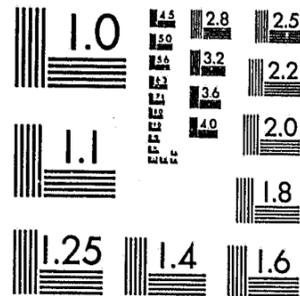


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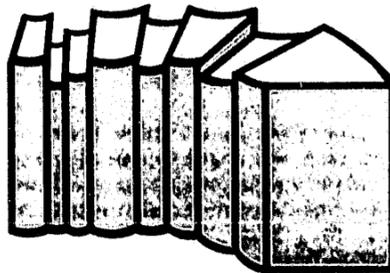
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Beyond Crime: Law Enforcement Operational and Cost Data

Introduction

The National Association of Criminal Justice Planners prepared this report for the Bureau of Justice Statistics, U.S. Department of Justice, to examine the operation of selected law enforcement agencies and determine their respective costs to the communities they serve. The report seeks to facilitate comparison and assessment of different agency practices for the benefit of community discussion as to what services and functions a law enforcement agency should perform, how the agency should perform them, and on what basis the agency's performance should be assessed.

The report has four main sections. The first details how an agency receives a call for service and handles it administratively. The second section examines agency report writing to assess what amount of activity shows up in written reports as opposed to being handled verbally, and to reveal the nature of cases processed by law enforcement

agencies. The third section examines the agency's investigative function, and the fourth section focuses on the agency's resources and budget, including staffing and training costs.

Averages cited in the report are calculated on a per capita basis using population groupings of 1,000 people.

Methodology

Fifty-three agencies contributed data to support this analysis; 55 percent of the agencies serve populations of fewer than 100,000 and 45 percent serve populations of 100,000 or more. Some sheriff's departments have been included in this analysis since sheriff's departments generally have law enforcement responsibilities; only the amount of responsibility varies.

The data-gathering instrument was a 17-page questionnaire completed by the agencies, detailing operational and cost factors associated with their

routine practices. Most of these data reflect the 1982 calendar year.

Calls for service and dispatches

Calls for service

Calls for service cover a broad range of activities from citizen requests for assistance to officer requests to be taken out of service for meal breaks. Calls for service initiate the process that generates a significant portion of the law enforcement agency's workload. However, they do not alone provide a good basis for measuring that workload because of lack of consistency in handling such calls; an officer is not always dispatched to the scene nor is a report always written.

Dispatch

Dispatching is the act of sending an officer to a specific location to take official action. Despite some different methods for counting dispatches (some agencies count the number of incidents and some count the number of officers dispatched), dispatches provide a good basis for examining how an agency responds to service demands. The average number of dispatches per 1,000 population is 715. There is consider-

Summarized from *Beyond Crime: Law Enforcement Operational and Cost Data* by Mark A. Cunniff with permission of the National Association of Criminal Justice Planners, 1983.

Beyond Crime: Law Enforcement Operational and Cost Data is available from the National Association of Criminal Justice Planners, 1500 Massachusetts Avenue NW., Washington, DC 20005, Attention: Mark Cunniff. The price is \$12.00. It is also available at no charge from the NCJRS Microfiche Program, Box 6000, Rockville, MD 20850.

able disparity in the dispatch rate of large and small agencies, with small jurisdictions reporting 27 percent more dispatches than jurisdictions serving populations of 100,000 or more.

Priority calls

Agencies exercise discretion in screening calls. Due to the volume of calls, and the urgent nature of some, agencies employ a classification scheme to rate the priority of calls. To minimize the difficulty of trying to compare these classification schemes, the questionnaire inquired about those calls demanding the agency's "quickest response." The proportion of dispatches involving priority calls ranges from a low of 3 percent to a high of 56 percent, with an average of 16 percent. Data show that small agencies respond twice as quickly as large departments, but spend only 20 minutes on average at the scene, whereas the large agency's average time is 28 minutes at the scene. This slower response time is understandable in view of the increased population per square mile in the large jurisdictions.

911 and CAD systems

Half the agencies use a 911 system while 30 percent use computer-aided dispatch (CAD). Agencies with 911 systems evidence faster response times, particularly for priority calls when the response time is nearly 50 percent quicker. Only departments serving populations of 100,000 or more have CAD systems, and of these 10 agencies, 6 also have 911 systems. A significant finding was that agencies with CAD systems have a dispatch rate one-and-one-half times greater than those agencies without CAD.

Patrol car characteristics

Over half of all agencies' personnel work is in the patrol division, and response to calls for service is handled by this division. However, most of the patrol force is deployed through patrolling beats by car. Patrol cars, therefore, are in operation an average of 19 hours per day for 321 days per year. The average patrol car receives considerable use during its short life, logging nearly 33,000 miles per year and lasting about 2.75 years.

Patrol car costs

The critical component of the patrol car function is its staffing. While two-person patrol cars were once fairly common, because of the higher cost factor the overall staffing ratio for the car is 1.12 officers per car. Small agencies seldom assign two officers to a car while large ones employ one two-officer car for every three one-officer cars, generally in the most troublesome neighborhoods and at night.

The three major components of vehicle costs are gas and oil (35 percent), maintenance (24 percent), and capital costs (32 percent). Understandably, agencies serving larger jurisdictions have sizably higher gas, oil, and maintenance costs. The three major auxiliary equipment items usually associated with a patrol car are radio, light bar, and siren; since these items often outlast the car's life, they are not purchased as frequently and contribute only modestly to costs.

Agency reports

The value of an inquiry into the official reports maintained by a law enforcement agency lies in the light it can shed on agency reporting practices—how much activity shows up in reports and how much is handled verbally.

Report writing rates vary substantially since only a few agencies always write reports following dispatches. One agency writes reports on only 13 percent of dispatch incidents. The average report writing rate for agencies serving populations of 100,000 or more is 48 percent, compared to a 63 percent rate for small agencies. Report writing rates are an important element to be considered when examining an agency's crime records and when interpreting changes in agency records.

Four types of reports are examined: traffic tickets, traffic accidents, crime incidents, and arrests. Since vehicular traffic absorbs a considerable amount of attention from law enforcement agencies, it is not surprising that 57 percent of all reports are traffic related (tickets and accidents). The crime-related reports (criminal incidents and arrests) make up 43 percent of the total. These findings do not vary from the large to the small jurisdictions.

When official crime report data are presented to the public, they are usually in the context of the Uniform Crime Reports (UCR) Part I offenses and the Violent UCR crime rate. The data gathered show little difference between overall crime rates in small and large jurisdictions; however, large jurisdictions show much higher UCR and Violent UCR crime rates than small jurisdictions.

For every three crime reports there is one arrest. The average number of arrests in a year per sworn officer is 25; large agencies average 30 arrests, while small agencies average 20.

In looking at the percentage of total arrests attributable to the patrol officer, large agencies show 80 percent and small agencies 90 percent. This high percentage is not surprising since the substantial share of the agencies' staff is dedicated to patrol. Nearly 30 percent of all arrests are for felonies, 56 percent for misdemeanors, and 9 percent for juvenile status offenses.

Investigations

Although the term "investigation" can be used to describe a broad range of activities, the investigative function is narrowly defined to cover the conduct of followup inquiries on crime incident reports. Since the vast majority of an agency's recorded crimes are generated by the patrol division, most agencies permit their patrol officers to conduct subsequent investigations. However, fewer of the large agencies permit this practice. A possible explanation for this is that having fewer personnel in the small agencies hinders specialization, so that the patrol officer is more of a generalist. Some law enforcement executives believe that it is more efficient and leads to higher job satisfaction for patrol officers to conduct followup investigations. Consequently, the statistics documenting this practice may stem not only from resource considerations but from policy preferences as well.

The average disposition rate on active referrals is 90 percent, which indicates a very strong tendency on the part of the investigative division to dispose of almost as many cases as come in during the year. However, agencies with larger workloads will have higher

carryover from the previous year, and therefore will have lower disposition rates.

Resources

Agency budgets

An examination of the agency as a whole concludes by looking at budget as well as personnel data. Although there is a strong correlation between the amount of money budgeted and the amount spent by an agency, fringe items (such as retirement contributions) and capital expenditures (such as building construction and motor vehicles) can sometimes show up in another agency's budget. These items are handled differently by local governments. For this reason, some adjustments were made to the budget figures provided by the agencies.

Budget distribution

Over half the respondents indicated that significant portions of their budgets were not contained in the law enforcement agency's budget. A general observation is that 86 percent of the budget of both the large agencies and the small ones goes to personnel and fringe costs, while equipment costs consume only 4 percent. Over half of the agencies reported that the purchase of police vehicles constituted the entire or a substantial share of the equipment budget. The per capita cost of providing law enforcement averaged \$113 per year, with a range of \$38 to \$317. Influencing the range were such factors as the type of jurisdiction being served, the agency's share of the law enforcement responsibility, or the officers' number of years in service.

Staffing

The questionnaire did not attempt to collect information regarding the average time on the job; it did gather data on the recruits and staffing characteristics of the agencies. For every 100 authorized sworn positions, there are 97 employed staff and, while sworn officers make up most of the agencies' staff, 22 percent of the staff are civilians.

Distribution of staff

Organization staffing charts basically comprise three sections—patrol, investigations, and other. Although there was some disagreement on how functions were defined, an average of 54 percent of an agency's staff is assigned to patrol and 12 percent to investigations. The other category, making up the remainder of the staff, includes such services as dispatching, training, and special task forces (organized crime, for example). A final observation on staff shows that the number of law enforcement employees (both sworn and civilian) per 100,000 population does not vary in the aggregate between the two types of jurisdictions; there are 296 law enforcement employees per 100,000 population.

Training

Training is a critical element in staff development. Although training may address itself to recruits or to officers already on the staff (inservice training), the focus here is on three aspects of recruit training: hours required, flow of recruits through training, and its costs. Agencies serving populations of fewer than 100,000 showed a tendency to equal States' recruit training requirements; the larger agencies, on the other hand, exceeded the training requirements of the State by 60 percent. The number of recruit training hours required by the agencies had considerable range—from 280 hours to 1,051 hours. The large agencies required, on the average, one-third more training than the small agencies.

Recruits

Most of the large agencies conduct their own recruit training and evidence a dropout rate of 7 percent. Agencies serving smaller jurisdictions generally use outside training facilities and have a dropout rate of only 2 percent. The dropout rate may be related to the relationship between the recruit and the trainer: in an outside training facility the recruit is a client; in the agencies conducting their own training the recruit is an employee.

Training costs

Training cost analysis applies to the large agencies only, since few of the smaller agencies were able to provide the requisite data. The average cost to train a recruit in large jurisdictions is \$12,163. Thirty-nine percent of this expense goes to training facility costs such as instructor salaries, while the bulk covers personnel and fringe costs paid to the recruit.

Conclusion

This report clearly illustrates that there is considerable variation in law enforcement administrative practices in the United States. This variation is primarily because law enforcement is a function of local government; operation is heavily influenced by the local community. Variation also results from the administrative discretion afforded law enforcement officials in running their agencies. For example, law enforcement officials exercise some control over the workload coming into the agency by having policies that direct the screening of crimes to determine eligibility for investigation.

These variations in administrative practice have the positive effect of providing options to elected and agency officials. Variations in agency practice make data collection more difficult, however. More can be done to improve the reliability and validity of statistics relating to agency operation, although such data collection efforts will always fall short of clinical standards due to the necessity of accommodating the work environment. This report provides a basis from which to work toward that objective.

Sources on this topic:

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[Provides publications; answers telephone inquiries.]

Further readings:

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