How Many Police Officers Do You Need? A Performance-Based Approach to Police Staffing and Allocation

How many police officers does an agency need? This question is difficult to answer in the best of times. It has become more so in recent years, as an economic downturn caused police agencies to consider hiring freezes, furloughs, lay-offs, salary and benefit cut-backs, and retirement incentives.

Police decision-makers themselves have few resources to help them answer this question. To be sure, there are multiple approaches to determining the number of officers for an agency. Still, we found these methods have not been described and synthesized in a way that most practitioners could immediately understand and implement. To better guide police decision-makers on staffing allocation decisions, the COPS Office and the Michigan State University School of Criminal Justice partnered to research the current staffing landscape (interviewing representatives of agencies of varying types), approaches to determining staffing need, how alternative ways of providing service could affect workforce planning, and the relationship between police staffing and community policing.

The Staffing Landscape

From a long-term perspective, police agencies face a three-fold challenge in meeting their staffing needs: a decreasing number of qualified applicants, expanding attrition, and a broadening scope of police work. Staffing budgets are also precarious.

Yet while agencies feel they are understaffed, few are able to conclusively demonstrate through workload analysis that this is true. As one focus-group participant told us, “If the answer to our problems is more staffing, we’ll always be understaffed.”

Perceived understaffing may compromise community-policing and problem-solving efforts. Increased duties arising from fiscal constraints reduce other officer time spent in the community. While transferring
community-policing duties to non-officers could help alleviate staffing burdens, our interviewees told us this could lead to public perceptions that the agency does not care about residents.

**Approaches to Determining Staffing Needs**

We found agencies typically take one of four approaches to determining staffing needs: per capita, minimum-staffing, authorized-level, or workload.

The per-capita approach requires determining an optimum number of officers per person, then calculating the number of officers needed for the total population. Advantages of this method include its simplicity and ease of interpretation. Disadvantages include its failure to address how officers spend their time, the quality of their efforts, and community conditions, needs, and expectations. Given these disadvantages and others, experts strongly advise against using population rates for determining police-staffing needs.

The minimum-staffing approach requires police decision-makers to estimate a sufficient number of patrol officers to deploy at any one time. This is a fairly common approach reinforced by policy and collective bargaining. There are, however, no objective standards for setting the minimum staffing level. This may result in deploying too few officers when workload is high and too many when it is low.

The authorized-level approach uses budget allocations to specify a number of officers that may be allocated. It does not typically reflect any identifiable criteria but rather an incremental budgeting or other political decision-making process. As such, it can become an artificial benchmark for need, creating the perception that the agency is understaffed and overworked if the actual number of officers does not meet the authorized number.

A more comprehensive approach would determine workforce levels based on actual police workload. Workload-based approaches derive staffing indicators from demand for service. Such an approach estimates future staffing needs by modeling current levels of activity. There are challenges to such an analysis: definitions and measures of “work” may vary by agency. Still, staffing models based on workload and performance objectives are preferable to other methods not accounting for environmental and agency-specific variables.

The steps of a workload-based assessment are:

1. Examine the distribution of calls for service by hour, day, and month
2. Examine the nature of calls
3. Estimate time consumed on calls for service
4. Calculate an agency shift-relief factor
5. Establish performance objectives
6. Provide staffing estimates

**Alternative Delivery Systems**

Establishing performance objectives is perhaps the most key activity of workload assessments to freeing officers for other duties such as community policing. In particular, determining what fraction of an officer’s shift should be devoted to calls and what should be available for other activities determines how much is available for the discretionary activities of community policing.

Yet there are other ways agencies can deliver services and free officers for other duties. Such alternative delivery systems can include different ways of managing non-emergency calls for service, of reporting crimes and accidents, and even of having non-sworn personnel handle calls. The 911 system has provided an easy and effective method for citizens to contact police. In some communities, it can be difficult to find a non-emergency number to call police. This poses a dilemma, as most calls for police service are not emergencies, and citizens use 911 to request all types of police service. This has led many communities to adopt a 311 system for nonemergency calls. Such a system led to a 25-percent reduction in 911 calls for one urban agency.

Providing different ways for citizens to report crime and accidents can also alleviate demand on sworn staff. In most communities, police officers are dispatched to the scene of an incident to gather information for a report that citizens may need for their own purposes (such as insurance claims), even though for many incidents there is little likelihood the case will be solved. Providing alternative means, such as telephone reporting units or officer response by appointment, for reporting of many incidents can help free time of sworn personnel for other duties.

Agencies can further alleviate the demands on sworn personnel by assigning more duties to non-sworn staff. Until recently, law-enforcement agencies were organized so that nearly all functions were performed by sworn officers. Many departments now employ a significant number of non-sworn staff, who typically cost less, to support police operations. Non-sworn personnel often serve as community service officers. They may also assist patrol officers in non-enforcement activities, respond to citizen requests for service, identify and report criminal activities, assist citizens in identifying crime-prevention techniques, and assist in traffic control for special events.

**Staffing for Community Policing**

The evolution of community-policing duties has tremendous implications for police staffing. Agencies may have a dedicated problem-solving unit, but still fully train and expect all officers to engage the community. There is no standard benchmark to assess appropriate levels of staffing for community
policing. Rather, levels tend to be determined locally based on qualitative assessments, performance objectives, and practical considerations. Agencies that implement community policing throughout the organization typically see patrol officers bear most of the effort. This, in turn, requires agencies to increase discretionary time for patrol officers.

While staffing allocation models can greatly affect how communities staff and allow discretionary time for community policing, future research might consider developing workload-based models to specifically assess staffing needs for community policing. Unlike patrol, which can be fairly well predicted based on easily measurable time to respond to calls for service, an approach to determining staffing levels for community policing would need to account for fluctuations in its practice by agency.

How to Learn More
To help practitioners and decision-makers better navigate the challenges of contemporary police staffing allocation, we prepared both an executive primer and guidebook to summarize the findings of our work and to detail a practical staffing approach. Referenced and linked below, we hope these resources provide those engaged in the staffing process additional context that helps to inform their discussions and processes.


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