Jeremy M. Wilson and Alexander Weiss, *A Performance-Based Approach to Police Staffing and Allocation* (Washington, D.C.: U.S. Department of Justice, Office of Community Oriented Policing Services, 2012),www.cops.usdoj.gov/Publications/041218461_Performance-Based-Approach-Police-Staffing_rev091912.pdf (accessed February 5, 2013).

[7]J. Thomas McEwen et al., *Evaluation of the Differential Police Response Field Test*, NCJ 101378 (Washington, D.C.: U.S. Department of Justice, National Institute of Justice, 1986), www.ncjrs.gov/pdffiles1/Digitization/101378NCJRS.pdf (accessed February 5, 2013).

[8]Albemarle County. "Performance Management: Police Response Times Rural Areas," www.albemarle.org/department.asp?department=perfmgt&relpage=3473 (accessed February 5, 2013).

A B E S T P R A C T I C E S G U I D E F O R R E C R U I T M E N T , R E T E N T I O N , A N D T U R N O V E R I N L A W E N F O R C E M E N T

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Recruiting sufficient numbers of qualified applicants to meet the staffing needs of an agency is the most fundamental human resource process in a police department. The success of the department's recruitment efforts impacts every other function in the agency.

For years, law enforcement agencies offered good, stable employment. A readily available workforce enabled many police leaders to ignore the importance of recruitment. Today, employers nationwide, including police departments, report having difficulty attracting and retaining sufficient numbers of qualified employees. There are a number of factors both inside and outside the organization contributing to this condition.

The purpose of this guide is to provide an overview of the issues that impact an agency's ability to recruit sufficient numbers of qualified persons who are a 'good fit' within a police agency and the processes to successfully attract these individuals. In addition, factors contributing to increased levels of employee attrition and processes for developing a high retention environment will be identified.

RECRUITMENT

Police departments are service organizations. The quality of their service delivery is directly linked to the quality of personnel they recruit, hire, and retain. Failing to recruit and retain personnel that 'fit' with the agency will have a direct impact on the organization's ability to serve their community. The process of attracting potential employees is more complex than merely convincing a large number of persons to submit an application for employment. To be more effective, agencies must view recruitment in a comprehensive manner. Before a department begins to recruit officers, the number of officers and the needs of the department should be identified through a staffing analysis and a review of the average turnover rates.

Once the number of employees that are needed is identified, the core values of the organization and the unique aspects, or 'employer brand', should be clarified. This information is critical for establishing the caliber of officers needed and what the department has to offer employees. In addition, leaders must designate specific individuals to act as official department recruiters, but every officer can be enlisted to help with the search. Finally, the process of actually recruiting employees should make use of a variety of recruitment strategies.

Staffing Analysis

To determine the number of officers required to serve the needs of the community, the department should conduct a staffing analysis. There are several formulas available for projecting the number of employees needed. Assuming the department receives appropriations to fund additional positions, the projected need is added to the number of current vacancies. At the same time, the average turnover should be determined. To estimate the anticipated vacancies, planned and unplanned turnover must be considered. Planned attrition includes persons who are known to be leaving the department in the next 12 –18 months (i.e. retirement). Reviewing the average number of persons who resigned in the past 24 – 36 months can be used to estimate the number of unplanned turnover. Combined, the staffing projection, current vacancies, and estimated turnover provide recruiters with the approximate number of new officers that will need to be recruited.