

WORKSHOP IN POLITICAL THEORY & POLICY ANALYSIS

Police Services Study Technical Report

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EVALUATING THE ORGANIZATION OF
SERVICE DELIVERY: THE POLICE

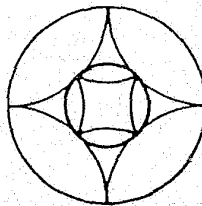
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This report draws heavily on Policing Metropolitan America, which is the Summary Report of the Police Services Study, as well as on Patterns of Metropolitan Policing, which is our Comprehensive Report. The efforts of all staff members of the Police Services Study have been essential for the development of this and other reports from this project.

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EVALUATING THE ORGANIZATION OF
SERVICE DELIVERY: THE POLICE

Major organizational reforms have been proposed by the President's Commission on Law Enforcement and Administration of Justice in 1967, by the National Advisory Commission on Criminal Justice Standards and Goals in 1973, and by such bodies as the Committee for Economic Development and the Advisory Commission on Intergovernmental Relations. The proposed reforms include:

- reducing the number of police agencies serving metropolitan areas by as much as 90 percent.
- establishing a minimum size for police agencies (recommended minimums vary from 10 to 50 full-time sworn officers).
- changing state laws to facilitate cooperation and consolidation.

None of the major recommendations for change cite empirical evidence to support their contentions.¹ The data previously presented are largely compilations of the numbers of agencies providing general municipal or county-level police services in a few metropolitan areas. Although the number of agencies is indeed large, simple sums and lists of agencies do not provide information about the types of arrangements among agencies that may or may not exist in metropolitan areas. Nor do such lists provide any evidence about the relative performance of the individual police agencies.

Assumptions are often made that most police agencies provide training, crime lab, and other expensive specialized services for themselves and that most municipal police agencies cannot pursue a fleeing suspect beyond their boundaries. Assumptions are also often

made that little cooperation exists among police agencies and that extensive duplication of police services exists due to the fragmentation and the degree of overlap in the American federal system.

For future public policies to be based on information rather than on untested assumptions, an empirical and valid picture of the broad spectrum of organizational arrangements existing across the country has long been needed.

The Scope of this Study

The Metropolitan Areas

Two hundred metropolitan areas met the original NSF requirements for inclusion in this study. These criteria were a 1970 Standard Metropolitan Statistical Area (SMSA) population of less than 1.5 million and an SMSA boundary (defined by the U.S. Bureau of the Census) that did not cross state lines.²

We drew a stratified sample of metropolitan areas from each of the 10 regions used for administrative purposes by the U.S. Department of Justice and other federal agencies. This sample produced a list of 80 SMSAs for intensive study.

The 80 SMSAs selected for study provide a wide spectrum of metropolitan area sizes, densities, and types. They are located in 31 states. Three of the SMSAs have more than one million residents. Ten have fewer than 100,000. Population densities in the 80 SMSAs range from 31 persons per square mile in the Great Falls/Montana SMSA to more than 3,000 persons per square mile in the Paterson-Clifton-Passaic/New Jersey SMSA.

The Police Services Included

Police perform a variety of tasks, some of which are direct services to citizens. We examined the delivery of three direct services: Patrol, Traffic Control, and Criminal Investigation. These three services represent a range of police activity and include many of the more time consuming and/or higher priority police services to citizens.

Auxiliary services are used by police agencies in their production of direct services. They are services to the producers of policing rather than direct services to citizens. We included four: Radio Communications, Adult Pre-Trial Detention, Entry-Level Training, and Crime Laboratory. Some of the agencies that produce direct services also produce their own auxiliary services. Some do not produce auxiliary services for themselves but obtain them from other direct service police agencies. Still other direct service agencies receive auxiliary services from specialized agencies that do not produce direct services.

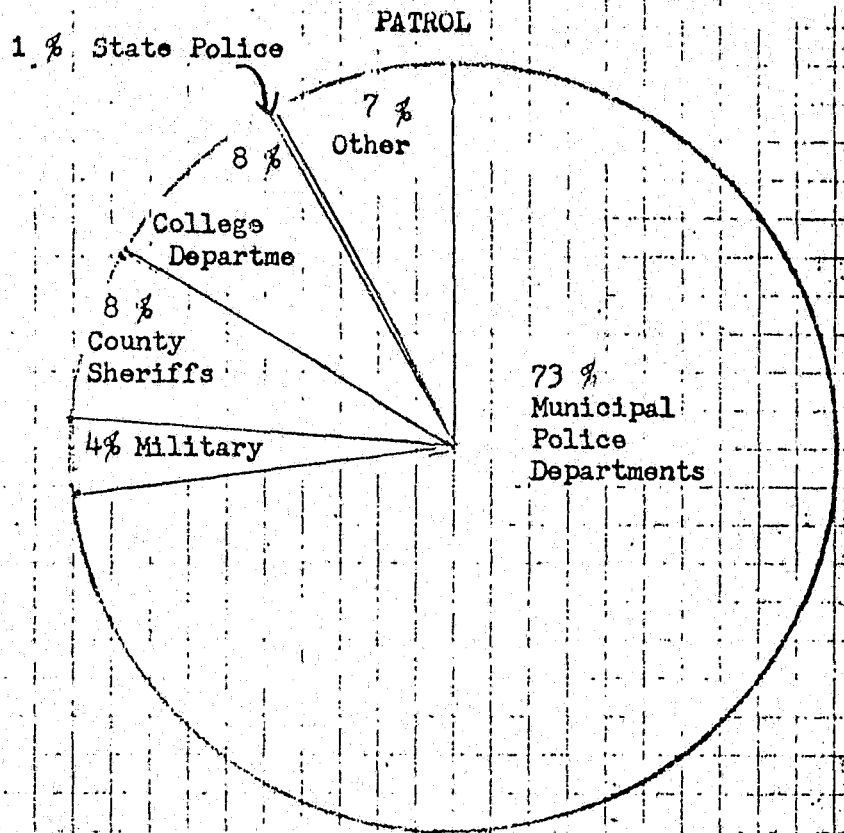
The Findings

Number and Type of Producers

More than 1,400 police agencies produce one or more direct services in the 80 SMSAs.³ Nationwide, municipal police departments constitute over two-thirds of direct services producers as illustrated in Figure 1. However, with the exception of radio communications, few direct service producers also produce their own auxiliary services. Of the 1,454 direct service producers, only 11 percent produce adult pre-trial detention, 15 percent produce entry-level training, and eight percent

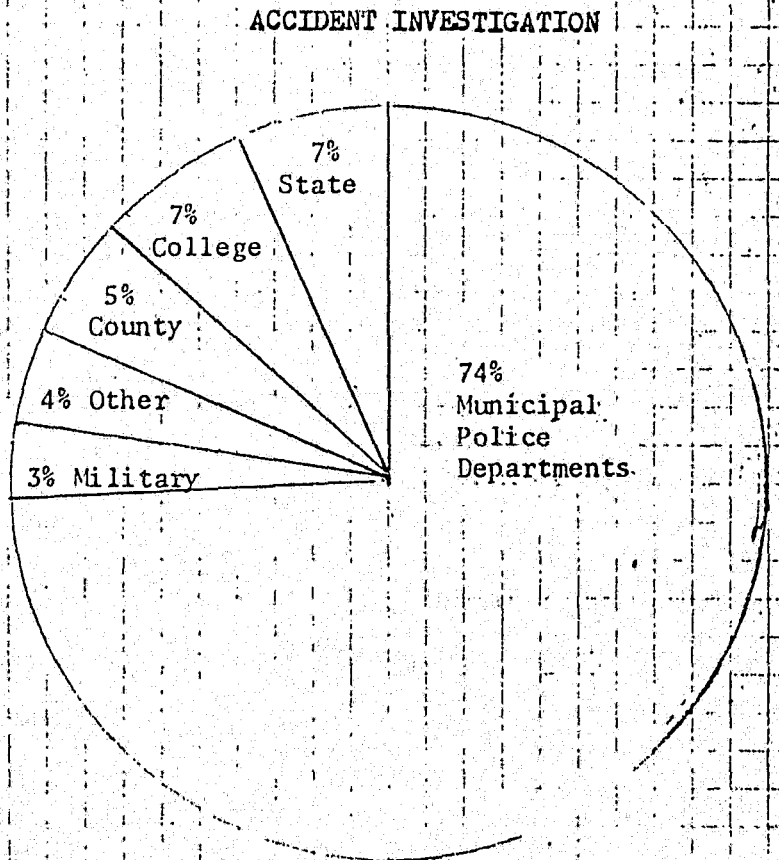
FIGURE 1

DISTRIBUTION OF PATROL BY TYPE OF AGENCY



Total Number of Agencies = 1278

DISTRIBUTION OF ACCIDENT INVESTIGATION BY TYPE OF AGENCY



Total Number of Agencies = 1206

produce laboratory analyses. Auxiliary services are often supplied to direct service producers by specialist agencies organized to capture potential economies-of-scale in these more capital intensive services. Or, auxiliary services are supplied by large, general police agencies such as County Sheriffs or State Police. Patterns for auxiliary service delivery vary considerably from service to service, but these services are widely available.

The number of agencies producing crime laboratory analyses for the 80 SMSAs is small -- only 83. State agencies comprise nearly half of this number. As shown in Figure 2, the number of producers of entry-level training is somewhat larger (but still considerably less than the number producing patrol) and distributed somewhat differently. There are 31 regional training academies serving one or more of the 80 SMSAs.

The general notion that there are a large number of police agencies serving metropolitan areas is substantiated by the findings discussed, but only in regard to direct service and radio communications producers. The number of producers of detention, entry-level training, and crime lab analyses is substantially smaller. Wide variations exist by size of metropolitan area and region which preclude making broad generalizations for all metropolitan areas.

Agency Size

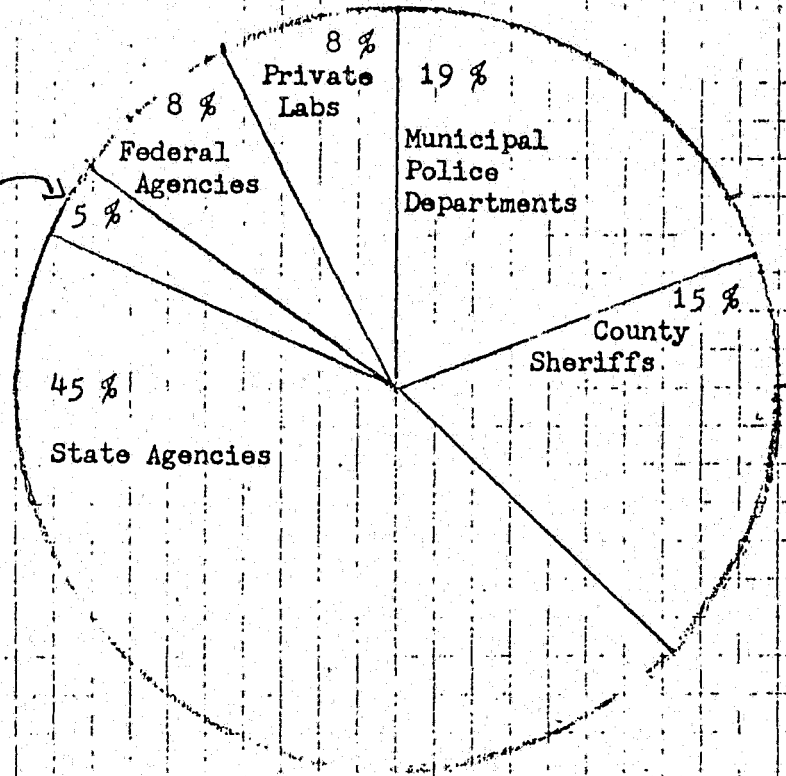
One widely debated characteristic of police agencies in general is agency size. Some critics recommend eliminating departments as large as 25 officers, and seem to believe that departments with fewer

CRIME LABORATORY ANALYSIS

FIGURE 2

DISTRIBUTION OF CRIME LABORATORY ANALYSIS BY TYPE OF AGENCY

Multi-jurisdictional Arrangements

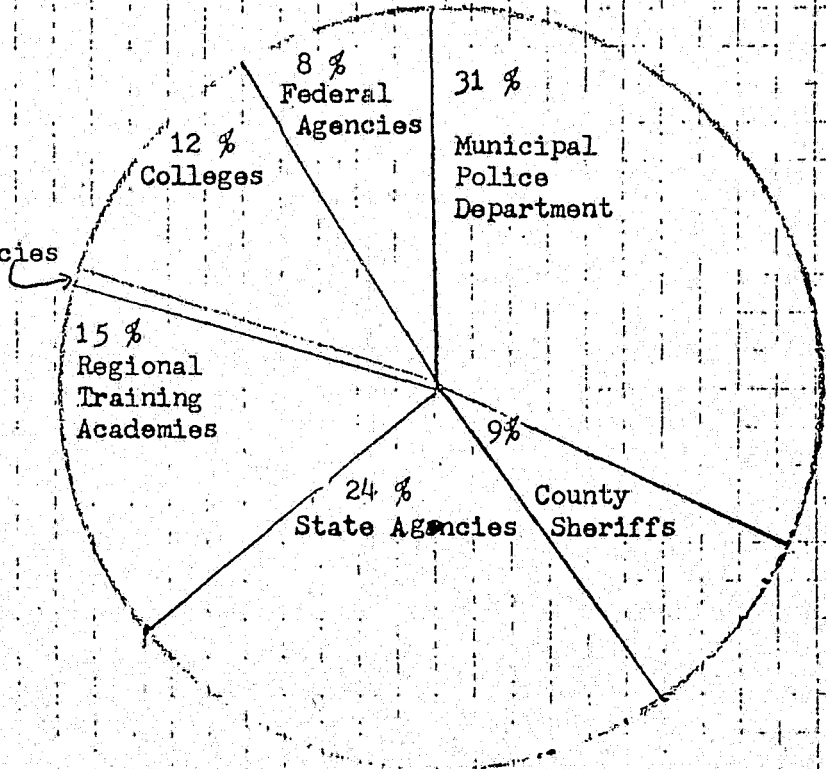


Total Number of Agencies = 83

ENTRY-LEVEL TRAINING

DISTRIBUTION OF ENTRY-LEVEL TRAINING BY TYPE OF AGENCY

1% Other Agencies



Total Number of Agencies = 213

than 50 to 75 officers are unlikely to be effective. In the 80 metropolitan areas studied, the median agency supplying patrol has 12 full-time employees, 10 of whom are sworn officers. America is a nation of small police forces. Twenty-five percent of all patrol producers have no more than four full-time employees and no more than three full-time officers. Seven percent of these producers have no full-time personnel and rely instead upon part-time paid and voluntary personnel. Only six percent of the patrol producers employ more than 150 full-time sworn officers.

But, while small police agencies are the most common producers of patrol, most full-time sworn officers are employed by relatively large agencies. More than 50,000 full-time police officers are employed in the 80 metropolitan areas. Nearly 50 percent of these officers are employed by departments having more than 150 sworn officers. Twenty percent of the agencies producing patrol employ 80 percent of the full-time sworn officers. Police agencies with fewer than 10 full-time sworn officers -- a full 50 percent of all agencies -- employ only five percent of the full-time police officers in the 80 metropolitan areas. So, while the statement that America is a nation of small police forces is true in terms of the number of police agencies, it is also true that most police officers work in, and most Americans receive police services from moderate- to large-sized police agencies.

These data indicate that, at least as far as police patrol in metropolitan areas is concerned, the volume of argument for eliminating small departments represents a large blunderbuss aimed at a relatively

small mouse. Complete elimination of all municipal patrol producers that employ 10 or fewer officers would have a small effect on the way that patrol service is delivered in the metropolitan areas taken as a whole. However, as we shall see, it would probably have a negative impact on the availability of patrol service to the residents of the parts of those metropolitan areas that are supplied by the smaller producers. Few small agencies produce their own services.

Size and Patrol Deployment

By not producing a number of additional services, smaller local patrol producers are able to achieve a higher level of patrol officer deployment. Municipal departments with 10 or fewer officers assign, on the average, almost 100 percent of their officers to patrol while those of over 150 officers assign 56 percent to patrol on the average. To a certain extent, there is nothing startling about this finding. Larger departments tend to be more specialized, assigning more officers to specific non-patrol duties.

What is remarkable, however, is the magnitude of the differences in assignment and deployment of officers. The largest patrol producers generally have only about one-half as many officers on the street in proportion to their total sworn officers as do even moderately sized agencies. While the median municipal departments between 5 and 20 full-time officers have one-fifth to one-quarter of their officers on the street at 10 pm, the median departments with more than 150 have about one-eighth.

A major factor in this difference is the basic allocation of officers in the department. When a larger percentage of the officers are assigned to specialized duties, a lower percentage is available to be on the street. A second important factor is that larger departments place a lower proportion of their officers assigned to patrol on the street.

The median departments between 5 and 50 officers maintain a ratio of around one-fourth or higher, while the median department of over 150 officers places about one-fifth of its officers assigned to patrol on the street at 10 pm. This may be reflective of diseconomies-of-scale in the production of patrol services. As departments get larger, a smaller proportion of the officers assigned to patrol actually get placed on the street.

Duplication of Services

Duplication of police services has been another major concern of critics of American policing. One of the most important questions is the extent of duplication in service delivery which actually exists in metropolitan areas.

Where multiple agencies operate in the same geographic areas, the agencies have usually adopted some division of labor which eliminates duplication. The most common type of division is alternation. Alternation can occur in time, in space, or with respect to specific clientele groups. For example, a number of small municipal police departments patrol the streets of their municipalities from eight am

to midnight. When they are not on duty, the county sheriff patrols in their municipalities. This is alternation in time.

For traffic patrol, a division of responsibility by type of thoroughfare is often established. State agencies frequently patrol traffic on interstate freeways and major state highways and not elsewhere in the jurisdiction. Municipal and county police rarely patrol freeways if the state police are there.

While alternation is the most frequent division of labor between multiple patrol and accident investigation producers, producers of criminal investigation have frequently relied upon coordination as a means of working out arrangements between multiple producers. Coordination occurs when two or more producers interact in planning regular service production for the same service recipients. Once alternation and coordination are separately examined, the remaining "real" duplication of services is very small.

Fresh Pursuit and Cooperation

The number of police agencies in metropolitan areas, is cited as a deterrent to effective law enforcement because it is presumed to limit the capacity of police officers to pursue a fleeing suspect beyond jurisdictional boundaries and to inhibit cooperation among agencies.

Of the 39 states having specific legislation on fresh pursuit, 22 authorize all county and municipal peace officers to engage in fresh pursuit (the immediate pursuit of a suspected criminal) throughout their state for any offense.⁴ An additional eight states authorize

statewide pursuit under at least some circumstances. That 30 states authorize some form of statewide fresh pursuit contradicts frequent assertions about the general incapacity of police officers to pursue beyond their own jurisdictional lines. Of the nine additional states having other forms of legislation regarding intra-state fresh pursuit, seven authorize countywide pursuit for any offense.

When a suspect flees across state lines, what authority does the pursuing officer have? Here, the legislation is more clear-cut: the vast majority of states have extended to a police officer, through the Uniform Act on Fresh Pursuit, as broad authority to pursue, arrest and hold a felon in custody as any police officer has in the state entered. Thus, contrary to general impressions, police officers serving most states have relatively broad powers to pursue fleeing suspects, particularly when a suspected felony is concerned. Some states without specific intra-state authority, have used their authority under the Uniform Act authorizing inter-state hot pursuit as authorization for hot pursuit within their own state.

We also find the level of cooperation among police agencies producing patrol services to be much higher than one might expect after reading many of the descriptions of metropolitan police in national reports. Approximately nine out of 10 agencies give or receive emergency assistance outside their own jurisdiction. While the proportion of agencies who belong to formal mutual aid agreements is lower (nearly half of all patrol agencies), membership in such formal agreements is not necessary for emergency assistance to be

rendered. Half of the patrol agencies which both give and receive assistance are not members of mutual aid agreements. Larger police agencies are less likely to engage in either formal or informal mutual aid, while agencies operating in metropolitan areas with large numbers of patrol producers are more likely to engage in both formal and informal assistance.

Is There a System

The complexity of police arrangements in metropolitan areas can be better understood by using an industry approach, where no single center of authority exists. On the surface, there are relatively large numbers of police agencies in metropolitan areas. However, while the number of police agencies is higher in larger metropolitan areas, larger metropolitan areas have a lower ratio of agencies for the population being served.

We find large numbers of small direct service agencies. However, the proportion of the population in a metropolitan area being served by these smaller agencies is quite low. These smaller agencies achieve a much higher ratio of patrol officers on the street to citizens being served, than larger agencies. In earlier studies, our consistent findings were that small- to medium-sized police departments performed as well or better than larger departments.⁵ Most small agencies do not produce their own auxiliary services. However, they are able to obtain these services from other agencies, frequently specialists in the field. Only a small proportion of even the larger agencies produce their own auxiliary services themselves. Patterns of service

division, in the form of alternation and coordination, reduce the level of real duplication in the delivery of police services to a negligible level.

The findings from this study paint a complex picture of a public service industry with a large number of small agencies operating primarily as patrol specialists, a small number of larger police agencies which also produce a broader range of services, and a small number of highly specialized agencies that produce many of the auxiliary services. There is definitely a system with its own regularized but complex patterns.

Because we find sufficient patterned regularities among metropolitan police agencies to say there is a system, does not mean our findings support the simple maintenance of the status quo. The performance of most systems can be improved. We assume that changes in police organizational arrangements can increase the effectiveness, equity, efficiency, and responsiveness of police. However, given that many reform proposals are based on too simple an image of how the current system operates, adoption of these reforms may make performance worse rather than better. It would appear that the most difficult organizational problems facing police in metropolitan areas are those of larger departments rather than those of the small where most current reforms focus. In Phase II of this study we will do an in-depth study of alternative ways of organizing police serving metropolitan areas so that we can make policy recommendations for future changes which are empirically based and theoretically sound.

NOTES

1. See Ostrom, Elinor (1975) "On Righeousness, Evidence, and Reform: The Police Story." *Urban Affairs Quarterly*, Vol. 10 (June), 464-486.

2. A Standard Metropolitan Statistical Area is defined by the U.S. Bureau of the Census to be (except in the New England states), a county or group of contiguous counties that contains at least one central city of 50,000 inhabitants or more, or several cities with a combined population of at least 50,000. Contiguous counties are included in an SMSA if they meet criteria related to social and economic relationships to the central city. In the New England states, SMSAs consist of clusters of contiguous cities and towns which meet similar criteria.

3. The findings presented in this paper are documented in Patterns of Metropolitan Policing by Elinor Ostrom, Roger B. Parks, and Gordon P. Whitaker, forthcoming and in Policing Metropolitan America by the same authors to be published by the Government Printing Office in February or March, 1977.

4. The process of determining whether a state does or does not have legislation in this area involves a somewhat complex analysis. There may be a statute dealing with arrest powers, but jurisdictional limits are not mentioned. Or, a statute dealing with the problem of intra-state fresh pursuit may have been repealed. To illustrate, Iowa police officers are ordered to "pursue and arrest any person fleeing from justice." Iowa Code Ann. S368A.17 and 18 (1973). Although

this duty is not limited by any reference to jurisdictional lines, a recent Iowa case has held that an officer seeking to make an arrest without a warrant outside his originating jurisdiction must be treated as a private person. State v. O'Kelly, 211 N.W. 2nd 589 (1973). Wyoming did have a statute permitting statewide pursuit, Wyo. Stat. S7-163 (1957), but Rule 56 of the Wyoming Rules of Criminal Procedure provided that this statute be superseded as of February 11, 1969. And in Illinois, the intra-state fresh pursuit power was presumably defined by case law or opinions of the Attorney General. Upon further investigation, however, citations verifying these authorities were not found.

The full citations to relevant statutes are contained in Larry Wagner (1975) "Patterns of State Laws Relating to Fresh Pursuit." Police Services Study Technical Report Number 1. Bloomington, Indiana: Workshop in Political Theory and Policy Analysis.

5. See, for example, Ostrom, Elinor et al. (1973) Community Organization and the Provision of Police Services. Beverly Hills, California: Sage Publications; Ostrom, Elinor and Roger B. Parks (1973) "Suburban Police Departments: Too Many and Too Small?" In Louis H. Masotti and Jeffrey K. Hadden, eds. The Urbanization of the Suburbs, Vol. 7, Urban Affairs Annual Reviews. Beverly Hills, California: Sage Publications, 367-402; Ostrom, Elinor and Gordon P. Whitaker (1974) "Community Control and Governmental Responsiveness: The Case of Police in Black Communities." In David Rogers and Willis Hawley, eds. Improving the Quality of Urban Management, Vol. 8, Urban Affairs Annual Reviews.

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