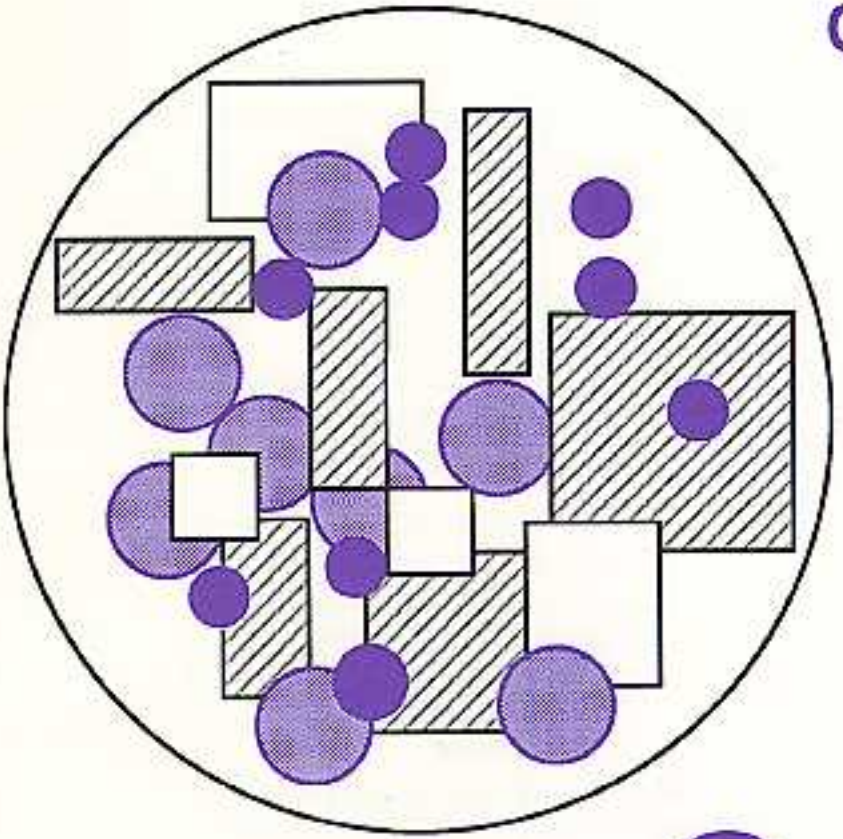
A Commission Report

Metropolitan Organization: The Allegheny County Case



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Washington, DC 20575
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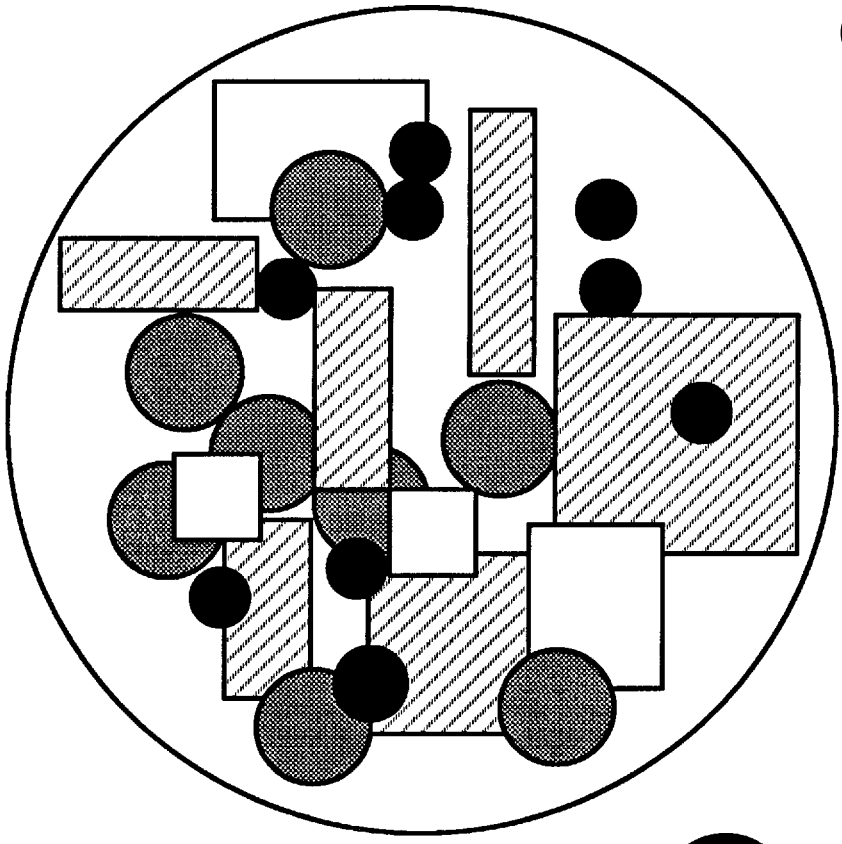

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The Commission and its staff retain final responsibility for the content of the report.

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Metropolitan Organization: Toward a Further Understanding

INTRODUCTION

In its 1988 report entitled *Metropolitan Organization: The St. Louis Case,'* the Advisory Commission on Intergovernmental Relations (ACIR) focused on organization and governance in complex metropolitan areas. The report characterized the challenge of metropolitan organization in the 1980s as one of understanding:

> The problem of metropolitan organization in 20th-century America has been viewed, by many observers, as presenting first and foremost a *challenge of reform.* Today, propositions linking the fragmentation of jurisdictions with disorganization and ineffectiveness can no longer be accepted as self-evident. The basic problems of metropolitan organization have come to pose, first and foremost, a ***challenge of understanding.*** For this purpose, the ACIR has undertaken a research program consisting of a series of case studies, beginning in the St. Louis area. From a better understanding of metropolitan organization and governance, more discriminating and, in the end, more effective efforts to adjust the structure of metropolitan areas can be developed. In the absence of understanding, reform efforts, to the extent they are successful, may yield a harvest of unintended consequences.[2]

This report continues the effort to learn how complex metropolitan areas function, with a case study of Allegheny County, Pennsylvania, the central county of the Pittsburgh metropolitan area.

METROPOLITAN ORCANIZATION AND GOVERNANCE

A concern with both ***organization*** and ***governance*** suggests two basic questions:

1) The question of organization—what patterns are more likely to be *responsive* to citizen preferences, *efficient* in producing services, and ***equitable*** in financing and delivering services?

2) The question of governance—what patterns are more likely to enable individuals to establish and maintain desirable patterns of organization in view of changing preferences, technologies, and other circumstances of metropolitan life?[3]

The first question leads to the empirical study of the patterns of metropolitan organization. Does complexity—often labeled fragmentation—result in less responsiveness, less efficiency, and less equity, or do metropolitan areas behave as "local public economies"[4] that develop a variety of organizational arrangements closely matched to diverse public problems? The question of governance leads to a focus on the institutional arrangements that may allow individuals to control and direct the development of local public economies.

Metropolitan organization presents a complicated puzzle. Citizen preferences for public services are diverse, varying from place to place within a metropolitan area over time. Moreover, preferences can be aggregated at different levels with different results—from neighborhoods to cities and towns, counties, sub-metropolitan regions, and the metropolitan area as a whole. Public services also differ in their scale of effects—air pollution control affects an entire airshed; police patrol may affect a single neighborhood. Technologies to produce public services exhibit gross differences in scale economies. Resources to provide services are not distributed uniformly across a metropolitan area, and achieving fiscal equity does not guarantee equity in service delivery.

Such a diverse array of problems is unlikely to be addressed satisfactorily by a boiler-plate solution applied uniformly across metropolitan areas, or even across different communities within a single area. Solutions depend on the specifics of time and place rather than on abstract knowledge of a single correct pattern.

In the early reform literature, metropolitan areas were viewed as failing to conform to a rational pattern of organization. The recommended pattern usually was a single, areawide government. Later, a two-tier variant was introduced. Common to both was a presumption in favor of uniform arrangements to provide and produce specific services throughout a metropolitan area. Metropolitan ar-

eas with large numbers of local governments were viewed as organizationally "fragmented" and affected by an assortment of ills, including inefficiencies and inequities.

If solutions depend on the specifics of time and place, however, there is no single correct structure to organize the provision and production of services. Diverse organizational arrangements are appropriate. If this diversity is recognized, the basic approach to governance of metropolitan areas must be different. Local citizens and their elected officials would need structures that empower them to make choices among alternatives. The governance structures of metropolitan areas should, in this view, be sufficiently open to allow for a variety of arrangements that respond to variable conditions?

ACCUMULATING EVIDENCE: FRAGMENTATION, COMPLEXITY, AND PERFORMANCE

Increasingly, research indicates that fragmented metropolitan areas can be more efficient in providing public services. In one of the most careful studies to date, Mark Schneider reports that growth in local expenditures, controlling for relevant service conditions that serve as proxies for service demand, was slower in more fragmented metropolitan areas than in less fragmented areas.[6] This finding is consistent with a growing body of local public finance research.' Christopher Bell reports similar results with respect to school district organization in the states.[8]

Problems with the measurement of structure, however, limit what can be learned from this research. The fragmentation of a metropolitan area is usually measured as a ratio of the number of jurisdictions to population. Sometimes, only particular types of jurisdictions are counted, such as municipalities, yielding a measure of horizontal fragmentation. Other measures include all jurisdictions considered to be governmental in nature by the U.S. Census of Governments, thus summing over jurisdictions that do and do not overlap territorially. In neither case does fragmentation measure the vertical structure of a metropolitan area (i.e., the amount of territorial overlap among jurisdictions). Nor does it measure the presence of nongovernmental public bodies created by local governments.

Metropolitan areas that are more fragmented in jurisdictional terms tend to have more complex patterns of organization, developing a variety of multilevel or multiscale arrangements. To describe such systems accurately requires a careful mapping of the relationships among jurisdictions. The structure cannot be summed up adequately in a single indicator that measures the number of governments per capita.

Evidence has begun to emerge that complex metropolitan areas may be more efficient than those that are organized more simply, whether the latter are highly consolidated or highly fragmented. David Chicoine and Norman Walzer report higher citizen perceptions of quality for some services (libraries and streets) for which provision was concentrated, as well as for some others (education and parks) with fragmented provision.[9] The implication is that a mixture of service arrangements may be appropriate. Roger Parks reports higher technical efficiency in police service in metropolitan areas that combine fragmentation of patrol and immediate response to citizen requests with more concentrated radio communications and investigation of the most serious crimes. A combination of small and large police service producers organized in nested arrangements was found superior both to pure horizontal fragmentation and to full vertical consolidation.[10]

Research reporting positive effects in cases of jurisdictional fragmentation and organizational complexity challenges the presumptions that underlie traditional metropolitan reform. It also challenges all students of metropolitan organization to understand and explain how fragmentation can yield positive effects. Metropolitan areas with similar populations and comparable numbers of governmental units may still have significantly different organizations and operations.[11] Complex metropolitan areas can be understood only on their own terms; researchers must get "inside" fragmented systems to see how they are organized and governed.[12]

THE ACIR RESEARCH PROGRAM: EXPLORING FUNCTIONAL ARRANGEMENTS

The ACIR research program on the organization of local public economies seeks to investigate the characteristics of organization and governance in jurisdictionally fragmented metropolitan areas. The focus of inquiry is on functional arrangements for taxation, service delivery, and governance.[13] These functional arrangements (action patterns) can be distinguished from jurisdictional arrangements (authority patterns).

The problem of metropolitan organization is concerned with how authority patterns affect action patterns. Jurisdictional arrangements establish the legal capacity to create a range of different functional arrangements. Jurisdictional arrangements do not determine functional arrangements, but create possibilities within limits. While some possibilities are foreclosed by fragmentation, left open is a wide variety of arrangements for interjurisdictional coordination.

Functional arrangements can be viewed as intermediate or intervening variables, linking (1) jurisdictional arrangements (some configuration of fragmentation and overlap) and (2) outcomes (efficiency, responsiveness, and equity). The range of possible functional arrangements includes independent action by each jurisdiction (with potential duplication) and various forms of coordinated action by two or more jurisdictions. The decisionmaking processes may include cooperation, contracting, collusion, competition, conflict, negotiation and conflict resolution, rulemaking and enforcement, problem solving, and "buck passing."

This approach to metropolitan research takes a vital step beyond a simple focus on jurisdictional arrangements to look at the relevant functional processes and arrangements. In this way, it may be possible to discover the basic organizational dynamics of a jurisdictionally fragmented metropolitan area.

The ACIR research program includes case studies of individual metropolitan areas that examine the linkages between jurisdictional and functional patterns. Individual

case studies cannot assess the comparative performance of more or less fragmented areas. Other researchers are pursuing comparative analysis of service provision based on performance measurements.[14] The functional arrangements studied for this report lead directly to outcomes of service provision, and studying those arrangements may lead to suggestions for improving the functioning of metropolitan areas. If, as research indicates, metropolitan areas that exhibit a high degree of jurisdictional fragmentation can perform comparatively well, it is important to learn how and why.

A THEORY OF LOCAL PUBLIC ECONOMIES

The theoretical orientation used in this report distinguishes the "provision" of public services from their "production."[15] Provision refers to collective-choice processes that determine (1) what goods and services to provide, (2) what private activities to regulate, (3) the amount of revenue to raise and how to raise it, and (4) the quantities and quality standards of goods and services to be provided. Production refers to the technical processes of combining resources to make a product or render a service.

Different considerations apply to the organization of a collectivity to provide a service than to the organization of an agency or firm to produce a service. Local governments are primarily provision units that decide what services will be provided and how, but do not necessarily organize production in-house. The collective decision to organize a provision unit reflects the existence of a community demand for service—a community is willing and able to pay for something that its citizens want. Provision can be differentiated in two complementary ways. One method (corresponding to some measures of fragmentation) divides responsibility among a set of nonoverlapping jurisdictions, such as municipalities or school districts. Another approach divides responsibility between jurisdictions that overlap territorially. Provision units may or may not be in a position to organize their own production units—police departments or fire departments, for example. Local governments can arrange for production in a variety of ways, including in-house production, intergovernmental and private contracts, coordinated or joint production, franchises, vouchers, and the encouragement of voluntary production.[16] Such arrangements allow providers to capture the benefits of economies of scale without being limited to producing everything at a single scale of organization identical to that of provision.

In most metropolitan areas, therefore, the structure of the production side of a local public economy tends to be different from the provision side. For example, there are usually fewer producers than providers of a service, due at least in part to economies of scale in production. Some small providers of direct services, like police patrol, may choose to contract with other production units. Moreover, various indirect service components can be differentiated and produced under arrangements that reflect diverse economies of scale. For example, the number of units that produce police communications and dispatch will tend to be less than the number that produce routine patrol; still fewer units may be involved in the production of police training and the investigation of serious crimes. Services such as these are often produced by joint units created by intergovernmental agreements, by larger scale patrol producers under contract, or by units organized by overlapping county or state jurisdictions."

Among the issues that can be addressed by nesting smaller units inside larger ones is distributional equity. One popular view is that fiscal equity is best obtained by enlarging the size of jurisdictions to encompass economically diverse communities, creating a broader tax base and, in theory, allowing more resources to be distributed to poorer areas.

Public economies can be organized, however, so that overlying jurisdictions can raise revenues for purposes of redistribution without depriving distressed communities of their autonomy as provision units. If citizen preferences within large general units support resource redistribution to distressed communities, they may also support redistribution to smaller autonomous units by overlying jurisdictions. Counties, for example, are often useful arenas for redistribution, and they have increased this role significantly in the last decade." Preserving the jurisdictional autonomy of communities in need has the advantages of encouraging local self-reliance, allowing recipient communities to control many aspects of provision (including the choice of services to be provided), and enabling them to monitor and control important aspects of production whether or not production is organized in-house.

FUNCTIONAL DIMENSIONS OF METROPOLITAN ORGANIZATION

The ACIR study of St. Louis City and County identified a number of characteristics of metropolitan organization and governance,[19] many of which can be considered attributes of "civil community," as described by Daniel J. Elazar, that enable jurisdictionally fragmented areas to function in coherent ways.[20] The characteristics of St. Louis County, which are summarized here, became working hypotheses in the study of Allegheny County.

local Government Constitution

One basic attribute of metropolitan governance in areas with substantial jurisdictional fragmentation appears to be a body of rules that applies to the formation, modification, and conduct of local governments. This body of rules can be understood as a "local government constitution" or legal framework that enables communities to constitute governmental units. Two levels of governance are implied: (1) one level is concerned with the choice of rules that enable the creation and adjustment of local governments within legal constraints; (2) another level is concerned with making choices that establish and maintain discrete local governments. In part, fragmentation derives from the rules of local government formation and boundary adjustment that allow a large number of jurisdictions to be created and maintained with qualified independence from one another. At the same time, the local government constitution includes to some extent a capability for adjusting authority relationships. In this sense, the legal framework may include mechanisms of metropolitan governance (capabilities to make and adjust rules across

boundaries) in the absence of a single metropolitan government. Because most of the rules that apply to local governments are embodied in either state statutes or state constitutions, the character of metropolitan governance depends to a large degree on institutional arrangements that vary state by state.

Multijurisdictional Forums for Discussion and Negotiation

Closely related to the rules that make up a local government constitution are metropolitan arrangements that facilitate discussion and negotiation. Statewide and countywide leagues of municipalities, county associations, and other local government associations (including, for example, school superintendents, police and fire chiefs), bring local officials together to share information and discuss common issues. In addition, many metropolitan areas have active councils of governments that bring together elected and appointed officials. These mechanisms facilitate the use of local initiative and consensusbuilding in securing adjustments in the legal framework under which local public agencies work and interact with one another.

Large Investment in Representation

A large number of locally elected officials with correspondingly small constituencies reflects a major investment in political representation. Low ratios of citizens to elected officials allow citizens to have easy access to local governments and an effective voice in decisionmaking. Jurisdictional fragmentation and proliferation apparently are associated with a determination on the part of citizens to maintain high levels of representation. Territorially overlapping jurisdictions provide channels of representation at different geographic scales. Representation in a county council adds to representation by municipal and, sometimes, special district officers.

Citizen Officials

Small local jurisdictions also tend to rely on part-time, "amateur" elected officials, not only as representatives but also as executives and administrators. such as mayor or village president. Citizens serve in lieu of and often in addition to full-time professional employees. Although frequently paid for their time, the rate of pay generally does not compensate them at market value; thus, most citizen officials are more nearly volunteers than employees. When serving in lieu of professionals, citizens perform essential functions in small jurisdictions. When serving in addition to professionals, however, citizens can be viewed as contributing both a local perspective and a level of information that professionals are somewhat less likely to bring to bear on their work.

Overlapping Jurisdictions and Special Districts

Jurisdictional overlap can be used as a tool of coordination among fragmented jurisdictions. Two types of overlapping jurisdictions are found: special districts and overlying general governments.

Special districts that provide specific services are useful complements to primary jurisdictions, such as small local municipalities and school districts. Often, they address somewhat larger scale concerns, some areawide and some not, that are difficult either for smaller jurisdictions to address separately or for larger jurisdictions to address uniformly. In terms of production, special districts can capture scale economies that differ from the boundaries of general local governments.

In addition to special districts, general governments overlap in metropolitan areas. This overlay can provide a basis for metropolitan governance based on rules that apply to local governments within the larger jurisdiction, as well as for organizing an overlying government to provide a limited range of services.

Separation of Provision and Production

Frequently in jurisdictionally fragmented areas, local units that make provision for a service do not choose to produce the service, but enter into contractual arrangements with other governmental units or private firms. There is no economic reason to restrict the organization of local governments to those that are able to produce all, or any, of the direct services they provide. Very small municipalities frequently choose to make decisions related to provision, while obtaining services from public and private vendors. Even larger municipalities often choose to arrange for the production of indirect or auxiliary services—and some direct services—by others. This makes good economic sense in view of the economies of scale that apply to the components of public service delivery.

Coordinated and Joint Service Production

Closely related to the separation of provision and production is joint production by multiple providers as well as coordination among separate producers. Ranging from informal cooperation and mutual aid among service delivery personnel to jointly administered projects, programs, and facilities, these ties and overlays add a critical dimension to the organization of the production side of a local public economy.

CRITERIA FOR THE STUDY

In the St. Louis study, seven criteria were used to evaluate the provision and production of public services.[21] The same criteria are used in this study, plus one having to do with "public entrepreneurship," derived from the St. Louis study.

Six of the criteria deal with functional arrangements and associated decisionmaking processes:

> Self-Determination and Citizen Choice. To what extent are citizens able to establish and control a variety of local governments, adjust their boundaries, and transfer authority among jurisdictions? To what extent can citizens choose among jurisdictions to locate a residence or business? The question is one of process, not just rules: to what extent do the rules of self-determination enable self-determination and citizen choice to occur?

Representation and Accountability. Can communities of interest of differing sizes gain effective representation of their views? Are the costs to citizens of making their views known to public officials kept reasonably low? Are elected public officials and administrators effectively accountable to the communities of interest (neighborhood, municipal, county, metropolitan)?

Coordination. Is production coordinated for closely related services and service components? Do serious deficiencies develop—the price, perhaps, of too much self-determination—or does significant functional coordination emerge from arrangements that cross jurisdictional boundaries?

Competition among Service Producers. Do local jurisdictions "shop around" for the most economical method of service production? Does this competition effectively yield cost savings and/or service benefits taking into account the costs of occasional shifting among producers?

Metropolitan Problem Solving. Are genuinely metropolitanwide problems effectively addressed on a metropolitan basis?

Public Entrepreneurship. This criterion is added in view of findings from the St. Louis study. Public entrepreneurship—the work of officials and citizens who initiate ideas and who carry the burden of ensuring discussion, compromise, and creative settlement of differences—spurs innovation, often consisting of new interjurisdictional efforts. One of the measures of a productive public economy is the level of entrepreneurial activity aimed at addressing problems, improving services, or securing more efficient and effective service production.[22]

These criteria do not answer performance questions directly, such as how good garbage pick-up or police protection or street maintenance may be in any jurisdiction of a metropolitan area. The criteria do identify processes or arrangements that are necessary to effective and efficient performance, even if they do not guarantee it.

Additional criteria are needed to evaluate fiscal relationships among local governments. These are:

Productive Efficiency. Are services and service components produced for populations large enough to capture any returns to population size? Are there significant uncaptured economies of scale or size?

Equity. Do fiscal differences among local jurisdictions reflect patterns of racial or income differences? To what extent are some types of communities relatively advantaged or disadvantaged in fiscal capacity?

Although fiscal data alone, without performance measures, do not permit a definitive assessment of efficiency or equity, the relationships among fiscal variables provide an indication in each case.

THE ALLEGHENY COUNTY CASE STUDY

Allegheny County was selected for study because it is, by conventional measure, the premier fragmented metropolitan county with more than one million residents. By Census of Governments count, Allegheny County had 323 governments in 1982. With a 1980 population of 1,450,186, Allegheny County's fragmentation "score" is 2.23 governments per 10,000 residents. St. Louis County has a fragmentation score of 1.55, while Cook County, Illinois, with 516 governments, has a score of 0.98.

Allegheny County, like St. Louis County, is a "hard case" in the sense that by traditional accounts of metropolitan organization it should exhibit all of the pathologies of fragmentation. If confusion, discord, and a lack of cooperation among independent governments are characteristics of fragmented metropolitan areas, Allegheny County should exhibit them all.

Allegheny is the central county of the four-county Pittsburgh metropolitan area, which contains a total population of 2.2 million. Pittsburgh, Allegheny's central city, is home to nearly 30 percent of the county's population and the principal place of work for many more. The county outside of Pittsburgh is fully incorporated by an additional 129 municipalities[23] that range in population from 127 to nearly 58,000 (almost evenly split above and below 5,000 population). Twelve municipalities have fewer than 1,000 residents. Most of the municipalities are members of one of eight councils of governments,

Elementary and secondary education is provided by 43 independent school districts, with two overlapping intermediate units for specialized services. Fire protection is supplied principally by approximately 250 volunteer fire companies. Only three of the municipalities have fully paid fire departments, although several more employ some paid fire personnel. The paid and volunteer fire companies are linked by fire defense councils, associations that facilitate cooperation in fire fighting, training, and equipment sharing.

By conventional measure, Allegheny County has more and substantially different fragmentation than St. Louis City and County. Pittsburgh is approximately the same size as St. Louis, and includes approximately the same proportion of city-county residents. Pittsburgh, however, is an integral part of Allegheny County, where St. Louis City is constitutionally separate from St. Louis County. There are, therefore, two nonoverlapping county governments in St. Louis as opposed to the single county government in Allegheny. Outside of their central cities, the areas differ in the form of fragmentation. While Allegheny County is fully incorporated, St. Louis County is only 60 percent so, when measured in population terms. Allegheny County government is not responsible for providing urban/suburban type services to a substantial population. St. Louis County government provides urban/suburban services to nearly 400,000 residents of unincorporated territory.

The areas differ, too, in how they provide and produce public services. Allegheny County has many more police departments and school districts than St. Louis County. Allegheny County has many fewer public fire depart-

ments, but more fire companies, most of which are volunteer. St. Louis' departments are paid or mixed paid and volunteer. Allegheny County has more public departments that produce street services, but has virtually none of the private street associations found throughout much of St. Louis City and County.

Allegheny County also has a different "reform" history. Where St. Louis and St. Louis County frequently have attempted total or partial consolidation of independent jurisdictions, Allegheny County has consistently taken a two-tier, federated approach, leaving existing jurisdictions intact. Traditional metropolitan reform has been on the public agenda much less frequently in Allegheny County, with the last major effort in 1929 (see Chapter 2). Subsequent efforts have focused on altering the structure of county government through adoption of home rule charters. These efforts have not been successful.

As in St. Louis and St. Louis County, Allegheny County residents have not opposed efforts to address regional issues when the approach preserved local jurisdictional autonomy. Authorities for the provision and production of some services, such as water supply and sewage collection and treatment, overlap large numbers of municipalities. Eight councils of governments link municipalities in regions (see Chapter 2). Municipalities commonly cooperate for the production of police and street services (see Chapter 4). There is formal cooperation among independent school districts through overlapping intermediate units governed by the districts (see Chapter 5). The volunteer and public fire companies are linked by membership in one of eight fire associations, and they report extensive cooperation in fire suppression and other activities (see Chapter 4). Thus, Allegheny County, like St. Louis County, is not "balkanized" in the pejorative sense meant by critics of fragmentation. Rather, it has a complex organization. Allegheny's complexity, like its fragmentation, is different from that in St. Louis City and County, thus affording the opportunity to learn more about the operation of complex organizational patterns in multijurisdictional metropolitan settings.

PROSPECTUS

Chapter 2 describes patterns of growth and the present political geography of Allegheny County, including its municipalities, school districts, volunteer fire companies, and the county government. The chapter includes a broad description of intergovernmental cooperation, with special attention to councils of governments. Basic fiscal arrangements are described, and a history of past reform efforts is included. Chapter 3 analyzes the basic governance structure of the county, describing the rules that comprise its local government constitution.

Chapter 4 analyzes patterns of provision and production for police, street, and fire services. Chapter 5 focuses on elementary and secondary education.

Chapter 6 analyzes the political economy of Allegheny County. Analyses of returns to population size in service production and of the extent of fiscal disparities among the county's municipalities and school districts are included. Chapter 7 concludes the report with a discussion of the functional dimensions of metropolitan organization in Allegheny County, and the application of the evaluative criteria discussed above.

This study concentrated on police, street, fire, and education because they are large, traditional functions of government with predominantly local responsibilities. There are, however, many other local functions, such as mass transportation, environmental protection, solid waste management, welfare, and housing, in which local governments have significant, often growing, roles. Studies of these additional functions, along the lines of inquiry used in this report, would extend existing knowledge of how metropolitan governance works, and should be pursued. Until that is done, care should be exercised to avoid overgeneralizing the findings in this report.

Notes

1 U.S. Advisory Commission on Intergovernmental Relations (ACIR), Metropolitan *Organization:* The St. Louis Case (Washington, DC, 1988).

2 Ibid, p. 12.

3 These questions are posed by Roger B. Parks and Ronald J. Oakerson in "Metropolitan Organization and Governance: A Local Public Economy Approach," Urban *Affairs Quarterly* 25 (September 1989): 18-29.

4 ACIR, *The Organization of Local* Public Economies (Washington, DC, 1987).

5 For a comprehensive review of research on organizational and interorganizational structure in metropolitan areas and the relationships of structure and performance, see Vincent Ostrom, Robert Bish, and Elinor Ostrom, Local *Government in* the United States (San Francisco: ICS Press, 1988).

6 Mark Schneider, "Fragmentation and the Growth of Government," Public Choice 48 (1986): 255-263.

7 Recent reports include Randall Eberts and Timothy Gronberg, "Can Competition among Local Governments Constrain Government Spending?" Federal Reserve *Bank* of Cleveland Economic Review 24 (Quarter 1,1988): 2-9; Thomas J. DiLorenzo, "Economic Competition and Political Competition: An Empirical Note," *Public* Choice 40 (1983); and Jeffrey S. Zax, "The Effects of Jurisdiction Types and Numbers on Local Public Finance," in Harvey S. Rosen, ed.. Fiscal Federalism: Quantitative *Studies* (Chicago: University of Chicago Press, 1988), pp. 79-103.

8 Christopher Bell, "The Assignment of Fiscal Responsibility in a Federal State: An Empirical Assessment," *National Tax Journal* 41 (June 1988): 191-207.

9 David L. Chicoine and Norman Walzer, *Governmental Structure and* Local *Public* Finance (Boston: Oelgeschlager, Gunn & Hain, 1985).

10 Technical efficiency measures the transformation of available resource inputs to valued outputs, and thus goes beyond efficiency characterizations that focus solely on public expenditures. See Roger B. Parks, "Metropolitan Structure and Systemic Performance: The Case of Police Service Delivery," in K. Hanf and T. A. J. Toonen, eds., Policy *Implementation in* Federal *and Unitary* States (Dordrecht, Netherlands: Martinus Nijhoff Publishers, 1985), pp. 161-191. The complex mixture of service arrangements discussed here should not be confused with reform proposals for a simplified two-tier approach.

11 See the work of David R. Reynolds comparing the organization of St. Louis, Detroit, and Los Angeles in his "Progress toward Achieving Efficient and Responsive Spatial-Political Systems in Urban America," in John S. Adams, ed., Urban

Policymaking and Metropolitan Dynamics: A Comparative Geogmphical Analysis (Cambridge, Massachusetts: Ballingcr Publishing Company, 1976), pp. 463-53.

[12] ACIR, *Metropolitan Organization: The St. Louis Case,* p. 3.

[13] The remainder of this section repeats the arguments **posed** in ACIR, *Metropolitan Organization: The St. Louis Case,* pp. **3-4.**

[14] No system of government is perfect. It **is** always possible to point to problems and shortcomings. Metropolitan reform advocates use the manifestation of problems and shortcomings to argue for reform, but the evaluation of institutional performance requires a ***compamtive*** assessment of institutions. Only on this basis can we know whether proposed reforms are more likely to solve problems or make them worse. The simple existence of problems and shortcomings does not establish that a metropolitan area is not comparatively well governed. Moreover, there are difficulties with performance measurement in the public sector. In the absence of a cardinal scale of measurement for goods and services such as police and education, the best one can do is to compare the performance of one institution with another. See notes 5 through 11.

[15] This distinction was introduced by Vincent Ostrom, Charles M. Tiebout, and Robert Warren, "The Organization of Government in Metropolitan Areas: A Theoretical Inquiry," *American Political Science Review 55* (December 1961): 831-842.

[16] Vincent Ostrom and Elinor Ostrom, "Public Goods and Public Choices," in **E. S.** Savas, ed., *Alternatives for Delivering Public Seivices: Toward Improved Performance* (Boulder: Westview Press, 1977), pp. 7-49.

[17] Elinor Ostrom, Roger B. Parks, and Gordon F? Whitaker, *Patterns of Metropolitan Policing* (Cambridge, Massachusetts: Ballinger Publishing Company, 1978).

[18] Mark Schneider and Kce Ok Park, "Metropolitan Counties **as** Service Delivery Agents: The Still Forgotten Governments," *Public Administration Review* 49 (July/August 1989): 345-352. See also Edwin Benton and Platon Rigos, "Patterns of Metropolitan Service Dominance: Central City and Central County Service Roles Compared," *Urban Affairs Quarterly* 20 (March 1985): 285-302.

[19] These conclusions are detailed in ACIR, *Metropolitan Organization: The St. Louis Case,* Chapter 8.

[20] Daniel J. Elazar, *Cities of the Prairie: The Metropolitan Frontier and American Politics* (New York: Basic Books, 1970) and *American Federalism: A View from the States,* 2nd Edition (New York: Thomas Y. Crowell, 1972), pp. 183-192.

[21] ACIR, *Metropolitan Organization: The St. Louis Case,* pp. 7-8.

[22] For a further discussion of the importance of public entrepreneurship, see Ronald J. Oakerson and Roger **B.** Parks, "Citizen Voice and Public Entrepreneurship: The Organizational Dynamic of a Complex Metropolitan County," *Publius: The Journal of Federalism* 18 (Fall 1988): 91-112.

[23] Two of these, McDonald and Trafford Boroughs, lie partially in Allegheny County. The majority of the population of each borough resides in adjacent counties of the PMSA.

Chapter 2

Allegheny County: Patterns of Complex Organization

COUNTY HISTORY AND GROWTH

The first permanent European settlement of Allegheny County dates to 1742, with the construction of a log cabin on the shore of the Monongahela River at present-day Braddock.[1] In 1754, French troops and their Indian allies drove off a small group of Virginians who were constructing a fort at the Forks of the Ohio, the confluence of the Allegheny and Monongahela Rivers, and completed its construction as Fort Duquesne. The French tenure was short lived, however. After an initial debacle in which a British expedition under General Edward Braddock (with aide-de-camp George Washington) was roundly defeated, a second British expedition led by General John Forbes dislodged the French in 1756, dismantling their stockade and constructing Fort Pitt. Fort Pitt withstood its last major Indian attack in 1762-1763, thus assuring British and, later, United States control of the region. The struggle for control over the temtory of Allegheny County continued, however, with Virginia and Pennsylvania claiming jurisdiction. Virginia established early control, but the ratification of the Mason-Dixon line in 1780 resolved the dispute in Pennsylvania's favor.

Allegheny County came into existence in 1788, created from portions of Washington and Westmoreland counties, with the town of Allegheny designated as county seat. At its creation, the county extended to the shores of Lake Erie. As additional counties were created in Pennsylvania, Allegheny County's borders shrank, reaching their current configuration by 1800.

Pittsburgh was designated as the county seat in 1791, replacing its cross-river rival, Allegheny. Pittsburgh was incorporated as a borough under the laws of the Commonwealth in 1794 and became a city in 1816. With a population of 6,000, Pittsburgh was regarded as the "Gateway to the West,"[2] offering ready river transportation down the Ohio to the Mississippi and on to New Orleans. The county population in 1816 was roughly 10,000.

Pittsburgh and Allegheny County grew at a rapid pace throughout the 19th century. Their growth was fueled by one of the most remarkable outpourings of commercial and industrial development in the United States, indeed in the world. The region's development resulted in part from its geographic location west of the Allegheny mountains, protecting its infant glass and iron industries from eastern competitors, and at the origin of the Ohio river, yielding easy access to markets. A second factor was the richness of the region's resources, with ample reserves of coal and other raw materials.[3] Still a third factor was rich human capital in the persons of entrepreneurs and inventors—such as Andrew Carnegie in iron and steel; George Westinghouse with air brakes and alternating current; Henry Heinz with horseradish, which developed into the "57 Varieties"; and the Mellons with their banking enterprises.[4] A fourth factor in the region's development was the flood of immigrants—initially English, Scotch-Irish, and German, and later, Scandinavian, eastern European, and southern black—who worked the enormous mills in "hell with the lid off," as Lincoln Steffens described Pittsburgh in 1903.[5]

MUNICIPAL INCORPORATION

By 1910, Allegheny County's population exceeded one million, and Pittsburgh's, 550,000. In 1907, Pittsburgh had become the nation's sixth largest city by virtue of its merger with the neighboring city of Allegheny, a source of substantial controversy.[6] By this time, the county's political geography had emerged in a configuration quite similar to that found today.

Allegheny County has been incorporated since its creation in 1788. At that time, seven townships recognized as municipal governments in Pennsylvania comprised the county. In 1800, there were ten townships. The creation of new municipalities, leading to the present 130 townships, boroughs, and cities, occurred mainly through incorporating new boroughs within townships, splitting townships into two or more separate municipalities, and, to a much lesser extent, combining smaller municipalities to form cities.

At the end of the Civil War, 38 of the present Allegheny County municipalities were in existence.' The major growth in number of municipalities occurred in the post-Civil War period, especially at the end of the 19th and start of the 20th centuries (43 between 1891 and 1910, 12 in 1892 alone). By 1910, the county had 108 municipalities. During the post-World War II period, 1945-1960, when the number of suburban municipalities was growing rapidly around many American cities, growth around Pittsburgh slowed, with only eight new municipal governments coming into existence. Since 1960, only one new municipality has been created in Allegheny County.

"Suburbanization" appears to have taken place in Allegheny County well before it occurred in many other metropolitan counties, in part because many of the new

municipalities were not suburbs of the type created in later years. They were not tracts of residential housing providing escape from the central city. They were "mill towns," created at the instigation of private entrepreneurs to encapsulate their major mills and factories, protect them from taxation and regulation, and provide them with local police powers that could be and were used to ward off union organization in the mills.'

Twenty-nine municipalities were created in the valleys of the Monongahela and Youghiogheny rivers and along Turtle Creek after the Civil War, all but four by 1910. These municipalities (Braddock, Rankin, East Pittsburgh, Munhall, Duquesne, Clairton, and their neighbors) were places of immense industrial creativity. The mills and factories built there, most of which are idle today, employed upwards of 100,000 men in their prime, and stand as monuments to their creators and to those who worked in them. In the early days of air transportation, the glow at night from the "Mon Valley" blast furnaces provided pilots with their major navigational checkpoint when flying west from New York toward Chicago.

During this period, 25 new municipalities were created in the valleys of the Allegheny and Ohio rivers. If not mill towns, many of these were at least company towns, incorporated to buffer a new commercial or industrial enterprise from undue taxation and to provide it with a friendly local administration. Incorporations of new residential communities occurred, some of them on the hills above the company towns, to provide amenities for mill owners and managers. The period was one of massive immigration from Europe, especially eastern Europe. Social and ethnic segregation in separately incorporated municipalities allowed accommodation to distinct differences in life styles.

> Around the lowland mills crowded the immigrants, the Slavs, the Germans, the Italians, and the Irish with their tolerance for saloons and their devotion to the Roman Catholic Church. On the hills lived the Presbyterians with their abhorrence for alcohol and their dedication to Protestantism.[9]

Areas outside of the river valleys developed and incorporated as transportation routes linking them to Pittsburgh were established. Communities in what is now called Parkway West developed after the opening of the Point Bridge in 1876. Communities in the South Hills and Parkway West developed further as inclines were constructed on Mts. Washington and Oliver, and after the boring of the Liberty and Fort Pitt tubes through Mt. Washington.

METROPOLITAN REFORM IN ALLEGHENY COUNTY

Throughout the first three decades of the 20th century, Pittsburgh expanded its boundaries through annexations—the forced annexation of the city of Allegheny in 1907 being the largest.'" These annexations were authorized by special legislation enacted by the Pennsylvania General Assembly, allowing the mergers to be decided by a simple majority of voters in Pittsburgh and the area to be annexed, rather than by concurrent majorities in both. In response, the League of Boroughs and Townships of Allegheny County was formed in 1910-11 to combat Pittsburgh's initiatives in the General Assembly." The league was successful in defeating several annexation bills and other legislation to create a metropolitan district government during the years up to 1923. Pittsburgh continued to grow by annexation, principally where residents of the area to be annexed signed petitions supporting annexation.[12] Pittsburgh legislators continued to submit bills to allow unilateral expansion by the city. They were concerned that Pittsburgh was falling behind its industrial rivals in population size and, therefore, attractiveness to new industry.

In 1923, the Commission to Study Municipal Consolidation was appointed by the governor, with representatives of Pittsburgh, the third class cities of Clairton, Duquesne, and McKeesport, and the boroughs and townships in Allegheny County. The commission, with research support from prominent political scientists associated with the National Municipal League, developed an enabling amendment to the Pennsylvania Constitution authorizing residents of Allegheny County to create, if they so chose, a federated city of Pittsburgh. The federated city would become, its proponents argued, the nation's fourth largest city in the 1930 census. The amendment was approved by the General Assembly and by voters statewide in 1928. The commission submitted a charter for a federated city to the General Assembly the following year. After substantial amendment to limit the functions to be consolidated, the proposed charter was approved and sent to Allegheny County voters for their consideration.[13] All existing municipalities were to be retained intact.

In June 1929, the charter was voted on, receiving a 68 percent majority of positive votes countywide and majorities in 82 of 123 municipalities—exactly two-thirds. The vote was not sufficient for adoption of the plan, however. The commission had proposed a majority vote in a majority of communities; the state Senate changed the requirement to a majority vote in two-thirds of the communities; the House of Representatives modified the rule again, to a two-thirds majority in a majority of communities. It was this last requirement that defeated the plan—the two-thirds majority was obtained in only 50 of the 123 municipalities.[14]

There was some controversy over whether the House amendment was a fluke or a deliberate action by opponents of the plan. The president of the League of Boroughs and Townships, Joseph T. Miller, also chairman of the commission and a strong supporter of the plan, described the action as no more than a "printer's option in setting his type," but others were more skeptical. "One Pittsburgh reformer" was quoted saying that "it would be difficult to elect the twelve Apostles if one had to get a two-thirds vote from all the boroughs and townships in Allegheny County."[15] Whether a fluke or not, it allowed a minority of county residents from predominantly working class and rural cities, boroughs, and townships to thwart the wishes of a substantial majority of their fellow citizens.[16]

Joseph Miller and others continued to argue for reform in Allegheny County following the 1929 charter defeat, but with little success. In 1951, a Metropolitan Study Commission recommended the transfer of a number of functions from municipalities to the county. County as-

Table 2.1
Allegheny County Demographics, by Region

Region	Number of Municipalities[1]	Population (1984 est.)	Percent Nonwhite (1980)	Percent below Poverty Line (1979)	Per Capita Income (1979)	Per Capita Income (1985)	Percent Change in Real Income (1979-85)
Pittsburgh-Mt. Oliver	2	406,943	24.7%	16.5%	$6,838	$9,985	–2.2%
Allegheny-Valley North	17	73,390	1.7%	6.5%	9,200	13,540	–1.4
Eastern Suburbs	7	151,289	12.4%	5.1%	8,163	11,621	-4.6
Mon Valley	33	199,194	10.1%	10.3%	7,067	9,500	–10.0
South Hills	14	237,524	2.1%	3.7%	9,529	13,649	–4.1
Parkway West	22	131,432	3.6%	6.8%	7,878	11,086	–5.7
Ohio Valley	18	39,298	4.1%	5.6%	9,836	14,292	–2.7
North Hills	15	170,093	1.2%	4.2%	8,774	12,649	–3.4
Total County'	**128**	**1,409,163**	**10.9%**	**9.1%**	**8,003**	**11,439**	**-4.3%**

[1] Excluding McDonald and Trafford.

Source: Pennsylvania State Data Center, Diskette User's Data Express (DUDE1); and 1980 Census of Population and Housing. Data Tape STF-3.

sumption of responsibilities for public health, a regional transit authority, and libraries was implemented to greater or lesser extent. Assumption of broader responsibilities was rejected, as was an urban home rule charter for the county. Later attempts to adopt a home rule county charter were defeated at the polls in 1974 and 1978. Residents of Pittsburgh and 16 other municipalities approved home rule charters during this period. County home rule, however, is thought to imply a greater county role in metropolitan governance. The strong attachment to local authority found among county residents and local officials (see below) prompted their defeat of the county home rule proposals.

COUNTY DEMOGRAPHICS

Allegheny County can be thought of as an amalgamation of many diverse "neighborhoods." Pittsburgh is composed of distinct, identifiable neighborhoods, many with strong community-based organizations." Many of the neighborhoods outside Pittsburgh are incorporated as independent municipalities, while other municipalities contain many neighborhoods within their boundaries.

Describing the county at the neighborhood level is a task beyond the scope of this study. Even describing it municipality by municipality would be tedious. Fortunately, the neighborhoods and municipalities lie naturally in a smaller number of identifiable regions. These regions, with names like the Mon Valley, North Hills, and Parkway West, contain relatively identifiable population groupings that tend to differ from one another. The following discussion of county demographics is organized around these regions.[18]

Race

In 1980, approximately 11 percent of Allegheny County's population was nonwhite, virtually all of them blacks. The black population is concentrated predominantly in Pittsburgh (two-thirds) and in a small number of communities located east and southeast of Pittsburgh, including the Mon Valley communities of Braddock, Clairton, Duquesne, Homestead, McKeesport, and Rankin, and adjoining communities in the Eastern Suburbs, such as Monroeville, Penn Hills, and Wilkinsburg. This concentration is illustrated in Table 2.1, with Pittsburgh's nonwhite percentage approximately twice the county average, the Eastern Suburbs and Mon Valley at or near that average, and low percentages in the remaining regions.

Income

In 1979, approximately 9 percent of the county's population had incomes below the poverty level (see Table 2.1). The lowest per capita incomes and the highest percentage of residents with incomes below the poverty level were in Pittsburgh-Mt. Oliver, followed by the communities in the Mon Valley. Between 1979 and 1985, per capita income (measured in constant 1982 dollars) declined by 10 percent in the Mon Valley, as a result the closing of major steel mills and related businesses during and following the recession of 1982. Most of the mills remain closed, and many former mill workers are unemployed.[19] The highest per capita incomes in 1985 were in the Allegheny Valley North, South Hills, and Ohio Valley communities. Especially low-ranking communities were Braddock, Duquesne, Haysville, Homestead, North Braddock, and Rankin, all with per capita incomes below $8,000. The top end of the income scale included Edgeworth, Fox Chapel, and Sewickley Heights, all with per capita incomes approximating $40,000.

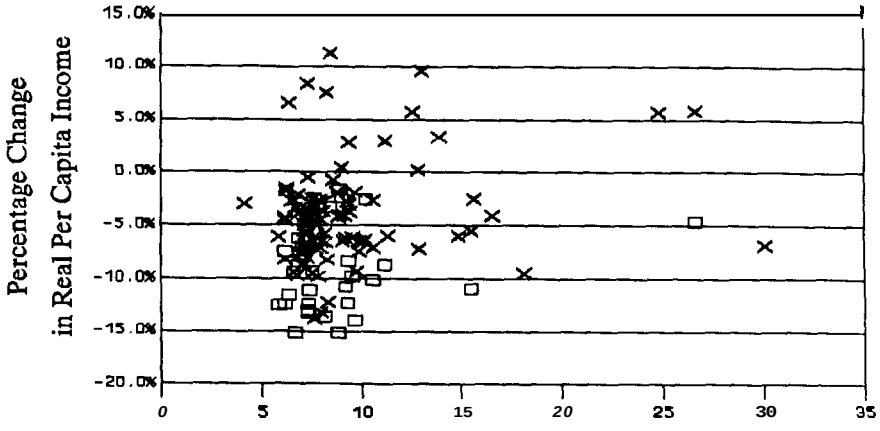
Figure 2.1 is a scatter plot of the percentage change in real per capita income changes measured in constant dollars from 1979 to 1985 against 1979 per capita income. The economic plight of many Mon Valley communities is highlighted in the Figure. Mon Valley communities are identified by an open box and communities in the rest of the county by an "x." Most Mon Valley communities were among the lowest in per capita income in 1979, and they suffered among the greatest percentage declines in income from 1979 to 1985.

Duquesne, Munhall, and Liberty, for example, had declines of 14 percent or greater in real income. Communities

Figure 2.1

Change in Real Per Capita Income, 1979-1985

(constant 1982 dollars)



□ = Mon Valley community.

with the greatest percentage increase in real per capita income over this period included Marshal (+11.2 percent), Bradford Woods (+9.5), Blawnox (+8.4), and Ohio (+7.6).

BASIC POLITICAL GEOGRAPHY

Allegheny County has 128 municipalities of *six* legal classes.[20] (The constitutional and statutory rules for each class and their governmental structures are discussed in Chapter 3). Municipalities include one second class city, Pittsburgh, with a home rule charter; two third class cities, Clairton and Duquesne; 76 boroughs; 33 townships—21 of the first class and 16 of the second class; and 16 home rule municipalities in the suburban county. Of the home rule municipalities outside Pittsburgh, one was originally a third class city; *six* were boroughs, five were first class townships, and four were originally second class townships. In addition to the municipalities, there are 43 independent school districts. Overlaid on these municipalities and school districts are 8 councils of governments (COGs), 2 educational intermediate units, 136 single purpose municipal authorities, 13 multipurpose authorities, and the Allegheny County government. The county also contains some 250 volunteer fire companies, which operate more or less independently of the municipalities in which they are located. Counting only publicly organized provision units, excluding fire companies but including COGs, intermediate units, and municipal authorities, the number of local governments in Allegheny County is 330. Allegheny County's population in 1984 was 1,409,163, yielding a ratio of approximately one governmental unit for every 4,300 county residents. By this ratio, Allegheny County is shown to have more governments for its population than any other county with one million residents or more in the United States.

Municipalities

Most of Allegheny County's municipalities are small—68 of them, more than half, had fewer than 5,000 residents in 1984, and 12 have fewer than 1,000. Figure 2.2 depicts the municipal geography of Allegheny County,

Table 2.2

Municipal Governments in Allegheny County

Population	Number[1]	Population (1984 est.)	Percent of Total Population	Land Area (square miles)	Percent of Total Land Area
0-1,000	12	6,358	0.5%	16.0	2.2%
1,000-2,000	18	27,490	2.0	36.9	5.0
2,001-5,000	38	133,453	9.5	152.4	20.9
5,001-10,000	32	248,732	17.6	176.7	24.2
10,001-20,000	14	195,308	13.8	111.0	15.2
20,001-58,000	13	395,239	28.0	181.5	24.9
Pittsburgh	1	402,583	28.6	55.1	7.6
Totals	128	1,409,163	100.0	729.6	100.0

[1] Excluding McDonald and Trafford.

Source: Pennsylvania State Data Center, Diskette User's Data Express (DUDE1).

and Table 2.2 describes the distribution of local governments in population and land area. Despite the presence of many small municipalities in the county, most Allegheny County residents live in the larger municipalities. Eighty percent of the municipalities contain only about 30 percent of the county population. Pittsburgh includes 29 percent of the county population, and municipalities with populations of more than 20,000 residents accounted for another 28 percent.[21]

A remarkable feature of municipal government in Allegheny County (and throughout Pennsylvania) is the large number of locally elected officials. Although a complete count is not available, the minimum number that could be elected under the governing codes is nearly 1,300, or approximately one elected official for every 1,100 citizens. This is one of the highest elected official to citizen ratios in the nation.[22]

Especially in the smaller municipalities, elected officials serve as part-time administrators of municipal affairs. In the smaller boroughs and townships, elected council members, commissioners, and supervisors exercise collective responsibility for municipal service delivery, with administrative support from a part-time municipal secretary. Of the 68 communities with populations of less than 5,000, only 12 reported full-time managers, and 5 had full-time secretaries in 1987.[23] Larger municipalities were more likely to have full-time administrators. Thirteen of the 32 municipalities with populations between 5,000 and 10,000 employed full-time managers; 8 employed full-time secretaries. Of the 27 municipalities with populations greater than 10,000, all but three reported a full-time manager or secretary.

Pittsburgh, with a 1984 population exceeding 400,000, is the largest municipality in the county. The next largest, Penn Hills, has fewer than 60,000 residents, and only 13 suburban municipalities exceed 20,000 population. The two third class cities include slightly more than 20,000 residents and less than 5 percent of the county land area (Table 2.3). The most numerous municipalities by type are 76 boroughs, which together contain approximately the same percentage of the county population as Pittsburgh. However, because of their larger land area, they are less densely populated on average than the central city. First class townships include about 14 percent of the county population and nearly 19 percent of its land area, while townships of the second class include 5 percent of the population and 25 percent of the land area. The second class townships comprise most of the semi-rural, relatively undeveloped parts of the county.[24] The 16 suburban home rule municipalities include 22 percent of the county population and 25 percent of its land area.

Since Pittsburgh is a home rule city, slightly more than half of Allegheny County's citizens reside in communities with home rule powers. Twelve of the 16 home rule municipalities employ full-time managers, while one reported employing a secretary full time. Full-time managers or secretaries were also reported by more than half of the first class townships and two-thirds of townships of the second class. Boroughs are much less likely to have full-time administrators in manager (19) or secretary (10) positions.

LOCAL ATTACHMENT

A strong attachment to local authority characterizes Allegheny County officials and citizens.[25] Allegheny County residents are often second, third, and even fourth generation residents with firm social ties to their communities. This attachment carries over into a stout resistance to proposals that would consolidate local municipalities. "Metropolitanism" is a term that is widely known and used with a distinctly negative connotation throughout the suburban portion of the county. Although willing to engage in a variety of interjurisdictional cooperative ventures and to create overlying arrangements for particular purposes, residents and local officials have not been willing to entertain proposals that would erase the separate identity of their communities. Metropolitan reform, at least in the traditional sense, is not part of the policy agenda of Allegheny County.

Various factors explain this enduring attachment to local communities, although no single one is overriding. These factors include historical patterns of municipal development and reform in the county and the state, together with economic, social, ethnic, and topographical features of the county.

To begin with, the topography is more conducive to the formation of local than countywide attachments. The county is cut into three sections by its major rivers, the Allegheny and the Monongahela, which combine in Pittsburgh to form the Ohio. The Youghioheny River and Turtle Creek further bisect the southeastern part of the county. Bridges across these rivers afford some linkages among separate communities—Pittsburgh is tied together by such bridges—but for long stretches of each river no cross-river traffic is possible. Steep ridges rise rapidly from the river banks in much of the county, making traffic between river valleys and surrounding areas difficult. Ravines cut partially into these ridges, making traffic along the river valleys difficult in a number of areas. Outside of the river valleys, much of the county's terrain is quite rugged, repeating the pattern of steep ridges cut by ravines.[26]

Original settlements in Allegheny County formed along the river banks and in the ravines running down to the rivers, on the hilltops cut by these ravines, and in similar topographic formations along and above the many streams. These settlements could not easily expand into one another as they grew, and so amalgamation into larger communities was slowed if not prevented. Following adoption of a permissive incorporation law in 1834, settlements as small as 300 persons could secede from existing townships, forming new townships and boroughs.[27]

Economic forces, too, worked to create and maintain many distinct communities. The river valleys, as discussed above, are home to many relatively small towns, most of which have existed for close to a century, if not longer. These towns, created at the instigation of or captured by the owners of their large industrial plants, served to protect those investments from taxation by larger units of government, and provided the mill owners with local police powers that could be used against union organizers. Absentee industrial property owners exerted major influence

Figure 2.2
Allegheny County Municipalities

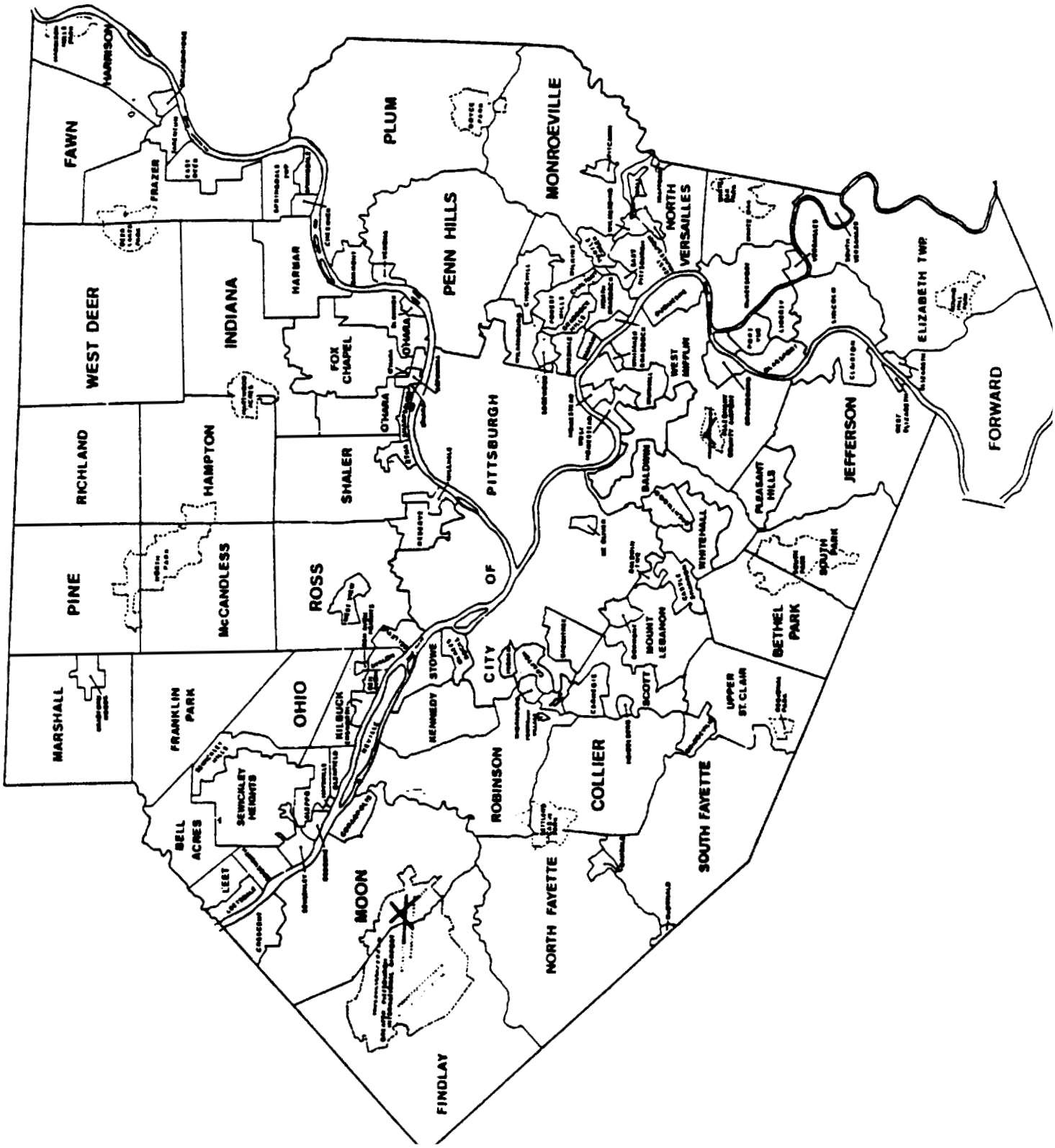


Table **2.3**
Types of Municipalities in Allegheny County

Class of Municipality	Number[1]	Population (1984 est.)	Percent of Population	Land Area (square miles)	Percent of Land Area
Second Class City (Pittsburgh)	1	402,583	28.6%	55.1	7.6%
Third Class City	2	22,040	1.6	4.5	0.6
Borough	76	409,149	29.0	171.9	23.6
First Class Township	21	195,414	13.9	134.8	18.5
Second Class Township	12	70,617	5.0	181.4	24.9
Home Rule	16	309,360	22.0	181.9	24.9
Total County	128	1,409,163	100.0	729.6	100.0

[1] Excluding McDonald and Trafford.

Source: Pennsylvania State Data Center, Diskette User's Data Express (DUDE1).

over government and politics in these towns for many years.[28] Although their influence waned with the closing of the mills, a process mostly completed by the recession of the early 1980s, the spirit of local autonomy they helped to foster continues today.

A further contribution to strong local attachments is the ethnic diversity of Allegheny County. Immigrants from many nations and ethnic backgrounds flocked to the county seeking the jobs made available by the rapid industrialization of the post-Civil War period through World War I. In 1910, more than 600,000 of the county's one million residents were either foreign born or the children of foreign-born parents.[29] Black Americans, too, migrated to the county during this period, also seeking jobs in the expanding industries.[30] A 1922 description, albeit of Pittsburgh and not the entire county, remains applicable in many areas today:

> ...Pittsburgh is a city in which are many isolated settlements and communities, difficult or indirect of access. [The foreign born exhibited the] natural tendency to live in groups according to nationality. This tendency, combined with classifications of an economic character. . .is often further intensified by the physical segregation induced by the rough topography.[31]

Prior instances of forced consolidation, including the annexations by Pittsburgh discussed earlier, contribute to strong local attachments. In the early 1960s, many school districts were forced to consolidate with one or more of their neighbors in order to receive state funds for education. Those mergers, according to several persons interviewed for this study, continue as an unpleasant memory for many county residents, contributing to their wariness toward initiatives that can be tarred with the label of metropolitanism.

OVERLAPPING JURISDICTIONS, SPECIAL DISTRICTS, AND QUASI-GOVERNMENTS

In spite of and perhaps related to their preferences for independent local jurisdictions, Allegheny County residents have developed a number of overlapping jurisdictions and cooperative ventures that link politically autonomous units in functional combinations. These combinations contribute significantly to the viability of the county's system of local government. In Allegheny County, as elsewhere, jurisdictional fragmentation does not necessarily produce functional fragmentation.

County Government

The principal local jurisdiction is the Allegheny County government. It is the only second class county in Pennsylvania. Its form of government is the same as that of most counties in the commonwealth, with the exception of Philadelphia (the only first class city-county) and a few counties that have adopted home rule charters. Residents elect three county commissioners, who serve as the governing board, and a number of "row offices," including sheriff, district attorney, prothonotary,[32] clerk of courts, register of wills, recorder of deeds, two jury commissioners, controller, and treasurer.

Special Districts and Quasi-Governmental Jurisdictions

Overlaid on the municipal and county governments of Allegheny County are many special district governments and quasi-governmental units. School districts are the only form of extra-municipal special district allowed direct access to the tax base in Pennsylvania.[33] Somewhat akin to special districts elsewhere, but limited to the issuance of revenue bonds to finance their operations, are single-purpose and multipurpose "municipal authorities," many of which extend across municipal or school district boundaries. Nestled within the borders of most municipal governments are the service areas of one or more of the volunteer fire companies. These companies, while organized independently of municipal governments, are supported in part by municipal revenues and, often, have contractual linkages to the municipalities in which they are found.

School Districts and Intermediate Units

The 43 independent school districts range in size from the Pittsburgh-Mt. Oliver district, with an average daily student membership of approximately 40,000, down to approximately 900 students. District populations range from fewer than 9,000 persons to more than 400,000. School districts are organized both within and across municipal boundaries.

School districts are governed by nine-member school boards elected at large. The school boards "hire all school personnel, provide for school buildings, buy textbooks and other supplies, levy taxes, and issue bonds for school purposes. A district superintendent is chosen by the board to provide administrative leadership.

Overlaid on the school districts are intermediate units, "established to provide specialized services on a regional basis."[35] Intermediate units were established originally by the Pennsylvania Department of Education, but are governed by boards composed of local school board members. There are two intermediate units in Allegheny County, one organized by the Pittsburgh school district, which also includes the municipality of Mt. Oliver, and the second by the remaining 42 districts. The intermediate units provide "consultative, advisory, and educational program services to component school districts," and "furnish ancillary services necessary to provide opportunity for adequate basic services to all pupils."[36] One important service provided by intermediate units is special education for handicapped students.

Municipal Authorities

Municipal authorities are corporate political bodies established by other local government units for purposes of borrowing money and supplying one or more specialized services. Many authorities were created to overcome restrictions on municipal and school district debt that applied prior to state constitutional amendments adopted in 1968. Even though these debt restrictions are no longer as stringent, authorities have continued to be created at a significant rate. About one-third of the existing active authorities were created after this constitutional change, with significant additions in water, sewer, and health authorities. There were 136 single-purpose and 13 multipurpose authorities in the county in 1985.[37]

The largest number of authorities provide school buildings,[38] sewer or water facilities, and parking facilities. The largest authorities are the Allegheny County Sanitary Authority (ALCOSAN), providing sewage collection and treatment for Pittsburgh and many county municipalities; Port Authority Transit (PAT), operating a countywide transit system created from the consolidation of a number of failing private transit companies; and the Municipal Authority of the Borough of West View, which provides water service to many municipalities in Allegheny and adjacent counties. Municipal authorities, unlike other local government units (except two intermediate units), have no directly elected governing officials. They are governed by boards, with members appointed by the governing bodies of the units that create them.

Volunteer Fire Companies

An estimated 250 volunteer fire companies are the principal providers of fire protection in suburban Allegheny County.[39] The companies serve all municipalities, except Pittsburgh, McKeesport, and Wilkinsburg, which have full-time paid departments. Some municipalities employ a few paid fire fighters, often as drivers for municipally owned equipment, while relying predominantly on the volunteer companies for fire suppression. The volunteer companies have no legal standing as units of government, but most of them receive partial funding from the municipalities. The companies select their own members, elect their own officers, and raise the bulk of their revenues through public appeals, carnivals, bake sales, bingo games, and the like. By local reports, fire companies are important actors in local politics, endorsing candidates for local office and supporting the campaigns of those endorsed.

PUBLIC ENTREPRENEURSHIP AND THE DEVELOPMENT OF MULTIORGANIZATIONAL ARRANGEMENTS

Allegheny County is overlaid with a variety of functional and intergovernmental arrangements that serve to knit separate governmental units together to pursue common purposes. The county government and a number of public and private associations, organizations, and individuals support existing arrangements and foster the development of new ones. Among the functional overlays are the intermediate units for public education and fire defense councils and associations linking the volunteer fire companies. Multijurisdictional functional arrangements are found in police and street services as well. The councils of governments (COGs) are multifunctional overlays in addition to the county government.

During this century, there have been several efforts to reform the municipal political geography. These efforts, envisioning a two-tier, federated structure with an enhanced role for county government, have been resisted by citizens and officials. In the words of a 1982 report sponsored by the Allegheny Conference on Community Development (ACCD) on prospects for intergovernmental cooperation in the county, "(I)t appears likely that such efforts, however well intentioned, will continue to be doomed as long as they smack of 'metropolitanism' or in any way resemble efforts to restructure local government."[40] While major local government restructuring in Allegheny County, as elsewhere in metropolitan America, is not viewed with favor, interlocal cooperation has created a network of functional ties and overlays that continues to grow. The Allegheny Conference surveyed citizens and elected and appointed officials, and found that:

> Citizens indicate strong support for intergovernmental cooperation.
>
> Elected officials indicate substantial support for cooperation.
>
> Appointed officials indicate high levels of involvement in cooperative arrangements and perceive even greater potential for future cooperation.[41]

The consortium recommended a number of actions to encourage such cooperation. To a greater or lesser extent, most of the recommended actions have been undertaken.

This is not to say that cooperation and coordination have been achieved in all parts of the county or in all services. Instances of failure to cooperate or coordinate similar services among municipalities can be found in most of the county. Local attachments and "turf" considerations

have impeded joint ventures. Such ventures require careful negotiation and attention to local prerogatives. Assessing the extent of desirable cooperation and coordination among municipalities and other governmental units in Allegheny County is akin to the fabled "half-full or half-empty" conundrum. A wide variety of joint ventures can be identified, and public entrepreneurship continues to seek ways to increase the range of cooperative and coordinated arrangements.

Jurisdictional fragmentation is often fertile ground for public entrepreneurship. Entrepreneurial efforts proceed within the informal bounds laid out by long-standing public opinion. Within these constraints, elected and appointed officials in the county government, municipalities and school districts, local foundations, universities, community organizations, and intergovernmental organizations exercise the initiative associated with public entrepreneurship.

Among the organizations active in fostering intergovernmental cooperation in Allegheny County are the county commissioners and various departments and bureaus of county government; the state, principally through the regional office of the Department of Community Affairs; the Allegheny League of Municipalities and its constituent organizations; the subcounty councils of governments; the Southwestern Pennsylvania Regional Planning Commission; academics from the major universities; and private and nonprofit organizations, such as the Allegheny Conference on Community Development, the Intergovernmental Cooperation Program now housed with the Greater Pittsburgh Chamber of Commerce, the Pennsylvania Economy League, and the Coalition to Improve Management in State and Local Government (at Carnegie Mellon University).

County Government as an Intergovernmental Partner

The county government is an active participant in numerous interlocal cooperative ventures, and often an initiator or sponsor. In 1968, the county established the Authority for Improvements in Municipalities with a $30 million bond issue. Managed by the county's Department of Development, the authority makes loans and grants to municipalities for infrastructure improvements. Through 1986, the authority's loans totaled $12 million and its grants, $5.6 million.[42] The grants are used to encourage functional cooperation, as in the sewer maintenance and cleaning program (SMAC), in which equipment was purchased for each COG for use in its member municipalities. The SMAC program was developed as part of the Intergovernmental Cooperation Program (see below), as was the Local Government Academy, which provides training for officials and their staffs. The academy is now funded principally by the county government.

The Department of Development administers the county's community development block grant (CDBG) funds, principally through COGs, which consider requests for funding and approve bids on projects.

The county departments of Planning and Development have been working with groups of municipalities to develop cooperative storm water management systems. One such system, an intermunicipal stormwater district, would cover 24 municipalities in the North Hills, and would be funded by user charges. Authorization for such a system requires state legislation, which the county is seeking.[43]

The county also assists municipalities in augmenting local service capacities. The County Police and Fire Training Academy offers entry and in-service training for police and fire fighters, with reimbursement from the state. The county operates a crime lab that is used by municipal departments, and county police supply back-up investigative services on request.

The county government has been active in attempts to reduce the economic distress of communities that suffered major losses from the decline of steel and related industries, especially in the Mon Valley. In 1986, the county commissioners appointed a 16-member Mon Valley Commission to study problems and make recommendations for revitalization. Based on detailed reviews of data, studies, and public forums convened by seven task forces, the commission recommended priority actions to assist citizens and local governments. Recommendations related to local government included:

> Prepare legislation and regulations for a larger state role in monitoring municipalities, preventing distress, and intervening where necessary.
>
> Evaluate alternative structures, including the creation of a service district, COG based where possible, to undertake major functions, such as: water, sewer, stormwater, waste disposal, and, potentially, parks and recreation, planning, code enforcement, and development.
>
> Assist municipalities in evaluating their fiscal and management capacities and in taking remedial action.
>
> Provide targeted incentives for local government modernization, such as conditional loans and grants.[44]

The commission drew particular attention to a need for "increased cooperation among communities" in the Valley, citing existing COGs as a structure for such cooperation.[45] Partial implementation of the commission's recommendations is under way, including an assessment of local governments' service capacities undertaken by the Southwestern Pennsylvania Regional Planning Commission.

Allegheny league of Municipalities

The Allegheny League of Municipalities (ALOM) links associations of boroughs and townships of the first and second class, and serves as secretariat for each. Membership in ALOM is maintained by Pittsburgh, the third class cities of Clairton and Duquesne, three large home rule municipalities (McKeesport, Mt. Lebanon, and Penn Hills), and two large municipal authorities (ALCOSAN and Westview Water Authority). The league is active in lobbying the General Assembly for legislation beneficial to its membership and sponsors a conference each spring to bring together local elected officials and members of the

Table **2.4**
Allegheny County Councils of Governments (COGs)

Name	Members	Location	Major Services*
Turtle Creek Valley	17	Southeast, Near Pittsburgh	Payroll and billing Street maintenance pool
Steel Valley	9	South, in Mon Valley	Planning Shared finance manager
Twin Rivers	11	Extreme Southeast	Joint dispatch Firing range
Quaker Valley	15	Northwest	Joint purchasing
Char-West	20	West, Near Airport	Planning (airport expansion and solid waste)
North Hills	12	North	Credit Union Planning (emergency management)
Allegheny Valley North	15	Northeast	Planning (priority street maintenance)
South Hills Area	15	Southwest	Credit union Joint purchasing council

*In addition to CDBG and SMAC activities.

General Assembly. The league is fiianced by its members, by a contribution from the county commissioners, and by funds raised from workshops and the annual conference.

ALOM sponsors two nonprofit corporations—Municipal Risk Management (MRM), which performs a broker/agent function in securing workmen's compensation insurance, and Municipal Risk Property & Casualty (MRPC), which performs a similar role in securing property/casualty insurance. MRM and MRPC negotiate group policies for members, resulting in substantial dollar savings on their insurance coverage. ALOM formed these corporations in 1980 after exploring the possibility of a risk-sharing, self-insurance pool among its members, finding that Pennsylvania law did not permit a self-insurance pool, and lobbying successfully for legislation that allowed pooling of insurance coverage among municipalities.

Councils of Governments

Municipalities in Allegheny County have formed eight councils of governments (COGs) that provide a continuing association among member boroughs, townships, and third class cities. The legal form of association is a voluntary intergovernmental agreement adopted by ordinance or resolution of each governing body. The Pennsylvania Department of Community Affairs (DCA) argues that this form of association becomes valuable when there are cooperative agreements among several municipalities or for several functions.[46] COGs were formed in various parts of the county during the 1970s, beginning with Turtle Creek Valley COG, just southeast of Pittsburgh, in 1971. A small COG formed in the Churchill area east of Pittsburgh became inactive in 1982.[47] Two COGs in the western part of the county merged to form Char-West COG in 1981. Of the 130 municipalities in the county, 114 are now COG members, including 86 percent of the county population outside Pittsburgh [Table 2.41.

The county government, although not formally a member of any COG, maintains an active liaison with each of them through its Department of Development and Authority for Improvements in Municipalities. One of the principal COG activities has been the distribution of CDBG funds allocated to them by the county government, which receives federal CDBG funding for all municipalities except Pittsburgh and "hold harmless" Model Cities. The success of the COGs can be traced in part to their usefulness in implementing the CDBG program. The COGs also participate in the SMAC program, initially funded by the county government in 1984, producing services for member municipalities on a fee basis.

Although state law does not prescribe a structure for governing, financing, and administering COGs, a fairly common pattern has evolved, with variations in detail. Most COGs have two governing bodies: a general assembly composed of all elected officials of the member municipalities, which meets annually to review COG activities, adopt the budget, and amend by-laws; and a board of directors, usually composed of one elected official designated by each municipality, which meets monthly. One of the COGs experienced a controversy over the participation of borough mayors in its governance; the latest attempted resolution allows mayors to serve as alternates, but not as regular board members. All of the COGs raise part of their revenue from member dues. Some use a three-tier dues structure based on population. Others use a formula based on population and assessed valuation. The Turtle Creek Valley COG relies on a flat rate per municipality.

Each COG employs an executive director, appointed by the board of directors. Some COG executive directors are professional public administrators; others are not.[48] The COGs range in size from 9 to 20 members and in populations served from 54,000 to 130,000 residents. None of the COGs is a "big budget" operation; none has an elaborate office complex. The number of full-time staff is minimal. As one executive director remarked, the COGs are best understood as ''extensions'' of their member municipalities, not as independent or freestanding organizations.

Grantsmanship is an important part of all COG activities, though it is more important in some than in others. COGs have obtained one-time grants, mostly from the state, to conduct feasibility studies, purchase capital equipment, and introduce programs. The potential of

such COGs as Turtle Creek Valley and Steel Valley to serve a number of distressed municipalities is, arguably, tied to future grant support.

The entrepreneurial activities of the COGs have not been limited to seeking grants. Increasingly, led perhaps by Turtle Creek Valley's entry into supplying computer payroll and accounting services, the COGs have turned to fee-based service delivery as a source of support. This is a productive form of public entrepreneurship that increases the capacity for self-reliance among small municipalities. By searching out functions for which cost savings can be realized from increasing the scale of production, COGs improve the productivity of their members.

Each COG has developed its own service orientation. Turtle Creek Valley, the oldest COG, performs a computerized payroll and accounts payable service for 12 municipalities, and has begun doing utility billings—a service dominated by private contractors among small municipalities in the county—and tax collections. The South Hills Area COG (SHACOG) houses a joint purchasing council for municipal commodities that serves some 60 municipalities (this program preceded the establishment of SHACOG). Twin Rivers COG, located in the southeastern part of the county, recently began managing a joint dispatch service for several area police, fire, and emergency medical departments, and, for a number of years, has operated a police firing range. Twin Rivers and Steel Valley COGs double as regional planning commissions. With grant support from the Intergovernmental Cooperation Program, Steel Valley COG supplies a shared finance manager for three municipalities. Quaker Valley COG, just northeast of Pittsburgh, has started manufacturing traffic control signs, and Steel Valley COG furnishes street sweeping services to five COG members and three nonmembers. Char-West runs a surplus property auction for municipalities, with help from other COGs.

The COGs serve as centers of innovation in intergovernmental cooperation and as vehicles for the diffusion of innovations. Success in one COG stimulates efforts in others. Quaker Valley COG, after the fashion of Twin Rivers, has received a grant from the state Department of Community Affairs to study the feasibility of joint dispatch for member municipalities. Quaker Valley, Steel Valley, Twin Rivers, and North Hills COGs, emulating Turtle Creek Valley, are developing the capabilities to operate a payroll and billing service. Two COGs (SHACOG and North Hills) now operate a credit union for municipal employees.

Innovation is continuing in many COGs. Turtle Creek Valley is developing joint street maintenance programs among small municipalities, with a strong emphasis on preventive maintenance. Allegheny Valley North is planning to install a hydropower generator on an Allegheny River lock and dam. Profits from the sale of electric power will be divided among 13 participating communities. Char-West is developing plans to acquire and operate a solid waste disposal site—a move that could relieve rapidly escalating cost pressures on municipal solid waste collection in the county.

Many services supplied by one COG also benefit municipalities in others, as well as nonmunicipal agencies. SHACOG's credit union also serves municipal employees in Char-West and Quaker Valley. The joint dispatch service operated by Twin Rivers serves volunteer fire companies as well as municipal police departments. As a group, the eight COGs contribute to countywide coordination and problem solving (outside Pittsburgh). The joint purchasing council operated by SHACOG, the surplus property auction organized by Char-West, and the possible solid waste disposal site being developed by Char-West potentially have a countywide clientele.

COGs have become significant arenas for public entrepreneurship in many parts of Allegheny County. In the words of the Mon Valley Commission, COGs "future viability depends on three factors: (1) their ability to raise money, especially in an era when grants are declining; (2) their capacity to identify programs which are acceptable to the membership but which may address controversial areawide issues; (3) their acceptance as a legitimate areawide voice on problems confronting the area."[49] COG directors and officers can be viewed as public entrepreneurs who remain "in business" as long as their work is beneficial to their member communities.

Another benefit of the COGs is their function as forums for discussion among officials.[50] COGs have likewise contributed to regular meetings of service administrators—as in the meetings of police chiefs sponsored by the Steel Valley and Twin Rivers COGs and similar meetings of public works foremen in these COGs and Turtle Creek Valley.[51] These, too, have led to joint service activities—shared dispatch and combined public works teams, for example—that might not have occurred otherwise.

Public-Private Partnerships

Pittsburgh and Allegheny County have for years had strong public-private partnerships. The chief executives of the major corporations and banks headquartered there have taken a continuing interest in public affairs that has affected the area significantly. The most visible and important of the many organizations fostering private involvement in public affairs have been the Greater Pittsburgh Chamber of Commerce and the Allegheny Conference on Community Development (ACCD).[52] ACCD was instrumental in achieving smoke control during the late 1940s, and worked closely with the Chamber in achieving flood control for the area. In partnership with Pittsburgh's Mayor David L. Lawrence, ACCD was a major contributor to Renaissance I, the renewal of downtown as the "Golden Triangle." During the 1960s and early 1970s, ACCD sponsored or participated in efforts to defuse racial tensions in Pittsburgh. In the mid to late 1970s, the Chamber of Commerce, with significant efforts by executives from the Mellon Bank, worked with the county commissioners and the mayor to form ComPAC and ComPEP, both involving teams of loaned corporate executives who worked with the county and city to improve managerial efficiency. ACCD and the Chamber have continued to be active in community affairs, with ACCD providing initial co-sponsorship of the Intergovernmental Cooperation

Table 2.5

Revenues in 1985, by Source
(Excluding Public Service Enterprises)

Revenue Source	Pittsburgh			Third Class Cities			Boroughs		
	Total	Per Capita	Percent of Total Revenues	Total	Per Capita	Percent of Total Revenues	Total	Per Capita	Percent of Total Revenues
Population 1984	402,583			22,040			409,149		
Total Revenues	$289,049,039	$717.99	100.0%	$4,817,044	$218.56	100.0%	$88,195,002	$215.56	100.0%
Tax Revenues									
Total	197,583,275	490.79	68.4	2,783,090	126.27	57.8	57,734,380	141.11	65.5
Real Estate	93,147,493	231.37	32.2	2,288,480	103.83	47.5	38,311,756	93.64	43.4
Earned Income	55,570,577	138.04	19.2	294,628	13.37	6.1	14,096,543	34.45	16.0
Real Transfers	4,372,326	10.86	1.5	17,613	0.80	0.4	1,761,028	4.30	2.0
Mercantile	5,374,733	13.35	1.9	87,001	3.95	1.8	909,926	2.22	1.0
All Other	39,118,146	97.17	13.5	95,368	4.33	2.0	2,655,127	6.49	3.0
Miscellaneous									
Total	91,465,764	227.20	31.6	2,033,954	92.28	42.2	30,460,622	74.45	34.5
Licenses, Permits, Fines, Forfeits, Use of Money, and Properly	21,924,134	54.46	7.6	169,878	7.71	3.5	5,281,212	12.91	6.0
Intergovernmental Grants and Aid	56,408,281	140.12	19.5	695,304	31.55	14.4	10,664,506	26.07	12.1
Departmental Services	5,033,577	12.50	1.7	35,160	1.60	0.7	2,804,193	6.85	3.2
Sewer Rents and Charges	605,646	1.50	0.2	886,648	40.23	18.4	6,317,868	15.44	7.2
All Other	7,494,126	18.62	2.6	246,964	11.21	5.1	5,392,842	13.18	6.1

Program and the Chamber now supporting it financially (see below). ACCD, the Chamber, and many corporations contributed executive and managerial personnel to the work of the Mon Valley Commission cited above.

Nonprofit Organizations

Other significant organizations contributing to public entrepreneurship in Allegheny County include nonprofit organizations such as the Pennsylvania Economy League (Western Division), and the Coalition to Improve Management in State and Local Government. The Economy League, closely associated over the years with ACCD, provides research and consultation services to county and municipal governments and school districts. The league is supported in major part by membership fees paid by corporations, allowing it to provide its services at relatively low cost. The league served as plan coordinator for financial recovery plans developed under Pennsylvania's Distressed Community Act in the Allegheny County communities of Clairton, Braddock, and Wilkinsburg, with continuing efforts to implement the plans in the latter two communities.

The coalition has both a national program and a local one focused on improvements in Allegheny County. The coalition was instrumental in the establishment of an Office of Management and Productivity in the county government, provides consulting support to the local COGs, and is developing a handbook on strengthening local government capabilities for intergovernmental cooperation.

Intergovernmental Cooperation Program

The Intergovernmental Cooperation Program (ICP) was formed as a committee of the Allegheny League of Municipalities in 1982, with funding from Allegheny County and the Allegheny Conference on Community Development. It incorporated as a nonprofit organization in 1985, but was unsuccessful at obtaining continued funding. It is now sponsored by the Greater Pittsburgh Chamber of Commerce, which provides administrative support and financing for the program's staff.

The ICP has initiated a number of cooperative ventures. It has been a catalyst, along with the county government, in the formation of the councils of governments and has helped the COGs to implement cooperative ventures. Among these are sharing major public works equipment (equipment purchased with funds from AIM), pilot projects for a shared finance director in the Steel Valley COG and a shared public works professional in the Turtle Creek Valley COG, the development of a microcomputer information network linking the eight county COGs (COGNET), and a demonstration Disaster Management Project with the North Hills COG.[53] The ICP, through its public safety committee, is working with a consulting firm on the development of a plan for an enhanced 911 system. The ICP presents Intergovernmental Cooperation Awards each year to individuals, municipalities, and other organizations that have contributed to cooperative arrangements in the county at the Allegheny League of Municipalities Conference, recognizing their contributions and drawing attention to further opportunities for interlocal cooperation.

Local Officials and Managers

Municipalities in Pennsylvania are empowered to "jointly cooperate. . . in the exercise or in the performance of their respective governmental functions, powers, or responsibilities."[54] Local officials and managers in Allegheny County have used this power extensively. Informal sharing of equipment or personnel expertise is reported to be widespread. Some communities agree to provide services (snow removal, for example) in a remote part of an adjoining municipality to which they have easier road access. Written agreements are common, often for reciprocal as-

Table 2.5 *(cont.)*
Revenues in 1985, by Source
(Excluding Public Service Enterprises)

First Class Townships			Second Class Townships			Home Rule Municipalities			Municipal Total		
Total	Per Capita	Percent of Total Revenues	Total	Per Capita	Percent of Total Revenues	Total	Per Capita	Percent of Total Revenues	Total	Per Capita	Percent of Total Revenues
195,414			70,617			309,360			1,409,163		
$34,215,418	$175.09	100.0%	$13,618,811	$192.85	100.0%	$85,647,369	$276.85	100.0%	$515,542,683	$365.85	100.0%
23,623,238	120.89	69.0	7,760,668	109.90	57.0	55,058,250	177.97	64.3	344,542,901	244.50	66.8
13,397,781	68.56	39.2	3,888,272	55.06	28.6	25,958,185	83.91	30.3	176,991,967	125.60	34.3
7,634,744	39.07	22.3	2,857,776	40.47	21.0	20,404,489	65.96	23.8	100,858,757	71.57	19.6
884,797	4.53	2.6	436,500	6.18	3.2	3,832,870	12.39	4.5	11,305,134	8.02	2.2
784,706	4.02	2.3	55,499	0.79	0.4	2,068,556	6.69	2.4	9,280,421	6.59	1.8
921,210	4.71	2.7	522,621	7.40	3.8	2,794,150	9.03	3.3	46,106,622	32.72	8.9
10,592,180	54.20	31.0	5,858,145	82.96	43.0	30,589,119	98.88	35.7	170,999,784	121.35	33.2
1,733,874	8.87	5.1	793,152	11.23	5.8	5,115,495	16.54	6.0	35,017,745	24.85	6.8
4,425,436	22.65	12.9	1,747,256	24.74	12.8	10,511,331	33.98	12.3	84,452,114	59.93	16.4
928,388	4.75	2.7	466,098	6.60	3.4	4,104,508	13.27	4.8	13,371,924	9.49	2.6
2,138,028	10.94	6.2	1,740,738	24.65	12.8	7,806,061	25.23	9.1	19,494,989	13.83	3.8
1,366,454	6.99	4.0	1,110,901	15.73	8.2	3,051,724	9.86	3.6	18,663,011	13.24	3.6

sistance in emergency situations.[55] These informal and formal cooperative agreements also evidence widespread public entrepreneurship in the county.

FISCAL PATTERNS

In 1985, Allegheny County general governments and school districts raised slightly more than $1.8 billion in total revenues. Municipalities accounted for roughly 30 percent of the total, some $553 million.[56] Revenues of Allegheny County government were $461 million, about 25 percent of the total.[57] School district revenues accounted for the remaining $800 million, or 45 percent of all revenues.[58] These data understate total governmental and quasi-governmental revenues in the county by an unknown but not insignificant amount. They do not include revenues of municipal authorities (principally user charges and lease payments) or volunteer fire companies (in addition to revenues they receive from the municipalities).

Municipal Revenues

Municipal governments in Pennsylvania have access to a wide range of tax and other revenue sources. Excluding Philadelphia, which has a unique revenue structure, total municipal revenues in the state split roughly in half between those raised from taxes and from nontax sources (such as fees, grants, and aid from other governments), and revenues of public service enterprises (such as municipal water and electrical utilities).[59] The most important tax source for Pennsylvania municipalities is the real estate tax, which accounted for 52.5 percent of municipal tax revenues statewide (and 25.3 percent of total revenues, excluding Philadelphia) in 1982. Other taxes available to municipalities include taxes on earned income (generally the second most important tax source), occupation, occupational privilege, intangible personal property, real estate transfer, amusements, and mercantile/business privileges.

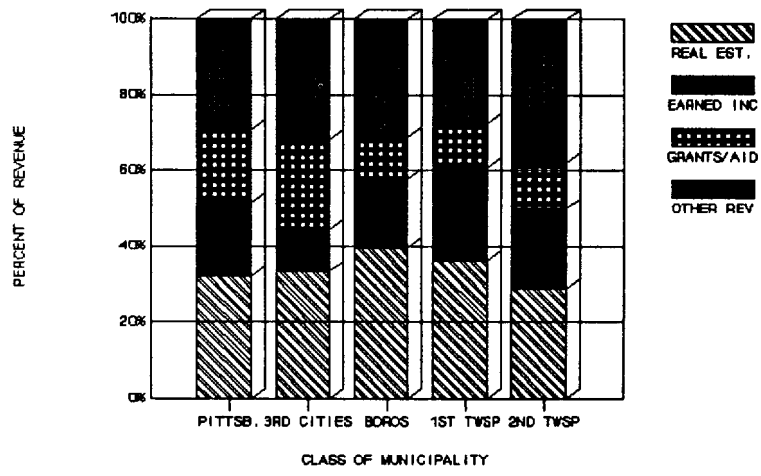
Municipalities in the county obtained about two-thirds of their total revenues from tax sources in 1985, substantially above the state average. The revenue sources used most heavily were the real estate tax (34 percent of total revenues and 51 percent of tax revenues); the tax on earned income (nearly 20 percent of total and 29 percent of tax revenues); and grants and other aid from the county, state, and federal governments (approximately 16 percent of revenues].[60] The remaining 30 percent of municipal revenues consisted of real property transfer, mercantile and other "nuisance taxes" authorized under Act 511, and miscellaneous revenue sources, such as licenses and permits, fines and forfeitures, use of money and property, departmental services, sanitary sewer rents, and other miscellaneous revenues (Table 2.5).[61]

In percentage terms, third class cities and boroughs were most dependent on the property tax, raising more than 40 percent of their revenues on average from this tax (Table 2.5 and Figure 2.3, Panel A). First class townships also relied heavily on the real estate tax, while second class townships and home rule municipalities made the least use of the property tax on average.[62] Townships and home rule municipalities made the heaviest use of the earned income tax,[63] while third class cities used this source much less than average. Pittsburgh benefited most from county, state, and federal grants and aid. For Pittsburgh, the bulk of the grant and aid revenues were from federal grant programs, while for the other municipalities the revenues were split roughly evenly between such grants and state highway aid from the motor fuels tax.

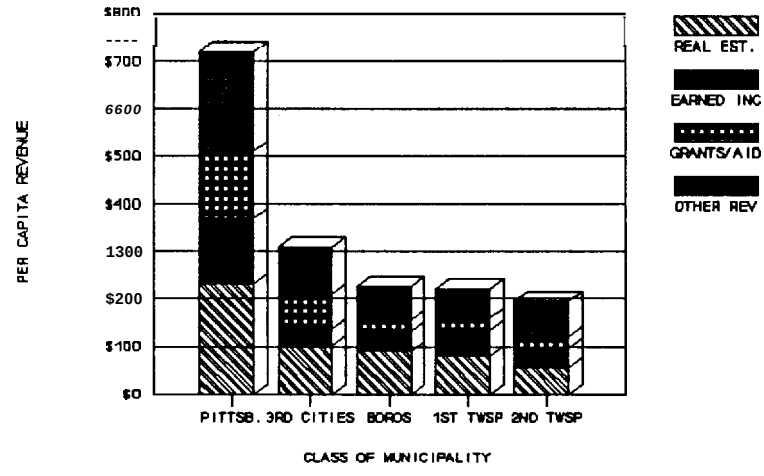
In absolute terms, Pittsburgh raised more revenues in 1985 than the rest of the municipalities combined (56 percent). The city's per capita revenues were higher than all but Sewickley Heights. Pittsburgh raised more revenues

Figure **2.3**
Revenue Sources for County Municipalities, 1985
(Excluding Revenues of Public Service Enterprises)

PANEL A. PERCENT OF REVENUES BY SOURCE



PANEL B. PER CAPITA REVENUES BY SOURCE



per capita from each of the major revenue sources (Table 25 and Figure 23, Panel B), including about twice as much from the property tax, three times as much from earned income taxes, five times as much from grants and aid, and four times as much from other sources. Pittsburgh's real estate and earned income tax rates are substantially higher than most municipalities." Its status as the area's major employment center accounts for much of these differences—Pittsburgh's employment in 1985 was about one-half of the county total.[65] The city's size makes it eligible for grants that are not available to other municipalities. Pittsburgh obtained about two-thirds of all grant and aid funds allocated to municipalities in Allegheny County during 1985.

Pittsburgh also pays for services from its own revenues that in surrounding municipalities are often the responsibility of the county government or overlying municipal authorities, or are franchised to private suppliers. For example, Pittsburgh spent more than $8 million for health services in 1985, more than 80 percent of the county total. The city spent nearly $17 million on parks and recreation services, approximately two-thirds of the amount spent by municipalities countywide, and its refuse collection and disposal costs of $9 million were 42 percent of the total. Differences in service responsibilities are important to an understanding of revenue differences between Pittsburgh and its neighbors.

Outside Pittsburgh, average per capita revenues in 1985 were highest in home rule municipalities and lowest in first and second class townships (Table 25 and Figure 23, Panel B). The higher revenues of home rule municipalities are at least in part a function of additional service responsibilities. About 31 percent of the suburban population resides in home rule municipalities, but they spend 55 percent of the suburban total for libraries and for parks and recreation and two-thirds of the total for health services. Their spending for common services such as general administration, police, and streets and highways is roughly proportional to the suburban average. Townships of the first and second class have expenditures for these common services that are roughly proportional to their share of county population. However, their expenditures for libraries, parks and recreation, and health services are substantially lower in total and as a percentage of suburban spending. They rely more extensively on county provision of these services.

County Government Revenues

Allegheny County government had revenues of $461 million in 1985.[66] Forty-two percent of these revenues were intergovernmental transfers, 80 percent of which came from the state. Fifty-eight percent were own-source revenues, two-thirds of which were derived from the real estate tax, the only major tax source available. The county derived 22 percent of its own-source revenues from user charges, principally charges for services at the county airports and county hospitals, and 10 percent in miscellaneous revenues, principally interest on investments.

School District Revenues

Of the $800 million revenues of Allegheny County school districts in the 1984-85 school year, $539 million or about two-thirds was raised locally, $235 million (29 percent) came from the state, $23 million came from the federal government, and about $3 million came from other unspecified sources.[67] The local percentage of total school revenues ranged from just over 50 percent in one district (South Allegheny) to over 80 percent in five wealthy districts.[68] Of the revenues raised locally, $371 million (69 percent of local revenue and 46 percent of total revenue), came from the real estate tax, while $92 million (17 percent) came from Act 511 taxes, principally the earned income tax, which school districts share with municipalities.

SUMMARY

Allegheny County is a collection of diverse communities. These communities, whether organized as independent municipalities or neighborhoods within the larger municipalities, or as independent school districts, maintain a strong attachment to their community identities. Overlying these local communities are a city government (in Pittsburgh), councils of governments for most municipalities outside Pittsburgh, a county government, two intermediate units for educational purposes, and fire defense councils and associations for fire services. These overlays provide opportunities for collaboration and coordination among the local communities, while preserving their jurisdictional independence.

Notes

1 This section draws on Henry Steele Commager, "Forts in the Wilderness," in Stefan Lorant, ed., ***Pittsburgh: The Story of an American City*** (Garden City, New York: Doubleday & Company, 1964), pp. 9-46; and on material contained in Allegheny County Board of Commissioners and Allegheny County Bicentennial Commission, ***Welcome to Allegheny County, 1987 General Information Map*** (Pittsburgh, 1987); and League of Women Voters, ***Allegheny County Government: Organization, Facilities and Services*** (Pittsburgh, 1971).

2 Lorant, "Gateway to the West," in Lorant, pp. 47-79.

3 Oscar Handlin, "The City Grows," in Lorant, pp. 81-128.

4 John Morton Blum, "The Entrepreneurs," in Lorant, pp. 219-260.

5 Lincoln Steffens, "Pittsburg: A City Ashamed," *McClure's Magazine,* May 1903 (also in *The Shame of the Cities).*

6 The merger took place against the expressed wishes of much of Allegheny's population, and was made possible by an act of the Pennsylvania General Assembly (Guthrie-Watson Greater Pittsburgh bill) permitting merger by a simple majority vote in a referendum held in Pittsburgh and Allegheny. Legal protest against the law and merger led to the U.S. Supreme Court's Hunter v. Pittsburgh decision in 1907, incorporating "Dillon's Rule" into federal jurisprudence.

7 "In existence" means existence as a municipality with the present name or a close substitute. Because municipal creation in Pennsylvania consists of secession from or splitting existing municipalities, the boundaries of many of these 38 communities are quite different today. The dates of municipal incorporation used for this section are taken from Allegheny Board of Commissioners and Bicentennial Commission, *Welcome to Allegheny County.*

8 Roy Lubove, ***Twentieth Century Pittsburgh*** (New York John Wiley & Sons, 1969). For example, in the bitter Homestead strike of 1892, in which strikers fought private police and, later, the state militia that attempted to reopen the mills. See Henry David, "Problems of Labor," in Lorant, pp. 207-218. During the steel industry strike of 1919, the mayor of Duquesne denied a meeting permit to union organizers, and is reputed to have said,

"Jesus Christ himself couldn't hold a [union] meeting in Duquesne." Lubove, p. 12, quoting from S. Adele Shaw, "Closed Towns: Intimidation as It is Practiced in the Pittsburgh Steel District," *Survey* 43 (November 8, 1919) : 62

[9] Jon C. Teaford, ***City and Suburb: The Political Fragmentation of Metropolitan America, 1850-1970*** (Baltimore: Johns Hopkins University Press, 1979), p. 12.

[10] Lubove, p. 27. To this day, some of the street names and street numbering in Pittsburgh's North Side, previously the City of Allegheny, are retained by local residents as they were prior to this shotgun mamage.

[11] This discussion draws on Lubove, pp. 97-101, and on Teaford.

[12] A catalog of Pittsburgh's growth through annexation can be found in ***City of Pittsburgh 1975 Annual Report*** (Pittsburgh: City Controller, 1975), pp. 108-110.

[13] See Teaford, pp. 154-57, for a discussion of the commission's proposed charter and the legislature's amendments.

[14] See Lubove, p. 101. Teaford reports that the two-thirds majority requirement was met in 48 of 122 municipalities, p. 167.

[15] See Lubove, p. 100; and Teaford, pp. 126-127. The quote (by Teaford, p. 169) is from the ***Homestead Messenger,*** June ***26,*** 1929, p. ***4.***

[16] Teaford provides data showing the vote distribution across municipalities characterized by the median value of monthly rentals, a measure of local wealth, and by distance from the center of Pittsburgh, a measure of rural character. See Tables 12 and 13, pp. 169-170. Support for the charter was clearly related to the wealth and urban character of the communities. Blue collar and rural communities opposed it.

[17] A 1980 survey identified 74 separate neighborhoods in Pittsburgh, with populations ranging from 900 to 25,000. See Roger S. Ahlbrandt, Jr., ***Neighborhoods, People, and Community*** (New York Plenum Press, 1984).

[18] The region names and definitions used in this discussion follow quite closely those used in Franklin Toker, ***Pittsburgh: An Urban Portrait*** (University Park: Pennsylvania State University Press, 1986), pp. 263-315.

[19] For an insightful discussion of the difficulties and opportunities for improvement in the Mon Valley, see Mon Valley Commission, ***Report to the Allegheny County Board of Commissioners: For the Economic Revitalization of the Monongahela, Youghiogheny, and Turtle Creek Valleys*** (Pittsburgh, February 1987).

[20] Two additional municipalities, McDonald and Trafford, are located partially in Allegheny County and partially in adjacent counties, and are not included in this count.

[21] The distribution of population in Allegheny County is substantially more skewed toward the smaller municipalities than that found in the recent ACIR study of St. Louis City and County. In St. Louis, about 90,000 persons resided in municipalities with fewer than 5,000 residents, and 826,000 resided in either the city or the large unincorporated county jurisdiction. In Allegheny County, 168,000 persons live in small communities—those with fewer than 5,000 inhabitants—and 402,000 in Pittsburgh, the only large jurisdiction. St. Louis has more of the very smallest local governments than does Allegheny County, however, with 22 communities of fewer than 1,000 residents compared to Allegheny's 12. See U.S. Advisory Csmmission on Intergovernmental Relations, ***Metropolitan Organization: The St. Louis Case,*** (Washington, DC, 1988).

[22] The small municipalities elect as many officials as do their larger neighbors. Elected official to citizen ratios in these small communities are, therefore, especially high.

[23] Allegheny League of Municipalities, ***Report of Wage and Salary Programs in the Municipalities of Allegheny County—1987*** (Pittsburgh, 1987). The survey includes data for 101 of the county's 130 municipalities (the 29 not responding were predominantly small municipalities). The counts in this section include managers and municipal secretaries who are listed as full time and whose salary compensation appeared consistent with full-time employment. The latter qualification yields somewhat lower counts than the league's summary tables. Persons listed as manager/secretary were counted as managers.

[24] ***Six*** of the 12 second class townships have population densities of less than 300 persons per square mile, the minimum density required for changing their status to first class (see Chapter 3).

[25] Early evidence of this strong local attachment is that Allegheny County was the site of the Whiskey Rebellion of 1794, the first armed post-constitutional challenge to the federal government of the United States.

[26] In response to this pattern of ridges and ravines, the City of Pittsburgh has 720 bridges and the remainder of Allegheny County has 1,000—more bridges, we were told, than any city in the world except Venice.

[27] Teaford, p. 7.

[28] Their influence had positive as well as negative aspects in the eyes of at least one observer. Referring to Munhall, she found "the influence of the Carnegie Steel Company practically dominates borough action and has made the local government efficient and without suspicion of graft." Margaret Byington, ***Homestead: The Households of a Mill Town*** (New York, 1910), pp. 20-21, quoted in Teaford, p. 15.

[29] Lubove, p. 3.

[30] See Thomas Bell, ***Out of this Furnace*** (Pittsburg: University of Pittsburgh Press, 1976).

[31] Frederick Bigger, "Pittsburgh and the Pittsburgh Plan," ***Art and Architecture*** 14 (November-December 1922): 271-272, quoted in Lubove, p. 88.

[32] "The Prothonotary is the chief clerk of the Civil Division and the Family Division of Common Pleas Court. He is responsible for keeping records in civil actions and in . . . family related matters. . . which come under the jurisdiction of the Court. He issues writs, initiates the execution of judgments and keeps records of judgments paid, takes bail on bonds in civil cases, processes appeals to the Superior and Supreme Courts and from decisions of the Board of Viewers. Among his other duties are the recording of charters of nonprofit corporations, the recording of fictitious names in business, the recording of all municipal claims and tax liens, and the filing of annual reports from municipal auditors, treasurers and tax collectors." League of Women Voters, pp. 16-17.

[33] Special taxing districts for local projects (e.g., water, sewer, or street lighting projects) are permitted ***within*** the boundaries of Pennsylvania townships.

[34] Department of Community Affairs, ***Citizen's Guide to Pennsylvania Local Government*** (Harrisburg, 1984), pp. 3-4.

[35] League of Women Voters, 1971, p. 70.

[36] ***Citizen's Guide,*** pp. 3-4.

[37] Department of Community Affairs, ***Directory of Municipal Authorities in Pennsylvania 1985*** (Harrisburg, 1985). Active authorities are those that this directory does not list as "terminated." A number of active authorities had no outstanding debt in 1985.

[38] These are referred to as "lease back" arrangements, whereby an authority issues revenue debt for the construction of a school facility, then retires the debt by leasing the facility back to the authority's sponsoring school district.

[39] Estimate provided by Merrill Parker, Director, Allegheny County Fire Academy.

[40] Allegheny Conference on Community Development and Consortium for Public Administration Field Services, ***To Cooperate or Not to Cooperate: A Report on Intergovernmental Cooperation in Allegheny County*** (Pittsburgh, April 1982), p. 15.

[41] Ibid, pp. 21-23.

[42] Allegheny County Department of Development, ***Allegheny County Economic Resource Profile*** (Pittsburgh, August 1987), p. 2

[43] Interview with Ray Reaves, Director, Allegheny County Department of Planning, March 29, 1988.

[44] Mon Valley Commission, ***Report,*** pp. 15-16.

[45] Ibid., p. 10.

[46] Department of Community Affairs, "COGs and Intergovernmental Cooperation," 4th Edition (Harrisburg, 1986) p. 9.

[47] The members were Wilkins Township and the boroughs of Forest Hills, Churchill, and Chalfont. Chalfont is now a member of Turtle Creek Valley COG. A fire chiefs association continues to serve the same four municipalities.

[48] One manager of a home rule municipality interviewed for this research indicated that there has been a tendency for the COGs to replace professionally trained directors with a person selected from the COG staff, usually with less formal training, as turnover in directors occurred. This appears to have occurred in at least two of the COGs in recent years, but the extent of the trend countywide could not be ascertained, nor could its implications, if any, for COG viability.

[49] Mon Valley Commission, ***Report,*** p. 126. While speaking particularly of the three COGs in the Mon Valley region, these conditions for continued viability are appropriate to COGs throughout the county.

[50] Donald Chisholm identifies these informal linkages as essential to coordination in systems of multiple, independent organizations. See Chisholm, "Ill structured problems, informal mechanisms, and the design of public organizations," in Jan Erik Lane, ed., ***Bureaucracy and Public Choice*** (Beverly Hills: SAGE Publications, 1987), pp. 76-93; and ***Coordination without Hierarchy: Informal Structures in Multiorganizational Systems*** (Berkeley: University of California Press, 1989).

[51] See Mon Valley Commission Local Government Task Force Draft Report (Pittsburgh, 1987).

[52] For an extensive discussion of the Conference and its activities, see Shelby Stewman and Joel A. Tarr, "Four Decades of Public Private Partnerships in Pittsburgh," in R. Scott Fosler and Renee A. Berger, eds., ***Public-Private Partnerships in American Cities*** (Lexington, Massachusetts: D.C. Heath Company, Lexington Books, 1982), pp. 59-127.

[53] COGNET encountered significant difficulties in linking the different hardware and software systems used by the eight COGs, and is no longer operating.

[54] 53 P.S. 481; Intergovernmental Cooperation Law (Act 180), 1972.

[55] Department of Community Affairs, "COGs and Intergovernmental Cooperation," p. 4.

[56] Preliminary report of ***Local Government Financial Statistics 1985*** made available by the Division of Municipal Statistics, Pennsylvania Department of Community Affairs. These data are compiled from the 'Annual Audit and Financial Report'' (form DCA BLGS 30) submitted to the Division by each municipality.

[57] U.S. Advisory Commission on Intergovernmental Relations, City-County Finance Diskettes, FY 1985 (Washington, DC, 1988).

[58] Pennsylvania Department of Education, Bureau of Basic Education Financial Administration, Division of Child Accounting and Subsidy Research, ***Selected Revenue Data and Equalized Mills for Pennsylvania Public Schools, 1984-85*** (Harrisburg, 1985).

[59] Data for 1982 from Department of Community Affairs, Bureau of Local Government Services, ***Taxation Manual,*** Fourth Edition (Harrisburg, 1986), p. 3.

[60] Municipal revenues discussed in this section exclude those of publicservice enterprises such as local water and electrical systems. In a few municipalities, these enterprises account for substantial revenues and expenditures, but in most municipalities such enterprises are operated by legally separate municipal authorities.

[61] Department of Community Affairs, ***Local Government Financial Statistics, 1985,*** Tables I-IV.

[62] This difference is in part a function of millage rate limitations. Second class townships are limited to 14 mills, third class cities to 25 mills, and boroughs and first class townships to 30 mills. These limits may be exceeded by 5 mills with court approval, and the limits no longer apply if a municipality adopts a home rule charter.

[63] For home rule municipalities, this increased reliance on the earned income tax results partially from the higher rates they impose. In 1987, 8 of the 16 suburban home rule municipalities imposed earned income tax rates higher than the 0.5 percent rate used in other municipalities. See Pennsylvania Economy League, "Compilation of Assessments and Tax Rates of Allegheny County Cities, Boroughs, Townships, and School Districts 1987" (Pittsburgh, 1987).

[64] Pittsburgh's real estate tax millage rate is not limited by state law, although the city is constrained to tax buildings at one half the rate levied on land. In 1985, the city's millage rate was 52.067. Its adjusted millage rate, computed by the Pennsylvania Department of Community Affairs as the rate applied to actual market value of property, was 15.982, higher than every municipality except Clairton, and approximately 2.5 times the county average. Pittsburgh's earned income tax rate is similarly unconstrained by state law. In 1985, it was 2.125 percent of residents' income, more than double the rate of most other municipalities (Pittsburgh's school district adds an additional 1.875 percent to this rate, for a total of 4 percent. Non residents are not subject to this tax if their home municipality levies the tax. Most do so at a rate of 1 percent for the combined municipal and school levy. This 3 percent spread in earned income tax rates is said by many in the area to account for a large portion of Pittsburgh's population loss in recent years.

[65] Southwestern Pennsylvania Regional Planning Commission, Cycle IV Forecasts.

[66] ACIR, City County Finance Diskettes.

[67] Department of Education, ***Selected Revenue Data and Equalized Mills for Pennsylvania Public Schools, 1984-85.***

[68] State aid in Pennsylvania, as elsewhere in the United States, is targeted toward local school districts with lesser amounts of resources.

Chapter 3

Metropolitan Governance: State Rules and Local Choices

A LOCAL GOVERNMENT CONSTITUTION

Local government in Allegheny County is organized by citizens and officials under state constitutional and statutory authority. The entire body of state law that pertains to local governments can be considered a "local government constitution," which entails two levels of choice:

- ***Level One:*** State legislators and constitution makers choose enabling rules that allow citizens and officials to create and subsequently modify local governments, each endowed with a limited range of legal powers.
- ***Level Two:*** Local citizens and officials choose to create specific local governments, or to modify those already created, by adopting or amending municipal charters or other organic acts.

Both choices are constitutional in a functional sense—the rules chosen create governance structures but do not directly govern. The second level is nested within the first—the choices that constitute local governments and interlocal relationships are made within a framework of state law and the state constitution. The complex state-local relationship is often summed up by the proposition that local governments are "creatures of the state." This legal doctrine, known as Dillon's Rule, is part of Pennsylvania legal tradition.[1] In a literal sense, however, the characterization is usually incorrect. More accurately, local governments might be characterized as the "creatures" of local communities.[2] State law is frequently the parent of a process of local government formation and thus only indirectly the parent of local governments. This is ordinarily the case in Pennsylvania. Four different types of rules make up a local government constitution:

1) Rules of association—specifying how local government units may be created;
2) Fiscal rules—specifying the ways in which local governments may raise revenue;
3) Boundary adjustment rules—specifying how local government boundaries may be changed;
4) Contractual rules—specifying how local government units may enter into agreements with one another.

The discussion in this chapter examines these four sets of rules, then turns to the pattern of choice in Allegheny County.

RULES OF ASSOCIATION

Pennsylvania local government law underwent considerable change as a result of the adoption of a new state constitution in 1968. Pre-1968 statutes governing municipal annexation and consolidation were eventually invalidated by the courts on the basis of the constitutional provisions. Although the state legislature retains constitutional authority to prescribe new rules on these matters, it has not done so. Pre-1968 legislation pertaining to municipal incorporation and school district consolidation remains valid.

The new constitution extended optional home rule authority to all counties and municipalities. This authority was implemented by the Home Rule Charter and Optional Plans Law of 1972.[3]

All Pennsylvania citizens reside in the jurisdiction of a municipality. There is no unincorporated territory in the state. Municipalities include townships,[4] boroughs, and cities, in addition to home rule municipalities, which are treated here as a separate class of local government. All four types exist side by side in Allegheny County. Townships are the basic municipal unit. Boroughs and cities displace township organization through a process of incorporation. Since 1972, any municipality has been free to adopt a home rule charter. In the absence of unincorporated territory, county governments are overlying jurisdictions (except in the consolidated city-county of Philadelphia) whose role in municipal service provision is supplementary, never exclusive.

Townships

Townships originally were formed either by special state legislation or by county courts. After Pennsylvania was fully organized, new townships were formed by dividing existing ones. In 1937, the legislature repealed the procedures for division of townships. State law classifies townships as first class or second class. There are 21 first class and 12 second class townships in Allegheny County.

A second class township is the historic township form. It remains what might be called the "default option," which will exist unless citizens take action to create a different type of municipality. Second class townships orga-

nize territory (largely rural) that in many other states would be unincorporated. Second class townships are governed by a board of three supervisors, elected at large for staggered, six-year terms. The number of supervisors may be increased to five with voter approval.' To become a first class township, a population density of at least 300 persons per square mile is required, and voters must approve the change in a referendum. The governing body is composed either of five commissioners elected at large or up to 15 commissioners elected by ward.

Township supervisors or commissioners may, by ordinance, create an office of township manager. More than half of the first class townships and two-thirds of the second class townships report either full-time managers or full-time secretaries, though the duties of secretaries vary and may not include supervisory authority over department heads.

Boroughs

Townships and boroughs are nonoverlapping units. Borough incorporation is equivalent to secession from a township, except when an entire township becomes a borough. There are 76 boroughs, making them the most numerous class of local government in the county.

Borough incorporation is treated as a judicial action, A majority of citizens (required to be resident freeholders, but not necessarily local voters) petitions the court of common pleas for incorporation as a borough. Prior to 1981, the incorporation was decreed by the court pursuant to such a petition. Since 1981, state law has required approval of a proposed incorporation by a majority in a referendum. There is no statutory requirement of minimum population, and the legal view is that the incorporation of totally undeveloped territory, with no resident voters, is still permissible.

Also since 1981, state law has required that the court appoint a borough advisory board when there is an incorporation petition. Approval of the petition is discretionary, based on court findings in accordance with common law and statutory criteria of appropriateness. The advisory board members may represent interests that oppose incorporation, such as the existing township government. Borough incorporation petitions have been denied on the basis of advisory board findings, even when a substantial majority of affected residents signed the petition. Borough incorporation is not automatic even when it is favored by an extraordinary majority, but is contingent on majority agreement by freeholders and voters in addition to third-party review and approval on the basis of legal and technical criteria. Incorporation requires local consent, but communities seeking incorporation do not enjoy full powers of self-determination.

Borough disincorporation procedures, since passage of the 1968 state constitution, are somewhat unclear. Ten percent of the registered voters may petition to annul the borough charter. Approval by the voters creates a new second class township (the default option) from the borough territory. Prior to 1968, the Borough Code authorized the reversion of borough territory to the township from which it was created, but this provision has been held invalid in the courts.[6]

Boroughs, by statute, have what is popularly known as a "weak mayor" form of government. The mayor is separately elected for a four-year term and has a veto power over the council (that can be overridden by a two-thirds majority). The mayor has no appointment powers, and administrative responsibilities are limited to supervision of the police department (e.g., making out work schedules for police officers). The office lacks a critical element of executive authority—powers of appointment and removal—and is widely regarded as largely ceremonial. A "good mayor" is highly visible in the community and regularly attends the social functions of churches and other community organizations.

Power is concentrated in the elected council, which determines its own numbers and method of election: three, five, or seven councilmen if elected at large, and one, two, or three from each ward if elected by ward. The council elects a president from among its own members, who usually exercises political leadership. In most boroughs, the council functions as a legislative body and an administrative team. Each member of council chairs a committee responsible for supervising a specific function. Any council member is free to give directions to municipal employees, subject to the scrutiny of the council and the president. A borough secretary is usually employed (mostly part time) to administer routine matters. Department heads report directly to council.

The council also may create, by ordinance, an office of borough manager, who becomes the chief administrative officer. A few boroughs have upgraded the position of secretary to secretary-manager. Nineteen boroughs in Allegheny County report a full-time manager, and ten have a full-time secretary. The manager or secretary-manager system substantially alters the structure of borough government by unifying administrative supervision in a single appointed officer.

Cities

Pennsylvania has four classes of cities, based on population. Philadelphia, the only city with more than a million residents, is the only city of the first class. Pittsburgh is the only second class city, and Scranton is the only city designated class two-A. All other cities are considered third class, although those that meet the population requirement of 100,000 for class two-A have the option of joining that class. (Clairton and Duquesne are the only remaining third class cities in Allegheny County.)

The incorporation of third class cities is different from boroughs in two ways. First, there is a minimum population requirement of 10,000. Second, unlike new boroughs, new cities are not carved out of the jurisdiction of another government but result only from a change of status by an entire township or borough or from consolidation. City incorporation, therefore, does not engender the degree of intergovernmental conflict often associated with borough incorporation. Since 1945, only three new cities have been created in the state.

Third class cities have a commission form of government, unless a mayor-council or council-manager form is adopted by referendum. Under the commission form, a mayor and four council members constitute the governing body,

each member taking administrative responsibility for one of five major departments. The mayor is presiding officer.

Home Rule Municipalities

The 1968 state constitution permits all municipalities to frame their own home rule charters. The 1972 implementing legislation' provides a two-step charter procedure. First, voters must approve the creation of a government study commission. The issue may be placed on the ballot either by initiative petition or by ordinance. Members of the commission are elected at the same time. Second, if the commission recommends a new charter, it must be approved by a simple majority of the voters. Home rule municipalities do not rely on state law for authorization to act and are not subject to those portions of the state code that apply to municipal governments (i.e., township, borough, and third class cities codes). Home rule municipalities are subject to general legislation that applies to all municipalities, and may exercise only those powers not prohibited by the state constitution, general law, or the local charter. Boroughs and townships that adopt a home rule charter also frequently adopt the new title of "municipality." Seventeen Allegheny County municipalities have reorganized under home rule charters. This number includes five former townships of the first class and four of the second class, *six* former boroughs, one former third class city (McKeesport), and the City of Pittsburgh. With the exception of Pittsubrgh, the trend has been for home rule municipalities to create some variation of council-manager government.

The state constitution may also allow a community within an incorporated jurisdiction (including cities) to form a new, independent municipality, subject to voter approval in the entire jurisdiction. In 1985, the Allegheny County Board of Elections accepted petitions for a referendum to determine whether the first ward of the City of Clairton would be reestablished as the Borough of Wilson. The board ruled that the question had to be put before voters in the entire city, and the proposal was defeated.*

Volunteer Fire Companies

Somewhat different rules of association apply to fire protection than to other services. Provision by privately organized, volunteer fire companies is common throughout suburban Allegheny County. Municipal governing bodies may not change from volunteers to paid professionals (or vice versa) without referendum approval by a majority of voters? The requirement also applies to changes from a mixed system. Different rules also apply to raking municipal revenue to support fire protection (see discussion under "fiscal rules").

School Districts

The formation of school districts in Pennsylvania historically was tied to the formation of municipalities. Since 1911, state law has prescribed that each new municipality constitute a separate school district, with the exception of very small municipalities.[10] If the new district would be fourth class, which has a resident population of less than 5,000, district formation required approval by state school officials. In 1965, the requirement of state approval was broadened to include new third class districts, with resident populations up to 30,000." With these exceptions, school district boundaries tend to follow municipal boundaries. School districts that subsequently were consolidated (see discussion of boundary adjustment rules) usually overlie two or more entire municipalities rather than containing parts of different municipalities,[12] a "patchwork" pattern frequently found elsewhere.

Third and fourth class school districts are governed by nine-member boards of school directors elected for four-year overlapping terms. The legislature has also created 29 "intermediate units" throughout the state to provide consulting, advisory, and program services to school districts (see Chapter 5). The school districts generally are responsible for program operation.

Community colleges may be established by school districts, municipalities, intermediate units, or the joint action of any of these units. Each institution is governed by a board of trustees appointed by local government, or in Pittsburgh (as a second class city) by the mayor with approval of the council.

County Government

Although counties are also allowed to frame home rule charters, Allegheny County has not done so. It retains the traditional form of government provided by the state constitution and laws. The principal governing body is a three-member county commission, required to be bipartisan. There are 11 separately elected constitutional officers. The powers and duties of the county government and its offices are prescribed by statute. Allegheny is the only county of the second class (there are nine classes), and state law pertaining to the county government is, in effect, special legislation. This special legislation does not include rules affecting municipalities or school districts within the county.

Municipal Authorities

The Municipality Authorities Act, originally enacted in 1935,[13] authorizes any county, municipality, or school district to form a "municipal authority" to perform specific functions. The local governing body, not the voters, creates the authority and appoints a five-member board of directors. Charged with responsibilities related to a particular purpose or project, municipal authorities may borrow money and issue revenue bonds, exercise the power of eminent domain, and impose service charges, but they do not have the power to tax.[14] Municipalities often create authorities to finance and operate water and sewer systems. School districts create municipal authorities to finance and construct school buildings. Counties and municipalities may also create housing authorities and industrial development authorities, organized and governed along similar lines, but authorized under separate state legislation.

The Municipality Authorities Act also authorizes two or more local governments, again including counties, municipalities, and school districts, to create "joint authorities."[15] A joint authority board must have a number of members at least equal to the number of participating local governments, but no less than five. The composition of

each board is established by the authority's articles of incorporation, giving the governments the flexibility to negotiate representation arrangements. New local governments may join an existing authority with approval of the authority board and the governing bodies of the other members. Current members may withdraw with approval of the authority board, provided that the authority has not issued bonds or other obligations.

Joint authorities enable a group of small local governments to finance and construct large capital projects, such as water and sewer systems, transit systems, and airports, that would not be economically feasible for each government acting alone. The same arrangement allows county governments to join with municipalities in common projects. According to the Pennsylvania Department of Community Affairs (DCA), the creation of joint authorities was greatly stimulated in the 1960s when new state and federal legislation began to require higher levels of sewage treatment and to extend those requirements to many more communities. The U.S. Environmental Protection Agency (EPA) required construction of regional treatment facilities as a condition for receipt of grants. According to DCA, joint authorities created for this purpose often "represented the first time neighboring municipalities had ever cooperated in a joint program involving a heavy capital expenditure."[16]

Allegheny County, as a county of the second class, is authorized to create a port authority, governed by a board appointed by the county commissioners, which may impose user charges and issue revenue bonds. The Port Authority of Allegheny County provides bus and rail transit. A second class county (Allegheny County) or a second class city (Pittsburgh) may establish individual or joint public auditorium authorities. In the case of a city-county authority, two members of the governing board are appointed by the county commissioners, two by the mayor, and one jointly. Two auditorium authorities have been formed—the Pittsburgh-Allegheny County Public Auditorium Authority and the Pittsburgh City Stadium Authority.

Environmental Improvement Compacts

The 1968 Pennsylvania Constitution required the state legislature to provide for "area governments" that would include two or more municipalities.[17] Accordingly, the Environmental Improvement Compact Law of 1972 authorized the creation of area compacts by referendum, with concurrent majorities required among all affected municipalities. A compact, governed by an elected board of five, seven, or nine members, is authorized to conduct any governmental function, and may levy a real estate tax of up to 2 mills, impose service charges, issue bonds, and exercise the power of eminent domain.[18]

Compacts potentially represent a step beyond joint authorities in several respects. A compact constitutes a new, independent local government, created by citizens, not by local governing bodies. The compact board is elected, not appointed by local governing bodies, and has the power to tax, albeit a very limited power compared to municipalities. Thus far, the authority to create compact governments has not been used.

BOUNDARY ADJUSTMENT RULES

The boundaries of local governments are generally modified in one of two ways: annexation of new territory by an existing local government or consolidation of two or more units into a single government. The rules for making such adjustments vary widely from state to state. In Pennsylvania, annexation was made extraordinarily difficult by the 1968 state constitution, and consolidation, as in most states, is allowed only with the concurrent approval of voters in the affected jurisdictions.[19]

Annexation

Like incorporation, municipal annexation becomes a much different issue in a state with no unincorporated territory. Before 1968, second class townships, although considered municipal corporations, were subject to annexation by boroughs and cities but were not allowed to annex territory from boroughs or cities. This was addressed by the 1968 constitution in two ways.

First, the constitution authorizes boundary changes by a citizen initiative and referendum procedure, without action by municipal officials.[20] The procedure requires approval by concurrent majorities of voters in each municipality. Townships may acquire additional temtory, but only if the voters in another jurisdiction petition for and agree to the change. The same holds for boroughs and cities. There is no requirement that the territory added be contiguous.[21]

Second, the state legislature was directed to enact a uniform annexation procedure for all types of municipal government. The legislature has not established such a procedure, resulting in the invalidation of all previously existing statutes without any replacement except the initiative and referendum.

As a result, municipal annexation has been virtually eliminated. In its place is a relatively minor provision for boundary adjustment with the mutual consent of voters in the affected municipalities. The principal implication of this situation is that township residents may not obtain annexation by an adjacent borough or city without the consent of a majority of township voters. Under the 1968 constitution, township residents cannot be given this capability without also allowing borough or city residents to seek annexation by an adjacent township. Boroughs and cities are apparently unwilling to risk the possibility of losing territory to townships in order to get the power to annex territory from townships.

Consolidation

Consolidation of local governments in Pennsylvania can take one of two forms: (1) absorption of one municipal unit by another and (2) the combination of two or more units to create a new unit. The 1968 constitution provides for consolidation by citizen initiative and referendum, with concurrent majorities in the affected jurisdictions. As with annexation, there is no requirement that local governments choosing to consolidate be contiguous.

Neither annexation nor consolidation has been of great importance in Allegheny County since 1945. The absorption of Eden Park Borough by Mckeesport City in 1952 has been the only consolidation.

School district consolidation, or "combination" in the term used by state law, may be accomplished by a simple majority vote of the boards of school directors, with approval of the state board of education. Approval by local voters is not required. "Combined" districts need not be contiguous. During the 1960s, the state legislature provided for a special process of school reorganization in an effort to reduce the large number of small school districts. Reorganization plans were submitted to the state Department of Public Instruction by county boards of education (since abolished, replaced by intermediate units) and approved by the state Council of Basic Education. (School district consolidation is discussed further in Chapter 5.)

FISCAL RULES

The state code for each class of local government (e.g., the Borough Code or Public School Code) contains taxing authority. Additional taxing authority for local governments (in some cases redundant authority) is established by the Local Tax Enabling Act (1965), widely known as Act 511. This legislation allows local governments to exercise a broad range of taxing powers except a sales tax. In addition to real estate taxes, the most common sources of revenue are taxes on income, some of which apply to nonresidents; intangible personal property; occupation; occupation privilege; amusement; mercantile or business privilege; and a head tax. The local government codes and Act 511 establish revenue limits. Real estate tax limits do not apply to home rule municipalities, and are of only secondary importance in school districts.

In nearly every instance, the taxing power is vested by state law in the local governing body (elected council or board), with no requirements for voter approval, except for initial approval of a few special purpose levies in boroughs and second class townships. Home rule municipalities and counties may establish their own rules with respect to electoral consent.

Real Estate Taxes

Real estate taxes have millage limits that differ among the classes of local governments. Boroughs and first class townships may levy up to 30 mills, but second class townships are limited to 16 mills. Third class cities are limited to 25 mills. Third class cities, boroughs, and townships may obtain court approval to exceed the limits by as much as 5 mills.[22] All municipalities may also levy real estate taxes earmarked for specific purposes allowed by state law, including a levy of 3 mills to support volunteer fire companies in boroughs and townships[23] and an unlimited levy for debt service. For Allegheny County, the only second class county, the real estate tax is limited to 20 mills, 5 mills less than most other counties. However, the county has authority to use a variety of special levies.

School districts have considerably greater authority to raise revenue. Although nominally limited to 25 mills on real estate, the districts also may levy a rate sufficient to meet minimum state requirements for teachers' and supervisors' salaries and to pay for building rentals and sinking fund charges on indebtedness. They may also employ a number of special levies. In practice, therefore, school boards typically levy real estate taxes well in excess of the millage limit. In this way, the fiscal rules create an asymmetry between overlapping municipalities and school districts that frequently contributes to ill-will between their governing bodies.

The 1968 constitution allows counties and municipalities to reconstitute themselves under home rule authority, which allows them, in part, to write their own fiscal rules in the process of framing a charter. Home rule communities may establish real estate tax limits or have no limit. All local governments, however, remain limited to the taxes (e.g., real estate or income) authorized by the state legislature. Home rule thus overrides statutory real estate tax limits, but does not leave local governments free to enact any type of tax they please.

Act 511 Taxes

Act 511, the 1965 Local Tax Enabling Act,[24] authorizes supplementary revenue sources for municipalities and school districts but not for counties.[25] Instead of enumerating each tax allowed, the statute provides general authority for political subdivisions to levy taxes on "persons, transactions, occupations, privileges, subjects and personal property.. .and upon the transfer of real property, or of any interest in real property within the limits of such political subdivisions. . . ."[26] The total amount of Act 511 taxes that may be imposed by any jurisdiction is limited to the amount that would be raised by a tax of 12 mills on the total market valuation of real estate in the jurisdiction. The statute establishes a large, somewhat indefinite set of local taxes in order to create a limited supplementary source of revenue.

In addition to the general limit on all revenue from Act 511 taxes, the statute limits the rates on specific levies (none of the limits apply to home rule municipalities). The specific limits, rather than the general limit, have been the principal constraint on local taxing capabilities.[27] Earned income taxes are limited to 1 percent, per capita taxes (head taxes) and occupational privilege taxes (distinguished from occupation taxes, discussed below) to $10 per person,[28] real estate transfer taxes to 1 percent of the amount of the transaction, and an amusement tax to 10 percent (only Pittsburgh may impose this tax on movie theaters). Mercantile or business-privilege taxes are limited to 1 mill on the gross receipts from wholesale transactions and 1.5 mills on retail transactions (2 mills in Pittsburgh).

Most of these tax sources raise revenue directly from residents of the taxing jurisdiction. There are two, relatively minor, exceptions. The occupational privilege tax is levied by and paid to the employing jurisdiction.[29] The other exception is the earned income tax, with an important qualification. Municipalities (but not school districts) may impose the income tax on nonresidents,[30] who receive a tax credit if their jurisdiction of residence also has imposed an earned income tax. All communities in Allegheny County have adopted an earned income tax, thus virtually erasing the revenues that might be obtained from a nonresident levy.[31]

The indirect source of revenues collected from businesses may lie outside the jurisdiction. Those who ulti-

mately pay a tax may be different from those who initially pay it.[32] Two Act 511 tax sources have a clear potential for reaching nonresidents. The amusement tax may easily function as a 10 percent sales tax paid by consumers regardless of where they reside. Mercantile and business privilege taxes,[33] measured by gross receipts, may be passed on to consumers, much like a sales tax. Pittsburgh may levy a tax of 2 mills on retail vendors (including restaurants), and the Pittsburgh School District is authorized by the Public School Code to levy a mercantile tax of one-half mill, including places of amusement, over and above the mercantile and amusement taxes authorized by Act 511.[34] The burden of commercial real estate taxes also may be borne, in part, by nonresidents, reflected in the prices that consumers pay for goods and services. (An analysis of the capacity of Allegheny County municipalities to raise revenues from nonresidents can be found in Chapter 6.)

Act 511 overrides previous state restrictions on the power of local units to levy occupation taxes, which are based, like property taxes, on an assessed valuation of the occupation.[35] Only two small municipalities in Allegheny County made use of this tax in 1985.

Many Act 511 taxes are subject to sharing between municipalities and overlapping school districts. In addition to the flat-rate occupation tax mentioned above, shared taxes are the per capita tax, earned income tax, real estate transfer tax, and occupational privilege tax. Sharing is either on a 50/50 basis or as agreed to by the two jurisdictions. The requirement does not mean that both governing bodies must consent to the levy; however, if one unit decides to use the tax, it must share the revenues.[36] The result is to tie the process of raising revenue for one jurisdiction to that of another. A community decision to raise more revenue for schools, from most Act 511 sources, cannot be made without also increasing revenue raised for municipal purposes, and vice versa.[37]

The general language of Act 511 taxes creates some scope for local creativity in devising new taxes, with the added advantage that locally devised taxes are not subject to rate limitation. Efforts by school districts to levy taxes on residential construction ran into legal and political opposition and were eventually prohibited by the state legislature.[38] Taxes on the gross receipts of commercial parking lots have been allowed by the courts under the general authority of Act 511. In Allegheny County, the Moon Area School District, which encompasses the Greater Pittsburgh International Airport, levied such a tax at a rate of 15 percent.[39] The absence of rate limitation potentially allows the imposition of confiscatory rates. The City of Pittsburgh adopted a similar tax on commercial parking lots, eventually increasing the rate to 20 percent of gross receipts. The U.S. Supreme Court refused to declare the tax unconstitutional under the Fifth and Fourteenth Amendments even though the city's parking authority was a competitor with the taxpayers and the tax could render commercial parking unprofitable.[40]

County governments, while not included in the general authorization of Act 511, may supplement their revenues from real estate taxes with a tax on intangible personal property.[41] Originally mandated by state law in 1913 and set at 4 mills, the county tax was made optional in 1978.[42] This tax source is reserved to county governments by Act 511, which prohibits municipalities and school districts from taxing personal property subject to taxation by counties.[43] The City of Pittsburgh and the Pittsburgh School District are exempt from the prohibition, and are separately authorized to levy a personal property tax of 4 mills each. As a result, Pittsburgh residents are subject to an effective rate of 12 mills on personal property.

Special Tax Districts

Special tax districts are often created in relatively large heterogeneous jurisdictions, such as counties, as a means of increasing the level of service provision. In the absence of unincorporated territory, there is likely to be less need for this institutional device, and its use is quite limited in Pennsylvania. The principal demand for such districts would arise in second class townships, the "default form" of Pennsylvania local government. Second class townships are, in fact, authorized to create special tax districts to provide fire hydrants, street lighting, and police protection, on petition by a majority of the property owners in an area. Libraries are one municipal-type service that Pennsylvania county governments sometimes provide. Municipalities that maintain a library may, with voter approval, withdraw from a county library district and cease to pay county library taxes, in effect creating a special tax district in the remainder of the county.[44]

Debt Rules

The 1968 Pennsylvania Constitution rewrote the basic rules governing municipal debt. The previous constitution had set a municipal debt ceiling at 15 percent of the assessed valuation of taxable property. Debt in excess of 5 percent required voter approval. The new constitution does not establish debt ceilings, but does authorize the legislature to fix limits based on the total revenues of a municipality rather than on the assessed valuation of property. Accordingly, in 1972, the legislature provided for the computation of a local "borrowing base" by averaging the total of money received by a local government unit from all sources for the preceding three fiscal years.[45] The Local Government Unit Debt Act (1972) also prescribes limits of 300 percent of the borrowing base for counties and 250 percent for all other local governments.[46] The statute defines local governments as cities, boroughs, townships, and school districts. Authorities are not included; they may issue revenue bonds but may not incur general obligation debt.

The legislature also defined a category of debt not mentioned in the constitution. "Lease rental debt" consists of payments by a municipality or school district to an authority for the use of a facility, which the authority uses for debt service. Court decisions under the old constitution had defined such payments as nondebt,[47] thus allowing municipalities to create a municipal authority to avoid constitutionally imposed debt ceilings. The Local Government Unit Debt Act, however, explicitly treats such payments as debt and prescribes a second set of debt limits that

include lease rental debt, 400 percent of borrowing capacity for counties and 350 percent for *all* other local governments.

Both the old and new state constitutions exempted "self-liquidating" debt from limitation.[48] The exception applies to debt incurred for projects that are supported from project-generated revenues. Thus, municipalities, like authorities, are free to issue revenue bonds without legal constraint.

The 1968 constitution permits local governments to supplement their borrowing capacity by obtaining voter approval for a debt issue. The legislature distinguishes "electoral debt" from "nonelectoral debt." Debt approved by the voters in a referendum is not included in the computation of a jurisdiction's nonelectoral debt.[49] The ballot issue must specify the purpose or project for which funds will be used. Referenda also are required to convert nonelectoral to electoral debt and to change the purpose for which electoral debt was incurred.

The new constitution and implementing legislation created greater borrowing freedom for municipal officials and, at the same time, gave local citizens the power to ovemde statutory limitations by majority vote in a referendum. The loophole that allowed local governments to use authorities to evade debt limits was plugged. Since 1972, there has been no reason to create municipal authorities to expand debt capacity. Municipalities enjoy greater freedom to incur debt, but local officials are somewhat more constrained, given the inability to use authorities to increase debt without limit.

CONTRACTUAL RULES

The Intergovernmental Cooperation Act of 1972[50] implementing Article IX, Section 5, of the state constitution, authorizes counties, municipalities, and school districts to enter into joint service agreements.[51] The only requirement is that each jurisdiction be authorized to undertake any function to be performed jointly. Local governments also are authorized to transfer functions. Interlocal agreements were first authorized by state law in 1943, but the old law excluded school districts and did not permit transfer of functions.[52] Citizens may use the initiative and referendum to compel their governing bodies to enter into an intergovernmental agreement or to transfer functions.[53] Among the joint activities that can be set up under the Intergovernmental Cooperation Act are mutual aid agreements, parallel-action agreements (e.g., agreements for joint financial support of community libraries or volunteer fire companies),[54] contract purchase of services, and joint service production (e.g., an emergency dispatch center). Councils of governments (COGs) are created under the same intergovernmental authority.

LOCAL GOVERNMENT FORMATION IN ALLEGHENY COUNTY

A local government constitution consists of possibilities—options—until communities choose to create government units and arrangements. The rules of association, together with the fiscal, boundary change, and contractual rules, establish the legal constraints and opportunities within which communities create the institutions of local government. The citizens and elected officials of Allegheny County have used their authority to form governmental units selectively, over the years, to establish and maintain a large number of municipalities and municipal authorities, but to resist consolidation of local governments, including (often without success) state efforts to consolidate school districts.

Historically, municipal incorporation—especially boroughs—was an important way by which Allegheny County communities constituted local governments. Most of the 76 boroughs were formed prior to World War I.[55] Development generally featured dense residential use of land and "Main Street" shopping, often, in the Mon Valley, clustered around a large steel plant. To govern these communities, boroughs were carved out of the territory of existing townships, displacing township organization. In more recent years, suburban development became less intensive, and began to feature large residential lots in subdivisions separated by expanses of open space. Shopping centers replaced Main Street, and industrial development slowed. Borough incorporation also came to a virtual standstill.[56] Instead, second class townships were upgraded, and many of those undergoing population growth became first class townships or adopted home rule charters." Today, 21 of the 33 townships (64 percent) are first class, making them the second most numerous class.[58] Eight of the remaining second class townships have population densities that would permit first class status, but they have not chosen to exercise the option.

Despite its infrequent use in recent years, borough incorporation continues to offer local communities a potential option. The most recent incorporation, in 1976, was Pennsbury Village, a 500-unit condominium community occupying 46.7 acres east of Pittsburgh, formerly in Robinson Township. Originally a rental community, the units were sold as condominiums in 1973. A perceived lack of adequate street maintenance and police protection from the township government led to consideration of forming a borough, but the major impetus came when the township sought to require residents of Pennsbury Village, which had its own wastewater treatment plant, to connect to a new township facility at a one-time cost of $200,000 plus a tap-in fee of $37,000 and a monthly charge of $30 per unit thereafter. By comparison, incorporation required, in addition to time and effort, collecting contributions to cover legal costs of slightly over $20,000. Today, the borough government and the condominium association function side by side, each electing a council. The condominium council, with a budget still three to four times the size of the borough budget, retains responsibility for the maintenance of common grounds—38 buildings, lawns, and recreational facilities. The borough government is responsible for police, fire, emergency medical service, streets, trash collection, and wastewater treatment. The borough council contracts with the nearby Borough of Carnegie for police, fire, and ambulance services, and employs an engineer to offer technical advice on street maintenance and operation of the wastewater treatment plant.

In sharp contrast to the consolidation of school districts (see Chapter 5), Allegheny County has seen little activity related to the consolidation of municipalities in

recent decades. The 1968 state constitution modified the consolidation rules to allow for citizen initiative and referendum without participation by municipal officials. Since that time, 21 citizen initiatives have been on the ballot throughout the state (none in Allegheny County), only two of which were approved.[59]

The most numerous type of local government in Allegheny County is the municipal authority. As discussed above, before 1968, authorities were created in part to evade debt limits. They also are used as intergovernmental arrangements. About one-third of the 149 municipal authorities in Allegheny County in 1985 were created after the adoption of the 1968 constitution. Most of the recently established authorities are for water, sewer, and health services, functions for which there are likely to be significant economies from intergovernmental cooperation.

Absent in Allegheny County—and throughout Pennsylvania—are special purpose governments, other than school districts, with separately elected officials and independent taxing powers. Municipal authorities lack both of these features. In other states with large numbers of local governments, independent special districts are often used to provide fire protection, parks, and libraries, in addition to water and sewer facilities. Compact governments, a type of unit created pursuant to the 1968 constitution to provide opportunities for "area government," could possibly be used as special governments. The statute, however, is very general—even vague—in its language; one interpretation is that compact governments are not special units, but a new "level of government."[60] Greater specificity may be required to enable communities to create *limited purpose* governments rather than "area governments" with general powers, albeit very limited fiscal powers. In any event, there is no particular demand for this type of jurisdiction.

Each of the municipal classes—cities, boroughs, and first and second class townships—have drawn on the home rule powers made available by the 1968 constitution. McKeesport adopted a home rule charter in 1973, and Pittsburgh did so in 1974. Six former boroughs and 9 former townships have done the same. In addition, two townships have adopted optional plans of government, creating township managers. Home rule charters, in addition to enhancing the revenue powers of municipalities, enable boroughs and townships to redesign their forms of government. Most have chosen to create some variation of the council-manager form. Communities that want to retain the historic borough or township government have not adopted home rule charters and operate under the local government code for their municipal class.

SUMMARY

The character of governance in a metropolitan county such as Allegheny depends on (1) the nature of the rules that apply to diverse local governments and (2) the nature of the process for making and adjusting those rules. On the one hand, the legal framework gives citizens and elected officials considerable authority to create and maintain a variety of local government units. On the other hand, the process for adjusting the legal framework includes a state constitutional requirement for uniform statewide legislation within municipal classes.

Most of the flexibility available to local communities derives from borough incorporation, optional plans of government, home rule charters, and the creation of municipal authorities. Citizen consent is required in all cases except the creation of municipal authorities. Boundary adjustments between municipalities require concurrent majorities in both jurisdictions. As a result, it is more difficult for a portion of a township to annex itself to an adjoining borough or city than to incorporate as a borough.

The use of the initiative and referendum has been slow to develop in Pennsylvania. One result has been a widespread reliance on nonbinding advisory referenda on controversial issues.[61] Although the 1968 constitution instituted initiative and referendum procedures to decide boundary adjustments, the voting rule is such that few boundary adjustments can succeed.

Perhaps the principal authority in the hands of citizens is the power to frame and adopt home rule charters that contain broad initiative and referendum powers on other issues as well.[62]

State law makes very little use of citizen referenda in the local fiscal rules, with the exception of debt approval. Municipal officials who seek to raise the real estate tax rate above the statutory limit must take their case to court rather than to the voters. School district directors have even less restriction on their ability to raise rates. As a result, local citizens are required to take their case *against* a tax increase to local officials, rather than having local officials bring their case *for* a tax increase to them.

There is some difference in the way different local governments are treated by the state constitution. Allegheny County, the City of Pittsburgh, and the Pittsburgh School District are governed by what is, in effect, special legislation. Pittsburgh is a home rule city, reducing its dependence on state legislation while allowing a degree of special treatment by the state legislature. At the same time, the townships, boroughs, and other school districts in the county are governed by general law applicable to broad municipal classes. The result is an ability to tailor the local government constitution to the needs of Pittsburgh and Allegheny County, while other governments in the county are treated exactly like similar units throughout the state.

The Allegheny County government, although an overlying unit with countywide jurisdiction, has little authority over other governments in the county. County government is broader than municipalities and school districts, but it is not a "higher" government in a hierarchical sense. Instead, the basic governance of Allegheny County *as a multijurisdictional metropolitan area* is mainly through the state constitution and statewide legislation. The rules that govern the formation of local governments, modifications of boundaries, revenue-raising capabilities and limitations, and interjurisdictional relationships are state rules. The Pennsylvania Constitution requires that state legislation with respect to local government "be uniform as to all classes of local government regarding procedural matters."[63] Local or special laws that would regulate the affairs of local governments, or that would create new

townships or boroughs, or modify the boundaries of townships, boroughs, or school districts, are explicitly forbidden.[64] Legislation that applies exclusively to the City of Pittsburgh or to Allegheny County (but not to other local governments in the county) is allowed on the basis of classification by population. Whether this practice is a matter of constitutional necessity or legislative custom is unclear.

Uniform state legislation may attenuate the process of metropolitan governance in Allegheny County. Local governments are unable to negotiate a settlement of common issues and have that settlement translated into state legislation. The major issues affecting Allegheny County as a metropolitan area become entangled with statewide issues. Conflicts among townships, boroughs, cities, and school districts must be settled on a statewide basis if settlements are to be incorporated as a part of uniform legislation. Important intergovernmental issues, such as the tension between townships and boroughs over annexation, remain unresolved. Other issues, such as the fiscal formula relating the revenue-raising powers of a central city like Pittsburgh to those of the surrounding governments, have to be settled in the same way throughout the state instead of being adapted to the specific time-and-place conditions of a complex metropolitan area.

In its study of St. Louis County, ACIR concluded that metropolitan ***governance*** need not require a metropolitan ***government.*** Governance does depend, nevertheless, on a rulemaking capability that is metropolitan in scope. State rules apply to Allegheny County in its entirety, and, therefore, the minimal condition for metropolitan governance is met. There are rules, and they apply countywide. The difficulty is that the same rules apply simultaneously to the rest of the state. This has the effect of reducing the incentives of local officials to engage in forms of entrepreneurship that would depend on adjustments in general state law.

One feature of the local government constitution in Pennsylvania, however, appears to mitigate intergovernmental conflict: the absence of unincorporated territory. The existence of second class townships as a "default" form of local government means that county governments are, outside Philadelphia, always an overlying unit, never the only local jurisdiction in a community. Counties and municipalities are not rivals contesting for unincorporated territory. This situation may leave county officials free to adopt strategies that are generally supportive of local municipalities, including a central city, such as Pittsburgh.

A major area of unresolved conflict in Allegheny County concerns fiscal rules. The City of Pittsburgh is concerned that it is precluded from levying an income tax on nonresidents. The provision that keeps Pittsburgh from doing ***so,*** however, is part of Act 511 authority given to classes of municipalities on a statewide basis. All that the suburban jurisdictions must do, under state law, to deny Pittsburgh a nonresident tax is to enact an income tax on their residents. Changing the rules depends on statewide negotiations, not just on an accommodation between Pittsburgh and its surrounding municipalities. Maintaining an appropriate fiscal balance between the central city and the suburbs may require occasional tinkering with the fiscal rules—a process that would seem to face prohibitive obstacles, including costs of time and effort, if the whole state is affected by a change.

Notes

1 Robert E. Woodside, ***Pennsylvania Constitutional Law*** (Sayre, Pennsylvania: Murrelle Printing Co., 1985), pp. 507-509. Dillon's Rule became a part of federal precedent on appeal of a Pennsylvania case, Hunter v. Pittsburgh, upholding Pittsburgh's unilateral annexation of the City of Allegheny.

2 See U.S. Advisory Commission on Intergovernmental Relations (ACIR), ***The Organization of Local Public Economies*** (Washington, DC, 1987); and Ronald J. Oakerson and Roger B. Parks, "Local Government Constitutions: A Different View of Metropolitan Governance," ***American Review of Public Administration*** 19 (December 1989): 279-294.

3 53 Pennsylvania Statutes, Chapter 1/2.

4 In many other states, mostly in the Midwest, townships are not considered to be municipal corporations as they are in Pennsylvania and throughout New England.

5 Pennsylvania Department of Community Development, *Referendum Handbook,* 4th Ed. (Harrisburg, 1987), p. 26.

6 The provision was held to violate the constitutional requirement of a uniform boundary change law, discussed below. See ***Referendum Handbook,*** pp. 28-29.

7 53 Pennsylvania Statutes, Chapter 1/2; Home Rule Charter and Optional Plans Law. Philadelphia has had home rule authority since 1952.

8 Pennsylvania Department of Community Affairs, ***Boundary Change Rules*** (Harrisburg, 1985), p. 24.

9 See the discussion in ***Referendum Handbook,*** pp. 17-19.

10 24 Pennsylvania Statutes 2-201.

11 School districts are classified by five population classes for legislative purposes. See Chapter 5.

12 Formerly, state law allowed a majority of taxable inhabitants of any contiguous territory to form an "independent" district by petition to the court of common pleas. Concurrent majorities were required if the proposed district included temtory within more than a single established district. The formation of independent districts was disallowed in 1965, except to join another school district.

13 53 Pennsylvania Statutes 306.

14 Townships may also create special taxing districts for portions of a township, but these districts have no independent authority or separate governing body. See discussion of fiscal rules.

15 Pennsylvania Department of Community Affairs, *COGs and Intergovernmental Cooperation,* 4th Ed. (Harrisburg, 1986), pp. 7-8.

16 Ibid., p. 7.

17 Ibid., p. 2.

18 The only other provision for special purpose governments with independent powers of taxation is for the creation of water supply districts, which may be formed in any county on the petition of resident landowners to an appropriate court.

19 Some students of local government see any reliance on concurrent majorities as reactionary, evoking the spirit of John C. Calhoun, and used as a selfish device by some groups to evade their responsibility for the greater public ***good.*** Others argue that the idea of concurrent majorities is based on a venerable federalist or covenantal principle—a principle of ***union*** as the foundation for achieving a greater public good. The principle comes into play every time a state is admitted to the union called the United States of America. Admission to the Union requires the consent of the Union and the consent of the people who live in the prospective state. Furthermore, the bound-

aries of a state cannot be changed without its consent. Clearly, the principle underlying the use of concurrent majorities did not die with Calhoun. The Advisory Commission on Intergovernmental Relations has endorsed the use of concurrent majorities to effect municipal consolidation. See ACIR, ***State and Local Roles in the Federal System*** (Washington, DC, 1982), p. 448.

[20] The procedure requires a petition signed by registered voters comprising 5 percent of the total number of votes cast for the office of governor in the last election within each municipality. Referendum approval requires a simple majority of the votes cast in each municipality.

[21] ***Referendum Handbook,*** pp. **14-15.**

[22] The municipality may be required to show that its request is based on due and reasonable cause, that it has exhausted all reasonable means of additional taxation, and that it has diligently explored all the facts necessary to form an intelligent judgment. The court does not determine the necessity or wisdom of the tax increase, but merely inquires as to whether the municipality's request is an abuse of discretion.

[23] Additional levies for the support of fire protection must be approved by voters in a referendum. Also with voter approval, second class townships may levy a special real estate tax up to 2 mills for fire hydrants. Boroughs may impose an additional levy of 8 mills to provide fire hydrants, fire hose, and street lighting, again with voter approval. ***(Referendum Handbook,*** p. **14.)**

[24] 53 Pennsylvania Statutes 6901.

[25] Philadelphia, as a first class city, is also excluded from Act 511.

[26] 53 Pennsylvania Statutes 6901 (Local Tax Enabling Act, Section 2).

[27] Pennsylvania Department of Community Affairs, *Taxation Manual,* 4th Ed. (Harrisburg, 1986), p. **14.**

[28] In the case of third class cities, the Act 511 per capita tax may be levied on top of a $5 head tax authorized by the Third Class City Code. It may also be levied by Pittsburgh in addition to a $1 poll tax (a head tax that has no relation to voting).

[29] See *Taxation Manual,* p. *23.*

[30] Home rule municipalities are limited to the statutory rate of 1 percent for nonresidents.

[31] In fact, the crediting rule creates a powerful incentive for all jurisdictions within a common area of employment to adopt the income tax once any significant number of jurisdictions has done so. Thus, the enabling provision alone virtually guarantees that the earned income tax will be universally used in a metropolitan area. The earned income tax is the second largest local revenue producer in the state, but this may be a result of the incentive created by state law rather than local preference. A much different pattern is found in the Philadelphia metropolitan area. Philadelphia is authorized separately to levy a wage and net profits tax, including a levy on nonresidents. No provision is made for crediting an Act 511 income tax against the Philadelphia tax. The Pennsylvania Department of Community Affairs reports that 119 municipalities in the four suburban counties that border Philadelphia (Bucks, Chester, Delaware, and Montgomery) have no earned income tax *(Taration Manual,* p. **15).** In this case, the reverse strategy may be at work—suburban communities choose not to enact an earned income tax in order to attract businesses to relocate from Philadelphia. The only other communities in the state without an earned income tax are located in predominantly rural areas.

[32] This phenomenon, known as "tax incidence," is a complicated subject in the study of public finance, and cannot be explored here.

[33] Although Pennsylvania law distinguishes mercantile from business privilege taxes, the difference is "more semantic than real" ***(Tmation Manual,*** p. *27).*

[34] Ibid.

[35] In Pennsylvania, occupations are subject to taxation on the basis of assessed valuation, much like property. The system dates from its use in England during the colonial period, when many occupations were owned as property and could be sold or transferred to others *(Taration Manual,* p. **23).** County assessment boards in Pennsylvania determine the assessed valuation of occupations, usually by creating a hierarchy of occupation classes. Municipalities are authorized by the state codes to levy an occupation tax on a millage basis up to the same limit as the real estate tax. The occupation tax is levied only on residents. Act 511 overrides the tax ceiling by authorizing municipalities to levy an occupation tax without a millage limit. The law extends this authority to school districts, some of which obtain high occupation tax yields by setting extremely high rates (Ibid.). In addition, Act 511 authorizes a flat-rate occupation tax limited to $10.

[36] The sharing requirement for earned income taxes does not a p ply to revenue raised by a home rule municipality in excess of the statutory rate limit.

[37] The sharing requirement would appear to contradict one major purpose of creating a separate and independent school district—to avoid mixing school-related decisions with other political decisions.

[38] *Taxation Manual,* pp. **36-37.**

[39] The tax was upheld by the state supreme court, which concluded that interstate commerce was unaffected and that taxpayers benefited from a civilized society made possible in part by education. See Ibid., p. **36.**

[40] City of Pittsburgh v. Alco Parking Corp., 417 U.S. 369 (1974). See discussion in ***Taration Manual,*** p. **36.**

[41] The City of Philadelphia, in effect a city-county, also may levy this tax, as may the Philadelphia School District (which does not do so). See *Taxation Manual,* p. **19.** Allegheny County is also authorized to levy a 1 percent tax on hotel Mom rentals, with revenues earmarked to support convention centers. Ibid., p. **35.**

[42] Ibid., p. 19.

[43] 53 Pennsylvania Statutes 6902 (6), Local Tax Enabling Act, Section 2 (6).

[44] ***Referendum Handbook,*** p. **24.**

[45] 53 Pennsylvania Statutes 6780-2(16), Local Government Unit Debt Act of 1972.

[46] These limits do not apply to Philadelphia or to the Philadelphia school district.

[47] See Walter W. Shearer, "Local Government Debt," Section 10, in Woodside, pp. 531-532.

[48] See Shearer, p. **531.**

[49] ***Referendum Handbook,*** pp. **15-16.**

[50] 53 Pennsylvania Statutes 481.

[51] Philadelphia, as a first class city, is excluded from this act.

[52] ***COGs and Intergovernmental Coopemtion,*** p. **3.**

[53] ***Referendum Handbook,*** p. **24.**

[54] ***COGs and Intergovernmental Coopemtion,*** p. 5.

[55] McDonald and Trafford, only parts of which are in Allegheny County, are not included in this count.

[56] Only four boroughs have been incorporated from portions of townships in Allegheny County since 1945: Pleasant Hills and Whitehall (1947), Baldwin (1960), and Pennsbury Village (1977).

[57] It is also possible for an entire township to incorporate as a borough. Second class townships received new powers following World War 11.

[58] In 1937, the formation of first class townships was given impetus when the state legislature provided protection from annexation not available to second class townships. The special rule required voter approval for any annexation of township territory. See ***Boundary Change Rules,*** p. *2.*

[59] *Boundary Change* ***Rules,*** pp. 18-19.

[60] *COGs and Intergovernmental Cooperation.*

[61] ***Referendum Handbook,*** pp. 1-5.

[62] Forty-one of the 58 home rule charters adopted throughout the state contain provisions for initiative and referendum. Ibid.

[63] Constitution of Pennsylvania, Section 1.

[64] Constitution of Pennsylvania, Article 111, Section 32.

Chapter 4

Municipal Services: Police, Streets, Fire Protection

This chapter turns from a discussion of general patterns of metropolitan organization and governance in Allegheny County to the organization for provision and production of specific municipal services—police protection, street and street-related services, and fire protection.[1] The basic patterns are somewhat different between police and street services, and quite different between these services and fire protection. There are numerous instances of interlocal cooperation and coordination.

The arrangements for basic service provision in the county are highly noncentralized. Police and street services are provided by municipalities, the county, and the state, virtually all by public departments. Fire services throughout most of the suburban county are organized by relatively small voluntary associations. Volunteer departments provide and produce fire services in all municipalities except Pittsburgh, McKeesport, and Wilkinsburg, which have municipal departments. There are relatively few intergovernmental contracts and few joint production units for direct services, although some experimentation with joint production is under way, especially for street services.

The situation is quite different with respect to indirect or auxiliary services (e.g., communications, purchasing, and training), for which there are contractual, cooperative, and even centralized production arrangements. Many local departments that supply direct services report cooperation with neighboring departments, especially for fire services (more than 90 percent in a 1982 sample of fire chiefs).[2] Cooperative efforts also were reported by more than 50 percent of a sample of police chiefs, and approximately 25 percent of a sample of public works directors.[3] Individuals interviewed for this study indicated that interjurisdictional cooperation has become more widespread in response to efforts by a number of organizations in the county.

POLICE SERVICES

Of the 130 municipalities in Allegheny County, all but one made provision for local police service in 1987. The predominant organization is a municipal police department (see Table 4.1). Sixty municipalities maintain 58 police departments composed entirely of full-time officers.[4] Three of these 60 municipalities, Pine and Marshall Townships and Bradford Woods Borough, operate a combined full-time department, the first such organization created

Table 4.1

Police Service Provision in Allegheny County Municipalities[a]

Municipal Population Category	Number of Municipalities	Municipal Population	Number of Municipalities With: Full-Time Department	Mixed Department	Part-Time Department	Contract Policing
0-1,000	12	6,270	1	1	2	8
1-2,000	18	26,770	4[b]	10	4	0
2-5,000	39	135,210	11[c]	25	3	0
5-10,000	31	238,710	20	11	0	0
10-20,000	14	191,790	10	3	0	1[d]
20-55,000	13	386,770	13	0	0	0
Pittsburgh	1	387,490	1	0	0	0
Totals	128	1,373,010	60[e]	50	9	9[d]

[a]Excluding McDonald and Trafford.

[b]Includes one municipality served by a joint police department.

[c]Includes two municipalities served by a joint police department.

[d]Includes one municipality served by Pennsylvania State Police.

[e]Includes three municipalities served by a single joint department.

Sources: 1987 police strength from Pennsylvania State Police.
1986 population estimates from Pennsylvania State University.

in Pennsylvania (in 1969) and still one of the few examples. An additional 50 municipal departments employ full-time and part-time officers, while nine departments have only part-time officers. Contracting for basic police services is uncommon. Eight small municipalities, none with populations exceeding 600, contracted with neighboring municipalities for police services in 1987. One municipality, Clairton, made no provision for police services, relying instead on the State Police.[5]

Police services are produced by 117 municipal police departments, the Allegheny County Police Department, the Pennsylvania State Police, the Housing Authority of the City of Pittsburgh, the Port Authority of Allegheny County, and several college and university campus police forces! The number of independent producers of police services is substantially larger than that found in most metropolitan counties. In a 1975 survey of 80 metropolitan areas, for example, the highest number of police patrol producers of all types in a single area was 91, while the median number was 13.[7] Allegheny County has roughly nine police departments per 100,000 citizens, 50 percent higher than in the median metropolitan area in 1975.

The explanation for the large number of police departments is that Allegheny County has many more municipalities than most metropolitan counties in the United States,[8] and 93 percent of them have a local police department. Nationwide, almost all county and municipal governments produce at least some police services through a police department. In a 1982 study, 96 percent of more than 1,600 responding communities organized their crime prevention/patrol services either wholly or in part with local government employees?

Local observers offered hypotheses to explain the persistence of this choice in Allegheny County. One factor they identified is the "weak mayor" form of borough government. In Pennsylvania boroughs, the mayor is not a member of the governing council[10] and has few functional responsibilities, but is responsible for day-to-day operation of the police department. If a borough contracted with a neighboring government for police service, or entered into a joint production arrangement, the mayor could lose this responsibility but might oversee a contractual arrangement. According to several local informants, mayors tend to oppose joint police ventures. Nevertheless, the plausibility of this factor as an explanation for the lack of joint ventures is limited by the lack of political power typically associated with the position of mayor in most boroughs.

Another explanation offered by local observers is the unwillingness of municipal police chiefs to surrender their authority by becoming supervisors in a larger, merged department. The Pine-Marshall-Bradford Woods joint police department, the only one in the county, was created at a time when Bradford Woods had one officer and Marshall had none. It was relatively easy to expand the Pine Township Police Department to include Bradford Woods while avoiding controversy over who would be the police chief—the chief of the Pine Township department was the obvious choice."

In 1983, the Allegheny Valley North Council of Governments, with assistance from the Pennsylvania Department of Community Affairs, developed a plan for an Allegheny Valley Regional Police Department.[12] The plan has not been implemented. Obstacles are said to include concerns about loss of local control by borough mayors, township commissioners and supervisors, and their constituents; an inability to agree on a process for selecting a chief; differences in union contracts; and differences in pension plan provisions and extent of full funding.[13]

The Allegheny County Police Department has 220 full-time officers, four times as many as the largest municipal department outside Pittsburgh. The county police patrol countyparks and the airports. They are also, in effect, a "major case squad," investigating serious crimes in the jurisdictions of municipal departments on invitation of a local chief of police. The county police supply back-up to municipal forces when requested, specialized services other than investigations (especially a hostage negotiation team called PASS),[14] and narcotics and organized crime investigations.

The availability of these specialized services from the county police was offered as a third explanation of why small municipalities maintain their own police departments. An additional explanation, not cited by local observers, lies in Pennsylvania law. There is no legal requirement that municipalities provide police protection or that there be full-time police departments.[15] The State Police can and do provide police service for municipalities choosing not to organize a municipal department. Many of the smaller municipal police departments in Allegheny County rely extensively on part-time officers, with few or even no full-time officers. A municipality may establish a police department at very low cost, and supplement its effort with services from the county police or the state police as needed.

All of these conjectures must be considered explanations as to why Allegheny County is not atypical. Given a set of provision units, production arrangements in a sense require no special explanation because they are not variant. The borough mayor explanation is peculiar to Pennsylvania, while the police chief explanation potentially would apply anywhere. Both can be considered short-term political costs. The availability of county supplementary police services is not so much an obstacle to joint ventures as it is a substitute. It is not a cost of joint action, but a factor that reduces the potential benefit of joint action. The statutory explanation refers to a lack of special legal incentive to engage in joint action, but there is nothing atypical in this, either. The choice of production arrangements for basic police services in Allegheny County, like the choice made throughout the United States, is predominantly that of locally organized police forces which, in turn, have back-up and supplementary service available to them from neighboring and overlapping jurisdictions.

Jurisdiction Size and Costs Per Capita

Most of the municipal police jurisdictions in Allegheny County are small, and so are their police departments. Of the 117 municipal police departments, only 38 employed more than 10 full-time officers in 1987, and only 12 (including Pittsburgh) employed 25 officers or more (Table 4.2). Still, most full-time police officers are employed by, and

Table 4.2
Police Service Production by Allegheny County Municipalities[a]

Dpartment Size (full–time)	Population	Percent of County Population	Percent of Departments	Number of Full–time Officers	Percent of Full–time Officers	Number of Part-Time Officers	Percent of Part-Time Officers
Part–time only	14,990	1%	8%	0	0%	63	21%
1-3	45,070	3	17	39	2	118	39
4-10	253,050	18	43	336	15	106	35
11-24	331,410	24	22	374	17	15	5
25-55	329,140	24	9	397	18	1	0
Pittsburgh	387,490	28	1	1,063	48	0	0
Totals	1,361,150	98	100	2,209	100	303	100

[a]Excluding McDonald, Trafford, and Clairton.

Sources: 1987 police strength from Pennsylvania State Police University.
1986 population estimates from Pennsylvania State.

most Allegheny County residents receive police services from, the larger departmcnts. Nearly one-half (48 percent) of the full-time municipal police officers work in Pittsburgh, and an additional 35 percent work in departments with more than ten full-time officers. Three-fourths of the county's population reside in areas served by departments with more than ten full-time officers."

The smaller departments augment their service delivery capacity by employing part-time officers. In 1987, there were 303 part-time officers employed in the county, and virtually all of them worked in departments with ten or fewer full-time officers and municipalities with populations of less than 5,000.[17]

Per capita police expenditures of Allegheny County municipalities in 1985 ranged from a low of $15 to a high of $323 per year." The countywide average was $65 per capita, while the population-weighted median expenditure was $50. Per capita costs in Pittsburgh were $98. Eleven small municipalities, either wealthy residential communities or industrial enclaves, had per capita police costs higher than Pittsburgh's in 1985, but their combined population was less than 1.5 percent of the county total.

When compared with other metropolitan city/counties of similar size, Allegheny County has substantially fewer police officers and spends less for police services. The 2,209 officers employed by municipalities in the county, divided by the estimated population in 1986, yield a ratio of 1.62 officers per 1,000 residents. If the Allegheny County police are added, the ratio increases to 1.78 per 1,000 residents. By way of comparison, St. Louis and St. Louis County, Missouri, with approximately the same population as Allegheny County, employ 3,607 officers, with a ratio of 2.54 officers per 1,000 inhabitants." The City of St. Louis had nearly 4 officers per 1,000 residents, compared to the City of Pittsburgh's 2.74." The ratio of officers to citizens in St. Louis County (which does not include St. Louis) was 1.93 per 1,000. In Allegheny County outside Pittsburgh, with county police included, the ratio is 1.40 per 1,000. Total local expenditures per capita for police services in 1982—$62—ranked the county 18th among the 21 American counties with resident populations exceeding one million.[21] The county was also 18th out of 21 in reported serious crime rates in 1983 (only Nassau and Suffolk Counties in New York and Middlesex County, New Jersey, reported lower numbers)."

The number of full-time and part-time officers per 1,000 inhabitants, and the per capita cost of police services for the median Allegheny County municipal police department in several size ranges are shown in Table 4.3. For those municipal departments outside Pittsburgh that employ full-time police, the median cost per capita is roughly $55. For municipal departments in St. Louis County, the comparable median cost was roughly $85 per capita.

Police Service Expenditures and Population Served

Some of the small municipalities in Allegheny County had the highest per capita expenditures for police services in 1985, while other small municipalities had the lowest (Figure 4.1). The variation in per capita expenditure decreases with increased population, but it is difficult to discern an overall pattern indicating economies or diseconomies related to the number of residents. The simple relationship between per capita expenditures and municipal population (shown as a solid line in Figure 4.1) is virtually flat.[23] Figure 4.2 shows average police expenditures in small

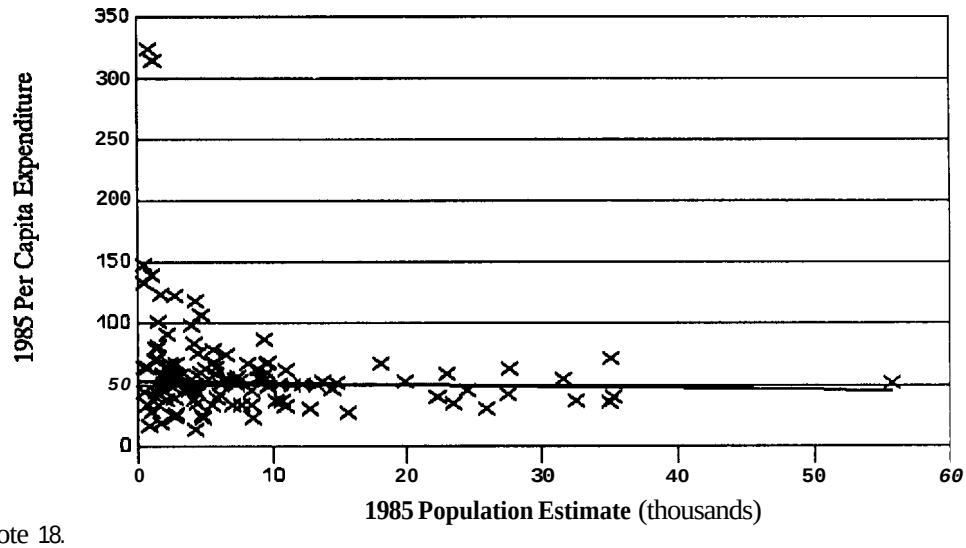
Table 4.3
Police Department Characteristics

	Value in Median Department:		
Department Size	Full-Time Officers per 1,000	Part-Time Officers per 1,000	Per Capita Expenditure[a]
Part-Time Only	—	4.30	$26
1–3	0.81	2.40	52
4–10	1.40	0.23	55
11–24	1.21	0.00	50
25–55	1.35	0.00	58
Pittsburgh	2.74	0.00	98

[a] See note 18.

Figure 4.1

Per Capita Police Service Expenditures in Suburban Municipalities, 1985



See note 18.

Table **4.4**

Per Capita Expenditure Elasticities and Partial Coefficients for Police Services in Suburban Municipalities', 1985

	Log-Linear Elasticities	Linear Partials
Resident Population (1,000s)	-0.052	-0.050
	(1.69[2])	(0.51)
Per Capita Income (1,000s)	1.182	2.794*
	(8.23)	(5.77)
Tax Price	-0.444*	-0.009
	(3.32)	(1.66)
Per Capita Intergovernmental Aid	-0.015	0.134
	(0.21)	(1.76)
Employment to Population Ratio	0.170*	26.4*
	(4.37)	(4.14)
Density (1,000s per square mile)	0.097+	1.875+
	(2.68)	(2.54)
Percent of Housing Built before 1940	0.002	0.081
	(1.21)	(0.81)
Percent of Families with Incomes below Poverty Level	0.018+	0.095
	(2.36)	(0.24)
Percent Change in Population 1980-1985	0.003	0.299
	(0.78)	(1.50)
Intercept	-3.411	9.616
	(1.78)	(0.87)
R^2 (adjusted)	0.57	0.48

[1] 120 suburban municipalities.

[2] (t statistic for parameter estimates).

* Significant at $p < .001$.

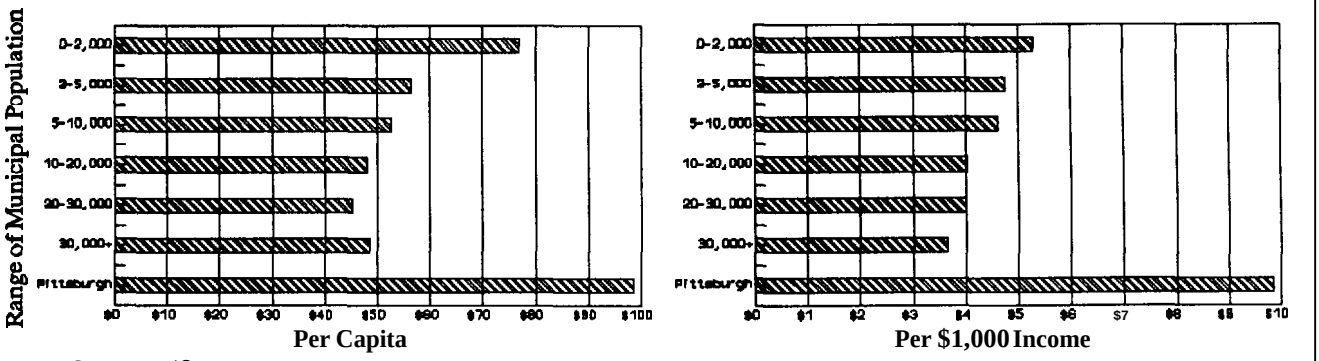
\+ Significant at $p < .05$.

jurisdictions to be higher than in somewhat larger ones. The jurisdictions with fewer than 2,000 residents in 1985 had police expenditures per capita and per $1,000 of local personal income that were, on average, substantially higher than those of larger jurisdictions. However, the data for places below 2,000 population are highly skewed by the presence of two small communities—Neville Township and Sewickley Heights—that have very high per capita police expenditures (see Figure 4.1). Above 2,000 residents, the data suggest limited size economies—average per capita expenditures and average expenditures per $1,000 of personal income generally decline with increasing municipal size, but these effects are small. Further, these data do not take account of differences in revenue base, tax price, or service conditions among suburban police jurisdictions, nor do they account for differences in service quality.

Econometric analyses of per capita expenditures and population, adjusting for differences in revenue base, tax price,[24] and service conditions, demonstrate little support for significant returns to population size among suburban police departments (data used in these analyses and data sources are listed in the Appendix). The model used for these analyses—developed in greater detail in Chapter 6—posits per capita expenditures to be positive functions of resident income and intergovernmental aid, and to be negatively related to tax price. Per capita expenditures also are expected to be higher in municipalities with large employment to population ratios, higher population density, older housing stock, and a larger poverty population. Table 4.4 presents coefficients from regression analyses of the model, including both elasticities from a log-linear estimate and partial effects from a linear specification.[25]

The most consistent predictors of per capita municipal police expenditures are resident per capita income, tax price, and the ratio of employment to population. Municipalities with higher income residents spend more for police services than those whose residents have lower incomes. So, too, do municipalities with higher ratios of

Figure 4.2
Municipal Police Expenditures Per Capita and Per $1,000 Personal Income, 1985



See note 18.

employment to resident population, a measure of both revenue raising potential and increased per resident expenditure required to produce police services for a large daytime population. Municipalities with higher tax prices spend less per capita on police services. Per capita police expenditures are higher in more densely populated communities, and those with a higher proportion of families with incomes below the poverty level. Each of these factors has been identified with higher levels of demand, and the sign of their coefficients is as expected. The coefficients for population change are consistent with a hypothesis that expenditure change tends to lag behind population change, although these coefficients lack statistical significance.

Significant negative coefficients for residential population in the estimates would indicate lower per capita costs in larger jurisdictions. The estimates reported in Table 4.4 do not provide evidence of significant size economies, however.[26] The coefficients for resident population—while negative—are small in magnitude. The partial effect is a reduction of 5 cents per capita for each 1,000 resident increase. It is not significantly different from zero by statistical test.

Service Components

If per capita police expenditures declined with population, the configuration of many small jurisdictions in Allegheny County could be charged with inefficiency in that service. The data do not reveal significant returns to population size, however. Police expenditures are relatively low and, after adjustment for variation in revenue base, tax price, and service conditions, are unrelated to jurisdiction population. Because some components—radio communications, training, sophisticated investigation, and crime lab, for example—require technologies with obvious scale economies in production, these results require further explanation. Small jurisdictions should incur relatively high costs if they produce these services for themselves.

Perhaps the best explanation of why there were no significant relationships of jurisdiction size and per capita expenditures is that, for the most part, components of police services where scale economies would be expected are not produced by most of the smaller departments. Of the 29 municipal departments with fewer than four full-time officers, only 5 produce their own dispatch services, and one of these does so in conjunction with another department (Table 4.5). The remaining 24 very small departments contract for dispatch services, often from a center that serves many smaller departments. Two of the larger joint dispatch centers are organized by Shaler Township, which dispatches for nine police departments and a large number of fire and rescue companies, and by the Twin Rivers Council of Governments, which dispatches 14 police departments, 22 fire companies, and 11 ambulance/rescue companies. There are other joint centers serving smaller numbers of departments. A similar trend is found among larger departments. Departments with 4 to 24 full-time officers also tend to be dispatched by contractual or combined dispatch centers, or to dispatch for other departments in addition to their own. Only the largest departments are likely to operate their own independent dispatch centers.

Cooperative and contractual dispatch arrangements have become increasingly common in recent years. During the 1970s, funds from the federal Law Enforcement Assistance Administration (LEAA) were available to depart-

Table 4.5
Police Dispatch Arrangements for Allegheny County Police Departments

Municipal Departments	Dispatch Own Department Only	Dispatch Own and Other Departments	Receive Dispatch via Contract or Combined Center
Part-time only	1	0	8
1 to 3 full-time	3	1	16
4 to 10 full-time	11	9	30
11 to 24 full-time	6	10	10
25 to 55 full-time	6	4	1
Pittsburgh	1	—	—
Totals	28	24	65

Sources: 1987 police strength from Pennsylvania State Police
Dispatch arrangements from Marshall Bond, Intergovernmental Cooperation Program

ments that wished to upgrade their communications equipment. LEAA funding was often contingent on the creation of joint dispatch centers. A 1982 sample of police departments in the county reported 41 percent of the departments involved in a cooperative dispatch arrangements. Currently, 56 percent of the departments—65 out of 117—either receive dispatch service from another department or joint center or provide this service to one or more neighboring departments.[27] This increase cannot be explained by federal funding incentives (LEAA was no longer in existence). Instead, the examples of the earlier centers apparently encouraged additional departments to create centers or join existing ones.

Training, which exhibits obvious economy of scale in production, is organized by county government (with reimbursement from the state) for municipal departments outside Pittsburgh. Pittsburgh operates its own training academy. Crime lab services also are organized by county government. The availability of investigative services from the county police allows smaller departments to put more of their personnel resources into patrol and immediate response.[28]

Complex police service systems, such as Allegheny County's, that combine many small departments producing patrol and immediate response with overlapping arrangements for services exhibiting economies of scale in production have been shown to be technically efficient in a comparative study of policing in U.S. metropolitan areas.[29] This does not mean that all police departments in the county are efficient, or that efforts to improve police service delivery through linkages are unwarranted. What we can say is that the system does not appear to suffer from inefficiency related to the size of jurisdictions.

This finding may provide an additional explanation for the choice of arrangements in Allegheny County. In the face of political and administrative obstacles to the creation of joint police departments, the absence of obvious, significant economic payoffs from increased jurisdiction size helps to account for the lack of public entrepreneurship in promoting mergers of police departments or seeking interlocal contracting. Without economic pressure to change production arrangements, political and administrative factors can be expected to dominate.

Cooperative Production Arrangements

As in most metropolitan areas, police departments in Allegheny County supply mutual patrol back-up, generally on an informal, as-requested basis.[30] This is facilitated for many municipal departments by shared dispatch arrangements. Allegheny County government is a major partner in local police cooperation, regularly supplying personnel to augment municipal patrol officers during special events and in emergencies. The county, as noted above, supplies training and crime lab facilities.

Other cooperative investigative teams also operate in the county. The South Hills Investigative Task Force links the nine communities of Baldwin Township, Bethel Park, Carnegie, Dormont, Greentree, Mt. Lebanon, Scott Township, South Park Township, and Whitehall. The task force has been in operation since 1985 and focuses on narcotics-related investigations,[31] using officers from its member departments. The second Cooperative Police Investigation Team has been organized by Elizabeth Borough, Elizabeth Township, Glassport, and McKeesport, with a similar focus on undercover narcotics investigations. In 1982, nearly 60 percent of police chiefs surveyed in the county reported that their departments were involved in cooperative investigative efforts.[32]

Cooperative investigative teams are not always easily established. Special factors cited for South Hills included municipal managers in each community with control over their police departments, which was important in overcoming any political difficulties. In the McKeesport area, police chiefs have met regularly for a number of years under sponsorship of the Twin Rivers COG, and their departments share a common dispatch center. In contrast with these successes, municipal departments in the area surrounding Wilkinsburg have not been able to agree on formation of a cooperative team. Wilkinsburg is surrounded on two sides by large municipalitics—Pittsburgh and Penn Hills—that have sufficient resources to conduct independent investigations, and on the remaining sides by wealthier communities that do not perceive sufficient crime problems to warrant joining in cooperative efforts.

An emerging area of cooperation is receipt of citizens' calls for police, ambulance, and emergency medical service. At present, Allegheny County does not have an areawide 911 emergency system. Callers must know the jurisdictional location to select the correct telephone number.

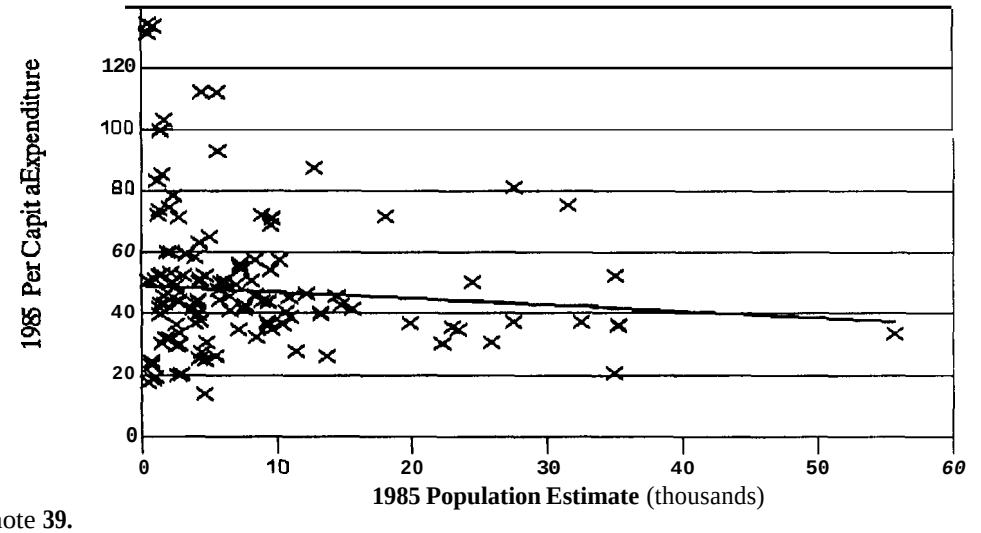
A task force organized by the Intergovernmental Cooperation Program has presented a report addressing the need for a countywide 911 system. This report was prepared by a local advisory board in conjunction with a national consulting firm. The proposed system would remove the need to know one's jurisdictional location when requesting emergency service. A call to 911 from any part of the county would connect a person to a dispatcher in the correct jurisdiction. Municipal police departments would retain dispatch responsibilities if they chose to do so, but would have access to video screen displays of telephone number and location information through a primary integrated Public Safety Answering Point (PSAP).[33] This system, if implemented, also holds the possibility of developing a countywide information network.

Other aspects of police service for which significant cooperation is reported include apprehension, detainment, disaster planning, special squads, educational services, traffic control, crime reporting, and juvenile services.[34] This cooperation helps maintain the viability of the numerous small police dcpartmcnts.

Police Services — A Summary

Outside Pittsburgh, arrangements for the production of police services form a complex pattern that can be explained as a configuration of variables. The elements of this pattern seem to fit together in a comprehensible way. One element is relatively low expenditures for police services, with variations related to community fiscal capacity and service conditions. This element is consistent with a reliance on police departments that are quite small with a

Figure 4.3
Per Capita Street Service Expenditures in Suburban Municipalities, 1985



See note **39.**

relatively high percentage of part-time officers. The absence of police contracting and full functional consolidation can be explained by a relatively low demand for police services compared to many other metropolitan areas—reported crime rates in the county are low for large counties—coupled with the absence of economies of scale in police patrol beyond the very smallest departments. Cooperative relationships for auxiliary services are common, facilitated by the availability of the county government to produce those service components that exhibit significant economies from large scale.

STREET SERVICES

Responsibility for the provision of highways, streets, and roads in Allegheny County is divided among the Commonwealth of Pennsylvania (1,873 miles), Allegheny County government (370 miles), and all municipalities (3,707 miles).[35] Production responsibility for the maintenance of state highways is vested in the Pennsylvania Department of Transportation (PennDOT), District 11, which includes Beaver and Lawrence counties in addition to Allegheny. County production responsibilities are divided between the county departments of Engineering and Construction and Maintenance.[36] Municipal production is carried on mainly by municipal street departments or public works departments.[37]

County and Municipal Street Production

County highway provision responsibilities have diminished over the years due to state preemption, leaving a fragmented pattern of roads rather than a coherent system. In effect, the county government is the residual road provider. The county also owns and maintains some 275 bridges (spans greater than 8 feet in length), including most of the large spans in Pittsburgh's downtown triangle. The Department of Maintenance, with an annual budget of about $24 million, is responsible for maintaining roads and bridges, all county buildings and parks, and two county airports. Although the department contracts out for surface treatment, it maintains a large in-house production capability, including heavy equipment and technical personnel, greatly exceeding any other municipal operation outside Pittsburgh. The department is placing increased emphasis on preventive maintenance, including crack sealing of road surfaces (100 miles completed in 1988).

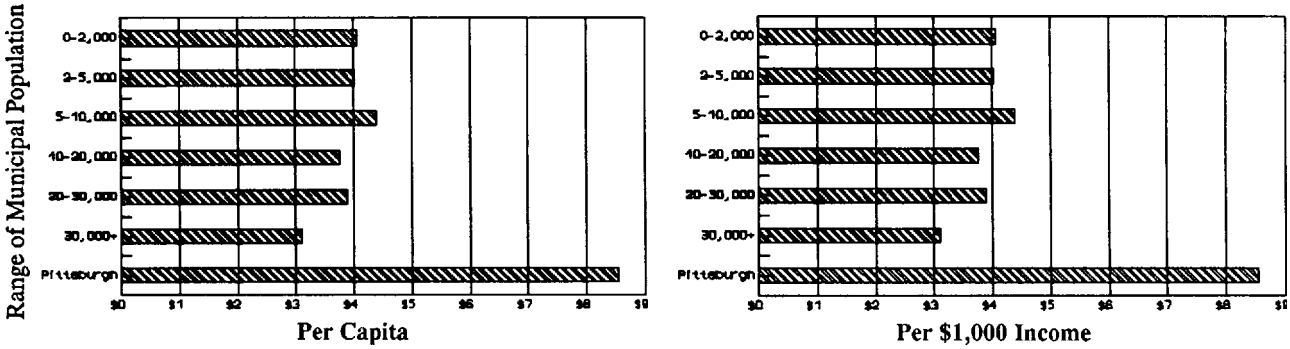
Street service expenditures in the county are roughly comparable to those in metropolitan counties of a similar size. In 1982, the county ranked 10th in per capita highway expenditures among the nation's 21 counties with populations exceeding one million.[38] Figure 4.3 depicts the range of per capita expenditures in 1985 for street services in Allegheny County municipalities outside Pittsburgh. The lowest per capita expenditure was $14 in Braddock. The highest was $134 in Thornburg. Small municipalities had both the highest and the lowest per capita expenditures for street services. The population-weighted average expenditure outside Pittsburgh was just under $50 per capita, while Pittsburgh spent $85 per capita.[39]

Street Service Costs and Population Served

Bivariate comparisons of jurisdiction size and street service costs per capita and per $1,000 personal income show a slight decline in costs with increasing population served (Figure 4.4).[40] Multivariate analyses of this relationship yield mixed and statistically insignificant results (Table 4.6). The elasticity of per capita street expenditures in relation to population is positive, indicating higher per capita expenditures in larger jurisdictions. The partial coefficient for resident population is negative, indicating lower per capita expenditures for them. In neither specification does resident population help explain much of the variation in per capita expenditures. Much more important factors are per capita income and intergovernmental aid, which are both positively related to spending, and tax price, which is negatively related.

Figure **4.4**

Municipal Street Service Expenditures Per Capita and Per $1,000 Personal Income, 1985



See note 18.

Cooperation in Street Services and Public Works

Allegheny County, acting through its Department of Development and its associated Authority for Improvement in Municipalities (AIM), has actively stimulated cooperative street and public works ventures. One such project, which also involved the COGs, is the sewer maintenance and cleaning **(SMAC)** program. Using funds made available by AIM, the Department of Development purchased television equipment to allow inspection of sewer lines from the inside and "sewervactor" equipment to remove blockages. The equipment is available for rental by municipalities from the COGs for a fee that covers operating costs.

Table *4.6*

Per Capita Expenditure Elasticities and Partial Coefficients for Street Services in Suburban Municipalities,[1] 1985

	Log-Linear Elasticities	Linear Partials
Resident Population (1,000s)	0.053	–0.198
	(1.49[2])	(1.88)
Per Capita Income (1,000s)	0.801*	1.667+
	(5.13)	(3.18)
Tax Price	–0.470*	–0.013+
	(3.12)	(2.24)
Per Capita Intergovernmental Aid	0.262+	0.382*
	(3.11)	(4.60)
Employment to Population Ratio	0.016	19.7+
	(0.35)	(2.94)
Density (1,000s per square mile)	–0.010	–0.205
	(0.25)	(0.26)
Percent of Housing Built before 1940	0.006	0.131
	(2.76)	(1.20)
Percent of Families with Incomes below Poverty Level	–0.006	–0.547
	(0.76)	(1.28)
Percent Change in Population 1980-1985	–0.005	–0.270
	(0.93)	(1.25)
Intercept.	–1.725	32.5+
	(0.88)	(2.70)
R^2 (adjusted)	0.35	0.45

[1] 123 suburban municipalities.

[2] (t statistic for parameter estimates)

* significant at $p < .001$.

+ significant at $p < .05$.

Basic municipal street services are produced through in-house capabilities, supplemented by private contractors for special construction or reconstruction projects,[41] joint production of street sweeping through COGs, and other forms of mutual aid. The county Department of Maintenance supplies general back-up, mainly in the form of equipment sharing. Twenty percent of public works directors, surveyed by ACCD in 1982, reported cooperation in road repair activities.[42]

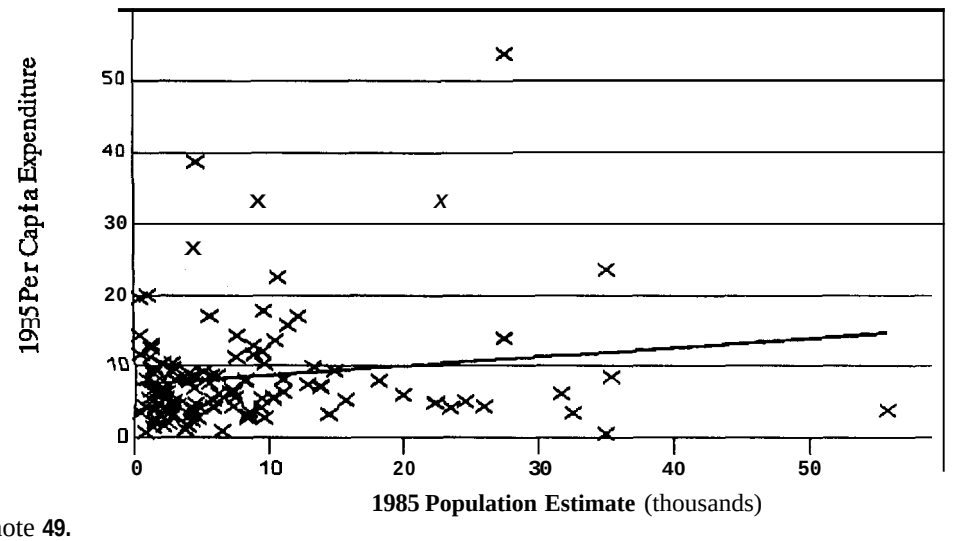
A somewhat different pattern is emerging among a group of distressed municipalities in the Mon Valley that are members of the Turtle Creek COG. Some of these communities own equipment but cannot afford to hire operators. In other places, the situation is reversed. With staff support from the COG, five small municipalities formed a joint public works team in 1987 that pools personnel, equipment, and materials to perform crack sealing on local streets. The county Department of Maintenance contributed a pick-up truck, and the chief maintenance engineer, Paul Ostrowslu, trained the work crew. Rankin, one of the municipalities, had begun crack sealing its streets five years earlier, and was able to supply experience and leadership.

With the help of small grants from the Intergovernmental Cooperation Program (ICP) and the Pennsylvania Department of Community Affairs (DCA), Turtle Creek COG was able to employ Ostrowski on a part-time basis. ICP and DCA are also funding a COG-wide street inventory and condition assessment to provide an information base for future joint activities. A street improvement project has been implemented in the tiny Borough of Wall, combining Community Development Block Grant funds with in-kind support from the Department of Maintenance.

Allegheny Valley North COG is experimenting with another innovation, the RIDER program, developed by the Southwest Pennsylvania Regional Planning Commission to set priorities for repairs that will preserve roadways in good condition, while identifying lower quality roadways that need extensive rebuilding. The RIDER street rating instruments and computer programs are available through the COG office.

Much of the cooperation between the county Department of Maintenance and the municipalities is on a proj-

Figure 4.5
Per Capita Fire Expenditures in Suburban Municipalities, 1985



See note 49.

ect-by-project basis. Ostrowski described one such project in detail in *The Pennsylvanian*.[43] West Elizabeth Borough, a member of the Steel Valley COG, had a stormwater drainage problem caused by upstream activities and the nonenforcement of building and grading ordinances. Solving the problem required cooperation from PennDOT, Jefferson Borough (not a COG member), and Allegheny County. Both the Department of Maintenance and the Steel Valley COG helped arrange and supported the cooperative effort. In another recent example, the Department of Maintenance reconstructed an access road to a school in the North County, and Northgate School District agreed to assume responsibility for its maintenance.

An interesting example of contracting in public works links numerous municipalities with PennDOT to remove snow and ice from state highways that pass through their jurisdictions. This arrangement would appear to save PennDot a substantial investment in extra **work crews,** while allowing the municipalities to recapture part of the cost of providing a needed service. Until recently, a similar arrangement operated between the county Department of Maintenance and **45** municipalities. Instead of cash, the department furnished municipalities with salt in exchange for removing snow and ice from county roads. The arrangement was suspended in 1988 because some municipalities were not meeting county standards.

There is a perception among local leaders that cooperative ventures are more feasible for street services and infrastructure maintenance than for some other services. Street and sewer maintenance are viewed as "safe," that is, less likely to stir citizen complaint than, for example, police. Yet, in a 1982 survey conducted by ACCD, roughly twice as many municipalities reported cooperation in police services as in public works services.[44] This is consistent with findings in the St. Louis County study. The most plausible explanation for different levels of cooperation in street and police services lies in the different nature of service production.

FIRE SERVICES

Fire services in Allegheny County are organized for the most part by volunteer fire companies. There are approximately 250 companies and approximately 20,000 volunteer fire, rescue, and EMS personnel[45] serving about two-thirds of the county population. Many municipalities are served by more than one volunteer company (in one case, seven). Only the cities of Pittsburgh, McKeesport, and Wilkinsburg have full-time paid departments, although several cities have some paid fire personnel.[46]

The volunteer fire companies raise the bulk of their funds through public solicitations, carnivals and other public events, and social functions. Many municipalities purchase and maintain equipment, supply fire station facilities, provide the volunteers with fuel and other supplies, carry liability and other insurance, and provide cash subsidies. Some municipalities pay volunteer fire fighters an hourly wage when they are actively fighting fires,[47] and some employ full-time drivers. Still, local governments supply remarkably little funding for fire protection. In 1982, the county ranked 19th in per capita expenditures for fire protection among the 21 U.S. counties having one million or more residents.[48]

Total 1985 fire protection expenditures by municipalities in the county were $39 million,[49] an average expenditure of $27.60 per capita.[50] Seventy-five percent of the total was spent by the Pittsburgh Fire Department. Outside Pittsburgh, the average fire expenditure per capita in 1985 was just under $10. Only six communities, including Pittsburgh, reported fire expenditures of $25 per capita or more (Figure 4.5).[51]

These data understate the cost of fire protection because they do not include funds raised and expended by the volunteer companies. No data are available to estimate these funds, but it is reasonable to assume that adding them to the public total would yield a fire expenditure less than that of equivalent areas using fully paid fire departments.

By local accounts, Allegheny County is well protected by its volunteer and paid fire fighters. The absolute number of fire fighters exceeds by a very significant margin the number found in comparable areas that rely predominantly on paid fire departments.[52]

Local informants reported that the amount and quality of equipment are also quite substantial.[53] The Mon-Yough Fire Defense Council, one of eight fire associations outside Pittsburgh, maintains 81 first-line fire and rescue vehicles, which are operated by the council's 69 member organizations. If the other fire associations (see "Cooperation in Fire Protection" below) are similarly equipped, the number of fire and rescue vehicles in Alle-gheny County is more than double that in St. Louis County. The Mon-Yough Council members alone have approximately half the number of vehicles found in all of St. Louis City and County.[54] One could argue (and several persons did so argue) that the system of volunteer fire companies, with its competition to have the latest or the largest engines and other equipment, yields overinvestment in equipment.

Local fire fighters are trained by the county Fire Training Academy, which reports that both paid and volunteer companies maintain high standards. No data were available on fire insurance (ISO) rates in the county, and no comparisons with other similarly sized areas could be made.

Cooperation in Fire Protection

The fire companies (and many rescue and emergency medical services) outside Pittsburgh are organized into eight fire associations or fire defense councils, some of which include companies in adjacent counties. Mutual aid arrangements are common. In a 1982 survey of fire chiefs, 93 percent reported cooperation in fire fighting,[55] including first-response arrangements. The association members and a number of companies maintained by large corporations engage in joint training exercises.[56]

Fire, ambulance, and emergency rescue dispatch for many companies is supplied through centers within the fire associations. In several instances (e.g., in the Lower Allegheny Association and the Mon-Yough Fire Defense Council), they use the same dispatch centers as for police. Mon-Yough Regional Fire Dispatch serves 64 companies, the Shaler Township Communications Center serves 29 companies, and the South and West Fire Dispatch Centers serve 54 companies using four base stations.[57]

The fire associations also publish equipment lists that make it easier to share with neighboring companies.[58] Allegheny County, working with the associations, has organized hazardous materials response units in five regions.

SUMMARY

There are interesting differences in the patterns of delivery of police, street, and fire services in Allegheny County compared to other major metropolitan areas. The most obvious difference is the large number of production units — 117 municipal police departments and county police, approximately 250 fire departments, and 130 street and public works departments.

Police service expenditures and the number of personnel are significantly lower than in similarly sized areas, as are reported crime rates. Public fire protection costs are also much lower, although including funds raised and expended by the volunteer fire companies would, if they could be calculated, reduce the difference. The number of fire fighters is much higher than commonly found elsewhere. Street service expenditures are roughly comparable with those in other metropolitan counties.

There is no statistical evidence that the large number of police and street service producers contributes to excessive costs, or that the costs might be lowered by jurisdictional consolidations of small municipalities. The system of many small volunteer fire companies may result in overinvestment in equipment, but data were unavailable to assess production costs for this service.

There is relatively little intergovernmental contracting for service components delivered directly to citizens — basic police patrol, for example. Intergovernmental contracting is found for some auxiliary service components, especially dispatch. Municipal cooperation is common for a number of components of police services, and is growing for street services, facilitated by the Councils of Governments and the county government. Cooperation is the rule among volunteer fire companies. Allegheny County government is a significant partner in interlocal cooperation, as is the Greater Pittsburgh Chamber of Commerce's Intergovernmental Cooperation Program. The county government produces a variety of services that enhance the viability of the smaller production units of individual municipalities.

One should not conclude, however, that service production arrangements in Allegheny County are perfect, or that improvements are not possible. Although there is no need for systematic, across-the board consolidation of service, further differentiation that includes consolidation of production for some service components may be appropriate. Efficient arrangements vary, depending on municipal circumstances. The county structure allows for experimentation with alternative service arrangements, such as the joint public works team in the Turtle Creek COG. These efforts can identify potential improvements in efficiency and effectiveness of service production while minimizing the potential for unintended inefficiencies associated with large-scale reform projects.

Pennsylvania's strong tradition of local autonomy has not prevented interlocal cooperation in producing service components, allowing the capture of economies of scale and enhancing coordination. Respect for jurisdictional autonomy can make negotiation of these agreements a prickly task, and the structure of local governments in Pennsylvania makes it a task frequently subject to delay or veto. Still, the prevalence of such agreements in the county belies the characterization of "Balkanization" often made of jurisdictionally fragmented areas. The prospects for additional interlocal functional cooperation and coordination in the county appear favorable, especially as the councils of governments experiment with new responsibilities, and the supportive efforts of county government and the Intergovernmental Cooperation Program bear further fruit.

Notes

[1] These services and education were selected for study because (1) they are services most commonly provided by local govern

ments in the United States, (2) in most local governments, they account for the majority of local spending and employment, and (3) to permit consistency and comparison with *Metropolitan Organization: The St. Louis Case* (Washington, DC: U.S. Advisory Commission on Intergovernmental Relations, 1988).

[2] Allegheny Conference on Community Development and Consortium for Public Administration Field Services, *To Cooperate or Not to Cooperate: A Report on Intergovernmental Cooperation in Allegheny County* (Pittsburgh, 1982), Exhibit B-4.

[3] Ibid., Exhibits B-3 and B-2.

[4] This count does not include McDonald or Trafford Boroughs, only portions of which lie within Allegheny County. To be included in this count, a municipality had to have employed at least four full-time officers. Those with fewer than four full-time officers were included in the mixed full-time and part-time category regardless of whether they employed part-time officers.

[5] Clairton disbanded its paid police department in 1985 when it was declared a "distressed community" under Pennsylvania's Act 47. Braddock is now (1988) receiving Pennsylvania State Police service also, while retaining one full-time and several part-time officers in its own department.

[6] Production of police services by the Pennsylvania State Police, the Pittsburgh Housing Authority, the Port Authority, and college campus police forces are not discussed in this report.

[7] Elinor Ostrom, Roger B. Parks, and Gordon P. Whitaker, *Patterns of Metropolitan Policing* (Cambridge, Massachusetts: Ballinger Publishing Company, 1978), p. 77.

[8] ACIR's study of St. Louis County, Missouri, found 62 full-time municipal police departments serving 89 independent municipalities, with many small municipalities contracting for basic police service from the county police or an adjacent municipality. In this respect, St. Louis County is atypical of most metropolitan counties. The extensive contracting for police services in St. Louis is the result of a Missouri statute requiring all municipalities in the county with 400 or more residents to provide full-time police service. Because many municipalities are too small to support a force of four or more full-time officers (the number necessary to provide around-the-clock coverage), contracting is chosen as a means to comply with the statute. *Metropolitan Organization*, Chapter 4.

[9] Carl F. Valente and Lydia D. Manchester, *Rethinking Local Services: Examining Alternative Delivery Approaches.* Management Information Service Special Report No. 12 (Washington, DC: International City Management Association, 1984).

[10] The mayor may attend council meetings and participate in discussions, but has no vote on matters before the council. See Christine Altenburger, Kevin Kearns, and B. Guy Peters, "Strengthening Pennsylvania Local Governments: Implications for the Mon Valley," a paper presented at the University of Pittsburgh President's Conference on the Mill Towns, May 5-6, 1988.

[11] A 1986 survey of elected officials, administrators, police chiefs, and police officers in the South Hills provides some support for these explanations. Borough mayors and township commissioners consistently preferred the "status quo"—independent departments—to several merger options and to contracting. Police chiefs were more willing to entertain limited mergers or contracting, however, and police Officers generally favored limited mergers while opposing contracting for police service. See Robert Flaherty, "What is the Most Cost-Effective Way of Providing Police Protection to the Citizens of Baldwin Township, Castle Shannon, Dormont, and Mt. Lebanon?" University of Pittsburgh, Graduate School of Public and International Affairs, January 13, 1986.

[12] *A Strategy for Cooperation: Years 2 and 3* (Pittsburgh: Intergovernmental Cooperation Program, April 1985), p. 17.

[13] The question of pension plan funding was cited as a hindrance to functional consolidations in all areas of municipal service. Communities with fully funded systems are reluctant to combine functional departments with neighbors whose pensions are partially funded because this could require partial assumption of the unfunded liability. The state is forbidden constitutionally to assume any local government debts and is unable to assist functional combinations by removing this obstacle.

[14] PASS stands for Police Anti-Sniper Squad. See Sandra F. Donovan, "Special Police Unit Won't 'PASS' Out on Hostage Attempts," *The Times/Beaver Newspapers*, August 28, 1988.

[15] This contrasts sharply with Missouri law bearing on St. Louis County, where all municipalities with 400 or more residents are required to provide full-time police protection. This provision accounts for much of the interjurisdictional contracting for police services in St. Louis. Twenty-nine of Allegheny County's police departments would be forced to increase their full-time employment or consider contracts for basic police services if Pennsylvania had a similar law. See ACIR, *Metropolitan Organization*, p. 56.

[16] This skewed pattern, with most police departments relatively small, while most police officers work in larger departments and most citizens reside in the jurisdictions of larger departments, is common in American metropolitan areas. See Ostrom, Parks, and Whitaker.

[17] This reliance on part-time police has been challenged in Pennsylvania. A decision in Monroe County found that state law "gives no arrest authority to 'regular part-time' or 'casual part-time' police officers." A similar case, involving an arrest for drunken driving made by a part-time officer employed by North Braddock, was being litigated in Allegheny County at the time of our research. If the Monroe County precedent were to be accepted, substantial pressure for joint and contractual police services might be placed on small municipalities in Allegheny County.

[18] Comparisons of total police expenditures and expenditures per capita among municipalities in Allegheny County must be approached with caution. Most of the expenditure data in this report were obtained from the Municipal Statistics and Records Division, Bureau of Local Government Services, Department of Community Affairs (DCA), Commonwealth of Pennsylvania. They are preliminary tabulations of data reported by municipalities. A recent study by the Pennsylvania Economy League, Western Division, found inconsistencies in the ways that municipalities categorized expenditures, leading the league to believe that police expenditures are underreported, perhaps by a significant amount (personal communication from Boyd Messenger, Manager, Public Safety Programs, Pennsylvania Economy League, July 5, 1989). Further, the data obtained from DCA for municipalities with populations in excess of 25,000 differ to some extent from data reported for these same municipalities by the U.S. Bureau of the Census in the 1985 Government Finance series. Thus, the comparisons reported here should be read as suggestive of general patterns, with specific intermunicipal comparisons unwarranted.

[19] ACIR, *Metropolitan Organization*, pp. 57-58.

[20] St. Louis City's high ratio of officers to citizens reflects in part the way the police have been governed historically. In St. Louis, a board of police commissioners, appointed by the governor, determined police staffing levels and submitted a mandatory budget to the city. While this arrangement has changed somewhat as a result of Missouri's Hancock tax limitation amendment, the city's ratio of officers to citizens continues to be among the highest of large American cities.

[21] U.S. Department of Commerce, Bureau of the Census, *State and Metropolitan Area Data Book, 1986* (Washington, DC, 1987). The caution in note 18 above may apply here as well, although the Census Bureau uses different methods for its ex-

penditure estimates than the reports used by the Department of Community Affairs.

[22] Census, *State and Metrvpolitan Area Data Book, 1986.*

[23] Regressing per capita expenditures on population size yields an intercept of approximately $59 and a slope of negative 5 cents per 1,000 population.

[24] Tax price is computed as the ratio of the median value of an owner-occupied home in a given community to that community's market value of all real property. It is the "price" for community services that the median homeowner would pay if all services were financed by property taxes.

[25] The regressions are based on data from 120 suburban municipalities. Eliminated prior to the analyses were two municipalities only partially located in the county, three with extraordinarily high per capita incomes, one industrial enclave, and three municipalities reporting negligible expenditures for police services in 1985. The inconsistencies in reporting police expenditures cited in note 18 are of less concern for these econometric analyses. Unless underreporting is correlated significantly with size of population served. it simply serves to increase error variance in the coefficient estimates.

[26] These models do not account directly for variations in the quality or quantity of police services, although population served is a rough proxy indicator for service quantity. No acceptable indicators of service quality are available.

[27] 1982 data from Allegheny Conference, *To Cooperate or Not to Cooperate,* Exhibit B-3. Current data from Marshall Bond, Intergovernmental Cooperation Program.

[28] See Ostrom, Parks, and Whitaker, especially Tables 5-9 and 5-10, pp. 89-90. This study of policing practice by departments in 80 metropolitan areas shows that smaller departments deploy substantially higher proportions of their sworn personnel for on-street duties than do larger departments.

[29] See Roger B. Parks, "Metropolitan Structure and Systemic Performance: The Case of Police Service Delivery," in Kenneth Hanf and Theo A. J. Toonen, eds., *Policy Implementation in Federal and Unitary States* (Dordrecht, The Netherlands: Martinus Nijhoff Publishers, 1985), pp. 161-191.

[30] The 1982 survey of police chiefs in the county reported that "the majority of cooperative arrangements in police services are mutual aid agreements with other municipalities." Allegheny Conference, Exhibit B-3.

[31] See Charles J. Lee, Jr., *Cooperative Investigative Team* (Dormont, Pennsylvania: South Hills Investigative Task Force, Progress Report, January 1988).

[32] Allegheny Conference, *To Cooperate or Not to Cooperate,* Exhibit B-3.

[33] The county's topography is such that a number of such PSAPs would be required to reach all department's patrol units.

[34] Allegheny Conference, *To Cooperate or Not to Coopemte,* Exhibit B-3. "Significant cooperation" as used here means that at least 25 percent of the chiefs surveyed in 1982 reported that their department cooperated with at least one other department in the service component named.

[35] Allegheny County Department of Maintenance. Number of miles rounded to the nearest mile.

[36] These two departments were created in 1978 by dividing the Department of Public Works.

[37] Indeed, the principal function served by the original municipalities in the county—townships, the precursor to today's second class townships—was the building and maintenance of roads. Township organization still reflects that earlier emphasis, and boroughs and cities continue the model of production by a local government bureau.

[38] Census, *State and Metropolitan Area Data Book, 1986.*

[39] These data, like those for policing, were provided by the Pennsylvania Department of Community Affairs (see Note 18). It was not possible to determine whether they exhibit inconsistencies in reporting, but the possibility suggests a need for cautious interpretation of municipal comparisons.

[40] A population-weighted regression of per capita street service expenditures on municipal population indicates an intercept of approximately $49 and a negative slope of 20 cents per 1,000 residents. This regression line is shown on Figure 4.3.

[41] The Borough of Churchill departs from this pattern, relying on a long-standing contractual relationship with a private firm for the production of public works maintenance.

[42] Allegheny Conference.

[43] Paul Ostrowski, "Intergovernmental Cooperation Spells C-O-G," *Pennsylvanian,* May 1988, pp. 4-5, 12.

[44] Compare Allegheny Conference, *To Cooperate or Not to Cooperate,* Exhibits B-2 and B-3.

[45] These numbers are approximate because there is no authoritative central registry of volunteer fire companies. The estimate was provided by Merrill Parker, director of the county's Fire Training Academy. The numbers include volunteer companies and personnel that supply rescue and EMS services in addition to or instead of fire prevention and suppression.

[46] Wilkinsburg recently has been declared a distressed city under provisions of Pennsylvania's Act 47. The Pennsylvania Economy League was appointed by the state Department of Community Affairs to develop a recovery plan for Wilkinsburg. The recovery plan, adopted by the borough, recommended that the paid fire department be maintained for the immediate future, within certain budget constraints, and provided for a community-based task force to recommend possible service delivery efficiencies. That task force has recommended continuation of a paid fire department, together with exploration of alternatives over time (personal communication, Boyd Messenger, Pennsylvania Economy League, July 5, 1989). Citizens of Wilkinsburg voiced substantial support for their paid fire fighters at the meeting where the recovery plan was first presented. Communities with a combination of paid and volunteer fire fighters include Mt. Lebanon, Bellevue, and Camegie.

[47] This practice may be discontinued as a consequence of the 1985 Amendment to the *Fair Labor Standards Act* as it bears on municipal employees, many of whom are also volunteer fire fighters. If a municipality pays one of its employees while acting as a volunteer fire fighter, the hours paid are counted as a part of the employee's work week and, thus, may require the payment of overtime or the granting of compensatory time off.

[48] Census, *State arid Metropolitan Area Data Book, 1986.*

[49] Data from preliminary tabulations of local government financial statistics supplied by the Municipal Statistics and Records Division, Bureau of Local Government Services, Pennsylvania Department of Community Affairs. As with police and street expenditures, these data should not be used for specific intermunicipal comparisons (see Note 18).

[50] The comparable public expenditure for fire protection services in St. Louis City and County in 1985 was $75 million, for a per capita average of $52.85, nearly double that of Allegheny County. See ACIR, *Metropolitan Organization.*

[51] The upward sloping regression line shown in Figure 4.5 most likely does not indicate diseconomies of scale. Rather, it is likely that larger municipalities make relatively larger contributions to their volunteer fire companies and/or employ more fire fighters in-house.

[52] Compare Allegheny County's 20,000 volunteer fire fighters to the 1,859 full-time fire fighters in St. Louis City and County, ar

area with virtually the same population. Many fire protection districts in St. Louis County utilize some volunteer fire fighters, but the number falls well below the number in Allegheny County. In part, this difference is attributable to the requirements of volunteer fire companies. Since it is difficult to prepare schedules to ensure that a given number of volunteer fire fighters will be available whenever a fire should occur, companies must include many more fire fighters than would a paid department, which could make such schedules. The St. Louis data are from ACIR, ***Metropolitan Organization.***

[53] Several persons we interviewed stated that the amount of fire equipment in Allegheny County exceeded that in the entire state of Maryland. While the factual basis of this statement could not be ascertained, the evidence points to a very large equipment complement in the county.

[54] ***1988 Fire, Ambulance, and Rescue Companies Roster Book*** (McKeesport, Pennsylvania: Mon-Yough Fire Defense Council, 1988). For St. Louis, see ACIR, ***Metropolitan Organization,*** pp. **78-79.** If the Mon-Yough Council's equipment roster is typical of other county fire associations, there are approximately 300 first-line fire and rescue vehicles in Allegheny County outside the City of Pittsburgh. The number identified in St. Louis County was 130.

[55] Allegheny Conference, ***To Cooperate or Not to Cooperate,*** Exhibit **B-4.**

[56] In 1982, 74 percent of the fire chiefs surveyed reported cooperation in training activities. Ibid.

[57] Data from ***Pennsylvania Scanner Guide*** supplied by Marshall Bond, Intergovernmental Cooperation Program.

[58] For example, the ***Mon-Yough Fire Defense Council Roster Book.***

Chapter 5

Public Education

INTRODUCTION

Three questions are often asked about the organization of public education in fragmented metropolitan areas:

- Are small, separately organized school districts able to draw on expertise and specialized services that can be produced only on a larger scale?
- Are small school districts associated with relatively poor school performance?
- Does fragmentation cause serious fiscal disparities in the provision of education?

Relatively little is known about how the institutional characteristics of a metropolitan school system translate into school performance. After introducing school district organization in Allegheny County, this analysis focused on four relationships among districts: (1) organizational linkages, **(2)** specialized production arrangements, **(3)** performance patterns, and **(4)** fiscal patterns.

SCHOOL DISTRICT ORGANIZATION

The **43** school districts in Allegheny County differ in many important respects, beginning with size. The Pittsburgh district, with more than **40,000** students, is the largest. The other **42** districts range in average daily membership (ADM) from 913 in Cornell to 7,925 in Penn Hills. Eleven districts have an ADM of fewer than 2,000, and **24** districts have fewer than 3,000.

For the most part, the **42** suburban districts serve predominantly white, middle-income communities. Thirty-five districts are 90 percent or more white; none has a majority nonwhite population. Only the Upper St. Clair District has a median household income over $30,000 per year. Five districts have median household incomes of less than $15,000, and **20** districts range between $18,000 and **$22,000** per year. To some extent, these figures fail to reflect the substantial diversity among communities resulting in part from different ethnic and racial concentrations. Some districts have substantial poverty rates, seven of them at more than 10 percent. The districts also vary in the proportion of the population with a high school education. Poverty and educational background are useful as indicators of the schools' service conditions. Pittsburgh, with a poverty rate of more than 16 percent, is one of five districts in the county with relatively difficult service conditions. The others are Clairton and Duquesne, both located in the Mon Valley, plus Wilkinsburg Borough and Sto-Rox, on the eastern and western edge of Pittsburgh, respectively.

School districts in Pennsylvania, like municipalities, are classified into five population groups. Philadelphia and Pittsburgh are each classified separately. Second class districts must have populations between **30,000** and 500,000, and third class districts between **5,000** and 30,000. Districts with populations under **5,000** are fourth class. School districts are governed by nine-member boards of school directors elected to four-year overlapping terms.

Although separately governed, the initial establishment of school districts in Pennsylvania largely followed municipal incorporation. The state policy was that each municipality would have its own school district, with two exceptions: (1) the creation of new fourth class districts had to be approved by state officials and **(2)** for many years, voters in contiguous areas could petition the court of common pleas to create an "independent" school district (independent of municipal organization).[1] Under current law, state approval is required for creation of third class districts as well, and independent districts may be created only for the purpose of merging with an adjoining district.[2] Annexation automatically changes school district boundaries.[3]

Before 1961, school district consolidations could take place only at the initiative of school directors or district voters, and required concurrent approval in the districts. "Union" districts were created in this manner. In the 1960s, however, the state legislature created a special procedure to consolidate school districts, requiring a review of all districts with pupil populations under 4,000 and consolidation of all districts with pupil populations under **2,500.** (These are pupil populations measured by average daily membership, not total populations used to classify school districts.) The procedure, which is no longer in effect, was for county boards of education to prepare consolidation plans, which were then approved by the state Council of Basic Education. School districts that were consolidated in this manner are, in a literal sense, "creatures of the state." The state law was later modified to allow consolidation by joint agreement between school boards, eliminating the requirement for voter approval.[4]

ORGANIZATIONAL LINKAGES

The existence of a large number of autonomous local school districts does not mean that each district must "go it alone" in arranging for the full complement of elementary and secondary education services. The **43** districts in Allegheny County are supplemented by (1) joint service agreements, known as jointures; **(2)** intermediate units, one for

the Pittsburgh district and one for the suburban districts; and (3) two independent consortia, one in the southwest hills area and the other in the Mon Valley. These interorganizational arrangements create opportunities for specialized service production that otherwise would be unavailable.

Jointures

A jointure is a voluntary cooperative arrangement among school districts created and governed by the district boards of directors. Jointures maintain facilities for special education in four areas (Eastern, South Central, Southeastern, and Western), and maintain facilities for and provide vocational-technical education in three areas (Forbes Road East, Parkway West, and Steel Center). The Northern Area Special Purpose Schools jointure is the only one that provides special education facilities and vo-tech education.

The jointures are supplemented organizationally (at least initially) by municipal authorities. also created jointly by some school districts to finance (through revenue bonds), construct, equip, and furnish the specialized facilities.

The basic governing document of a jointure consists of legally binding Articles of Agreement, whereby school districts agree to establish a "joint school system" for limited purposes for a stipulated period of time (e.g., 40 years). The governing body is a board of school directors consisting of the members of the district boards. Annual approval of the operating budget is required by a majority of the board and two-thirds of the participating school districts.

Most other policy decisions are made by a joint school committee, with at least one representative from each member district board. The committee either organizes its own production unit (vocational-technical schools) or contracts with the Allegheny Intermediate Unit (special education centers and the Steel Center vo-tech services). Although one of the district superintendents must serve as the superintendent of record for the jointure, supervisory responsibility rests with a full-time director. In the Northern Area jointure, the superintendent of record serves as chairperson of a professional advisory committee of the district superintendents.

Jointures bring school district personnel together on a regular basis to discuss common concerns. In the Northern Area jointure, for example, regular meetings are held among the superintendents, principals, counselors, and personnel directors. The latter group has organized a consortium to operate a shared substitute teacher program.

Intermediate Units

The 29 intermediate units throughout Pennsylvania, established in 1971 as successors to county school systems, are, unlike jointures, creatures of the state. Like jointures, they are governed by member school districts. Intermediate units have a broad range of functions, the basic one being to act as a channel of communication between the state Department of Education and the school districts. Other functions typically include producing numerous auxiliary services as well as direct services to special education students. Because of its importance as an organizational overlay in the suburban county, this analysis focuses

size) and ability to pay. District contributions computed for Fiscal 1988-89 range from a low of $5,827 for Clairton

State and federal funding for AIU programs is complex, involving some 60 separate program budgets. The various "pots of money" range in size from a few thousand dollars to the exceptional children's program with more than $33 million. Many of the budgets commingle funds from more than one source.

Not surprisingly, AIU has a substantial administrative apparatus organized in four major divisions plus finance. The executive director is assisted by an associate and three assistant executive directors and a finance director. Some 29 program officers report to these second-tier supervisors or to the executive director.

Because public education is regulated extensively by the state, the intermediate units are used as a mediating structure by state and local officials. AIU regularly supplies information on how to comply with state mandates. Local districts and the state view this as an important service. Given the governance structure of AIU, its officials tend to view themselves as representatives of the districts, not as agents of the state Department of Education.

AIU is a complex intergovernmental institution. Created by the state, it is governed by local districts. Much of its institutional structure and many of its responsibilities are determined by state law. It operates in a collegial manner, however, and is often used to create and administer limited-purpose, voluntary consortia of some subset of districts. Administratively, AIU is much larger than any of its member districts, yet its direct service responsibilities are limited mostly to special education. Importantly, AIU has no supervisory authority over local school districts. It is a service organization that districts may use at their discretion, although the districts' financial contributions are mandatory.

Independent Consortia

The Mon Valley Educational Consortium is a community-based organization serving 20 school districts in three counties. Unlike jointures and intermediate units, this consortium was formed by a local citizen initiative and remains formally independent of school district organization. Founded in 1985 as the McKeesport Education Consortium of schools, businesses, and communities, the organization served only the McKeesport area district. Its initial projects included a community newsletter and an alumni association, both designed to foster greater community awareness of school activities. Since its expansion in 1987, the consortium serves 10 districts in Allegheny County (Clairton, Duquesne, East Allegheny, Elizabeth-Forward, McKeesport, South Allegheny, Steel Valley, West Jefferson Hills, West Mifflin, and Woodland Hills) and 10 districts in Washington, Westmoreland, and Fayette counties. The original 16-member governing board was expanded to 26 community representatives. School districts participate at their own initiative, and district superintendents meet twice each year.

The consortium raises funds for specific projects from the local communities and foundations. The staff is small—3.5 positions including the executive director and a secretary. Instead of seeking to increase its in-house production capabilities, the organization concentrates on building linkages between schools and other organizations.

An annual program called Great Ideas makes small grants to teachers (up to $300), schools (up to $1,500), and one district (up to $10,000), offering opportunities to try out new ideas. The teacher projects are reviewed by a committee of business people and educators in each district. A Partnership on Education program pairs schools with businesses and government agencies, including the *McKeesport Daily News*, U.S. Bureau of Mines, Alcoa Research Center, and a general hospital, to engage in joint teaching.

The South Hills Area School Districts Association (SHASDA) originated in 1969 when 12 superintendents began regular meetings. Although the number has grown to 16, the organization remains informal. Expenses are shared on a voluntary basis, and the staff consists of a secretary. Much of SHASDA's activity is political, focusing on working closely with the area's 13 state legislators. Personnel directors from the member districts maintain a data bank for use in collective bargaining. Since 1978, SHASDA has sponsored a spring conference for school board members, administrators, and students. A parallel association—Student SHASDA—was started in 1981. Motivated by a desire to improve relationships in interscholastic sports competition, the group organizes student visits and social events.

SPECIALIZED PRODUCTION ARRANGEMENTS

Two types of services comprise or contribute to public education:

1) Direct services to students, including classroom teaching, transportation, school lunches, and counseling.

2) Indirect or auxiliary services to the producers of direct services, including building maintenance, curriculum development, and in-service training.

In Allegheny County, most direct services are produced by school districts. Special education is produced in large part by the Allegheny Intermediate Unit in coordination with school districts. Vocational-technical education is produced mostly by separate schools organized and governed through jointures. AIU is the dominant producer of auxiliary services other than building maintenance. School districts produce some auxiliary services, depending on district size and wealth, and jointures and independent consortia are increasingly active. Interorganizational arrangements are important in producing special education and vo-tech education and for all auxiliary services. These areas are discussed below.

Special Education

Students with mental, physical, and multiple handicaps—the major special education program—either are enrolled in five special education centers provided by jointures (approximately 1,100 students) or receive special services in regular schools (24,000 students, including those with specific learning disabilities). All of the centers are staffed and operated by AIU, although the buildings are owned and maintained by jointures. AIU also supplies the majority of special education teachers in the regular schools. In some cases, the state subsidy plus the district

contribution is used to enroll handicapped students in private schools (e.g., schools for the blind or for autistic children). AIU evaluates all special education students.

School districts may hire their own special education teachers and receive the state subsidy directly or request the service from AIU. Riverview District, for example, staffs all of its special education classes. Two considerations led to this choice: (1) the ability of the district to control the classroom and (2) a desire to preserve local teaching positions in the face of declining district enrollments. The major cost associated with this option is the need to submit paperwork to the state for reimbursement. AIU estimates that roughly 20 percent of the state subsidy in its jurisdiction is being spent directly by school districts and encourages its member districts to assume as much responsibility as possible in view of limited state funding. In the majority of cases, however, an AIU teacher, hired and supervised by AIU, works in a district classroom under the control of a building principal. This arrangement depends on a high level of cooperation between school districts and AIU, and it frequently works well. Sometimes, there are difficulties in scheduling (working hours for AIU and district teachers may not coincide) and participation of AIU teachers in in-service education.

Special education also includes services for the hearing impaired and for socially and emotionally disturbed students, as well as a gifted and talented program. AIU supplies technical assistance to regular classroom teachers and, in some cases, teachers who move from school to school.

Vocational-Technical and Alternative Education

Arrangements for the production of vocational-technical education are considerably more straightforward than for special education. Three of the four area vo-tech schools are operated by jointures. The Steel Center program is operated by AIU, and McKeesport operates its own program.

The vocational program provided by the Northern Area jointure serves as an illustration. Nine school districts make up the jointure, formed in 1966: Avonworth, Deer Lakes, Fox Chapel, Hampton Area, North Allegheny, Northgate, North Hills, Pine-Richland, and Shaler Area. The joint school committee operates the Alfred W. Beattie Area Vo-Tech School, which offers a wide range of programs for the 11th and 12th grades, including business, graphic communications, health services, mechanics, culinary arts, and cosmetics. In 1984-85, Beattie had an ADM of 1,099 students for three hours each day at a per-pupil cost of $1,710. Like other vo-tech schools in the county, Beattie has experienced a serious decline in enrollments. In 1987-88, the ADM was down to 793 and per-pupil cost was $2,881, a 68.5 percent increase in three years.

To support the jointure, each school district is billed based on the number of students in the vo-tech school, making up nearly 90 percent of operating revenues. The state subsidy for vocational education accounts for less than 10 percent of funding. The administrative budget, which includes support services for the board, building maintenance, and capital costs, is shared by the districts in proportion to their share of the total assessed valuation of the area. This amount has been declining due to a decrease in capital costs. Each district is responsible for transporting its students.

In 1987-88, the Northern Area jointure established an alternative high school, also located in the Beattie facility. The program is intended for students "not receptive to or profiting from existing school programs."[5] Student quotas were allocated to each district based on its share of the total ADM in grades 10-12. Operating costs were allocated among the districts on the basis of student participation, but the method was changed to a student quota basis, thus giving each district an incentive to use its quota. Enrollment in the fall of 1988 was 81 students. Parkway West jointure also has introduced an alternative high school.

Auxiliary Services

The Allegheny Intermediate Unit supplies a wide range of indirect services to schools and school districts. AIU resources include an extensive film/video library and delivery service, and a learning resource center that houses instructional materials and a professional library. AIU offers in-service credit courses for continuing professional education. An evening and summer program was developed to emphasize classroom issues, and was made available to Pittsburgh and to private school educators. AIU also supplies consulting services for curriculum management and instructional support. AIU also organizes administrative consortia for joint purchasing, natural gas, health insurance, and workers' compensation.

Small school districts seem to be especially dependent on AIU for indirect services, often pooling money they have received from the state to have AIU organize joint programs. Larger districts may depend on AIU to develop service options. Out of the six district superintendents interviewed for this study, only one expressed reservations about the value of AIU, arguing that it was too large and not sufficiently responsive to the districts. The others cited AIU support and services as beneficial or essential.

One alternative and potential complement to reliance on AIU is greater use of jointures and independent consortia organized by the districts or, as in the case of the Mon Valley Education Consortium, by local citizen groups. The Northern Area jointure operates a substitute teacher service. The South Hills Area School District Association coordinates in-service training. The Mon Valley consortium complements the regular AIU support services.

Summary

Allegheny County school districts are not limited to those functions that each is capable of performing separately. Especially outside of Pittsburgh, the 42 suburban school districts can be looked on as the basic building blocks in a system of organization that extends across district boundaries. The purpose of these organizational linkages is to arrange for the expertise and specialized services often thought to be lacking in a fragmented area. Jurisdictional fragmentation provides a base for interorganizational efforts.

The specific arrangements vary. Both jointures and intermediate units are aptly named. Jointures are created from the ground up, so to speak, and represent a horizon-

Table 5.1

Service Conditions Model Explaining School District County Performance levels on "TELLS" Tests, Allegheny County

(Shown: Unstandardized Regression Coefficients and T scores, N= 43.)

	Reading		Math	
	1984-85	**1985-86**	**1984-85**	**1985-86**
Poverty Rate	-.0187	-.0213	-.0123	-.0185
	(4.38)	**(5.63)**	**(7.36)**	(3.88)
Percentage **of** Population High School Grads	.0037	.0040	.0081	.0068
	(3.33)	(2.30)	**(2.88)**	(5.34)
Percent **of** Population over Age 65	.0030	.0031	.0040	
	(2.23)	**(1.02)**	**(1.22)**	**(1.45)**
Standard **Error**	.0555	.0481	.0527	.0711
R^2	.7503	.8484	.8004	.6934

tal linkage that joins two or more districts in common efforts. Intermediate units are created from the top down and assume a role in the vertical linkage between school districts and the state. Yet, intermediate units are locally governed and often serve as organizational umbrellas for voluntary joint efforts among a limited number of districts. Automatic funding by state action is one of the strengths of **AIU** that also makes it less dependent on its immediate clientele, the school districts. Smaller and poorer districts clearly have more to gain from the services available from AIU, but larger and richer districts are not free to withdraw their support and therefore have incentives to participate. At the same time, the two voluntary consortia represent entrepreneurial efforts that go beyond what AIU has been willing and/or able to provide by way of support. The basic point remains that there are numerous feasible alternatives to what David Tyack called "the one best system"[6] (a single consolidated school district) in the metropolitan organization of public education.

PERFORMANCE PATTERNS

The Effect of District Size

School and school district consolidation have become part of the folklore of progressivism in American public education. Despite empirical results to the contrary,[7] education and public administration professionals often assume that smaller districts are associated with poorer school performance. Consolidation efforts continue in many states and communities, with public policy (though perhaps not public opinion) often firmly on their side. Pennsylvania promoted district consolidation as recently as two decades ago. Therefore, it is useful to examine the nature of the relationship between school district size and school performance in a fragmented metropolitan area such as Allegheny County. Because there is no convincing model that relates school characteristics to school performance," this analysis is exploratory and its conclusions tentative.

Test results from a statewide program, Testing for Essential Learning and Literacy Skills (TELLS), can provide a limited measure of student performance aggregated by district. Competency tests in reading and mathematics are administered in Pennsylvania's 501 school districts in the 3rd, 5th, and 8th grades. Students who score **16** or more percentage points below the national median on either test are eligible for remedial help. In this analysis, the percentage of 8th grade students found ***not*** eligible for remedial help is used as an indicator of aggregate student achievement in each district. This indicator measures the degree to which students, aggregated by district, reach a *minimum **level*** of achievement by the 8th grade. It does not measure the degree of student achievement ***above*** a minimum level. Nonetheless, minimum standards measure a basic and important dimension of student performance.

Ideally, an analysis of school district performance would use multiple indicators, including average or median scores on standardized achievement tests, graduation rates, college placement, and expressions of satisfaction or dissatisfaction by students and parents. The analysis here is based on a single indicator, but it is a useful one in many respects. Whatever local preferences may be for educational performance, it seems reasonable to compare school districts on the criterion of a minimum level of academic performance by as many students as possible. **Ex**cept where noted, all 43 school districts in the county are included in the analysis, using TELLS test scores for the 1984-85 and 1985-86 school years.

The Effect of Service Conditions

If student achievement is used as an indicator of school district performance, then that performance is determined mainly by service conditions, specifically students' social background? In this analysis, a school district's service conditions are measured by (1) the poverty rate, controlling for the percentage of a district's population over age 65,[10] and (2) the percentage of adults who have graduated from high school. Both of these variables are strongly and independently related to 8th grade test performance." As shown in Table **5.1,** the three variables together explain approximately 75 percent of the variance in test performance levels among the 43 districts for both years.

Service conditions, as measured here, are by and large beyond the control of a school district. Given the strong effect of service conditions on student performance, ***school performance*** cannot be equated with ***student performance*** (neither can they be divorced). ***An*** indicator of school performance can be derived by comparing actual

levels of student performance with the levels predicted by a service-conditions model. The difference between actual and predicted student performance levels can be interpreted as a rough index of school performance or effectiveness.[12] This approach is used in the discussion of district size effects.

The Effect of Per-Pupil Expenditures

Some of the unexplained variance in the service-conditions model can be explained by adding total expenditures per student. Districts that spend more money per student tend to have a higher percentage of students who do not require remedial help in the 8th grade, controlling for service conditions. The additional amount of the variance explained, between 2 and 3 percent, is not substantial.

The Effect of School District Size

School district size alone, measured by average daily membership, has a low positive association with student performance among the 42 suburban districts (i.e., larger districts tend to have larger percentages of 8th grade students performing at or above the minimum standard in reading and math in 1984-85 and 1985-86).[13] When considered jointly with service conditions, however, the coefficients relating size to the four performance indicators become negative in three of the four cases (i.e., the larger the districts the lower the performance), but the coefficients are weak and not significant. Overall, size does not appear to have a significant linear effect on performance when service conditions are controlled.[14]

School district size, nevertheless, has been an issue of great concern and considerable controversy in Pennsylvania. State policy during the 1960s sought to consolidate all districts with pupil populations under 4,000 and required consolidation of all districts with pupil populations under 2,500. By the early 1970s, a wave of school consolidations had been completed throughout the state. Thirty of the 42 school districts in suburban Allegheny County are a product of consolidation.

Since the period of consolidation, enrollments in the county have declined overall, leaving 20 school districts (including 14 consolidated districts) with an average ADM of less than 2,500, and 11 districts (including 7 consolidated districts) with less than 2,000. Eleven more districts have pupil populations between 2,500 and 4,000. The creation of Woodland Hills district is the only school consolidation that has occurred recently, and that was by federal court order to effect racial desegregation. If the state criteria used during the consolidation period were applied today, almost half of the county's school districts would be required to consolidate, and as many as two-thirds would be considered or consolidation.

The effectiveness of individual school districts in meeting minimum standards can be compared by computing a *residual* for each district after controlling for service conditions. First, the service-conditions model (shown in Table 5.1) is used to predict a performance score for each district; then, the difference between the observed and predicted scores is calculated. The difference is the residual. Districts with *positive* residuals are doing better than service conditions predict and are considered more effective. Districts with *negative* residuals are not doing as well as service conditions predict and are considered less effective. The residuals are thus used to estimate the effectiveness of school districts in educating students from communities with various conditions for learning.[15]

The approach used here is to examine the effectiveness of the smallest districts in the county, individually and as a group, compared to the others. The set of smallest districts—designated as Group I—was determined by computing the mean pupil population of all districts with fewer than 2,500 pupils (the cut-off for mandated consolidation) and defining the set as those districts with pupil populations below the mean (1,765 pupils). Group I is composed of nine districts, ranging in size from 913 to 1,610 students. Group II has 11 districts, ranging from 1,911 to 2,486 students. Together, Groups I and II comprise those districts that would have been required to consolidate under state criteria. Group III also has 11 districts with between 2,500 and 4,000 pupils, the additional districts that would have been considered for consolidation. Group 4 has 11 districts, with pupil populations over 4,000. This group would not have been affected by the state consolidation criteria.

The four groups are compared in Table 5.2 Notice that the average observed scores for Groups I and II are in the 70 percent range, while Groups II and IV fall in the 80 percent range, seeming to indicate that bigger is better. The difference in observed scores, however, does not take into account differences in service conditions. The mean scores predicted by the service-conditions model follow a similar pattern. This means that Groups 1 and I1 tend to have less favorable service conditions. The difference between the predicted and the observed scores, averaged for each group, is the average residual. Comparing the residuals across groups is a meaningful way of comparing effectiveness of school districts in different size categories.

Group 1—the smallest districts—displays the two largest positive residuals (one in reading and one in math) and compares favorably to all the other groups. Group 11—the next smallest districts—performs least well, having the largest negative residuals (two in reading, one in math). Group 111—districts between 2,500 and 4,000 pupils—is in second place, with consistently positive residuals. Group IV—the largest districts outside Pittsburgh—is in third place, with three out of four residuals negative. Although the linear relationship between district size and effectiveness across the full range is inconsistent (negative between Groups I and 11, positive between Groups II and III, and negative between Groups III and IV), the smallest districts as a group are relatively most effective.

School districts in Groups I and II would face consolidation under previous state rules. Such a requirement, however, would not be congruent with patterns of TELLS performance. The smallest school districts in the county tend to perform at least as well as districts in larger size groups, and often perform better, using minimum standards of reading and mathematics as indicators. Yet, the relationship of size to performance is inconsistent. This sort of relationship is incongruent with an automatic size threshold rule for consolidation. Rather, existing performance patterns suggest that consolidation proposals ought to be judged on a case-by-case basis.

Table 5.2
School District Effectiveness, Measured by Difference between Observed and Predicted Performance Levels on "TELLS" Tests, by Size Groups
(Pittsburgh shown separately, N=43)

School Districts Eighth Grade Test	Year	A Observed Score[1]	B Predicted Score[2]	A – B Residual[3]
Group I:				
Districts with fewer than 1,765 pupils (N = 9)				
Reading	84-85	79.3	77.1	+2.2
Reading	85-86	75.9	75.5	+0.5
Math	84-85	76.0	76.4	-0.3
Math	85-86	79.0	75.2	+3.8
Group II:				
Districts with 1,765 to 2,500 pupils (N = 11)				
Reading	84-85	77.6	79.1	–1.6
Reading	85-86	76.1	77.8	–1.7
Math	84-85	78.2	78.7	-0.5
Math	85-86	73.7	76.2	–2.5
Group III:				
Districts with 2,501 to 4,000 pupils (N = 11)				
Reading	84-85	87.4	86.6	+0.9
Reading	85-86	87.1	86.2	+1.0
Math	84-85	87.4	86.5	+0.9
Math	85-86	84.6	84.5	+0.2
Group IV:				
Districts with more than 4,000 pupils (N = 11)				
Reading	84-85	85.3	86.5	–1.2
Reading	85-86	86.3	86.0	+0.2
Math	84-85	86.9	87.6	-0.7
Math	85-86	84.0	85.0	–1.0
Pittsburgh: 40,599 pupils				
Reading	84-85	60.9	60.8	+0.1
Reading	85-86	58.3	57.0	+1.3
Math	84-85	76.9	63.1	+13.7
Math	85-86	64.2	57.3	+6.9

[1] Average of percent not eligible for remediation.

[2] Scores predicted from service-conditions model shown in Table 5.1 averaged over school districts in each group.

[3] Observed score – predicted score = residual. Numbers may not subtract precisely due to rounding.

From the evidence presented here, school district consolidation alone is unlikely to have an appreciably favorable impact on district effectiveness.[16] Only to the extent that consolidation is tied to other changes is increased effectiveness likely. One possibility is that consolidation would result in an increase in spending per student. If increasing the district size increases the tax base per student, and if taxpayers are willing to increase spending accordingly, the positive relationship between expenditure per student and student performance suggests some possibility of better performance as a result. Note in Table 5.2 that the performance of the Pittsburgh district, much larger than any other in the county, is consistently positive. Pittsburgh also spends much more per pupil than other districts with similar service conditions. Outside Pittsburgh, there is no significant relationship between district size and total spending per pupil. Again, it would appear that consolidation proposals can be judged only on a case-by-case basis."

It bears repeating that both small and large districts may excel in other ways not measured by the indicators used here. ***The districts with small negative residuals but high observed scores are, without doubt, excellent school districts in many respects.*** Minimum performance standards, nevertheless, reflect a basic public policy concern. This concern is especially relevant to those districts that face difficult service conditions—that have larger numbers of students who tend to perform below a minimum standard due to social background.

NORTHCATE SCHOOL DISTRICT: A CLOSER LOOK

To press the exploratory analysis of school district effectiveness still further, individual district residuals were

examined to search for consistently superior districts. Large positive residuals for reading and math for both years are uncommon.[18] The most consistent top performer was Northgate School District, the ninth smallest district in the county. Its residuals and (actual scores) are shown below:

Reading	84-85	+ 10.15	(94.0)
Reading	85-86	+ 4.54	(87.5)
Math	84-85	+ 12.36	(96.6)
Math	85-86	-6.69	(91.7)

The 1984-85 scores were more than two standard errors above the predicted scores for that year, but the 1985-86 scores fell just within a single standard error.

Northgate serves about 1,550 students who live in a 1.5 square mile area, adjacent to the northwest comer of Pittsburgh. All students reside within walking distance of one of two elementary schools (K-6) or the one junior-senior high school, and either walk or arrange their own transportation. The school district boundaries exactly overlay Avalon and Bellevue boroughs. Private schools enroll 13 percent of the district's elementary students and 3 percent of the secondary students. The district professional staff consists of a superintendent, buildings and grounds coordinator, and director of computer services, with offices in an old Victorian house.

There was a separate school district for each borough until 1971, when the state mandated consolidation. Separate high schools were maintained until 1976. Bellevue contested the consolidation in court, but lost. Avonworth, also a candidate for inclusion in the Northgate district, avoided the state mandate.

Northgate can be described as a low-income, white community with an average poverty rate and average school spending. Its median household income of $14,777 ranks it 37th out of the 43 districts. The poverty rate of 6.57 percent is close to the countywide average. Whites make up 98.09 percent of the population. An assessed valuation per student of $34,306 puts Northgate in 29th place in the county, but total expenditures per student of $5,256 put it in 20th place, close to the mean. As shown in Table 5.3, Northgate raises somewhat more local revenue than predicted from the size of its revenue base. About two-thirds of its revenues are raised locally. The district millage rate has been increased every year since 1980. In 1996, the district will become debt free, and it has begun a preventive maintenance program to forestall another bond issue.

In an interview, James C. Manley, Northgate superintendent, stressed three factors in accounting for the district's success. One is related to the district's small population and area, enabling students to walk to school and keeping school close to home. By holding down class size as well (a factor that is independent of district size), the schools are able to maintain a learning environment in which teachers know students and their families. School discipline is good, according to Manley. Vandalism of school property amounts to only about $100 in damage each year. Manley also noted that Northgate has never had a teachers' strike, and characterized the relationships among teachers, the administration, and the community as based on underlying trust.

A second factor cited is that the district employs 1.5 school psychologists, which enables Northgate to analyze student performance without a four-five month wait. The district has its own learning disability program in the elementary schools, but relies on the Allegheny Intermediate Unit for the secondary school program. AIU personnel are treated as part of the district staff.

A third factor is the conservative cultural climate of the community. Churches remain strong, and the North Borough Ministerial Association continues to perform a baccalaureate for graduating seniors. Families continue to regard education as important. Yet, the district also has a significant number of transient and single-parent families whose children often require special attention. The district makes a strong effort to stay in close touch with its community, publishing an annual scholastic calendar packed with information about school programs and services, and distributing a weekly column, "From the Superintendent's Desk," to the two local newspapers. Many of these columns are devoted to reinforcing a sense of pride in the achievements of Northgate students and residents.

The explanation offered by the Northgate superintendent is consistent with recent theoretical conjectures and research findings of James B. Coleman on school effectiveness.[19] Coleman distinguishes three school/community factors that affect performance:

1) physical capital—buildings, equipment, and materials in the schools, and books, materials, and a quiet place to study at home;

2) human capital—skills and talents of teachers, administrators, and parents; and

3) social capital—trust, goodwill, communication, and reciprocity.

Coleman's theory, together with Superintendent Manley's assessment of his district, affords a tentative explanation of why Northgate is consistently a top performer, controlling for service conditions. The service-conditions model contains a measure of physical capital (poverty rate) and human capital (high school graduation), but not social capital. Except for one human capital factor (school psychologists), the superintendent's assessment focused on the accumulated social capital in Northgate. It follows that Northgate would perform better than predicted by indicators of physical and human capital only. Because social capital draws on relationships between the community and school personnel, it cannot be treated exclusively as an in-school attribute or a community attribute. It is a product of interactions between schools and community. The ability of schools to function as an effective part of the communities they serve appears to be an important variable.

PATTERNS OF PROVISION

How Much Disparity?

Provision for public education in Pennsylvania, as throughout most of the United States, is a joint responsibility of local school districts and the state. In Pennsylvania, direct state aid provides 45.6 percent of total school district spending (plus 8 percent in retirement fund aid). In

part, state funding is intended to compensate for inadequate fiscal resources in some localities. Whether remaining patterns of disparity should be attributed to local patterns of organization or state aid policies and formulas or both is ambiguous.

Often, state education funds are accompanied by extensive regulation, so much so that the function of specifying what is to be provided, and often how, has been preempted by the state. Pennsylvania is no exception. Most of the district superintendents interviewed in Allegheny County cited the timely information about state requirements and advice on how to comply with them as an especially beneficial service of the Allegheny Intermediate Unit. The details of state regulation, however, lie beyond the scope of this study. The focus here is on fiscal patterns among the 43 school districts in the county, as affected by patterns of state assistance.

State Assistance

The distribution of most state financial assistance to school districts is based on complicated formulas that take into account such factors as number of students (technically, average daily membership), population density, local tax effort, and the percentage of pupils in households receiving Aid to Families with Dependent Children (AFDC).

The Equalized Subsidy for Basic Education, the largest state education aid program, consists of a base amount with economic supplements for qualifying districts. The base is calculated by multiplying an aid ratio that reflects district wealth (measured by the market value of taxable property and personal income) by (1) an educational expense factor established by the state legislature and (2) WADM—average daily membership indexed to give greater weight to secondary students. Aid ratios in Allegheny County range from 0.15 in Fox Chapel and Quaker Valley to 0.63 in Clairton. Pittsburgh's aid ratio is 0.36.

One of the two economic supplements is given to districts where at least 10 percent of ADM are students who receive AFDC. The amount of the supplement depends on the actual percentage, ranging from $100 to $500 per AFDC pupil. The second supplement is available to districts where the local tax effort exceeds the median effort statewide, and it varies from 1 percent to 5 percent of instructional expenditures according to district population per square mile. Large densely populated districts, such as Pittsburgh, are treated as exceptional cases and receive a supplement equal to 19 percent of instructional expenditures. This special subsidy is reflected in the total amount of aid distributed.

In addition to using formula-based calculations, the legislature has constrained the distribution of aid by imposing ceilings and floors. In 1985-86, no district received a subsidy increase of more than 8.45 percent or less than 2 percent over the previous year. Each district is guaranteed at least 80 percent of its subsidy. The subsidy ceiling tends to work against districts that are growing rapidly, while the floor cushions the effect of declines in enrollment. Small and needy districts, defined as those with an aid ratio of 0.5 or greater and an ADM of 1,500 or less, receive an additional $50 per pupil from the amount appropriated for the state basic subsidy program but added to the individual district's allotment. Thus, the small district supplement directly reduces the amount available to other districts.

The other major state assistance programs are for special and vocational education. The special education subsidy is intended to cover fully the added costs incurred by a district for the conduct of a state-approved program. Districts are to receive the difference between the cost of a regular education and the cost of special education per pupil.[20] Some of these funds are distributed directly to intermediate units, which operate most special education programs.

State support for vocational programs is considerably less than for special education. The vocational education subsidy is determined by a formula similar to that used for the basic subsidy. With some exceptions, the state pays an amount equal to 21 percent of the actual instructional expense for students attending vo-tech schools (or 17 percent in approved school district programs) multiplied by an aid ratio based on either market value of district property or personal income (but no less than 0.375).

Other state subsidies provide small amounts of support for programs such as health services, driver education, food services, and pupil transportation,

Variation in local Provision

Given the pattern of state support, school districts in Allegheny County vary in the percentage of revenue raised locally from a low of 51.9 percent in South Allegheny to a high of 88.2 percent in Quaker Valley. Overall, Allegheny county schools raise approximately 67.4 percent of their total revenues from local sources (61.2 percent for Pittsburgh).

Allegheny County suburban school districts rely predominantly on real estate taxes; Pittsburgh does so to a much lesser extent. In 1983-84, the suburban districts raised 83.3 percent of their revenues from the real estate tax, 12.9 percent from the earned income tax and other Act 511 sources, and the remainder from miscellaneous sources, including fees. Pittsburgh raised 54.2 percent from the real estate tax and 34.5 percent from Act 511 sources.

The revenue base of the school districts, measured by the market value of taxable real estate per student (WADM),[21] accounts for 83 percent of the variance in local revenues raised per pupil by all of the districts, reflecting their predominant reliance on real estate taxes (except Pittsburgh). The property tax base is used, as shown in Table 5.3, to predict a revenue amount for each district. The difference between the actual amount of revenue raised and the amount predicted by real estate values yields an index of local tax effort, expressed in dollars per student (WADM), also shown in Table 5.3. This difference is the residual amount unexplained by real estate values. Districts with positive residuals dig more deeply into their pockets, so to speak, than districts with negative residuals. Five districts have negative residuals and eight have positive residuals that exceed one standard error ($294). Pittsburgh is included among the districts with a high tax effort.[22] Most of the districts with low levels of local revenue not only have a low tax base but also make a relatively low tax effort. Note, however, that the two districts with the highest predicted local revenues—Fox Chapel and

Quaker Valley—also have large negative residuals; yet both still manage to rank very high (one is in first place) in actual local revenue raised per student.

The **43** districts vary considerably in total expenditures per student (from all revenue sources), ranging from $2,990 in South Park to **$5,881** in Cornell. Pittsburgh is second highest at **$5,256** per student. The countywide mean (averaged by students, not districts) is **$4,446.** Omitting Pittsburgh, the mean falls to **$4,020.** The standard deviation (a measure of dispersion) is **$478** per student, or **11.89** percent of the mean.[23] Because Pittsburgh is so different from most other districts in the county, the distribution of spending levels for the suburban districts is examined separately and shown in Figure **5.1**

Table **5.3**
Local Tax Effort, Allegheny County School Districts Ranked by Actual Local Revenue
(in dollars per pupil in average daily attendance)

School District	A Actual Local Revenue	B Predicted Local Revenue	A – B Residual
South Allegheny	$1,670	$2,003	-332*
Elizabeth-Forward	1,795	2,004	-209
South Park	1,829	2,311	-482*
Plum Boro	1,851	2,011	-160
Sto-Rox	1,977	1,990	-13
Clairton City	2,087	2,072	15
Duquense City	2,117	2,380	-263
Deer Lakes	2,121	2,265	-144
Highlands	2,136	2,221	-85
West Allegheny	2,211	2,477	-266
McKeesport Area	2,226	2,390	-164
Penn Hills	2,304	2,397	-93
Wilkinsburg Boro	2,421	2,431	-10
est. Jefferson Hills	2,755	2,832	-77
South Fayette	2,817	3,002	-185
East Allegheny	2,857	2,702	155
Hampton Township	2,937	2,900	37
Northgate	2,944	2,716	228
Carlynton	2,951	2,839	112
Moon Area	3,005	2,619	386*
Woodland Hills	3,028	3,224	-196
Baldwin-Whitehall	3,034	2,966	68
Shaler	3,047	2,933	115
North Allegheny	3,086	3,359	-273
Steel Valley	3,164	3,188	-23
Brentwood Boro	3,181	2,951	229
Keystone Oaks	3,230	3,336	-105
Pine-Richland	3,258	3,403	-145
Riverview	3,283	2,913	370*
Gateway	3,348	3,298	50
North Hills	3,380	3,698	-318*
Montour	3,398	3,455	-57
Bethel Park	3,470	3,110	359*
Allegheny Valley	3,522	3,679	-157
Avonworth	3,529	3,199	330*
Pittsburgh	3,636	3,151	485*
Upper St. Clair	3,715	3,399	316*
West Mifflin Area	3,715	3,502	213
Quaker Valley	3,909	4,340	-432*
Chartiers Valley	3,910	3,558	352*
Cornell	4,104	4,086	18
Mt. Lebanon	4,216	3,215	941**
Fox Chapel Area	4,223	4,814	-591**

* +/ More Than One Standard Error **($294)**
** +/ More Than Two Standard Errors **($588)**

The distribution is fairly symmetrical, with **71** percent of the student population in districts that lie within one standard deviation of the mean. Of the remaining students, **16** percent might be characterized as relatively advantaged **(19,071** students in five districts) and **14** percent as relatively disadvantaged **(18,610** students in seven districts). If Pittsburgh were included in the analysis, the result would be a sharply asymmetrical distribution with the **40,038** students in the central city added to the small group of advantaged students from the suburbs.

Among the **42** suburban districts, there is no statistically significant relationship between district size, measured by ADM, and expenditures per student. One of the arguments made for school district consolidation is that access to a wider tax base will increase school revenues. Although this relationship may hold in individual cases, it does not hold in Allegheny County as a general rule. An alternative, partly contradictory, argument sometimes is made that small districts choose to remain small in order to preserve a wealthy enclave and spend more per student on fewer students. From this argument, one might expect the highest spending districts to be among the smallest, but in Allegheny County this is not the case. While the argument may hold in individual cases, there is no pattern to suggest a general tendency in that direction.

Disparities

One of the greatest sources of concern with highly fragmented or differentiated metropolitan areas is the potential for disparities in service provision among separate jurisdictions. Although disparity is often taken simply to mean an inequality among jurisdictions measured by variation on a single variable, a more interesting approach is to view disparity as a relationship between inequalities on different but related variables. The basic disparity of interest is actually an intradistrict relationship—a disparity between the problems faced by a school district and its fiscal capacity to respond to those problems.

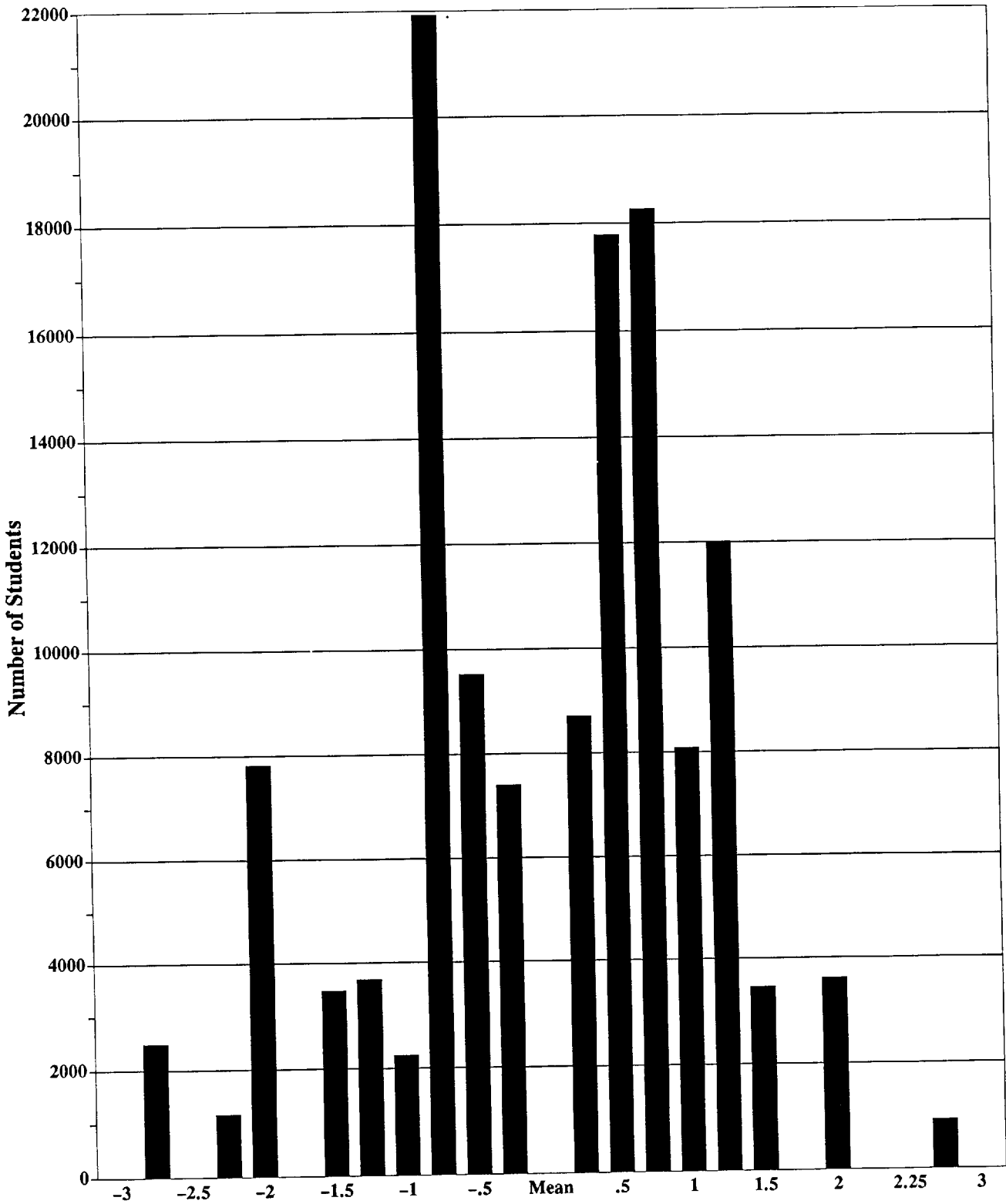
Consider the relationship between revenues per student and the percentage of low-income students. The school districts in a metropolitan area vary with respect to each of these characteristics: they are unequal. Disparity is more, however. It can be viewed as a relationship between these two inequalities, specifically, a combination of low revenues per student and a high percentage of low-income students. In this case, a negative coefficient would indicate disparity—a high score on one is associated with a low score on the other—and the degree of disparity in indicated by the size of the coefficient.

The concern with disparity is usually with extreme differences among jurisdictions. Thus, one approach is to compare the jurisdictions at the extreme ends of related distributions. In this way, substantially more advantaged and substantially less advantaged jurisdictions can be identified.

Figure **5.7**

Variations in Per Student Spending

(Allegheny County school districts outside Pittsburgh)



Four sets of variables are used to identify and assess disparity:

1) ***An index of local revenue capacity.*** Variation in local revenues is clearly one potential contributor to a disparity between service conditions and service capacity. **As** discussed above, the revenue base of local school districts in Pennsylvania consists mostly of the market value of taxable real estate. The local revenue levels predicted from the districts' property tax base, shown in Table **5.3,** are used here as an index of local revenue capacity. This index permits a direct comparison between revenue capacity and spending.

2) ***Patterns of state and federal assistance.*** Variation in state and federal aid to local districts may serve to reduce inequality in local fiscal capacity, although there also is a potential for increasing the inequality.

3) ***Total spending per student,*** reflecting the aggregate pattern of local, state, and federal revenues for each district. (See Figure 5.1)

4) ***Service conditions.*** Another possible contributor to disparity is variation in student social backgrounds, which, as discussed above, is a major actor in determining the service conditions faced by schools. The predicted performance levels on TELLS 8th grade reading and math exams can be used as an index of service conditions, measured in terms of the predicted impact on performance. Scores for 1984-85 and 1985-86 are averaged for this purpose. The index permits a direct comparison between expected and actual performance.

Tables 5.4 and 5.5 display the scores on each variable for ten districts at the ends of each distribution, including those districts that lie more than one standard deviation above or below the mean. The latter districts are considered as the ***most*** disadvantaged (Table 5.4) or advantaged (Table ***5.5)*** on each variable. The interesting relationships are those between the fiscal variables (revenue capacity, intergovernmental aid, and total spending) and service conditions.

As can be seen in Table 5.4, nearly all the districts that are among the most disadvantaged in local revenue capacity remain the most disadvantaged in total spending. Patterns of state and federal assistance do little to alter the relative position of the most disadvantaged districts. Still, state assistance in particular tends to flow in greatest amounts to districts that are lowest in revenue capacity, with the exception of Pittsburgh.

Turning to Table ***5.5,*** two of the four districts with greatest revenue capacity are absent among the districts highest in total spending. These two districts—Quaker Valley and North Hills—are among the districts having the lowest tax effort in the county. Moon Township, while below average in revenue capacity, is the only district to lead Pittsburgh in tax effort and, for this reason, is found among the highest spending districts. Despite a below average tax effort, Woodland Hills combines a better than average revenue capacity with better than average state and federal aid to join the group of highest spending districts.

Fiscal disparity depends on cumulative disadvantages between fiscal conditions and service conditions. Table **5.4** shows a considerable overlap between those districts lowest in revenue capacity and ***those most*** disadvantaged by service conditions. Duquesne, Sto-Rox, and Clairton are among the most disadvantaged in terms of predicted performance in reading and math, as well as in revenue capacity. McKeesport, also among the most disadvantaged on both service condition indicators, lies just inside one standard deviation below the mean in the fiscal capacity indicator. Wilkinsburg, disadvantaged in the reading indicator, is also well below average in revenue capacity. Steel Valley is close to the average. Only Pittsburgh among the districts most disadvantaged by service conditions is also among the highest spending districts (Table ***5.5).*** In terms or numbers of disadvantaged students, the greatest number by far are serviced by the Pittsburgh district.

Comparing service conditions to total spending, the greatest disparities are found in Duquesne and Clairton, both located in the economically depressed Mon Valley. Both districts are Socially disadvantaged, and both lie more than 1.75 standard deviations below the mean in total spending per student. Yet their levels of state assistance are well within a single standard deviation of the mean.

Federal aid to Allegheny County schools is oriented more toward assisting districts with relatively poorer social conditions, while state aid gives more dollars per student to districts with low revenue capacity. The districts that are most disadvantaged by federal aid, including Pittsburgh, are all considered to be socially disadvantaged. Those most advantaged by state aid are considered to be disadvantaged in terms of revenue capacity, Pittsburgh excepted. Given the strong association between social disadvantage and performance, federal aid seems to be more closely related to improving performance, while state aid **is** more closely related (though not entirely) to achieving greater fiscal equity. The much larger amount of state aid gives the state distribution system greater weight in determining the overall financial position of each district.

In sum, fiscal and social inequalities among school districts in Allegheny County are only partially cumulative. In several cases, low revenue capacity and low total spending combine with difficult service conditions. In Pittsburgh, where the greatest number of disadvantaged students live, local revenue capacity, local tax effort, and state aid combine to avoid a potential disparity between resources and needs, at lest compared to other districts.

SUMMARY

Public education in Allegheny County joins a large number of relatively small school districts (outside Pittsburgh) to a rich an3 varied array of organizational ties and overlays. School districts tend to be community based, reflecting their historical tie to municipal incorporation. Since the school district consolidations of the 1960s, however, most districts now serve more than one municipality. There is a strong tradition of cooperation among the 42

Table **5.4**

Disparities among School Districts in Allegheny County—Potentially Disadvantaged Districts

(dollars per pupil)

Revenue Capacity		Total Spending		Intergovernmental Aid				Service Conditions			
District	**Predicted Local Revenue**	**District**	**Spending**	**District**	**State Aid**	**District**	**Federal Aid**	**District**	**Predicted Math Score***	**District**	**Predicted Reading Score***
						Pittsburgh	329				
						(+3 SD)					
		South Park	2,777	Pittsburgh	1,962	Duquense City	228	Duquense City	55.8 (48.9)	Duquense City	54.8 (57.6)
		Duquense City	3,033			Sto-Rox	217	Sto-Rox	56.7 (52.1)	Clairton	56.1 (58.8)
								Clairton	56.8 (65.0)	Sto-Rox	58.3 (56.6)
										Pittsburgh	58.9 (59.6)
		(–2 SD)		(+2 SD)		(+2 SD)		(–2 SD)		(–2 SD)	
Sto-Rox	1,990	South Allegheny	3,113	Plum Boro	1,565	Clairton City	196	Pittsburgh	60.2 (70.6)	Wilkinsburg Boro	68.5 (57.6)
South Allegheny	2,003	Plum Boro	3,124	Deer Lakes	1,526	Wilkinsburg Boro	187	McKeesport	69.4 (64.3)	McKeesport	70.1 (69.2)
Elizabeth-Forward	2,004	Clairton City	3,140	Elizabeth-Forward	1,521	McKeesport Area	173			Steel Val.	71.3 (76.9)
Plum Boro	2,011	Elizabeth-Forward	3,309	West Allegheny	1,488						
Clairton City	2,072	Highlands	3,479	Sto-Rox	1,479						
Highlands	2,221										
Deer Lakes	2,265										
South Park	2,311										
Duquense City	2,380										
(–1 SD)		**(–1 SD)**		**(+1 SD)**		**(+1SD)**		**(–1 SD)**		**(–1 SD)**	
McKeesport Area	2,390	Sto-Rox	3,606	South Allegheny	1,456	Steel Valey	139	Steel Valley	71.2 (72.3)	Highlands	73.4 (77.3)
		West Jefferson Hills	3,664	Wilkensberg Boro	1,451	Moon Area	131	Highlands	71.8 (71.3)	Woodland Hills	74.5 (72.0)
		Deer Lakes	3,666	McKeesport	1,418	Woodland Hills	121	Wilkinsburg Boro	725 (63.0)	Cornell	76.0 (71.8)
				Shaler	1,397	East Allegheny	104	Cornell	73.0 (63.6)	South Fayette	74.0 (74.8)
[mean]	2,963	[mean]	4,446	[mean]	1,184	[mean]	84	[mean]	81.0	[mean]	81.6

*Actual Score in Parenthesis.

Table 5.5

Disparities among School Districts in Allegheny County – Potentially Advantaged Districts

(dollars per pupil)

Revenue Capacity		Total Spending		Intergovernmental Aid				Service Conditions			
District	Predicted Local Revenue	District	Spending	District	State Aid	District	Federal Aid	District	Predicted Math Score*	District	Predicted Reading Score*
[mean]	2,963	[mean]	4,446	[mean]	1,184	[mean]	84	[mean]	81.0	[mean]	81.6
Mt. Lebanon	3,275	Chartiers Valley	4,363	Chartiers Valley	978	Quaker Valley	41	West Jefferson Hills	87.9 (89.6)	Plum Boro	87.9 (85.0)
North Allegheny	3,359	Quaker Valley	4,400	Montour	930	Plum Boro	40	Brentwood Boro	88.7 (89.6)	West Jefferson Hills	88.0 (87.5)
Upper St. Clair	3,399	Avonworth	4,433	North Hills	920	Bethel Park	38	Gateway	88.8 (90.1)	Moon Area	88.0 (94.6)
Montour	3.455	Bethel Park	4,480			North Allegheny	32	North Hills	89.1 (87.9)	North Hills	88.9 (87.3)
Chartiers Valley	3.558					Hampton Township	31	Hampton Township	89.2 (88.8)	Hampton Township	89.6 (92.4)
Allegheny Valley	3,679					Pine-Richland	29	Pine-Richland	89.6 (94.5)	Pine-Richland	90.3 (90.5)
						West Allegheny	28				
						Mt.. Lebanon	27				
(+1 SD)		**(+1 SD)**		**(-1 SD)**		**(–1 SD)**		**(+1 SD)**		**(+1 SD)**	
North Hills	3.698	Mt. Lebanon	4,509	Fox Chapel Area	893	Elizabeth Forward	16	Bethel Park	93.5 (88.1)	North Allegheny	92.2 (95.8)
Cornell	14,086	Woodland Hills	4,546	North Allegheny	870	Upper St. Clair	15	North Allegheny	94.0 (94.5)	Bethel Park	93.0 (90.5)
		Moon Area	4,690	Cornell	869			Upper St. Clair	99.3 (96.9)	Mt. Lebanon	98.0 (96.1)
		Fox Chapel Area	4,943	Allegheny Valley	868			Mt. Lebanon	100.0 (97.6)	Upper St. Clair	98.6 (95.6)
				Upper St. Clair	782						
				Mt. Lebanon	760						
(+2 SD)		**(+2 SD)**		**(–2 SD)**							
Quaker Valley	4,340	Pittsburgh	5,256	Quaker Valley	480						
Fox Chapel Area	4,814	Cornell	5,322								

*Actual Score in Parenthesis.

suburban districts. A notable example is jointures for the provision of vocational-technical education and facilities for special education. The Allegheny Intermediate Unit serves all the districts outside Pittsburgh, producing direct services for special education students (and vo-tech students in one case), plus a range of indirect services. Most recently, the Mon Valley Consortium was launched to foster school improvement in an economically depressed portion of the county.

The jointures and AIU represent contrasting institutional approaches. Jointures are organized under terms of state law, but are set up at the initiative of local districts and are governed by them, without any intervening process of election and representation. AIU, in contrast, was established by state law and, while governed locally, elects a governing board from among school directors. With respect to vo-tech education, jointures bill school districts for services. AIU receives its funds directly from the state, and each school district's portion is deducted from its state aid allocation. AIU is more autonomous than jointures in governance and finance.

A key question in the evaluation of a public economy is the extent to which public entrepreneurship is able to emerge as a spur to innovation. Evidence of entrepreneurship is found in AIU and in jointures. The recent organization of administrative consortia within AIU and the development of alternative high schools by two jointures are important instances of entrepreneurship. Perhaps the most prominent example is found in the work of the Mon Valley Education Consortium. In this instance, a citizen entrepreneur—acting from outside the school system—has put together an organization that ties together 20 districts in three counties, forming a network that links schools with communities in efforts to nurture classroom and school improvement.

For many years, school district consolidation has been assumed to have automatic benefits. One of the benefits—access to expertise and specialized academic support services—is available to Allegheny County districts by virtue of AIU and other consortia. Jointures produce specialized educational services, another presumed consolidation benefit. Moreover, as this analysis shows, small school districts in Allegheny County cannot be presumed from their small size to be inadequate on at least one important indicator of school performance: the number of 8th grade pupils who perform at minimum achievement levels. Automatic minimum size thresholds for school district consolidation do not fit comfortably with the inconsistent relationship of district size to performance.

An analysis of disparities across school districts between revenue capacity and spending per student and service conditions yields mixed conclusions. For the vast majority of students in the county at the extreme low end of the service conditions distribution, there is no obvious disparity. This is due to the spending level of the Pittsburgh district that results from a combination of local revenue capacity, tax effort, and state aid. Serious disparities nevertheless remain, affecting small numbers of disadvantaged students in a few small suburban school districts. The Duquesne and Clairton school districts are the most severely limited in their capacity to respond to their relatively poor service conditions, as measured by students' social background. Compared to total county spending on education, the amount of money necessary to address these remaining disparities would be quite small.

The cause of these remaining fiscal disparities is ambiguous. If schools were funded exclusively or predominantly from local dollars, one might accurately attribute the cause to jurisdictional fragmentation. Yet roughly one-third of the revenue available to Allegheny County schools comes from the state, allocated by state formulas. One of the purposes of state aid is to correct for financial disparities. Failure to do so might be attributed to the way in which state aid is allocated among districts. In the case of schools, this conclusion is at least as plausible as the common argument that fragmentation is to blame for fiscal disparities.

Notes

[1] The policy connecting the formation of school districts to municipal incorporation dates to an act of the state legislature in 1911.24 Pennsylvania Statutes 2-201, 2-241.

[2] Ibid., 2-201, 242.1.

[3] Ibid., 2-226.

[4] Ibid., 2-224.

[5] Northern Area Special Purpose Schools, Articles of Agreement: Alternative High School (July 1, 1981).

[6] David B. Tyack, *The One Best System: A History of American Urban Education* (Cambridge, Massachusetts: Harvard University Press, 1974).

[7] See, for example, Herbert J. Kiesling, *A Study of Cost and Quality of New York School Districts* (Washington, DC: U.S. Department of Health, Education, and Welfare, Office of Education, 1970); and William A. Niskanen and Mickey Levy, "Cities and Schools: A Case for Community Government in California," Working Paper No. 14 (Berkeley: University of California, Graduate School of Public Policy, 1974).

[8] Robert E. Klitgaard and George R. Hall, "A Statistical Search for Unusually Effective Schools," in William B. Fairly and Frederick Mosteller, eds., *Statistics and Public Policy* (Reading, Massachusetts: Addison-Wesley, 1977), p. 5.

[9] This widely accepted premise can be traced to the so-called Coleman Report of 1966. See James B. Coleman et al., *Equality of Educational Opportunity* (Washington, DC: U.S. Department of Health, Education, and Welfare, Office of Education, 1966). See also Harvey A. Averch et al., *How Effective Is Schooling?* (Santa Monica: The Rand Corporation, 1972).

[10] The sign of the zero-order relation between percentage over age 65 and performance is negative, but the sign becomes positive in the service condition model.

[11] For poverty rate, $r = -0.880$ and -0.875 for 1984-85 and 1985-86 test scores, respectively. For percentage of high school graduates, $r = 0.839$ and 0.801, respectively. The correlation between poverty and high school graduation is -0.769.

[12] This interpretation assumes that the service-conditions model is correctly specified and should be viewed with caution. Sorting out the effects of community context from the effect of in-school activities on student performance presents difficulties. The service-conditions model used here, while it explains a large percentage of the variance in student Performance levels, no doubt fails to capture all of the effects of community. Presumably, there is also some degree of school-community interaction, especially over the long term (i.e., good schools

build strong communities and strong communities help sustain good schools). Some of the effect attributed here to school effectiveness may in fact be linked to other community attributes or to the joint effects of school and community. The more limited model is used here to avoid over-controlling in ways that would not allow the in-school effects to be detected. For a discussion and application of this approach to identifying effective schools, see Klitgaard and Hall, pp. 51-86.

[13] The correlation coefficients (and associated probabilities) relating ADM to each of the performance indicators for the 42 suburban districts are as follows: Reading 1984-85, r = +.20 (.19); Math 1984-85 = +.32 (.04); Reading 1985-86, r = .33 (.03); Math 1985-86, r = +.20 (.20). Adding Pittsburgh to the analysis changes three of the four coefficients from positive to negative, but none of the relationships are statistically significant.

[14] One possibility is that size has a nonlinear or threshold effect. Logically, it is possible that none of the districts outside Pittsburgh are large enough to make a significant difference in performance, but this contingency cannot be examined from the Allegheny County data alone. The possibility is nonetheless rather unlikely considering the evidence from large-scale empirical studies. See Note 6.

[15] One potential problem with a comparison of residuals is that districts that have relatively low predicted scores have more "room" to do better, so to speak, than districts with high predicted scores. To take an extreme example, a district with a predicted score of 99.9 can have a positive residual of only 0.1, while its negative residuals can be much larger, potentially 99.9. For this problem to affect the analysis by truncating the positive residual for a district, it would be necessary to have an observed score of 100 percent. No such score occurs. The regression model does predict perfect scores in three instances, but each time the district performance is somewhat less than perfect, resulting in relatively small negative residuals.

[16] This conclusion pertains only to performance up to 8th grade. An assessment of high school performance would require additional data.

[17] It can still be argued that consolidation may have an important economic benefit if it lowers the cost per pupil of producing education. Lower costs of producing education do not necessarily imply lower expenditures. Unfortunately, this sort of analysis is difficult if not impossible to conduct. Education is a multidimensional good. The indicator of performance used here measures only one, albeit an important dimension. Even assuming that all of the relevant dimensions can be measured, collapsing them into a single indicator would require assigning weights to the various dimensions. Arguments for local control of education rest in part on a presumption that different communities have different preferences for the various dimensions of the complex good called education. In other words, different communities would assign different weights to different dimensions. Clearly, any given school district would rationally seek to produce the greatest possible amount of education for its level of expenditures. Comparing the degree to which they succeed in doing so is problematic. If preferences vary among districts, it is also possible that different size districts may be appropriate. The approach taken here is more modest. Small districts that spend more or less average amounts per pupil are capable of achieving high levels of performance in meeting minimum standards, controlling for a highly relevant aspect of the local service conditions. Surely the consolidation of such districts should be approached with great caution and not be assumed to be desirable on the basis of enrollment figures alone. This point addresses a pertinent issue of public policy, namely, how to go about making decisions on school district consolidation. Nothing in this discussion should be construed to mean that any particular consolidation proposal would necessarily be unwise.

[18] In general, one can expect the smallest districts to appear more erratic in performance from year to year for statistical reasons. The small per pupil populations in each district increase the likelihood that the 8th grade populations in any one year will be above or below average. Small districts are more likely than large districts to experience wider variation in test scores from year to year. This does not mean that small districts are less consistent educationally than large districts, only that the overall effect of service conditions on small districts is more variable.

[19] See James B. Coleman, "Social Capital in the Creation of Human Capital," *American Journal of Sociology* 94 Supplement (1989): pp. S95-S120. See also Coleman and T. B. Hoffer, *Public and Private Schools: The Impact of Communities* (New York: Basic Books, 1987).

[20] The procedure is for the state to allocate money directly to special education centers and for each district to pay tuition to the state equal to the cost of educating a regular student. The actual amount of money available for distribution is determined *by an annual allocation in the governor's budget. In practice, school districts have accepted a larger percentage* of the operating cost than apparently prescribed by state law. Emerging litigation is challenging this practice.

[21] Weighted average daily membership. See discussion of state aid formulas.

[22] Given Pittsburgh's heavier reliance on Act 511 taxes, property values may underestimate the city's actual revenue base.

[23] This yields a coefficient of variation of 11.89 percent. In other words, the "average" distance of students from the mean is just under 12 percent of the mean.

Chapter 6

The Political Economy of Allegheny County

INTRODUCTION

This chapter presents an analysis of fiscal relationships among governmental units in Allegheny County. Four broad questions are examined:

1) Is there a relationship between population and expenditures for public services among the many, relatively small municipal governments?

2) What is the distribution of per capita revenue among municipalities and how is variation in revenue related to jurisdictional socioeconomic characteristics?

3) What is the distribution of residential tax burdens among municipalities and how is variation in tax burden related to jurisdictional socioeconomic characteristics?

4) What is the distribution in per pupil revenue among school districts and how is variation in per-pupil revenues related to district socioeconomic characteristics?

The first question addresses governmental efficiency, while the other three are related to fiscal equity. Answers to these questions provide limited information on these issues. Analyses based on revenue and expenditure data alone cannot be definitive—measures of service and of citizens' preferences are also needed—but patterns of fiscal relationships can indicate efficiency and equity problems.

Economic development issues are considered briefly, including recent efforts to address the serious decline in heavy manufacturing in parts of the county and its surrounding region, and to facilitate economic restructuring.

POPULATION SERVED AND MUNICIPAL EXPENDITURES

An important evaluative criterion for local government systems is efficiency in producing public services. Complex, fragmented systems like Allegheny County often are alleged to be inefficient because they contain many small municipalities that are unable to capture scale economies if they produce services by themselves, and to coordinate efforts through interjurisdictional production arrangements.[1]

Those who make this argument commonly claim that productive efficiency could be enhanced by consolidating small municipalities. The resulting larger municipalities should, by this argument, exhibit lower per capita expenditures for a given service level than municipalities with smaller populations. On the other hand, most economic analyses of population size economies for local government services have not found this relationship.[2]

Those who fault the production capacity of small jurisdictions miss the important distinction made in Chapter 1 between service provision and service production. Many communities are too small to efficiently organize *production* of a service or a service component. But efficient production may still be possible by arrangement with a larger scale producer, or jointly with other communities through contracting, multijurisdictional production, or overlapping production districts. A community also can be too big to organize production efficiently if it has a large, inefficient bureaucracy. In such a case, services can be provided more efficiently by contracting with smaller, competitive producers. The scale of provision need not and often should not match the scale of production. There is, therefore, no reason to anticipate significant population size economies for local government services.

The relationship between municipal population and service expenditures is affected by a variety of factors, including (1) returns to scale in production (positive and negative); (2) availability and choice of production arrangements sensitive to returns to production scale for small and large provision units; (3) returns to scale in consumption, including both non-rivalry and congestion effects; (4) externalities associated with population size; and (5) political effects of interest groups and municipal bureaucracies that vary with population size. The empirical relationship between per capita expenditures and population is, therefore, better termed "returns to population size" to distinguish it from returns to production scale or the more common usage, "economies of scale."[3]

To estimate the empirical relationship between per capita municipal expenditures and population in Allegheny County, we specify a reduced-form model including four exogenous variables—local personal income per capita [Y], intergovernmental aid received per capita [A], the tax price paid for services by the median resident [t][4], and population [n].[5] The model can be written in constant elasticity form as:

$$E/n = b_0 * Y^{b1} * A^{b2} * tb3 * n^{b4},$$

where b^1 through b^4 are elasticities of spending with respect to income, aid, tax price, and population, respectively. The

elasticity of spending with respect to a particular independent variable is the percentage change in per capita expenditure associated with a 1 percent change in that variable.

Income, intergovernmental aid, and tax price are variables commonly associated with demand for public services, while population is commonly associated with service cost or supply. In this reduced-form model, obtained by combining multiple equations representing service production, cost, demand, and other factors, the elasticities cannot be interpreted directly in supply, demand, or cost terms, but represent their combined effects? Still, those interested in what affects public service spending in Allegheny County and, especially, whether there are indications of returns to population size, will find estimates of the coefficients informative.

Taking logarithms of both sides of the equation and adding additional environmental factors to account for their effects, if any, on service costs, yields a log-linear estimating equation:

$$\log (E/n) = \log b_0 + b_1 \log Y + b_2 \log A + b_3 \log t + b_4 \log n + \Sigma b_j S_j$$

where the S_j are the added factors. Conventional expectations for coefficient estimates in a model like this are b_1, $b_2 > 0$, per capita spending higher as per capita income or per capita aid is higher, and $b3 < 0$, per capita spending lower as the tax price paid by residents is higher. It is possible to develop these expectations from economic theory, but for our purposes ordinary intuition should suffice. Higher income and/or higher per capita intergovernmental aid increase the budget available for purchase of local public services, and higher spending should be expected. A higher tax price for services reduces demand for them, with lower spending expected.

The expected sign of b_4, per capita expenditure elasticity with respect to population size, is ambiguous for reasons noted above. Population size in this model, therefore, is treated as an environmental cost factor similar to other Sj factors, but without specification of its anticipated relationship to per capita expenditures. If our empirical estimate of b_4 turns out to be negative, this would indicate increasing returns to population size or—in everyday language—the possibility of reducing expenditures by combining governments and increasing the population served by each remaining municipality. If the empirical estimate is positive, decreasing returns to population size are indicated—suggesting that combining governments could increase rather than reduce expenditures.

Expectations for other environmental cost factors, b_j, $j > 4$, depend on the particular Sj variables selected for inclusion. In the present analysis, five socioeconomic factors are considered—population density, the ratio of employment in a municipality to residential population, percentage of housing built before 1940, percentage of families living below the poverty level, and percentage change in jurisdiction population from 1980 to 1985. Low density should be associated with higher expenditures for dispersed facilities, transportation, and coordination, while high density should be associated with higher expenditures due to crowding effects. A high ratio of employment to population indexes a need to provide services for significant numbers of nonresidents and is expected to have a positive association with per capita expenditures. The percentage of housing built before 1940 is a proxy for deteriorating housing and infrastructure age, and is expected to be positively associated with expenditures. The poverty variable measures the relative size of a city's disadvantaged population and also is expected to be associated positively with expenditures. Population growth may require increased expenditures to extend services or it may allow spreading of service costs across additional residents—most likely both. Per capita expenditures may also be higher (lower) in shrinking (growing) communities if changes in service levels lag behind changes in population size. Because of these mixed possibilities, no expectation for the sign of the population change coefficient is specified.

In Chapter 4, this model was used to explore whether returns to population size (increasing or decreasing) were indicated in police and street service expenditures. Here, we examine whether returns to population size are indicated across a broader range of "common" service expenditures—common in the sense that most municipalities in the county spend significant amounts in the categories included. Common expenditures for this purpose are computed by exclusion, calculated as total reported expenditures in 1985 *minus* expenditures for public service enterprises, sewer and sanitation services, refuse collection, and fire services. Expenditures in these latter categories were excluded because of significant variation in funding.

Coefficient estimates for the model are listed in Table 6.1.' The first column contains elasticity estimates from the log-linear model. The second column presents coefficient estimates from a linear-additive, rather than log-linear form of the model. That is, the same variables are used for estimating purposes, but without the logarithmic transformation of the base model. The coefficients in column two, therefore, are to be interpreted as partial effects rather than elasticities. They represent the dollar change in per capita expenditures associated with a one unit change in each independent variable, holding the other variables constant.

The coefficient estimates show per capita expenditures for common local services to be positively related to income and intergovernmental aid, and negatively related to tax price, as anticipated above. These effects are significant both in magnitude and by statistical test in either model specification. Among environmental cost factors, the ratio of employment to residential population in a municipality has a strong, positive association with per capita expenditures in both specifications. Population density, percentage of housing built prior to 1940, and percentage of the population living in poverty have modest positive elasticities, but only the percentage of housing built prior to 1940 shows a significant, positive partial effect. Change in municipal population from 1980 to 1985 shows no effect in the log-linear specification, but has a significant negative partial effect. There is no indication of returns to population size in either equation estimates. Population elasticity and partial effects are small and not statistically significant. In other words, after accounting for important

Table 6.7
Per Capita Expenditure Elasticities and Partial Coefficients for Common Local Services in Suburban Municipalities', 1985

	Log-Linear Elasticities	Linear Partials
Resident Population (1,000s)	0.006	0.447
	(0.26)[2]	(1.03)
Per Capita Income (1,000s)	0.968*	10.9*
	(9.79)	(9.02)
Tax Price	-0.340*	-0.028+
	(3.56)	(2.30)
Per Capita Intergovernmental Aid	0.176*	0.407+
	(3.30)	(2.10)
Employment to Population Ratio	0.092+	64.9*
	(3.16)	(4.30)
Density (1,000s per square mile)	0.059+	1.428
	(2.28)	(0.45)
Percent of Housing Built before 1940	0.003+	0.674'
	(2.11)	(2.74)
Percent of Families with Incomes below Poverty Level	0.013'	0.530
	(2.40)	(0.54)
Percent Change in Population 1980-85	-0.002	-1.090+
	(0.64)	(1.93)
Intercept	-2.209	8.483
	(1.78)	(0.30)
R^2 (adjusted)	0.59	0.56

[1] 123 suburban municipalities. Common expenditures exclude those for public service enterprises, sewers and sanitation, refuse collection, and fire protection.

[2] (t-statistic for parameter estimates)

* Significant at $p < .001$.

+ Significant at $p < .05$.

factors other than population size, per capita expenditures are unrelated to jurisdiction population.

This finding of no size effect on local expenditures among Allegheny County's municipalities implies that, in part because of overlapping structures and the availability of services from the county (see Chapters 2 and 4), they do not suffer generally from inefficiencies related to size. This does not mean that all municipalities are equally efficient. Communities of the same size have different per capita expenditures, indicative of differences perhaps in service preferences but also in efficiency. Our analyses demonstrate only that per capita expenditures are not related to jurisdiction size and that the *system* of small municipalities in the county exhibits neither positive nor negative returns to population size.

Some additional caveats are in order. First, there are no indicators of service quality in our analyses. If, for example, service quality increases systematically with the number of persons served, then a finding of relatively constant per capita expenditure across communities of different population size indicates size economies—quality is higher in larger communities while per person expenditure remains the same. The reverse is true if service quality decreases systematically with number of persons served. In this latter case, relatively constant per capita expenditures across communities of different population size would indicate diseconomies of size, as service quality is lower in larger communities for a given per capita expenditure. Without quality indicators, these possibilities could not be addressed.

We should also note that scholars at the Center for Public Financial Management at Carnegie Mellon University in Pittsburgh present analytic results at odds with those in this section. In a recent paper, they use a curvilinear regression of 1980 municipal expenditures on 1980 population to estimate the expenditure/population size relationship, not accounting for differences in income, tax price, intergovernmental aid, or other factors. They report returns to population size, with an estimated optimal community size in Allegheny County of approximately 12,000 residents and estimated savings of 7.45 percent of 1980 expenditures had all suburban municipalities been this optimal size. Taking into account county topography and the possibility of consolidating adjacent municipalities while meeting some reasonable socioeconomic criteria, the Carnegie Mellon researchers estimate an optimal configuration of 65 municipalities to have afforded savings of 1.65 percent of 1980 expenditures?

The Center's estimation approach differs from ours by its failure to include variables associated with service demand or supply other than population size. We attempted to replicate their result by adding a curvilinear term to our estimating equations, but failed to obtain a similar effect. Neither population size nor its square were related to per capita expenditures in our models that included income, tax price, intergovernmental aid, and environmental cost factors. We also attempted but failed to replicate the curvilinear relationship using 1985 population and population squared alone to estimate 1985 expenditures. In our estimate, population and population squared were related positively to expenditures? We have no explanation for this latter difference from the Center's results.[10]

MUNICIPAL FISCAL VARIATIONS

Fiscal variations (i.e., significant differences in the amounts of revenue raised by different jurisdictions) are virtually inevitable in complex local public economies. These variations result partially from differences in revenue sources that can be tapped for local purposes, but they also reflect differences in costs of public services and the willingness of citizens to tax themselves for public service provision. Fiscal variations demonstrate inequality—per capita amounts of revenue raised are not equal across communities. Whether fiscal variations also demonstrate inequity requires careful consideration.

Unequal amounts of public revenues raised by two otherwise comparable communities suggest a difference in preferences for public services between the two communities. Given the same revenue base and cost of public services, a community that raises greater revenues exhibits a stronger preference for services than does its neighbor that raises lesser revenues. If each community had access to revenue bases with similar characteristics (e.g., resident incomes, taxable property, etc.), the fact that they raised different revenues would be no cause for concern.

Table 6.2

Factors Explaining Variation in Per Capita Own Source Revenues [R_o] of Suburban Municipalities', 1985

Equation I: Per Capita Income [Y_p]

$$R_o = \underset{(2.56)}{48.7} + \underset{(8.05)}{12.6} * Y_p \qquad R^2 = 0.34$$

Equation II: Per Capita Income [Y_p] and Per Capita Market Value of Nonresidential Property [NR_p]

$$Ro = \underset{(1.34)}{23.6} + \underset{(8.76)}{12.3} * Y, + \underset{(5.51)}{7.03} * NR, \qquad R' = 0.47$$

[1] 123 suburban municipalities. Own-source revenues exclude intergovernmental aid and revenues from public service enterprises. Figures in parentheses are t-statistics for the regression coefficients.

Indeed, it could be an advantage because citizens could choose between a high tax, high service community and a low tax, low service community.

Just as all individuals or households do not have the same incomes, all communities do not have access to comparable revenue bases. Some are home to residents with high taxable incomes, others have large amounts of taxable real property. Some have both, some have neither. Communities differ on factors that affect the cost of providing public services—large, nonresident working or shopping populations, for example—and the revenue raised. Communities differ in their citizens' preferences for public services and willingness to pay for them. These differences can confound analyses that attempt to link revenue bases to revenues actually raised. Still, exploration of this linkage and how it relates to other community characteristics can be informative. One can ask, for example, whether there are patterns of cumulative advantage or disadvantage across communities by analysis of how municipal revenues and revenue bases are related to citizen and community characteristics.

In search of patterns of cumulative advantage or disadvantage, we examine variations in two fiscal indicators. The first is per capita own-source revenue of suburban municipalities; the second, the percentage of household income represented by earned income and real estate taxes imposed by municipalities on their residential households. We relate variations in each of these indicators to variations in revenue bases available to the municipalities and to additional socioeconomic characteristics.

Variation in Own-Source Revenues

Own-source revenues of suburban municipalities in 1985 ranged from less than $90 per capita in Wall, South Versailles, Fawn, Frazer, West Elizabeth, and Forward to more than $400 per capita in Thornburg, Fox Chapel, Edgeworth, Rosslyn Farms, Neville, and Sewickley Heights. Per capita own-source revenues are associated significantly with two indicators of municipal revenue base—per capita income ($r = 0.59$) and per capita market value of real property ($r = 0.63$).[11] Given the municipalities' reliance on revenue from the earned income and real estate taxes (see Chapter 2), these associations are to be expected. The two revenue base indicators are correlated highly across the municipalities ($r = 0.73$), but this correlation masks an additional distinction between residential and nonresidential property. Per capita market value of residential property is correlated so strongly with per capita income ($r = 0.90$) as to be virtually indistinguishable from it in statistical analyses." Per capita value of nonresidential property, on the other hand, is unrelated to per capita income ($r = 0.04$), but is associated significantly with per capita own-source revenue ($r = 0.38$).

Variation in per capita income across the suburban municipalities accounts for 34 percent of the variation in their own-source per capita revenue (Table 6.2, Equation I). This represents the direct effect of income on revenue through the earned income tax and income's indirect effects through real estate taxes on residential property, other taxes, and charges. Adding per capita value of nonresidential property to the estimating equation increases the variance explained to 47 percent (Equation 11). This latter indicator captures direct revenue effects of real estate taxes on nonresidential property and indirect effects from other taxes and charges associated with the use of nonresidential property.

The strength of these two indicators in explaining own-source revenues and their statistical independence from one another suggest their use to classify suburban municipalities. Communities can be categorized as having low or high personal income and, separately, as having low or high nonresidential property value, based on whether their income and property values fall below or above the median values for county municipalities. Arraying the two categorization schemes orthogonally yields a four-fold typology of municipalities:

- ***Group 1:*** 34 communities with low per capita income and low nonresidential property values, home to 19 percent of the suburban population.
- ***Group 2:*** 28 communities with low per capita income but high nonresidential property values, with 16 percent of the suburban population.
- ***Group 3:*** 27 communities with high per capita income but low nonresidential property values, with 28 percent of the suburban population.
- ***Group 4:*** 34 communities with high income and high nonresidential property values, with 37 percent of the suburban population.

The first group of municipalities is disadvantaged with

Table 6.3

Average Per Capita Revenues by Source for Suburban Municipalities in Each Revenue Base Group', 1985

	Average Group 1	Average Group 2	Average Group 3	Average Group 4	Average Group 1	Average Group 2	Average Group 3	Average Group 4
	Total Own Source				*Real Estate Tax*			
Per Capita	$147	$195	$209	$233	$68	$97	$98	$102
Standard Deviation	(55)	(55)	(67)	(87)	(27)	(39)	(56)	(61)
	Earned Income Tax				*Total Other Tax*			
Per Capita	$28	$26	$53	$50	$8	$14	$15	$22
Standard Deviation	(8)	(8)	(16)	(23)	(6)	(10)	(8)	(19)
	Miscellaneous Charges/Other				*Intergovernmental Revenue*			
Per Capita	$42	$59	$43	$58	$30	$39	$25	$24
Standard Deviation	(36)	(42)	(29)	(35)	(18)	(29)	(21)	(6)

[1] 123 suburban municipalities.

respect to both revenue bases and indeed raises smaller revenues, averaging $147 per capita from own sources (Table 6.3). The fourth group has advantageous revenue bases and raises an average of $233 per capita from own sources. Groups 2 and 3 occupy middle grounds, with averages of $196 and $209 per capita, respectively.

The groups differ in their per capita revenues by major source (Table 6.3). Per capita revenues from the real estate tax in Group 1 communities average two-thirds of those in the other groups, each of which averages about $100 per capita. Average revenues from the earned income tax differ across groups on the income dimension but are not related to presence or absence of nonresidential property (Group 3 and Group 4 municipalities had nearly twice the per capita revenues from this tax as did those in Groups 1 and 2 communities). Average per capita revenues from other taxes are positively related to both income and nonresidential property values. Average per capita revenues from charges and miscellaneous sources are related somewhat to the value of nonresidential property, but not, on average, to differences in per capita income.

Intergovernmental aid revenues per capita tend to be slightly higher in lower income communities, but not those with the least advantageous revenue bases. Communities in Group 2—where average incomes are low but nonresidential property values are high—obtain more intergovernmental aid per capita on average than do their less advantaged Group 1 neighbors. This reflects the fact that aid is distributed to support infrastructure development and other purposes in addition to redistribution.

Indicators of community characteristics less directly related to community revenue bases show, not surprisingly, substantially weaker associations with per capita own-source revenue (Table 6.4). Among the simple correlations, only those with percentage of families living below poverty in 1979 ($r = -0.21$) and ratio of employment to resident population ($r = 0.39$) are significant statistically or substantively. The partial correlation and regression coef-

Table 6.4

Relationships of Community Characteristics with Per Capita Own Source Revenues in Suburban Municipalities', 1985

Community Revenue Characteristic	Relationship with Per Capita Own Source Revenue: Zero-Order[2] Correlation	Partial[3] Correlation	Regression[4]	(t-statistic) Coefficient
Percent of Families with Incomes below Poverty Level	−0.21+	0.19+	2.51'	(2.12)
Percent Minority Population	0.00	0.21+	1.43+	(2.36)
Percent Population over 65 Years Old	0.01	0.28*	2.59+	(3.20)
Density (1,000s per square mile)	−0.04	0.25*	4.89+	(2.86)
Percent of Housing Owner Occupied	0.11	−0.27*	−1.13+	(3.08)
Percent of Housing Built before 1940	−0.03	0.34*	0.87'	(3.92)
Percent of Housing Built after 1970	−0.07	−0.34*	−1.79'	(3.88)
Employment to Population Ratio	0.39*	0.28*	81.0+	(3.13)

[1] 123 suburban municipalities.

[2] Pearson correlation with per capita own-source revenue.

[3] Pearson partial correlation controlling for per capita income and per capita market value of nonresidential property.

[4] Regression coefficient when added to equation including per capita income and per capita market value of nonresidential property.

* Significant at $p < .001$.

\+ Significant at $p < .05$.

ficients—alternative means of attempting to adjust for per capita income and nonresidential property value differences—reveal additional statistically significant effects.

After adjustment for differences in the principal variables affecting own-source revenue—per capita income and market value of nonresidential property—per capita revenue tended to be higher in communities with greater percentages of poor, nonwhite, and elderly residents, communities that were more densely populated and had older housing stock, and communities that were significant employment centers. Again, after this adjustment, per capita own-source revenues were lower in communities with greater percentages of owner-occupied housing and newer housing stock. However, all of these relationships are substantively modest and the variables considered add little to our explanation for variations in per capita own-source revenue.

Own-source per capita revenues of suburban municipalities in 1985 were principally a function of two revenue base indicators—residents' per capita income and per capita market value of nonresidential property. As these indicators of revenue base exhibit wide variation across the municipalities, so too do the own-source revenues they raise. In 1985, intergovernmental aid served to reduce overall revenue variation slightly, but left a number of communities with per capita revenues well below those of their neighbors in the county. Nineteen percent of the suburban population resided in 34 communities—identified above as "Group 1"—that had especially low values for revenue base indicators, correspondingly low own-source revenues, and received about average per capita intergovernmental revenue. If Allegheny Countians or citizens of Pennsylvania were to consider this evidence of inequity in the county's fiscal system and chose to remedy it by subsidizing Group 1 communities, the cost would not be overly high. Additional aid averaging $57 per capita targeted to Group 1 communities would have been required in 1985 to bring their total per capita revenues up to the average in Groups 2 and 3. In total, this would have cost $10.5 million, an increase of 36 percent in overall intergovernmental aid to county suburbs, or about 5.5 percent of own-source revenues of the suburban municipalities.

Variation in Household Tax Costs

The two principal municipal taxes raised directly from households in Allegheny County are the earned income tax and the real estate tax on residential property (see Chapter 2). All municipalities in Allegheny County impose an earned income tax, which is collected from residents of a community regardless of where their incomes are earned. Dividing total earned income tax revenues of a municipality by the number of households it contains yields an estimate of the cost to an average household revenue from this tax.[13]

The highest estimated per household cost from the earned income tax in 1985 was $446 in Fox Chapel. Other communities with high per household costs from this tax—over $300—included Thornburg, Ohara, Upper St. Clair, Sewickley Heights, and Pittsburgh. Residents of each of these communities except Pittsburgh had incomes in 1985 substantially above the county average, and this is reflected in their high per household earnings tax costs. Pittsburgh's high per household cost results from its significantly higher earned income tax rate—a factor that also explains in part the higher costs estimated for Ohara and Upper St. Clair.

Communities with low estimated costs per household from the earned income tax are the Mon Valley communities of Homestead, Rankin, Duquesne, Clairton, and Braddock—each of which raised less than $40 per household from this source in 1985. The lowest was that of Homestead, $26 per household.

The real estate tax is collected from residential and nonresidential property. To estimate the per household cost of the real estate tax for an average household in each community, the community's revenue from the real estate tax was first multiplied by the proportion of its assessed valuation which is residential, and then divided by the number of households in the community.[14]

The highest estimated per household costs from the residential real estate tax—more than $500—were in Ben Avon Heights, Fox Chapel, Rosslyn Farms, Thornburg, Edgeworth, and Sewickley Heights (highest at $1,003 per household). The lowest per household costs from real estate taxes—less than $70—were in Sewickley Hills (lowest at $39), Forward, Haysville, Liberty, Plum, and Braddock.

An estimate of the dollar cost paid directly in municipal taxes by an average household in each community may be made by adding the average household cost of the earned income tax to the average household cost of the real estate tax.[15] To increase comparability across municipalities, household costs were adjusted upward to include the cost of trash collection where this appeared not to be a tax supported service.[16]

The lowest estimated total costs per residential household for earned income, real estate taxes, and trash collection and disposal—less than $150—were in Haysville, Braddock, Forward, Wall, Liberty, West Elizabeth, and East Pittsburgh. The highest total costs per household—greater than $1,000—were in Rosslyn Farms, Edgeworth, Thornburg, Fox Chapel, and Sewickley Heights. Pittsburgh's total cost per average household of $630 was among the highest in the county. In addition to the five communities listed above, only two other municipalities had computed total costs higher than Pittsburgh.

Household Cost Burdens

With the exception of Pittsburgh, estimated per household dollar costs from the earned income and real estate taxes and trash charges were roughly proportional to average household income." This indicates that, across suburban municipalities, household tax and trash costs are neither progressive (imposing higher rates on the wealthy) nor regressive (higher rates on the poor). The data do not allow us to examine the possibility of progressive or regressive tax and cost structures within municipalities.

A variable perhaps more relevant for assessing relative advantage and disadvantage than the estimated dollar cost paid by an average household is the percentage of household income required to pay that estimated cost. For ease of reference, we call this percentage the household

Table **6.5**

Relationships of Community Characteristics with Household Cost Burdens in Suburban Municipalities', 1985.

Community Revenue Characteristic	Relationship with Household Cost Burden: Zero-Order[2] Correlation	Partial[3] Correlation	Regression[4]	(t-statistic) Coefficient
Percent of Families with Incomes below Poverty Level	–0.02	0.04	0.002	(0.47)
Percent Minority Population	0.04	0.04	0.001	(0.49)
Percent Population over 65 Years Old	0.22'	0.24'	0.005'	(2.10)
Density (1,000s per square mile)	0.30*	0.34'	0.027*	(3.92)
Percent of Housing Owner Occupied	–0.10	–0.15'	0.003	(1.69)
Percent of Housing Built before 1940	0.29*	0.34*	0.004*	(3.95)
Percent of Housing Built after 1970	–0.40*	–0.43*	–0.009*	(5.28)
Employment to Population Ratio	–0.06	–0.06	–0.045	(0.66)
Per Capita Value of Nonresidential Property	–0.19'	–0.19'	–0.011'	(2.12)
Per Capita Intergovernmental Aid	0.26'	0.26'	0.003'	(3.03)

[1] 123 suburban municipalities.

[2] Pearson correlation with household cost burden (percent of household income).

[3] Pearson partial correlation controlling for average household income.

[4] Regression coefficient when added to equation including average household income.

* Significant at $p < .001$.

+ Significant at $p < .05$.

cost burden. By this measure, the highest household burdens were in Pittsburgh (2.5 percent of average household income) and McKeesport (1.75 percent), followed by West Homestead, Rosslyn Farms, Heidelberg, Osborne, Edgewood, and Pennsbury Village, all over **1.4** percent. The lowest cost burdens—less than 0.7 percent—were in Bradford Woods, Haysville, Aleppo, Pine, Sewickley Hills, East Pittsburgh, Forward, Braddock, and Marshall. High burdens were found in both upper and lower income communities, as were low burdens.

The average household cost burden in the suburban county in 1985 was 0.98 percent of household income, and nearly 80 percent of the suburban population resided in communities with cost burdens between 0.7 and 1.1 percent.'* About 21 percent of the suburban population resided in communities with burdens above this range, and 2 percent in communities with burdens below it.

Household cost burdens were related to some municipal socioeconomic characteristics and not to others (Table 6.5). Neither the percentage of families living below the poverty level nor the percentage of residents who were nonwhite showed any relationship to cost burdens. Burdens were higher in communities with higher percentages of elderly residents, older housing stock, and that were more densely populated. Burdens tended to be lower where housing stock and, most likely, infrastructure were newer and where a larger percentage of residents owned their own homes. The ratio of employment to population was unrelated to household cost burdens, but those communities with higher per capita market values of nonresidential property tended to have somewhat lower burdens, suggesting that they may be able to shift some costs away from residential households.

Intergovernmental aid in 1985 was targeted to some extent on communities with relatively higher household burdens. Percentage burden and total aid per capita correlated at a modest level of 0.26. The 31 municipalities with burdens in excess of 1.1 percent of average household income received an average of **$42** in state-federal nonhighway aid and **$16** in county aid per household, while the 9 communities with burdens less than 0.7 percent of income received an average of $31 per household in state-federal nonhighway aid and no aid from the county.

Patterned Inequalities?

Variation in per capita own-source revenue was found to be closely related to variation in per capita income and per capita market value of nonresidential property in suburban municipalities. Municipalities that had either residents with higher incomes or higher value nonresidential property, or both, raised greater own-source revenues than did municipalities with smaller values for these revenue bases. Variation in the dollar cost imposed on residential households was found to be even more closely related to variation in income. Municipalities whose residents had higher incomes collected more revenue from the earned income tax, the residential real estate tax, or both.

Variation in both fiscal indicators exhibits income neutrality. Communities whose residents have higher incomes have access to greater own-source revenues, but their residents contribute larger amounts to those own-source revenues. The system is one of "market equity" in this sense. Taxable nonresidential property is unrelated to residents' incomes, although it contributes significantly to own-source revenues and is related to lower costs for residential households. Low-income and high-income communities alike benefit fiscally from taxable nonresidential property.

Patterns of fiscal variation with other community attributes, *controlling for income and nonresidential property differences across communities,* indicate that poor and minority populations are slightly advantaged—per capita

own-source revenues are related positively to the percentage of poor and minority residents in a community, but household cost burdens are not. Communities with older housing stock, that are more densely populated, and that have a higher percentage of elderly residents are somewhat disadvantaged. Their per capita own-source revenues tend to be a bit higher than predicted by resident incomes and nonresidential property, but so too are household cost burdens. Their higher revenues presumably derive from the higher burdens paid by residential households, and probably reflect at least in part higher service costs. Conversely, communities with newer housing stock and a higher percentage of owner-occupied housing tend to have lower per capita own-source revenues than predicted by income and nonresidential property, but also to have lower household cost burdens. These patterns may reflect lower service costs and/or stronger resistance by homeowners to costs imposed on residential households.

None of the fiscal patterning with socioeconomic variables other than income is particularly strong. The only significant "patterned inequality" is that communities whose residents have higher incomes tend to have greater own-source revenues to spend for services. The communities most disadvantaged by this patterning are those identified earlier in "Group 1"—communities that combine low resident personal income with small nonresidential property bases. The intergovernmental aid system in the county does not reduce their disadvantage by much. To do so, aid would have to be increased by more than $10 million—a 36 percent increase, with that increase targeted on group one communities.

Pittsburgh: A Special Case

Pittsburgh is among the most advantaged communities in terms of per capita own-source revenues. Only Sewickley Heights and Neville Township scored higher on this indicator in 1985. But the estimated per household cost burden in Pittsburgh, 2.5 percent of average household income, is substantially higher than that found in any suburban municipality. It cannot be determined from this analysis why this burden is so high. One part of the explanation may be that the city is permitted to tax real property at different rates for buildings and land, thus enhancing its ability to export a larger portion of its real estate tax collections than accounted for by the estimate. Pittsburgh included 43 percent of the market value of nonresidential property countywide in 1985, also suggesting a high export potential. To the extent that this is true, our estimate of Pittsburgh's household cost burden from the real estate tax is overstated. Even with a reduced estimate for its real estate burden, however, its total household burden would remain high due to its high earned income tax rate. Because all the municipalities in the county impose earned income taxes, Pittsburgh cannot tax directly the earnings of nonresident workers, relying instead on the occupational privilege tax of $10 per worker as its only direct tax on nonresidents employed in the city.[19]

One factor that may help to account for Pittsburgh's high household burden is the added per resident cost for public services that results from its status as the major employment, shopping, and entertainment center of the county. With just under 30 percent of the county population in 1985, employment in Pittsburgh was roughly half the county total. Pittsburgh employs substantially more police personnel per resident than do most county municipalities, and has one of the few full-time paid fire departments. In addition, salaries and fringe benefits for public employees in Pittsburgh, although not the highest in the county, are in the upper range. The city's large number of public employees, combined with their relatively high salaries and fringe benefits, makes delivery of basic public services relatively more expensive in per resident terms. In 1985, the city's expenditures for general administrative services were 63 percent of the county total, 44 percent for police, 75 percent for fire services, and 43 percent for streets and highways. Pittsburgh also has access to extraordinary revenue sources that may help compensate for (or perhaps even stimulate) its high service expenditures. Its *Act* 511 revenues other than the earned income tax were $49 million in 1985, 90 percent of the municipal total from these taxes. Much of that $49 million must result from taxes paid by nonresidents. Real estate revenues were $93 million, more than half of the county total. More than half of real estate revenue came from nonresidential property, and much of the tax on nonresidential property is almost certainly exported to nonresidents.

The city received two-thirds of the state and federal nonhighway aid distributed in the county in 1985. Its aid revenue of roughly $330 per household contrasts sharply with the average in the suburban county of $39 per household, an advantage of 8.5 to 1. Average households in Pittsburgh pay a higher percentage of their incomes in taxes than do average households in the suburban county, but revenues from nonresident sources are markedly higher in Pittsburgh as well. Thus, Pittsburgh's status as the county's central city is unlikely to be the principal explanation for its high household burden. It is certainly true that the city and its residents would be much worse off fiscally if it were not for the large number of nonresidents who are employed there and who use Pittsburgh's shopping, entertainment, and other facilities.

What may be a more significant factor is the wider array of public services provided by Pittsburgh. The city's library expenditures in 1985 were 56 percent of the total spent by all municipalities; parks and recreation, 68 percent; and health, more than 80 percent.

It may also be that Pittsburgh suffers to some extent from diseconomies of size, incurring extra costs because of its large public bureaucracies. There are several municipalities in Allegheny County that have higher ratios of employment to resident population than Pittsburgh,[20] yet all of their residential tax burdens are substantially lower. This suggests that Pittsburgh's status as a major employment center alone cannot explain its high household burden.

VARIATION IN PER-PUPIL SCHOOL REVENUES

There was much less variance in school district revenues in 1984-85 than in municipal revenues. The South Park district had the lowest revenues per average daily membership (ADM), $3,105 per ADM.[21] Pittsburgh had

Table **6.6** *School*
Revenue Variations in Allegheny County

	Percent of Average Daily Membership (ADM)	Percent of Total Revenues per ADM	Average Revenues per ADM	Range of Revenues
City of Pittsburgh	**23.5%**	**30.1%**	**$5,939**	**—**
County Districts	**76.5**	**69.9**	**$4,221**	**$3,105-$5,175**
Number of Districts		**Variations in County Districts**		
Eleven Lowest in Revenues per ADM	**25.2**	**21.2**	**$3,559**	**$3,105-$3,770**
Next Ten	**24.3**	**23.4**	**$4,072**	**$3,816-$4,345**
Next Eleven	25.0	**26.2**	**$4,434**	**$4,361-$4,512**
Ten Highest in Revenues per ADM	**25.5**	**29.1**	**$4,807**	**$4,528-$5,175**

the highest revenues per ADM at $5,939. This yields a ratio of 1.9 to 1 between the highest and lowest per ADM revenues, contrasting with a ratio of **10.2** to 1 **for** municipal per capita revenues.

Table **6.6** summarizes variation in revenues per ADM among county school districts. The Pittsburgh school district is better funded than any other district in the county. Its revenues per ADM are about 40 percent higher than the average in suburban districts, and 15 percent higher than the best funded suburban district, **Fox** Chapel Area.

Among school districts outside Pittsburgh, the range of variation in revenues per ADM is from $3,105 in South Park to $5,175 in **Fox** Chapel Area. When grouped into quartiles on the basis of average daily membership, the 11 districts with the lowest revenues receive about three-quarters as much revenue as the ten districts with the highest revenues.

Total suburban school district revenue per ADM and revenue per ADM raised locally are both linked tightly to the market value of real property per ADM ($r = 0.82$ for total revenue and $r = 0.92$ for revenue raised locally). These linkages of revenue with property value in suburban school districts are much stronger than similar linkages in suburban municipalities (see above). Variation in market **value** of real property per ADM across suburban districts explains 84 percent of the variation in their local revenues per ADM.[22]

Median household income in each district is also related to suburban school's local revenue per ADM (see Table 6.7), but the relationship is much weaker than among municipalities and becomes insignificant once variation in property values is controlled.[23] Other district characteristics related to local revenues per ADM are the percentage of families with incomes below the poverty level and the percentage of minority residents in the district. Both characteristics are negatively related to district revenues (and to one another with $r = 0.75$), but as the partial correlations and regression coefficients show, the negative relationship is explained by poor and minority residents in districts where property values are lower. After adjustment for property value differences, the percentage of residents who are elderly is related positively to local revenues per ADM.

The simple correlations of aid from federal and state sources with local revenues per ADM indicate compensatory funding—suburban districts raising lower amounts of revenue locally receive higher amounts of aid. The federal aid correlation becomes insignificant once property value

Table 6.7
Relationships of Suburban School District Characteristics with Local School Revenues per Average Daily Membership,[1] 1985

	Relationship with Per Capita Own Source Revenue			
Community Revenue Characteristic	**Zero-Order[2] Correlation**	**Partial[3] Correlation**	**Regression[4]**	**(t-statistic) Coefficient**
Median Household Income	**0.34'**	0.03	**1.90**	**(0.19)**
Percent of Families with Incomes below Poverty Level	**–0.42'**	**0.04**	**3.48**	**(0.26)**
Percent Minority Population	**–0.26**	0.04	**1.67**	(0.27)
Percent Population over 65 Years Old	**0.08**	**0.32'**	**21.4'**	**(2.10)**
Federal Aid per ADM	**–0.36'**	0.16	**0.92**	**(0.98)**
State Aid per ADM	**–0.83***	**–0.35'**	**–0.70'**	**(2.35)**

[1] 42 suburban school **districts.**

[2] Pearson correlation with local revenue per ADM.

[3] Pearson partial correlation controlling for market value of real property per ADM.

[4] Regression coefficient when added to equation including market value of real property per ADM.

* **Significant at** $p < .001$.

+ **Significant at** $p < .05$.

variation is controlled, but the state aid relationship does not. State aid to school districts flows more toward those raising smaller local revenues even after control for their local property base. Federal and state aid per ADM to the Pittsburgh district is substantially higher than the suburban average—$329 versus $78 per ADM from federal sources, and $1,962 versus $1,165 per ADM from state sources.

METROPOLITAN PROBLEM SOLVING: ECONOMIC DEVELOPMENT ISSUES

Metropolitan problem solving is often viewed as difficult in jurisdictionally fragmented areas. One such problem is economic development, which has been on the agenda of decisionmakers at all levels in Allegheny County for many years. The approach to economic problems in this jurisdictionally fragmented area, therefore, is instructive.

In recent years, Allegheny County, like the rest of Southwestern Pennsylvania, has been undergoing dramatic economic change. The county and the region's economic base and employment in heavy manufacturing—principally primary metals—has declined significantly, while employment in the service sector, especially corporate services, has exhibited significant growth.[24] This restructuring of the local economy has caused serious fiscal distress in many municipalities, especially in the mill towns of the Mon Valley, the Youghiogheny, and Turtle Creek. At the same time, communities in other parts of the county have seen growth in high technology and service employment. The county and region have not developed a single, comprehensive approach to this restructuring. Rather, several local initiatives are under way, networked in ways consistent with the "partnership approach" that characterizes metropolitan problem solving in the area.[25]

In 1981, the Allegheny Conference on Community Development formed an Economic Development Committee ". . . to develop a unified economic strategy backed by broad consensus: not a 'quick fix' or an attempt to pose simplistic answers for current problems, but a forward-looking strategy that could position this region strongly for the remainder of the century, and lay a foundation for the next."[26] The Committee ". . . articulated a strategy based on the principles of balanced growth, a long-term perspective, reliance upon the marketplace with a supportive role for government, and coordination of separate efforts rather than central planning."[27] It recommended ten initiatives—among them efforts to enhance the growth of high technology, focus resources on emerging companies, provide export trade assistance, increase tourism, and support job training programs.

A second step was Strategy 21, a proposal developed in 1985 by a consortium of officials from Pittsburgh, Allegheny County, and the county's two major universities, Pittsburgh and Carnegie Mellon. The proposal requested funding from the state for airport modernization, advanced biotechnology and manufacturing centers to be built by the universities, and transportation improvements in the Mon Valley and across the southern part of the county.[28] Many of the proposed projects are under way, with some lag in transportation improvements.

In 1986, the Allegheny County commissioners created the Mon Valley Commission, which developed a set of "Priority Actions" to revitalize this former center of the steel industry.[29] In 1988, the Regional/Urban Design Assistance Team convened a multidisciplinary group from the Mon Valley area and other regions confronting similar problems.[30]

Many different proposals and initiatives have emerged from these and related efforts aimed at improving the county's economy. Some are well under way, while others remain in the planning stage, and still others have been superseded. Although significant economic restructuring has taken place, it is premature to evaluate the success of the county's efforts.

What is most interesting from the perspective of this study is the philosophy of local governance that informed these efforts. Those working to improve the economy of Allegheny County appear to take for granted the continuation of the county's jurisdictional structure, including its many relatively small municipalities. Rather than seeing a reduction in jurisdictional fragmentation as a necessary precursor to economic change and improvement, existing municipalities are seen as potential contributors to their own betterment. Opportunities for functional cooperation, coordination, and even consolidation are identified and recommended, but these recommendations show respect for the local base afforded by long-standing communities, and seek to build on this base through coordinated efforts organized by councils of governments and other consortia.

The operative approach to metropolitan problem-solving in Allegheny County is "partnership" between adjacent communities confronting similar problems, between the public and private sectors, and between municipalities and overlying governmental and quasi-governmental bodies. It is a prescription that respects citizens' attachments to their local communities, while drawing attention to prospects for cooperative ventures to resolve selected problems of broader scale.

SUMMARY

The analyses of fiscal relationships among Allegheny County municipalities and school districts provide insights into the efficiency and equity of the jurisdictionally fragmented system.

1) The analysis of returns to population size yielded no evidence of a relationship between per capita service costs and jurisdictional population. This finding, we believe, is a result of the quite significant array of *functional* coordination, cooperation, and consolidation found in the county. Groups of municipalities have joined together to arrange production of service components through a variety of functional overlays, while retaining jurisdictional autonomy. The finding of no returns to population size is not evidence that all municipalities are equally efficient or that efforts to enhance functional ties and overlays are not needed, but it does indicate that the *system* of fragmented jurisdictions does not engender substantial inefficiency.

2) The analyses of fiscal distributions found a strong relationship between resident income and municipal own-source revenues. While this relationship is consistent with a standard of "market equity," it is a disadvantage for some low income communities that do not have access to other revenue sources, especially taxable nonresidential property. Older, more densely populated communities, too, appear somewhat disadvantaged by the county's fiscal system. A further indication of potential fiscal disadvantage is the significantly higher cost burden on residential households in Pittsburgh compared to suburban municipalities. This is true in spite of the extraordinary revenues accruing to Pittsburgh by virtue of its large nonresident employment and its central city shopping and entertainment locus. Pittsburgh's higher burdens result in part from differences in the services it provides and the ways services are financed, and may reflect size diseconomies, although this could not be verified by the empirical analysis.

3) Patterned inequalities also were found among suburban school districts in the county, resulting from the strong linkage between revenues available to a district and the market value of real property. Resident income, poverty status, and racial characteristics are correlated with property values in suburban districts, so revenues per average daily membership are lower in districts with larger poor and minority populations. State and federal efforts to equalize school revenues have not been fully successful in the suburban county—state aid is much better targeted to low revenue districts than is federal aid. Students in Pittsburgh are relatively advantaged compared to students in other districts where advantage is indexed by revenues per average daily membership and aid from state and federal sources.

4) Allegheny County's approach to metropolitan economic development problem solving emphasizes partnership among a wide variety of stakeholders, including the many local governments. This approach differs from those that place a priority on reducing the number of jurisdictions.[31] In Allegheny County, consortia of local jurisdictions, operating through COGs and other collaborative ventures, are expected to play important roles in economic restructuring, especially in the most distressed areas. How these efforts develop, and with what success, are important topics for future research.

Notes

[1] See, for example, Committee for Economic Development, ***Reshaping Government in Metropolitan Areas*** (New York, **1970).**

[2] See William F. Fox, Jerome M. Stam, W. Maureen Godsey, and Susan D. Brown, ***Economies of Size in Local Government: An Annotated Bibliography,*** Rural Development Research Report No. **9** (Washington, DC: U.S. Department of Agriculture, Economics, Statistics, and Cooperative Services, **1979);** Robin Barlow, "City Population and Per Capita City Government Expenditures," ***Research in Population Economics*** **4 (1982): 49-82;** and Werner Z. Hirsch, ***Urban Economics*** (New York Macmillan Publishing Company, 1984).

[3] See John Yinger, "On Fiscal Disparities across Cities," *Journal of Urban* ***Economics*** **19** (May **1986): 316-337,** especially **322.** A variant, "returns to population scale," is used by William David Duncombe in ***Evaluation of Factors Affecting the Cost of Public Services with an Application for Fire Protection,*** Ph.D. Dissertation, Syracuse University, **1989.**

[4] Tax price for each community is computed by dividing the estimated median value of owner-occupied housing by the market value of all real property per household.

[5] Input factor costs, often included in a model of this form, are not included here. We assume that Allegheny County approximates a single market for input factors and, therefore, that factor costs are approximately constant countywide.

[6] For an example of how a reduced-form model of this type is obtained, see Barlow, pp. **71-76.**

[7] The model is estimated with data from **123** suburban municipalities. Six suburban municipalities are excluded from the analyses of suburban fiscal patterns. McDonald and Trafford have only a small portion of their populations residing in Allegheny County; Neville Township is a predominantly industrial island; and residents of Edgeworth, Fox Chapel, and Sewickley Heights have per capita incomes so high as to make their experience atypical. Data for all analyses can be found in the Appendix.

[8] Malachy Carey, Ashok Srinivasan, and Robert P. Strauss, "Optimal Consolidation of Municipalities: An Analysis of Alternative Designs" (Pittsburgh: Center for Public Financial Management, Carnegie Mellon University, August **3, 1989).**

[9] The OLS estimate for this model is:

$$EXP = 51{,}124 + 157 * POP + 2.06E\text{-}4 * POP',$$

with an adjusted R^2 of 0.84. Only the POP coefficient is significant. Its t-statistic is **9.7,** while the t-statistics for the intercept and population squared are approximately **0.5.**

[10] A second paper from the Center reports substantial cost savings that might be available to several small communities in the Steel Valley COG if they were to consolidate with their neighbors, and suggests this to be evidence of "potential economies of scale for small jurisdictions" more generally. See Beverly S. Bunch and Robert P. Strauss, "Consolidation of Small Governments: Can It Help Distressed Municipalities?" (Pittsburgh: Center for Public Financial Management, Carnegie Mellon University, January **29, 1990).** Their results are based on detailed analysis and forecasting of revenues and expenditures of nine municipalities, and indicates that seven of the nine could benefit from consolidation—two would be made worse off. We were unable to conduct similar analyses for all county municipalities and, thus, cannot relate our statistical results to the results reported in their paper.

[11] Market value of real property is that established by the state Tax Equalization Board and represents a uniform measure of taxable valuation.

[12] Per capita income [Y] explains **80** percent of the variance across municipalities in per capita residential property value [R]. The OLS equation linking the two variables is:

$$R = 4.7 + 1.39 * Y$$

The t-statistics for the intercept and slope terms are **6.2** and **27.2,** respectively.

[13] These earned income burden estimates assume that all households in a given community pay the tax. Actually, municipalities are authorized to exempt persons earning less than $5,000 from the tax. It was not possible to determine which municipal-

ities allowed this exemption. Where it is allowed, the burden on households actually paying the earned income tax would be higher than the estimates used here.

[14] This method yields per household cost estimates that may be higher than actual costs in municipalities where a significant portion of residential property is owned by nonresident landlords. If they are not able to include the full tax cost as a part of their rents, then the cost estimate for residential households made here should be reduced by the amount these nonresidents pay. No data were available to make such a correction, but we believe its effect would be small for most communities. Katherine L. Bradbury and Helen F. Ladd estimate that roughly 15 percent of property taxes on multifamily rental properties are paid by nonresident landlords in large American cities—"Changes in the Revenue Raising Capacity of U.S. Cities, 1970-82," *New England Economic Review* (March/April 1985): 20-37. No comparable estimates are available for small municipalities.

[15] This estimate understates households' tax costs somewhat by not including per household estimates for the variety of additional taxes levied by county municipalities (see Chapter 2). The incidence of these additional taxes—in particular the extent to which they are paid directly by households—could not be determined from the data available to us. For most municipalities, however, the dollar amounts raised by these additional taxes are small, and their inclusion would not change our estimates significantly.

[16] Fifty-nine communities with significant expenditures for trash collection and disposal in 1985 reported no revenues for this service, indicating that it was paid for with tax revenues. No adjustment in per household dollar cost was made for these communities. Another 30 communities reported significant revenues for this service, indicating that the municipality collected a fee or service charge for collection and disposal. For these, per household trash revenues were added to the dollar cost computed for taxes. It was assumed that trash collection and disposal in communities that reported neither expenditures nor revenues for this service was arranged by households using private haulers. In the absence of actual cost data, it was assumed that fees charged by private haulers were roughly comparable to the average charged by municipalities, and this amount ($16.50 per capita) was added to household tax costs.

[17] The correlation between dollar cost and average household income in suburban municipalities was 0.82. Regressing estimated dollar cost [DC] on average household income [AHI] yielded the equation:

$$DC = -22.0 + 0.0105 * AHI$$

with t-statistics of 1.00 and 15.9 for the regression coefficients and two-thirds of the variance in estimated dollar costs across the municipalities explained.

[18] Note that these data reflect 1985 burdens on *residential property only*. A recent report of burdens in communities in the Steel Valley COG reported significantly higher total burdens, but did not distinguish between residential and nonresidential property. An important point made in that report, however, is that burdens, undoubtedly including residential burdens, have increased since 1985 as communities have increased tax rates and obtained court-approved excess levies. See Robert P. Strauss and Beverly S. Bunch, *The Fiscal Position of Municipalities in the Steel Valley Council of Governments* (Pittsburgh Center for Public Financial Management, Carnegie Mellon University, 1987), pp. 22-23.

[19] Several persons interviewed for this research stated that the difference in earnings tax rate between Pittsburgh and its suburbs has contributed significantly to Pittsburgh's population loss in recent years, as city residents relocate to reduce their earnings tax burden.

[20] Neville Township, Green Tree, East Pittsburgh, Harmar, Leetsdale, Homestead, Collier, and Ohara all had ratios in 1985 that *exceeded* Pittsburgh's 0.79 persons employed per resident.

[21] Average daily membership is a formula-based measure of school district enrollment (see Chapter 5).

[22] The OLS estimate for the relationship is:

$$\$LOC/ADM = 587 + 21.2 * \$MKT/ADM$$

with market value measured in thousands of dollars. The t-statistic for the intercept is 3.50 and for the slope, 14.6, both statistically significant with 42 observations.

[23] Median household income in 1979 is used here, rather than 1985 per capita income used in the analysis of municipal own-source revenues. The latter was unavailable for school districts. Use of 1979 income with 1984-85 revenues partially explains the weaker relationship. The correlation of median household income with market value of real property per ADM is 0.36.

[24] Ralph L. Bangs, "Restructuring of the Regional Economy, 1983-1987," in Ralph L. Bangs and Vijai P. Singh, eds., *The State of the Region: Economic, Demographic and Social Trends in Southwestern Pennsylvania* (Pittsburgh: University of Pittsburgh, Center for Social and Urban Research, 1988), pp. 1-17, and Table 1-3, p. 107.

[25] Roger S. Ahlbrandt, Jr., "Regional Responses to Structural Change," in Bangs and Singh, pp. 29-53. This section draws heavily on Ahlbrandt's account.

[26] James E. Lee and Konrad M. Weis, *A Strategy for Growth: An Economic Development Program for the Pittsburgh Region* (Pittsburgh: Allegheny Conference on Community Development, 1984), p. 2. Quoted in Ahlbrandt, p. 30.

[27] Ahlbrandt, p. 31.

[28] City of Pittsburgh, County of Allegheny, University of Pittsburgh, and Carnegie Mellon University, *Strategy 21: Pittsburgh/Allegheny County Economic Development Strategy to Begin the 21st Century* (Pittsburgh: Office of the Mayor, 1985).

[29] Mon Valley Commission, *Report to the Allegheny County Board of Commissioners for the Economic Revitalization of the Monongahela, Youghiogheny, and Turtle Creek Valleys* (Pittsburgh, 1987).

[30] Regional/Urban Design Assistance Team, *Remaking the Monongahela Valley* (Pittsburgh: American Institute of Architects, 1988).

[31] Contrast, for example, the recommendations for governmental consolidation to foster economic development cited in ACIR's study of St. Louis, *Metropolitan Organization: The St. Louis Case.*

Chapter **7**

Governing a Metropolitan County

The jurisdictional fragmentation of Allegheny County is both long standing and, for large American counties, record setting. Most of the county's **130** municipalities were established by World War I. For a time, the city of Pittsburgh was able to expand unilaterally, and it absorbed the community of Allegheny over the objections of residents. Eventually, however, the rules governing consolidation of municipalities disallowed further expansion without the consent of the affected citizenry. **As** the Bureau of the Census counts governmental units, Allegheny is the most fragmented of the counties in the United States with more than a million population. Allegheny County has four cities, **84** boroughs, **42** townships, **43** school districts plus two intermediate education units, and **149** municipal authorities. This does not include the county's estimated **250** volunteer fire companies, eight councils of governments or nine education "jointures" that provide for special and vocational-technical education. If a high "density" of governmental units per person is thought to equate with a jurisdictional "jungle" or "thicket" through which citizens wander in a vain search for local services, Allegheny County should be marked with huge signs warning away unsuspecting visitors—and potential residents.

Jurisdictional fragmentation, however, does not necessarily lead to functional fragmentation. **A** metropolitan area **is** fragmented jurisdictionally to the extent that it contains numerous independent political jurisdictions. It is fragmented functionally to the extent that integral governmental functions and services are uncoordinated. Newcomers to Allegheny County need not fear that they are entering a land where local government has spun out of control. To the contrary, there is a wide range of options among diversely governed local communities, knit together in various ways that make for discernible patterns of metropolitan organization.

A focus on jurisdictional fragmentation implies that the appropriate model for understanding local government organization is the single city. **As** Daniel J. Elazar points out, however, "the metropolitan area is far from being a single city. Rather it is increasingly becoming a large, relatively low density urban region concentrated around several commercial, industrial, and cultural nodes, divided politically to give expression to diverse interests and groups." He continues:

> The organization of government in . . . metropolitan regions cannot be based upon the single city model. Rather, it must be based on an understanding of what is appropriately local within the region and what requires regionwide treatment. In those fields requiring regionwide treatment, the question must then be asked, how is that treatment thus provided? By some multipurpose governmental unit? By a congeries of single purpose units, each with boundaries tailored to its particular "service-shed" under local control? By similar congeries of state-sponsored governmental units or agencies functioning as arms of the state government? Or by a division of areawide responsibilities among existing local units on a contractual basis?
>
> There is no single answer to be found to this question suitable for all or even a majority of metropolitan regions. Rather, each must develop its own answer in light of its own situation.'

Clearly, metropolitan areas need to be understood in much different terms than single cities. The purpose of this chapter is to review, and within limits evaluate, the patterns of metropolitan organization and governance that characterize Allegheny County.

FUNCTIONAL PATTERNS OF METROPOLITAN ORGANIZATION

The term "metropolitan" as used here refers not to a comprehensive metropolitan government, which does not exist in Allegheny County, but to structures of organization and governance that embrace multiple local governments. Metropolitan governance in this sense is intergovernmental and multigovernmental. Rather than being imposed from above, it emerges out of processes of interaction among local citizens and officials as they address specific problems. Capabilities for collective action are created and used at different scales—as broad and formal as the Commonwealth of Pennsylvania and as small and informal as a volunteer fire company. The working relationships of metropolitan organization cross jurisdictional boundaries, linking small units with one another and with larger, overlying units, and formal institutions of government with informal community associations.

The following functional patterns are identified and discussed below:

A *metropolitan legal framework* or a body of rules governing the formation and the powers of local government that applies countywide.

A heavy reliance on ***community-based organization,*** reflected outside Pittsburgh in a large number of

small municipalities with numerous elected officials and volunteer fire companies, and inside Pittsburgh by a multitude of neighborhood associations.

An overlying county government that functions as an "umbrella," never as the "ground-level" jurisdiction. Two intermediate units serve much the same function in public education.

Multiple ties and overlays that connect jurisdictions, both vertically and horizontally. Voluntary councils of governments and jointures in the case of school districts produce direct and indirect services and coordinate selected activities among primary jurisdictions. Municipal authorities also serve as a mechanism for joint production. Contractual arrangements with public and private vendors separate provision from production in selected service components.

A Metropolitan Legal Framework

Metropolitan governance depends on a common legal framework that establishes the terms and conditions under which various local government units can be formed and modified, and operate in relation to one another.[2] The rules for the legal framework—here termed a "local government constitution"—constitute the first level of metropolitan governance. Without an ability to make rules that apply across governmental units, the constitution of a metropolitan area could accurately be described as Balkanized. Moreover, the nature of the legal framework is a basic factor influencing the character of governance that emerges in a metropolitan area.

Municipalities and school districts are the primary local jurisdictions in Pennsylvania. Rules bearing on their formation and modification govern the entry and exit of basic provision units into the local public economy. Rules that specify local government powers determine the range of intergovernmental actions. Fiscal rules, in particular, often attempt to take into account potential interdependencies among local governments. Adding to or subtracting from the powers of local governments, or classes of local governments, often has implications for metropolitan relationships.

The body of rules governing the formation and modification of local governments in Pennsylvania was described in Chapter 3. Because townships have municipal status and Allegheny County is entirely incorporated, rules for the formation of local governments are mainly of historic interest, but they do explain the number and variety of municipalities. It is the ability of communities to keep their local governments—or to modify them as they see fit—that commands greater attention today. The 1968 Pennsylvania Constitution extended home rule to all municipalities that choose to frame and adopt a charter.

Municipal consolidation is also firmly in the hands of citizens. The only procedure available is the initiative and referendum, requiring concurrent majorities in the affected municipalities. The General Assembly is free to prescribe different rules to govern consolidation, but has not chosen to do so since the adoption of the 1968 constitution. School districts can be consolidated by agreement of the boards of school directors. Still fresh in the minds of citizens are the school district consolidations mandated by the state legislature in the late 1960s.

A key feature of the legal framework that applies to Allegheny County is uniform statewide legislation for classes of local governments. This means that the powers of the state legislature are used to discriminate among local governments as townships, boroughs, and cities of varying population, but not to discriminate on the basis of their location in a particular metropolitan county. Although Allegheny County is the only county of its class, the municipalities within its borders are treated like other municipalities of the same class across the state (Pittsburgh is the only city in its class). Whether, under the Pennsylvania Constitution, it would be feasible to do otherwise is unclear. Perhaps the legislature could distinguish townships, boroughs, third class cities, and home rule municipalities within a second class county as separate subclasses. The existing legislative practice, however, is to consider only statewide legislation.

Sometimes, statewide rules can have a differential or a heightened impact in a large metropolitan area. Perhaps even more salient than the local metropolitan impact of statewide changes, however, is the incapacity they create for adjusting relationships selectively. Metropolitan problem solving often may depend on changing the basic rules. An inability to adjust those rules reduces the level of local investment in metropolitan decisionmaking. The Allegheny League of Municipalities, while it represents all local governments, including the county government, cannot build a countywide consensus for changes specific to Allegheny because the necessary state legislation is not available. The league's legislative program consists entirely of efforts to modify the state code as it affects municipalities across the state.

The state constitution and laws supply the legal framework that affords local communities of varying geographical dimensions a range of organizational options. The framework is also one that has not been adjusted to the particular circumstances of Allegheny County. At the level of basic rules, metropolitan governance in Allegheny County is driven by statewide perspectives and concerns.

Community-Based Organization

The citizens of Allegheny County have chosen to rely on forms of organization that are closely tied to geographic communities, most of which have deep historical roots.[3] This is most readily apparent in the large number of small municipalities outside Pittsburgh and in the volunteer fire companies that serve nearly all of these municipalities. The rules of municipal incorporation outside Pittsburgh allow for the greatest and most explicit reliance on community-based organization. Even within Pittsburgh, however, citizens tend to identify strongly with historic neighborhoods and to sustain active neighborhood organizations. The suburban school districts, despite forced consolidations, also retain strong community identification. Using the powers available to them, citizens seem to have maximized their reliance on community-based organizations to serve, where possible, as the primary units of local government.

Community-based organizations cannot, acting alone, solve all the problems that beset a metropolitan area. They can, nevertheless, provide an important base on which other, more encompassing, efforts can bc built. For example, as this study was in progress, nearly every municipality in Allegheny County was struggling with increased costs of solid-waste collection. Various responses were under consideration, including in some cases an imposition of user fees. Other municipalities were thinking about service modifications, such as moving from back-door to curbside collection. One small borough in the Mon Valley developed an in-house collection service in the face of escalating prices charged by contract vendors. The corollary of community-based organization is community responsibility and self-reliance—the recognition that to some significant extent communities must solve their own problems.

An Overlying County Government

The fundamental importance of an overlying county government is readily apparent in Allegheny County.[4] The county is not a metropolitan government, able to treat other units as subordinates. The county government is best understood as a broader, not a higher government. By virtue of full municipal incorporation, the county government is exclusively an overlying unit, never the primary jurisdiction. This allows the county government to concentrate on issues that transcend municipal boundaries.

The county government is concerned primarily with the delivery of state-mandated services (this report is not centrally concerned with the important role of county government as an administrative unit of the state). As a local jurisdiction, the county government takes on five basic roles:

- The provision of certain countywide services, such as an arterial highway network and a county park system.
- Provision and production of service components that benefit from economies of scale or broad-based coordination, such as police and fire training, the investigation of serious crimes, and forensic analyses.
- Planning, information gathering, and facilitating coordination, including an important problem-solving component for problems that spill over municipal boundaries.
- Funding for innovative municipal initiatives and ventures that take on an interlocal character.
- The provision of back-up services to municipalities or councils of governments, as needed.

Each role depends on cooperation with individual municipalities or associations of municipalities. Frequently, the county government is an important element in a broad metropolitan effort, one that includes foundations, universities, and major employers. Sometimes, a county official functions as a public entrepreneur who brings together interested parties, collects and distributes information, negotiates agreements, and follows up with implementation. Other times, county officials participate as members of organizational networks initiated elsewhere.

Multiple Ties and Overlays

In between the 130 municipalities and 43 school districts in Allegheny County, and the single overlying county government, there are numerous interorganizational ties and multiorganizational overlays. The most visible are eight councils of governments and, in public education, two intermediate units. Both within and outside these organizational umbrellas can be found other bilateral and multilateral arrangements—including school jointures and consortia, mutual aid agreements, and intergovernmental contracts.

Councils of Governments

Unlike bilateral or multilateral cooperative efforts limited to particular functions, a multifunctional COG creates a new source of public entrepreneurship? A COG executive director has incentives to look for ways to serve member municipalities and to find common ground for cooperation. Several of Allegheny County's COGs are slowly expanding their fee-for-service role, particularly Turtle Creek Valley and Twin Rivers. The voluntary nature of COGs equips them for this task. Instead of planning in the abstract what functions might be performed more efficiently on a larger scale, a COG approaches this question on an incremental basis. Only to the extent that cost savings and/or productivity improvements are demonstrated will municipalities tend to participate. In this way, a transfer of functions to COGs is likely to generate benefits that exceed costs.

COGs also potentially decrease the transaction costs of coordination by bringing municipal representatives together on a regular basis and, by creating a small set of similar organizations countywide, create more favorable conditions for the diffusion of innovations. The payoff from this sort of investment is long term. Current efforts to create new forms of intergovernmental cooperation in street maintenance and solid waste disposal, and efforts at the diffusion of previous innovations will determine whether the COGs can have a general, positive effect throughout the county.

The COGs serve as a useful organizational link between county government and more than 100 small municipalities. Clearly, the county government faces a problem in being able to communicate effectively with the municipal governments. COGs substitute in part for an expanded county-municipal liaison agency. Some of the COGs (to a certain extent all of them) emphasize grantsmanship. From this perspective, the COGs serve a useful "middleman" function. Much of this role is also absorbed with the distribution of knowledge and information, whether by word of mouth, memoranda, or seminars and workshops.

In conjunction with the county government, the eight COGs also contribute to countywide coordination and problem solving. As a production unit, a COG tends to serve a

wider clientele than its own membership. Many COG projects and innovations, such as the anticipated solid waste disposal site being developed by Char-West COG, have countywide implications. Thus, the COGs, by linking a large number of small municipalities with the county government, serve as vehicles for metropolitan problem solving.

It is also possible to overestimate the importance of the COGs to the development of intergovernmental cooperation. Many cooperative ventures preceded the formation of the COGs, such as the joint purchasing council now operated by SHACOG, and new forms of cooperation still are being developed. COGs are useful, or convenient, but they are neither a necessary nor sufficient condition for cooperative ventures. Sixteen municipalities in the county—among them Pittsburgh—do not participate in COGs. Often, all members do not participate in all COG activities. The existence of a COG is not a substitute for the entrepreneurial initiative and cooperation of local government officials and citizens.

There is a question as to how well the COGs will be able to survive the gradual erosion of federal support for local governments. Much of the work of COGs has been absorbed in the administration of the Community Development Block Grant (CDBG) program. Some part of the interest of county government in the COGs also derives from the need to implement the county's portion of CDBG through many municipalities. There seems to be some tendency, moreover, to replace professionals with nonprofessionals when vacancies occur in COG executive directorships. This does not always lead to a decline in entrepreneurial initiative or in effectiveness. In general, the COGs seem to be adapting to the new, more stringent financial environment by becoming more self-reliant and developing new service capabilities.

In sum, the COGs clearly make a positive contribution to the development of the local public economy in Allegheny County. They have increased the potential for public entrepreneurship and decreased the costs of coordination, both among municipalities and between municipalities and the county government. Moreover, they have done so at remarkably low cost to taxpayers.

Intermediate Units, Jointures, and Consortia

An intermediate unit (IU) is more like a county government—indeed IUs replaced county boards of education—than like a COG, although IUs are governed by representatives of the member units rather than by separately elected officials.[6] Still, IUs do not exist at the pleasure of their members, but at the discretion of the General Assembly. The Allegheny Intermediate Unit (AIU), which covers the suburban districts outside Pittsburgh, fills a role analogous to county government in relation to school districts, producing certain areawide services and auxiliary service components, engaging in planning and information gathering, and assisting school districts in various ways. Jointures, on the other hand, are more like COGs, particularly in the case of the single multifunctional jointure in the North Hills. Created and governed by member districts, jointures produce vocational-technical education and build and maintain facilities for special education services produced by AIU.

FUNCTIONAL EVALUATION

This study relies mainly on process rather than performance criteria to evaluate metropolitan functional arrangements. The criteria identify key processes that link structures of governance with performance—self-determination and citizen choice, representation and accountability, public entrepreneurship, coordination, and metropolitan problem solving. Each of these criteria is discussed below.

Self-Determination and Citizen Choice

The commitment to local self-determination in Allegheny County is so strong that "metropolitanism" is nearly taboo as a subject for public discussion. The basic rules of association in Pennsylvania—those bearing on incorporation, annexation, and consolidation—generally rely on local self-determination and are presently determined by the state constitution. The General Assembly, however, has the authority to substitute its own rules. Historically, important breaches of the principle of self-determination have occurred in the development of the region. Pittsburgh was built on nonconsensual mergers with adjoining municipalities. The sharp reduction in the number of school districts in the late 1960s and early 1970s was dictated by state authorities. Most recently, a federal court ordered a suburban school consolidation in order to promote racial integration. Despite their strong attachments to their communities, Allegheny County residents continue to be exposed to the possibility of legal mandates that would impose new jurisdictional arrangements without local consent.

The home rule capabilities created by the 1968 Pennsylvania Constitution are potentially an important enhancement of local self-determination and citizen choice. Historically, Pennsylvania has not relied heavily on the initiative and referendum. The principal forms of local government—boroughs and second class townships—were fashioned by state law rather than by local choice. Any municipality is now free to adopt a home rule charter and thus to create its own form of government. Even if local officials are reluctant to consider basic changes, the initiative power creates a potential for change over the long term.

As a political community, Allegheny County seems to be strongly committed to local self-determination. The county government, in particular, has not pursued initiatives that would rob municipalities of any of their basic prerogatives. Instead, county agencies, such as the Department of Development and Department of Maintenance, participate with municipalities as initiators or partners in a range of improvement efforts. There seems to be a common recognition that continued improvement in public services depends more on sustained cooperation than preemptive leadership. As a result, municipal officials are not required continually to defend their independent authority.

Representation and Accountability

The large number of locally elected municipal officials, coupled with relatively small jurisdictions outside Pittsburgh, would appear to enhance the representation of citizen interests. Besides the formal apparatus of elections, heavy reliance on citizen volunteers—especially in fire protection—may have a constraining effect on the

conduct of municipal government. Volunteer fire fighters tend to be politically active and influential in their communities. Other community organizations become involved in the support of volunteer fire companies. An infrastructure of community-based organizations has been understood since Alexis de Tocqueville[7] to strengthen local governance and increase community well-being.

As the research on this project progressed, the role of the borough mayor in local representation and accountability emerged as something of a puzzle. As explained in Chapter 2, the mayor has little political power but is the most visible local official, who regularly attends the meetings and gatherings of community organizations. The mayor might be viewed as an important link between borough hall and the citizens. Unlike council members (including the usually powerful council president), the mayor ordinarily has an office at the borough hall. Although political leadership commonly resides with the council president, greater community prestige attaches to being mayor.

Is it possible that the position of borough mayor tends to insulate the council and its president from criticism? Do local citizens blame the mayor when things go wrong even though the mayor may have little responsibility for policy or administration? Or are council members attentive to expressions of concern by the mayor because he is perceived as one who is in touch with the community, not to mention well regarded? In the latter case, a mayor could have considerable influence on some occasions without overtly exercising political power. The scope of this research was sufficient to raise, but not to answer, these questions. Whether the position of borough mayor contributes to or detracts from citizen representation and accountability is, nevertheless, an interesting puzzle that merits further research.

Another caveat on citizen representation and accountability concerns procedures for excess property tax levies. If a municipality, other than one of the home rule municipalities, reaches its statutory rate limit, it is allowed to levy in excess of the limit only by securing judicial determination of need, not electoral authorization. Presumably, expenditures in excess of revenues constitutes a need. If excess levies had to be approved by citizens voting in a referendum, greater pressure might be exerted on elected officials to find ways of saving money when the budget is tight. Fiscal controls, such as citizen referenda, have been found to be positively associated with the use of efficiency enhancing mechanisms, such as contracting for services.[8]

Service contracts are relatively uncommon in Allegheny County (see Chapter 4), suggesting that local officials in some of the smaller municipalities may not be as hard pressed to search out more efficient ways of producing services, Connecting the lack of direct citizen control over tax rates with the low level of municipal service contracting, however, is purely speculative with respect to Allegheny County.

Competition

Competition among service producers is presumed to be beneficial, giving provision units more alternatives and coaxing better and more efficient efforts from producers. Relatively little competition exists in Allegheny County because there is little contracting for service production. The tendency of municipalities to produce direct services in-house inhibits the development of competitive alternatives. The separation of provision and production, noted as a basic feature of metropolitan organization in St. Louis County, is observed only among the very smallest units in Allegheny County, where municipalities turn to in-house production at a low size threshold.

Coordination, Metropolitan Problem Solving, and Public Entrepreneurship

These three criteria have a strong interrelationship in Allegheny County. Intergovernmental coordination and problem solving derive from a process of public entrepreneurship, which when successful may produce results equivalent to more formal coordination and/or problem solving. The structure of Allegheny County affords many opportunities for ongoing public entrepreneurship, both in county government and among local communities.

The basic patterns of public entrepreneurship in Allegheny County link those in county government with those in municipalities and COGs, and municipal entrepreneurs join with their counterparts in neighboring communities. Sources of entrepreneurship in county government include officers in the Department of Development, the Authority for Improvements in Municipalities, the Department of Planning, and the Department of Maintenance. With the encouragement of the board of county commissioners, individuals in these departments have established working relationships with local officials throughout the county. Their entrepreneurship is frequently matched by that of COG directors. Municipal officials and managers also pursue initiatives in relation to nearby communities, sometimes under the auspices of a COG. Municipal cooperation does not necessarily depend on the efforts of overlying organizations, but can and does emerge from the initiative of individual municipalities.

In public education, the Allegheny Intermediate Unit (AIU) is a source of entrepreneurship in the development of functional consortia among school districts. Other consortia have been formed, however, at the initiative of district superintendents and, in the case of the Mon Valley Education Consortium, at the initiative of a private citizen. School district jointures, organized initially to provide for vocational and/or special education, also have begun to display entrepreneurial capabilities, organizing such joint ventures as alternative schools and a substitute teacher pool.

Substantial interlocal coordination is found in all four service areas—police, fire, streets, and education—investigated in this study. Coordination, like entrepreneurship, involves both overlapping and nonoverlapping jurisdictions. County government agencies and joint production units formed among municipalities contribute to the coordination of service production—for example, when municipal police patrol local streets but respond to calls through a joint dispatch center that serves several municipalities and rely on county police for investigative services. Or when a school district operates a school for students, including some who need special education services, but relies on the Allegheny Intermediate Unit to supply a spe-

cial education teacher, the delivery of the service depends on coordination. For the most part, coordination becomes routine once the arrangements have been established.

Parallel to coordination is "alternation," dividing service production responsibilities for different segments of a shared jurisdiction. Alternation is a substitute for coordination, for example, when county police take responsibility for traffic patrol on county roads, as well as patrolling county parks, while municipal police assume all other patrol responsibilities. The municipal and county police avoid duplication of effort by alternating between different parts of their common jurisdiction. More coordination is apparent in police and fire services than in streets, where there is greater alternation among state, county? and municipal producers. By and large, the county Department of Maintenance maintains county roads and municipal street departments maintain municipal streets. Yet, some of the more innovative and highly coordinated arrangements are being developed in street services. Even where basic responsibilities are divided on the principle of alternation, specific projects may require coordination.

Many local government observers in Allegheny County report that cooperation is difficult to attain, largely because of political jealousies in different local jurisdictions and a lack of trust among communities. This perception exists alongside widespread patterns of cooperation in the functions studied for this report.

It may be that local observers are referring to failures in cooperation for functions not examined in this study, or to unwillingness to enter into full functional consolidation of services, rather than unwillingness to cooperate in other forms. Clearly, local officials resist full functional consolidation of service production, just as they resist jurisdictional consolidation that would merge provision units.

Local officials also tend to be somewhat skeptical of the net benefits claimed for more limited joint ventures, but many have entered into a variety of interlocal cooperative arrangements. A skeptical attitude—having to be shown—can be defended as a responsible orientation to the public's business if the skeptic can be satisfied by a reasonable argument supported by evidence.

The high level of public entrepreneurship observed in both county and municipal governments for the services examined in this report is associated with ongoing joint efforts to solve problems. The most visible effort is the mobilization of local talent to address the economic problems faced by communities in the Mon Valley. Far from being ignored in their plight, Mon Valley municipalities find that they have to choose among competing joint ventures and sponsors. In another effort, the county planning department is spearheading the formation of a storm water drainage district among municipalities in the North County. West of Pittsburgh, an intergovernmental body has been created to address issues of development surrounding the Pittsburgh International Purport. Both the drainage district and airport-area venture involved county initiatives undertaken in collaboration with COGs and local municipalities.

County government entrepreneurship tends not to be preemptive of local responsibilities. Municipalities remain basically self-reliant even as they act jointly with county government. In the Mon Valley, state and county' agencies are searching for ways to assist local municipalities without displacing them. Community self-reliance also depends on local entrepreneurship. The Mon Valley borough of Braddock, for example, experienced a period of poor management in addition to economic decline, leading eventually to an application for state designation as a distressed community. The initiative for dealing with the local crisis, however, came from within the borough, where voters elected a new council pledged to address the community's fiscal troubles. Even as limited forms of assistance are made available, the primary responsibility for solving the problems rests with the borough. Indeed, outside assistance is likely to be contingent on a demonstrated willingness in the local community to face up to problems.

Allegheny County government and Pittsburgh city government enjoy a relationship that is mainly complementary rather than competitive. Visitors who amve at the Pittsburgh International Airport are greeted by huge signs erected by the county commissioners proclaiming that Pittsburgh is the "most livable" city in America. Pittsburgh and Allegheny County officials participated side by side in the extensive public-private partnerships that orchestrated the well-known "Pittsburgh Renaissance." Because the jurisdiction of Allegheny County overlies Pittsburgh, in contrast to the nonoverlapping jurisdictions of St. Louis City and St. Louis County, county officials have an incentive to contribute to development in the Pittsburgh Triangle, rather than seeking to attract revenue-generating businesses to the suburbs. The result is a more balanced approach to economic development throughout the metropolitan area.

One puzzle that remains unsolved is the fiscal relationship between Pittsburgh and the suburban municipalities. Pittsburgh's extraordinarily large daytime population undoubtedly creates service demands that Pittsburgh residents largely must shoulder. Of course, high-value property in the Triangle owes its value in great part to its ability to attract workers, shoppers, concert-goers, and sports enthusiasts from throughout the area. High-value commercial property is generally thought to be a profit maker for cities, generating revenues that exceed expenditures. Yet, Pittsburgh residents have relatively large tax burdens (see Chapter 6), encouraging the movement of residents to the suburbs.

FISCAL EVALUATION

In addition to the process criteria discussed above, this study used two criteria based on fiscal relationships: production efficiency and fiscal equity. Two of the most common criticisms of jurisdictionally fragmented metropolitan areas are that (1) numerous small local governments are inefficient due to their inability to capture economies of scale and (2) fragmentation of the tax base leads to a mismatch of resources and needs among local jurisdictions. The results of the fiscal analysis, described in detail in Chapter 6 (portions of the analysis are also found in Chapters 4 and 5), are summarized here, together with a discussion of policy implications.

Production Efficiency

Relatively little evidence was found of uncaptured returns to population size in the production of services by

municipalities and school districts. Controlling for service conditions, total expenditures per capita (per student in the case of school districts) are not related to size of populations served. This finding also holds for separate analyses of police, street, and education services.

A lack of systematic evidence pointing to uncaptured returns to population size does not prove that there are no economies remaining to be captured. It does establish, however, that relatively small production units are not necessarily inefficient for many service components, and that many in fact are relatively efficient, enough so that there is no significant statistical association between size of population served and per capita spending. Numerous opportunities may remain to improve the efficiency of service production in Allegheny County, and some of these opportunities may entail the consolidation of production units. Across-the-board consolidation of municipalities or school districts, however, is unlikely to improve efficiency. Instead, the method most likely to do so is to extend the basic approach already used in Allegheny County: to encourage public entrepreneurs to seek out new arrangements for producing selected service components that are likely to exhibit limited economies of scale.

Equity

The most serious apparent inequity among taxpayers in Allegheny County is the relatively heavy tax burden shouldered by residents of Pittsburgh, related in part to the city's larger daytime population. In municipal jurisdictions outside Pittsburgh, tax burdens are roughly proportional to income. Fiscal relationships, indexed by the real estate and earned income tax burdens on average households in each community, slightly favor jurisdictions with newer, owner-occupied housing over more densely populated jurisdictions with older housing stock and elderly residents. Overall, the fragmentation that is reflected in the large number of suburban municipalities in the county is not associated with significant inequities, using income neutrality as an indicator of distributional equity.

Fiscal disparity, defined as a mismatch of resources and problems, is a somewhat different matter. Some municipalities and school districts in the county are seriously distressed. Pennsylvania law allows the designation of municipalities and school districts as distressed communities, facilitating their financial assistance and recovery contingent on local initiative in addressing problems. Allegheny County government provides both financial and in-kind aid, preserving local self-reliance while making available some resources from the wider state and region.

In public education, the mismatch of resources and problems is most apparent for a few small suburban school districts with large proportions of students in poverty. The Pittsburgh school district does not face a similar disparity, due in part to state aid formulas that favor urban districts. Poverty and the attendant educational problems are not confined to central cities, and school districts outside Pittsburgh with high poverty rates are arguably the most seriously disadvantaged in the metropolitan area.

SUMMARY

Academic and professional literature in public administration, political science, planning, and public finance is filled with standard descriptions of metropolitan areas that almost invariably cite an assortment of problems said to derive from fragmentation. Allegheny County fits part of the standard description: it contains a large number of small, independent, often overlapping jurisdictions. Allegheny County also has problems, but they are not nearly as severe, or as endemic, as the literature on metropolitan areas would lead one to expect. Some of the problems widely thought to be inherent in metropolitan fragmentation are not found at all.

Little evidence was found to indicate that the county's collection of boroughs, townships, and third class cities are too small to arrange for and efficiently produce traditional police, fire, street, and school services to citizens. Neither is there evidence of destructive intergovernmental conflict. With few exceptions, fragmentation outside Pittsburgh does not generate systematic inequities among taxpayers. The major outlier in an analysis of fiscal equity is Pittsburgh, Some problems exist because of effects that spill over municipal borders—drainage problems in the North Hills, airport development problems in the western county, economic development problems in the Mon Valley. All of these problems, however, are being vigorously addressed.

A major reason why jurisdictional fragmentation does not create insuperable barriers to coordination and problem solving in Allegheny County is the availability of the county government as an overlying jurisdiction. Because the county is fully incorporated, the jurisdiction of the county government is exclusively an overlay, a complementary rather than competitive political jurisdiction. County officials are free to concentrate their energies on providing and producing a limited number of services and otherwise relating in productive ways to municipal governments. Considerable attention has been given to addressing problems that spill over municipal borders and to assisting distressed communities.

Still, citizens and local government officials in Allegheny County face a number of challenges that will continue to test their ability to adapt to change and to develop new patterns of organization and governance. Some of these challenges require at least a countywide perspective and may involve changes in state legislation (e.g., possible inequities in state school aid formulas). Others depend on developing new structures for municipal cooperation (e.g., to plan for recycling or to secure limited economies of scale in public works maintenance). Communities in the Mon Valley will continue to exhibit signs of distress as they struggle to cope with economic decline. In the case of municipalities and school districts that have become seriously distressed fiscally, a key challenge is to learn to help such communities without displacing community initiative and self-reliance.

Throughout urban and metropolitan America, one basic challenge is to foster and maintain active and effective communities with sufficient social capital to solve problems. The distinction between provision and production can aid in this process. Communities can continue to function as effective provision units, even while employing production units that are connected to borough or township hall by a contractual relationship. Good local government provides for its community, but does not necessarily produce all its services in-house. The organizational challenge is to build multilevel approaches to service provision and production that enable communities

to make effective choices, as well as to draw on the resources of a wider region when pressed by circumstances beyond their control.

The most prominent organizational features of Allegheny County are not functional fragmentation, inefficiency, and inequity, but public entrepreneurship, community-based organization and voluntarism, and intergovernmental problem solving. By extending these patterns of organization to new problems and opportunities as they arise, Allegheny County can continue to build a productive local public economy.

Notes

[1] Daniel J. Elazar, ***Building Cities in America: Urbanization and Suburbanization in a Frontier Society*** (Philadelphia: Temple University, Center for the Study of Federalism, 1987), pp. 219-220.

[2] Chapter 3 provides a detailed description of the legal framework for local government in Allegheny County.

[3] Chapter 2 provides a more detailed description of municipal governments. Volunteer fire companies are discussed in Chapter 4, and school districts in Chapter 5.

[4] Chapters 2 and 3 describe Allegheny County government further.

[5] Councils of governments are described further in Chapter 2.

[6] See Chapter 5 for a fuller description of cooperative arrangements in education.

[7] See Alexis de Tocqueville, ***Democracy in America.***

[8] See U.S. *Advisory* Commission on Intergovernmental Relations, ***The Organization of Local Public Economies*** (Washington, DC, 1987), Chapter 2.

Appendix

Data and Data Sources

The data used for the analyses in Chapters 4 and 6 of this report are listed in Tables A-1 through A-4 of this appendix. Sources used are as follows:

Population Estimates (1980 and 1984), Per Capita Income (1985), and land Area

Diskette User's Data Express, DUDES 1 and 3, obtained from the Pennsylvania State Data Center, The Pennsylvania State University at Harrisburg, The Capitol College, Middletown, PA 17057.

Population and Housing Characteristics (1979 and 1980)

U.S. Bureau of the Census, 1980 Census of Population and Housing, Summary Tape File 3A (Pennsylvania), 1982.

Extract of data for Allegheny County prepared by the Pennsylvania State Data Center, The Pennsylvania State University at Harrisburg, The Capitol College, Middletown, PA 17057.

Revenue and Expenditure Data for 1985, Market Value of Property in 1985

Preliminary tabulations of 1985 local government financial statistics for Allegheny County, obtained from the Municipal Statistics and Records Division, Bureau of Local Government Services, Department of Community Affairs, Commonwealth of Pennsylvania, Harrisburg, PA 17120. These data should be used with caution, as explained in Note 18 to Chapter 4. The per capita figures are computed using 1984 population estimates (see above).

Percent Residential/Non-Residential (1986)

Community Profiles for Municipalities in Allegheny County, prepared from data for 1986 supplied by the Department of Planning, Allegheny County, by the Pennsylvania Economy League, Inc., Western Division, Two Gateway Center, Pittsburgh, PA. Per capita data are computed using 1984 population estimates (see above).

Population, Number of Households, and Employment Estimates (1985)

Cycle 4 estimates produced by the Southwestern Pennsylvania Regional Planning Commission, 200 First Avenue Pittsburgh, PA.

Household Burdens from Real Estate Tax, Earned Income Tax, and Waste Collection and Disposal

Computed using data from sources above; see Chapter 6 for details.

Table A-1

Population, Households, Land Area, Income, and Poverty Data

Municipality	Population (1980)	Population (1984)	Population (1985)	Households (1985)	Land Area (sq. mi.)	Per Capita Income (1979)	Per Capita Income (1985)	Household Income (1979)	Household Income (1985)	Percent Below Poverty (1979)
Pittsburgh	423,959	402,583	397,237	159,002	55.1	6,845	9,998	17,173	24,978	16.5
Third Class Cities										
Clairton	12,188	12,258	10,681	4,502	2.7	6,540	9,154	16,345	21,718	17.3
Duquesne	10,094	9,782	9,256	3,815	1.8	6,239	7,899	15,389	19,165	17.9
Boroughs										
Aspinwall	3,284	2,984	3,061	1,394	0.4	9,353	14,356	20,823	31,523	4.4
Avalon	6,240	6,087	5,758	2,724	0.6	7,994	11,405	18,383	24,108	5.1
Baldwin	24,714	24,029	23,449	8,461	5.5	7,696	10,798	22,241	29,926	4.0
Bell Acres	1,307	1,254	1,254	448	5.4	12,882	17,842	37,618	49,942	3.4
Ben Avon	2,314	2,228	2,399	882	0.4	9,867	13,636	25,820	37,089	5.1
Ben Avon Heights	398	363	358	131	0.2	14,827	20,795	43,084	56,829	1.3
Blawnox	1,653	1,693	1,492	655	0.3	7,289	11,791	16,786	26,858	8.3
Brackenridge	4,297	4,097	4,166	1,685	0.5	6,591	8,913	16,596	22,037	13.2
Braddock	5,634	5,018	4,623	1,944	0.6	4,824	6,663	11,584	15,845	29.8
Braddock Hills	2,556	2,546	2,521	1,127	1.0	7,049	10,259	16,108	22,948	10.5
Brentwood	11,859	11,291	10,991	4,460	1.5	7,797	11,060	19,612	27,256	4.8
Bridgeville	6,154	5,899	5,719	2,376	1.1	8,092	11,624	19,745	27,979	4.6
Carnegie	10,099	9,585	9,618	4,051	1.3	7,699	10,808	18,353	25,661	8.3
Castle Shannon	10,164	9,677	9,631	3,650	1.6	7,907	11,485	20,896	30,305	5.0
Chalfant	1,119	1,113	1,007	396	0.2	7,315	10,554	19,155	26,838	9.4
Cheswick	2,336	2,187	2,117	834	0.5	8,856	12,662	23,573	32,141	4.1
Churchill	4,285	4,163	3,958	1,399	1.4	15,473	21,813	44,580	61,713	1.8
Coraopolis	7,308	6,959	6,544	2,782	1.3	7,201	10,380	16,700	24,417	8.0
Crafton	7,623	7,718	7,283	2,986	1.1	7,743	11,107	19,303	27,091	6.3
Dormont	11,275	11,118	10,493	4,187	0.8	7,187	10,279	18,079	25,760	6.0
Dravosburg	2,511	2,444	2,235	941	0.9	7,032	9,348	17,167	22,203	6.0
East McKeesport	2,940	2,807	2,706	1,111	0.4	7,049	9,608	17,528	23,402	9.4
East Pittsburgh	2,493	2,490	2,198	945	0.4	6,941	10,188	16,424	23,697	15.6
Edgewood	4,382	4,412	4,117	1,597	0.6	9,012	13,513	23,396	34,836	4.7
Edgeworth	1,738	1,817	1,675	609	1.4	24,749	39,055	66,022	107,417	2.4
Elizabeth	1,892	1,716	1,645	678	0.3	6,956	10,137	17,282	24,595	7.6
Emsworth	3,074	3,093	2,880	1,203	0.5	7,271	10,219	18,963	24,464	5.3
Etna	4,534	4,284	4,359	1,790	0.7	6,162	8,776	15,412	21,371	6.6
Forest Hills	8,198	8,125	7,405	2,784	1.5	9,326	13,412	25,606	35,674	1.6
Fox Chapel	5,049	4,836	5,617	1,754	7.8	26,577	42,009	84,913	134,529	2.2
Franklin Park	6,135	6,273	8,468	2,646	14.6	10,223	14,298	33,619	45,758	2.0
Glassport	6,242	5,930	5,489	2,114	1.6	6,738	8,803	17,766	22,857	6.3
Glenfield	246	258	214	88	0.8	6,251	9,192	15,635	22,353	12.8
Haysvile	117	129	110	38	0.1	4,163	6,026	15,464	17,444	0.0
Heidelberg	1,606	1,688	1,394	592	0.3	6,800	9,162	16,428	21,574	8.0
Homestead	5,092	4,780	4,681	2,242	0.6	5,765	7,551	12,065	15,765	22.8
Ingram	4,346	4,257	4,002	1,623	0.4	7,037	10,114	17,626	24,939	7.4
Jefferson	8,643	8,533	8,834	3,025	16.6	7,994	10,357	24,068	30,246	5.0
Leetsdale	1,604	1,499	1,516	585	0.9	7,274	10,142	19,310	26,283	6.6
Liberty	3,112	3,030	2,870	1,077	1.5	7,480	9,604	20,583	25,593	4.9
Lincoln	1,428	1,454	1,353	453	4.9	7,201	10,254	21,492	30,626	4.3
McKees Rocks	8,742	8,459	7,287	3,035	1.0	6,238	9,143	14,976	21,952	16.7
Millvale	4,772	4,634	4,216	1,818	0.6	5,856	8,206	14,109	19,030	12.9
Mt Oliver	4,576	4,360	4,109	1,659	0.3	6,182	8,830	15,558	21,870	10.4
Munhall	14,535	14,095	13,280	5,252	2.3	7,753	9,818	19,973	24,825	6.4
North Braddock	8,711	8,290	7,666	3,048	1.5	5,813	7,824	15,222	19,678	12.3
Oakdale	1,955	2,161	1,809	613	0.4	7,145	10,141	21,769	29,927	5.2
Oakmont	7,039	6,806	6,523	2,567	1.6	9,685	14,184	24,640	36,043	6.2
Osborne	529	515	511	187	0.4	11,338	15,905	34,767	43,462	1.6
Pennsbury Village	798	644	756	467	0.1	15,612	22,706	26,087	36,757	2.5
Pitcairn	4,175	4,175	3,806	1,603	0.5	6,708	9,176	16,312	21,787	9.5
Pleasant Hills	9,604	9,217	9,379	3,401	2.8	9,758	13,210	27,470	36,429	3.4
Plum	25,390	25,318	25,958	8,182	29.7	7,397	10,592	23,742	33,604	3.8
Port Vue	5,316	5,165	4,838	1,756	1.2	6,752	8,738	19,453	24,074	7.0
Rankin	2,892	2,658	2,529	1,006	0.4	5,377	7,285	13,205	18,314	25.6

Table A-1 (cont.)

Population, Households, Land Area, Income, and Poverty Data

Municipality	Population (1980)	Population (1984)	Population (1985)	Households (1985)	Land Area (sq. mi.)	Per Capita Income (1979)	Per Capita Income (1985)	Household Income (1979)	Household Income (1985)	Percent Below Poverty (1979)
Boroughs *(cont.)*										
Rosslyn Farms	521	499	484	175	0.6	18,119	24,473	50,956	67,685	1.4
Sewickley	4,778	4,765	4,245	1,891	1.0	9,434	13,557	21,635	30,433	7.5
Sewickley Heights	899	868	852	303	7.4	30,036	41,757	85,993	117,416	9.0
Sewickley Hills	419	456	485	165	4.4	10,115	14,116	30,587	41,492	8.3
Sharpsburg	4,351	4,065	3,939	1,739	0.5	6,356	10,115	15,279	22,911	8.1
Springdale	4,418	4,252	4,327	1,717	0.9	7,202	10,116	18,688	25,493	5.9
Swissvale	11,345	11,402	11,430	4,669	1.2	7,096	10,321	17,407	25,266	7.3
Tarentum	6,419	6,347	5,814	2,374	1.2	6,173	8,456	15,054	20,709	14.4
Thornburg	526	489	499	153	0.4	16,519	23,658	54,923	77,159	0.6
Turtle Creek	6,959	6,709	6,127	2,568	1.0	6,991	9,661	16,934	23,050	9.8
Verona	3,179	3,087	2,938	1,144	0.5	6,682	9,638	17,675	24,752	9.1
Versailles	2,150	1,976	1,926	817	0.5	7,810	10,759	18,682	25,363	3.4
Wall	989	989	864	333	0.4	6,292	8,119	16,807	21,066	8.6
West Elizabeth	808	759	765	278	0.2	6,671	8,884	19,770	24,447	7.9
West Homestead	3,128	2,901	2,779	1,075	0.9	7,761	10,074	20,395	26,042	12.1
West Mifflin	26,322	25,396	24,501	8,962	14.2	7,637	9,822	21,223	26,852	6.6
West View	7,648	7,634	7,148	2,819	1.0	7,323	10,877	19,000	27,580	4.4
Whitaker	1,615	1,564	1,507	578	0.3	6,901	9,396	18,243	24,498	5.2
White Oak	9,480	9,649	9,325	3,477	6.5	9,068	12,036	24,281	32,279	3.4
Wilkinsburg	23,669	22,729	22,997	10,481	3.1	7,359	10,679	16,525	23,431	13.8
Wilmerding	2,421	2,252	2,046	940	0.4	6,556	8,864	14,580	19,293	12.1
First Class Townships										
Aleppo	1,134	1,206	1,338	512	1.9	12,514	19,747	32,944	51,604	4.4
Baldwin	2,680	2,636	2,586	897	0.5	7,680	10,920	23,283	31,482	4.5
Collier	5,063	4,889	4,998	1,464	12.8	6,481	9,403	21,123	32,101	5.3
Crescent	2,862	2,687	2,755	911	2.1	7,844	10,565	23,879	31,950	3.1
East Deer	1,658	1,559	1,423	594	2.2	6,775	9,134	16,505	21,882	6.9
Elizabeth	16,269	16,231	15,597	5,291	15.8	7,894	10,301	23,514	30,366	3.2
Harrison	13,252	12,678	12,202	4,742	7.1	7,551	10,204	19,966	26,257	7.3
Kennedy	7,159	7,317	6,964	2,427	5.5	8,281	11,346	24,897	32,556	5.3
Leet	1,854	1,896	1,847	584	1.7	7,995	11,159	26,051	35,292	2.4
Neville	1,416	1,312	1,166	559	1.4	8,343	10,934	18,032	22,807	6.5
North Versailles	13,294	13,010	12,748	4,801	8.2	7,726	10,105	20,653	26,832	6.8
Reserve	4,306	4,308	4,724	1,650	2.0	7,144	10,070	21,159	28,831	3.3
Robinson	9,416	9,413	9,565	3,116	15.9	8,221	11,455	25,217	35,163	4.1
Ross	35,102	35,039	35,262	13,151	13.6	9,388	13,592	25,421	36,444	3.9
Scott	20,413	19,272	19,851	7,266	4.0	9,166	13,119	24,239	35,842	3.4
Shaler	33,694	32,933	32,543	10,835	11.1	7,999	11,592	23,724	34,817	4.0
South Fayette	9,707	9,610	10,191	3,364	21.2	7,127	9,728	21,475	29,470	7.4
South Versailles	425	389	372	137	1.0	6,561	9,107	17,769	24,728	9.1
Springdale	1,918	1,804	1,723	662	2.3	7,083	9,652	19,413	25,121	4.0
Stowe	9,202	8,826	8,417	3,373	1.9	6,652	9,659	16,877	24,103	14.3
Wilkins	8.472	8,399	8,131	3,194	2.6	9,263	13,250	23,900	33,731	3.5
Second Class Townships										
Fawn	2,899	2,878	2,700	924	13.7	6,831	9,791	20,250	28,610	2.5
Findlay	4,573	4,949	4,407	1,534	32.8	7,298	10,354	22,217	29,746	3.6
Forward	4,335	4,360	4,264	1,592	18.9	6,874	9,072	20,353	24,298	4.9
Frazer	1,509	1,493	1,334	468	9.4	6,920	9,549	20,673	27,219	4.4
Harmar	3,461	3,345	3,265	1,317	5.9	7,551	10,982	18,758	27,226	5.8
Kilbuck	1,219	1,107	1.033	257	2.6	8,781	12,854	32,685	51,666	3.2
Marshall	2,594	2,878	2,821	979	15.5	8,423	13,989	25,310	40,309	4.0
Moon	20,935	20,463	22,267	7,424	24.1	9,049	12,631	26,478	37,884	4.5
North Fayette	7,351	7,917	8.401	3,026	25.6	7,692	10,662	21,567	29,601	5.5
Ohio	2,072	2,111	2,132	695	6.8	8,254	13,253	33,400	40,655	0.0
Pine	3,908	4,464	4,411	1,409	17.0	9,538	13,367	30,247	41,847	3.3
South Park	13,535	14.652	13,701	4.943	9.1	7,941	11,011	23,854	30,520	4.3

Table A-1 (cont.)

Population, Households, Land Area, Income, and Poverty Data

Municipality	Population (1980)	Population (1984)	Population (1985)	Households (1985)	Land Area (sq. mi.)	Per Capita Income (1979)	Per Capita Income (1985)	Household Income (1979)	Household Income (1985)	Percent Below Poverty (1979)
Home Rule Municipalities										
McKeesport	31,012	28,853	27,639	11,102	6.6	6,433	8,628	16,071	21,480	14.4
Bellevue	10,128	9,646	9,521	4,463	1.0	7,771	11,234	16,913	23,966	7.5
Bethel Park	34,755	34,407	35,029	11,859	11.7	9,269	13,452	27,782	39,734	2.4
Bradford Woods	1,264	1,339	1,362	435	0.9	13,014	21,283	41,516	66,638	3.7
Green Tree	5,722	5,691	5,578	1,993	2.1	9,861	13,766	27,945	38,528	2.2
Monroeville	30,977	30,470	31,572	11,459	19.5	8,924	12,784	25,216	35,223	4.2
Whitehall	15,143	14,671	14,424	6,771	3.3	10,606	14,716	26,879	31,349	4.0
McCandless	26,191	25,897	27,548	9,248	17.4	10,544	15,325	31,662	45,650	3.6
Mt. Lebanon	34,414	33,633	35,115	13,472	6.0	12,811	19,174	34,115	49,977	2.4
Ohara	9,233	9,279	8,931	2,872	7.1	11,159	17,160	24,719	53,362	2.8
Penn Hills	57,632	56,072	55,743	19,211	19.0	7,643	10,670	22,517	30,960	5.1
Upper St Clair	19,023	18,992	18,088	5,898	9.7	13,866	21,377	47,322	65,559	1.2
Hampton	14,319	14,667	14,731	4,867	16.3	9,194	12,875	28,678	38,969	3.5
Indiana	6,080	6,300	6,012	1,983	17.6	8,582	12,715	26,181	38,549	5.5
Richland	7,749	8,472	7,537	2,747	14.7	8,177	11,498	25,258	31,547	2.9
West Deer	10,897	10,971	10,926	3,774	29.0	7,307	10,032	21,875	29,043	5.5

Table A-2

Population and Housing Characteristics, Density, Population Change, Property Value and Type

Municipality	Percent of Population Nonwhite (1980)	Percent of Population Over 65 (1980)	Percent of Housing Built Before 1940	Percent of Housing Built in 1970-80	Owner-Occupied (1980)	Population Density (1984)	Population Change 1980-84 (percent)	Market Value of Real Estate Per Capita (1985)	Percent of Real Estate Residential
Pittsburgh	24.9	16.0	63.3	4.8	51.2	7,306	-5.0	14,503	47.9
Third Class Cities									
Clairton	28.0	17.2	58.8	2.7	62.0	4,540	0.6	7,587	64.8
Duquesne	23.5	18.1	59.9	11.9	58.3	5,434	-3.1	9,701	55.6
Boroughs									
Aspinwall	0.6	19.5	62.1	6.7	48.0	7,460	-9.1	15,503	78.2
Avalon	1.2	20.9	52.2	7.8	47.8	10,145	-2.5	11,120	71.7
Baldwin	0.9	9.9	12.2	9.9	77.6	4,369	-2.8	13,318	87.8
Bell Acres	0.1	8.4	24.7	12.4	91.7	232	-4.1	26,159	92.9
Ben Avon	3.9	13.5	72.5	2.4	70.9	5,570	-3.7	11,975	96.5
Ben Avon Heights	0.0	13.1	70.1	0.0	94.6	1,815	-8.8	28,313	93.1
Blawnox	0.1	15.1	51.6	8.6	55.0	5,643	2.4	15,540	60.5
Brackenridge	2.5	19.9	69.4	5.5	64.0	8,194	-4.7	7,915	79.7
Braddock	47.8	18.4	75.9	1.9	42.3	8,363	-10.9	6,734	39.7
Braddock Hills	15.8	19.0	20.0	33.7	57.4	2,546	-0.4	15,183	47.2
Brentwood	0.3	17.5	38.0	4.3	66.0	7,527	-4.8	12,830	81.4
Bridgeville	4.2	17.7	45.3	8.9	68.0	5,363	-4.1	14,635	83.3
Carnegie	2.2	18.1	55.2	10.1	54.4	7,373	-5.1	12,572	72.0
Castle Shannon	0.9	11.8	19.5	7.2	63.3	6,048	-4.8	12,205	75.4
Chalfant	0.5	15.0	50.4	0.6	76.3	5,565	-0.5	10,379	87.2
Cheswick	0.1	12.8	29.8	7.0	81.7	4,374	-6.4	15,830	80.7
Churchill	1.5	11.7	7.5	7.0	98.4	2,974	-2.8	31,817	77.3
Coraopolis	12.3	18.9	65.3	10.7	59.6	5,353	-4.8	12,458	69.1
Crafton	1.6	13.2	61.3	10.6	51.5	7,016	1.2	12,106	77.0
Dormont	0.4	14.8	79.5	0.8	56.4	13,898	-1.4	10,159	83.2
Dravosburg	0.2	17.8	42.7	1.2	70.5	2,716	-2.7	10,346	69.3
East McKeesport	1.1	16.8	52.6	4.5	65.4	7,018	-4.5	10,203	86.1
East Pittsburgh	4.5	17.9	70.6	8.1	46.6	6,225	-0.1	18,568	27.5
Edgewood	1.7	14.2	74.0	1.9	63.4	7,353	0.7	15,112	82.3
Edgeworth	2.2	15.5	55.8	3.8	84.4	1,298	4.5	42,612	95.7
Elizabeth	7.9	19.8	76.1	1.5	60.4	5,720	-9.3	10,864	76.5
Emsworth	3.7	14.3	44.3	18.7	59.7	6,186	0.6	11,990	83.0
Etna	0.1	19.5	68.5	3.9	61.6	6,120	-5.5	11,181	71.8
Forest Hills	1.3	14.0	39.8	4.8	82.4	5,417	-0.9	17,601	85.3
Fox Chapel	2.6	8.8	18.3	22.0	94.6	620	-4.2	45,229	96.0
Franklin Park	1.9	7.7	16.3	28.9	92.0	430	2.2	24,486	93.6
Glassport	0.3	15.3	57.7	1.6	68.1	3,706	-5.0	8,356	85.9
Glenfield	2.9	16.3	74.0	0.0	83.0	323	4.9	14,266	72.2
Haysvile	9.6	16.2	59.0	12.8	71.8	1,290	10.3	17,582	34.7
Heidelberg	1.4	19.0	54.9	4.1	74.1	5,627	5.1	13,260	81.0
Homestead	37.5	24.0	70.7	3.7	40.6	7,967	-6.1	10,931	48.0
Ingram	2.8	16.0	53.3	10.2	60.1	10,643	-2.0	10,807	82.2
Jefferson	2.9	10.5	22.5	24.9	80.8	514	-1.3	16,290	74.6
Leetsdale	5.5	16.7	67.3	0.2	70.0	1,666	-6.5	28,230	46.3
Liberty	1.5	13.5	15.9	9.7	89.1	2,020	-2.6	11,859	93.0
Lincoln	0.4	8.7	27.6	9.1	90.9	297	1.8	13,007	87.5
McKees Rocks	9.6	18.3	66.1	1.3	51.9	8,459	-3.2	8,140	58.3
Millvale	0.1	18.5	79.2	2.5	56.6	7,723	-2.9	9,125	75.4
Mt Oliver	1.6	17.6	76.9	1.2	58.7	14,533	-4.7	7,492	79.5
Munhall	0.7	17.5	47.8	2.9	75.6	6,128	-3.0	11,192	80.2
North Braddock	14.6	16.5	71.3	3.1	64.9	5,527	-4.8	6,021	69.8
Oakdale	3.3	9.4	51.0	15.7	81.0	5,403	10.5	11,960	88.0
Oakmont	c.9	20.0	50.5	13.0	54.6	4,254	-3.3	15,292	75.7
Osborne	3.1	13.0	57.6	2.9	91.2	1,288	-2.6	26,773	89.8
Pennsbury Village	2.8	1.9	0.0	4.4	79.8	6,440	-19.3	21,074	100.0
Pitcairn	0.9	14.9	77.6	2.3	54.3	8,350	0.0	7,194	81.3
Pleasant Hills	1.5	9.8	4.6	15.3	76.0	3,292	-4.0	19,022	74.7
Plum	2.9	5.3	13.9	29.2	79.7	852	-0.3	13,418	83.3
Port Vue	0.0	12.3	29.1	3.6	83.8	4,304	-2.8	8.822	91.3

Table A-2 (cont.)

Population and Housing Characteristics, Density, Population Change, Property Value and Type

Municipality	Percent of Population: Nonwhite (1980)	Percent of Population: Over 65 (1980)	Percent of Housine: Built Before 1940	Percent of Housine: Built in 1970-80	Owner-Occupied (1980)	Pouulation density (1984)	Population Change 1980-84 (percent)	Market Value of Real Estate Per Capita (1985)	Percent of Real Estate Residential
Boroughs *(cont.)*									
Rankin	44.7	18.3	54.3	4.3	45.2	6,645	-8.1	6,175	53.5
Rosslyn Farms	0.0	14.0	53.4	0.5	95.1	832	-4.2	40,029	80.0
Sewickley	15.6	19.4	59.9	1.5	47.9	4,765	-0.3	19,339	72.5
Sewickley Heights	0.3	15.3	59.1	8.2	70.1	117	-3.4	58,532	90.6
Sewickley Hills	1.4	6.0	25.9	34.7	87.9	104	8.8	20,414	97.7
Sharpsburg	2.5	17.3	76.3	8.0	49.7	8,130	-6.6	10,901	52.1
Springdale	0.0	15.0	57.6	0.5	68.2	4.724	-3.8	12,263	69.0
Swissvale	6.0	18.0	67.3	3.6	61.0	9,502	0.5	9,639	77.8
Tarenturn	1.3	16.4	72.3	6.2	53.6	5.289	-1.1	7,681	71.1
Thornburg	0.0	10.1	43.9	6.7	98.8	1,223	-7.0	28,711	85.6
Turtle Creek	0.5	17.9	53.1	8.7	56.9	6.709	-3.6	9,384	57.1
Verona	2.9	13.5	65.9	8.0	56.7	6,174	-2.9	11,332	67.2
Versailles	2.0	19.2	45.0	18.6	60.0	3,952	-8.1	11,791	62.6
Wall	0.2	14.5	88.3	0.0	73.9	2,473	0.0	8,272	80.6
West Elizabeth	2.3	11.9	57.5	17.3	67.2	3,795	-6.1	7,116	62.6
West Homestead	3.3	13.1	47.3	4.5	71.8	3,223	-7.3	15,843	67.0
West Mifflin	6.7	11.8	17.6	12.5	82.4	1,788	-3.5	17,962	54.0
West View	0.2	15.8	54.6	9.8	69.6	7,634	-0.2	14,787	79.8
Whitaker	0.7	17.2	57.4	1.6	78.3	5,213	-3.2	8,667	92.0
White Oak	1.5	15.1	21.4	20.1	78.0	1,484	1.8	14,085	86.2
Wilkinsburg	38.1	17.5	52.8	8.7	41.7	7,332	-4.0	10,146	71.8
Wilmerding	3.0	23.6	76.5	8.3	51.5	5,630	-7.0	14,352	51.1
First Class Townships									
Aleppo	7.9	6.8	17.2	52.3	87.6	635	6.3	18,639	85.0
Baldwin	0.5	10.3	7.3	1.5	95.9	5,272	-1.6	14,266	83.1
Collier	2.6	18.8	33.2	8.4	84.6	382	-3.4	24,119	45.3
Crescent	3.8	8.8	26.0	17.4	84.5	1,280	-6.1	10,538	92.0
East Deer	3.6	20.8	63.4	4.3	71.7	709	-6.0	15,408	51.9
Elizabeth	2.5	10.4	25.3	19.9	86.0	1,027	0.2	12,551	86.7
Harrison	2.6	15.9	43.6	9.4	72.3	1,786	-4.3	13,998	73.7
Kennedy	0.7	11.3	10.6	17.1	88.3	1,330	2.2	16,538	82.7
Leet	2.9	7.9	37.0	22.2	86.2	1,115	2.3	11,924	95.5
Neville	0.6	18.2	29.6	2.7	52.9	937	-7.3	52,607	17.9
North Versailles	9.3	11.0	15.7	21.8	74.4	1,587	-2.1	13,630	69.3
Reserve	1.3	12.9	40.3	15.0	86.5	2,154	0.0	9,606	95.7
Robinson	1.3	8.0	17.1	24.6	84.7	592	-0.0	32,140	48.3
Ross	1.9	12.4	16.7	24.8	76.4	2,576	-0.2	18,212	73.7
Scott	2.4	16.3	13.8	13.4	68.0	4,818	-5.6	13,952	78.3
Shaler	0.8	11.2	20.3	16.0	86.0	2,967	-2.3	14,564	89.5
South Fayette	6.2	14.2	27.1	39.2	76.8	453	-1.0	15,233	74.5
South Versailles	0.0	13.9	31.9	5.6	86.6	389	-8.5	9,925	90.7
Springdale	0.0	11.2	41.0	12.7	84.3	784	-5.9	10,135	87.3
Stowe	0.6	17.3	63.1	4.2	62.8	4,645	-4.1	9,642	71.3
Wilkins	1.8	11.9	21.0	12.6	69.5	3,230	-0.9	18,475	68.5
Second Class Townships									
Fawn	0.2	10.0	27.7	11.2	81.7	210	-0.7	12,577	83.5
Findlay	1.7	8.5	32.0	33.6	81.2	151	8.2	28,560	37.1
Forward	0.2	11.5	30.2	19.6	83.1	231	0.6	11,213	51.6
Frazer	0.3	10.4	20.1	10.8	86.9	159	-1.1	12,818	90.4
Harmar	0.0	12.7	33.1	16.3	74.7	567	-3.4	26,910	35.6
Kilbuck	2.3	24.8	29.1	7.2	93.1	426	-9.2	15,872	95.0
Marshall	0.0	8.9	32.7	17.6	83.5	186	10.9	28,044	62.1
Moon	4.0	5.4	7.6	30.3	68.1	849	-2.3	15,895	67.0
North Fayette	1.7	9.2	23.4	34.7	86.4	309	7.7	13,758	71.5
Ohio	4.9	8.9	12.5	16.9	89.9	310	1.9	20,472	89.9
Pine	0.5	10.2	14.2	15.9	89.9	263	14.2	21,397	76.9
South Park	4.6	5.6	14.2	51.6	76.0	1,610	8.3	14,044	88.5

Table *A-2 (cont.)*
Population and Housing Characteristics, Density, Population Change, Property Value and Type

Municipality	Percent of Population: Nonwhite (1980)	Percent of Population: Over 65 (1980)	Percent of Housing: Built Before 1940	Percent of Housing: Built in 1970-80	Owner-Occupied (1980)	Pooulation Density (1984)	Population Change 1980-84 (percent)	Market Value of Real Estate Per Capita (1985)	Percent of Real Estate Residential
Home Rule Municipalities									
McKeesport	14.1	17.9	63.7	5.2	60.0	4,372	-7.0	8,564	76.8
Bellevue	2.3	18.9	56.9	9.6	39.0	9,646	-4.8	10,966	84.3
Bethel Park	2.2	8.5	8.6	23.9	80.0	2,941	-1.0	18,708	75.4
Bradford Woods	0.0	5.9	27.0	33.4	95.7	1,488	5.9	23,745	97.0
Green Tree	2 5	13.4	16.3	8.5	88.6	2,710	-0.5	34,428	38.2
Monroeville	8.0	7.3	8.0	27.0	71.8	1,563	-1.6	22,538	50.1
Whitehall	0.4	15.1	8.5	11.6	71.7	4,446	-3.1	18,446	86.4
McCandless	1.8	9.2	6.7	34.8	79.1	1,488	-1.1	22,357	80.8
Mt. Lebanon	1.1	16.4	36.4	5.8	73.0	5,606	-2.3	20,832	87.9
Ohara	0.6	11.7	24.1	19.4	90.1	1,307	0.5	31,825	61.3
Penn Hills	11.9	9.7	14.2	13.0	83.1	2,951	-2.7	12,518	84.5
Upper St Clair	1.2	5.2	5.1	30.5	96.4	1,958	-0.2	33,208	86.4
Hampton	0.6	6.9	18.7	31.5	87.1	900	2.4	20,960	83.6
Indiana	1.7	10.7	36.5	17.4	83.5	358	3.6	15,927	81.7
Richland	1.6	9.1	17.4	23.4	86.0	576	9.3	21,417	75.3
West Deer	0.8	9.3	35.6	21.9	86.0	378	0.7	12,775	89.4

Table A-3

Per Capita Revenues and Expenditures, 1985

Municipality	Per Capita Revenues in 1985—Excluding PSE's						Per Capita Expenditures in 1985		
	Total	All Taxes	Real Estate Tax	Earned Income Tax	Total Miscellaneous	Intergovernmental Aid	Total without PSEs	Police	Streets
Pittsburgh	727.53	497.44	234.49	139.89	230.27	131.13	708.64	98.46	85.49
Third Class Cities									
Clairton	265.42	151.95	126.39	15.15	113.47	18.63	247.64	36.61	40.53
Duquesne	214.13	125.32	101.37	14.35	88.80	31.09	250.65	57.03	37.16
Boroughs									
Aspinwall	253.80	175.72	120.58	44.26	78.08	6.56	219.02	57.28	5230
Avalon	201.29	146.29	105.86	32.19	55.00	8.93	193.12	63.72	44.43
Baldwin	182.01	111.90	71.69	36.84	70.11	9.94	179.84	34.39	34.79
Bell Acres	239.26	197.58	117.63	59.94	41.68	4.44	223.67	69.96	72.06
Ben Avon	186.88	157.21	100.04	48.27	29.67	8.14	196.48	67.50	78.35
Ben Avon Heights	349.09	312.03	214.61	78.23	37.06	5.91	325.49	116.43	106.15
Blawnox	242.95	159.20	111.25	36.45	83.75	12.24	278.69	81.88	52.80
Brackenridge	179.00	83.96	55.10	21.80	95.04	34.10	163.74	38.25	44.43
Braddock	166.11	114.51	73.10	15.66	51.60	19.72	184.50	60.30	14.01
Braddock Hills	230.54	183.82	119.85	22.95	46.72	12.73	189.04	55.64	48.83
Brentwood	206.08	144.30	102.45	36.80	61.76	13.12	198.16	61.90	38.89
Bridgeville	227.84	175.56	120.42	32.62	52.31	10.53	211.58	58.98	47.69
Carnegie	187.98	125.39	84.71	31.27	62.61	8.29	194.74	68.47	70.91
Castle Shannon	186.69	135.40	94.84	36.29	51.27	7.92	158.65	48.66	34.58
Chalfant	142.15	91.82	56.29	33.26	50.33	25.50	155.05	28.03	50.91
Cheswick	240.07	134.49	90.86	39.42	105.59	6.91	207.46	52.12	32.07
Churchill	305.96	258.72	136.62	77.18	47.40	4.72	245.29	98.17	43.25
Coraopolis	301.19	150.46	116.01	26.71	150.80	18.75	299.21	74.21	45.48
Crafton	229.71	164.49	92.74	44.32	65.12	17.94	206.92	51.40	55.47
Dormont	237.97	140.38	103.88	32.27	97.59	14.18	208.23	50.20	36.47
Dravosburg	242.66	123.37	71.54	28.07	119.28	30.00	224.68	50.74	50.31
East McKeesport	169.64	114.42	84.55	25.74	55.22	9.30	152.31	39.27	44.16
East Pittsburgh	253.06	192.63	161.70	19.49	60.44	17.45	257.21	91.54	53.20
Edgewood	274.71	218.10	153.89	48.46	56.64	12.11	197.25	84.01	39.86
Edgeworth	480.23	422.69	304.06	93.70	57.54	4.00	448.84	123.25	102.93
Elizabeth	307.04	106.74	74.87	27.14	200.30	24.69	248.87	48.80	45.61
Emsworth	187.29	146.09	102.70	34.68	41.20	11.08	180.31	50.62	47.00
Etna	222.61	130.95	90.47	28.04	91.66	15.99	254.65	57.72	37.83
Forest Hills	275.35	213.10	125.37	52.02	62.27	21.33	247.40	56.43	54.26
Fox Chapel	460.74	368.52	209.36	139.38	92.29	10.83	387.40	68.09	92.93
Franklin Park	158.01	115.22	29.26	64.26	42.77	6.13	128.72	23.55	32.26
Glassport	133.08	89.00	59.89	21.61	44.07	9.62	136.06	33.74	26.27
Glenfield	301.76	120.24	73.63	42.15	181.52	21.29	257.17	56.88	62.42
Haysvile	125.55	77.70	49.87	18.10	47.85	17.07	105.84	0.00	33.95
Heidelberg	311.20	163.64	99.98	33.70	147.56	39.58	235.15	80.24	43.35
Homestead	246.96	152.51	129.66	12.69	94.41	34.26	292.25	107.22	52.24
Ingram	155.95	122.94	81.43	33.49	33.00	9.91	146.82	49.50	36.83
Jefferson	288.77	143.88	98.68	36.63	145.01	8.83	261.26	55.87	43.88
Leetsdale	334.66	241.32	199.25	26.97	93.33	28.80	330.46	101.43	85.19
Liberty	123.74	57.90	23.75	29.23	65.84	5.08	138.71	26.64	29.91
Lincoln	194.84	110.70	71.92	21.25	84.14	44.72	188.77	40.59	73.60
McKees Rocks	218.47	122.38	86.27	22.99	96.09	16.82	211.75	49.40	55.85
Millvale	169.96	112.79	75.18	22.59	57.17	14.70	158.30	44.90	50.27
Mt Oliver	199.47	120.50	57.57	47.86	78.97	18.54	196.71	50.80	43.87
Munhall	200.53	156.70	125.68	25.57	43.86	11.66	187.42	49.88	39.99
North Braddock	141.40	106.49	76.70	19.10	34.93	15.85	147.40	34.21	42.58
Oakdale	243.69	111.49	65.60	39.98	132.21	47.90	177.22	57.17	32.09
Oakmont	261.08	148.19	97.38	42.37	112.96	18.96	237.47	55.53	41.26
Osborne	444.19	263.61	188.44	57.19	180.58	111.92	262.95	63.87	50.49
Pennsbury Village	368.93	334.83	232.98	86.06	34.10	4.72	223.59	64.59	22.94
Pitcairn	139.38	66.55	46.00	18.01	72.82	10.85	159.01	45.82	41.70
Pleasant Hills	337.03	177.10	108.75	46.39	159.83	12.05	282.87	86.47	36.24
Plum	148.62	68.65	24.02	41.03	79.94	9.11	135.76	31.16	30.49
Port Vue	173.38	104.03	75.66	27.64	69.34	14.03	146.93	23.10	30.70

TableA-3 (cont.)

Per Capita Revenues and Expenditures, 1985

Municipality	Per Capita Revenues in 1985—Exclude PSE's: Total	All Taxes	Real Estate Taw	Earned Income Taw	Total Miscell-aneous	Intergov-ernmental Aid	Per Capita Expenditures in 1985: Total without PSEs	Police	Streets
Boroughs {cont.)									
Rankin	158.68	94.94	81.04	11.22	63.73	17.06	173.83	47.88	36.33
Rosslyn Farms	518.04	451.34	336.71	93.89	66.70	5.71	437.37	147.66	130.96
Sewickley	389.40	232.75	157.44	42.51	156.69	14.32	369.14	117.92	62.96
Sewickley Heights	832.37	572.75	393.45	134.38	259.62	14.79	677.47	323.12	133.32
Sewickley Hills	117.89	79.84	13.42	57.53	38.06	3.47	104.61	44.33	17.56
Sharpsburg	246.11	123.40	73.90	21.93	122.71	40.68	240.47	55.11	58.06
Springdale	181.13	76.04	45.25	22.62	105.09	6.15	199.56	34.87	51.26
Swissvale	167.54	131.67	97.90	27.87	35.86	10.84	161.85	49.84	27.55
Tarentum	201.24	89.56	62.71	17.90	111.66	20.32	212.42	39.25	50.26
Thornburg	447.98	386.45	271.28	95.11	61.53	6.26	406.80	133.02	134.06
Turtle Creek	207.12	123.52	95.05	24.23	83.55	31.84	211.85	50.58	50.45
Verona	179.57	126.82	96.86	23.71	52.75	11.20	146.83	56.96	20.40
Versailles	206.60	140.55	92.79	25.54	66.05	11.39	193.41	51.15	59.62
Wall	91.59	59.80	37.23	20.39	31.79	7.08	80.93	17.36	18.58
West Elizabeth	102.30	75.81	43.92	23.30	26.49	7.38	108.36	34.13	24.49
West Homestead	282.82	223.64	191.40	25.75	59.18	26.30	290.45	122.79	71.24
West Mifflin	228.93	179.54	112.97	32.07	49.43	18.75	213.05	45.71	50.00
West View	214.47	151.09	108.11	32.43	63.34	13.50	190.40	54.91	34.80
Whitaker	140.56	91.49	68.65	21.10	49.07	20.74	136.06	34.05	30.04
White Oak	227.67	175.12	110.78	35.71	52.56	8.60	166.54	53.36	43.73
Wilkinsburg	253.34	162.54	122.10	26.55	90.79	36.43	234.60	58.88	35.87
Wilmerding	401.67	146.51	107.13	24.97	255.15	165.20	242.40	37.94	74.29
First Class Townships									
Aleppo	211.65	143.62	90.67	39.83	68.03	4.18	223.82	79.90	52.25
Baldwin	185.22	137.70	76.57	37.39	47.52	14.18	175.86	59.32	29.51
Collier	242.10	184.49	127.19	24.91	57.65	21.70	212.08	63.17	64.64
Crescent	153.16	109.55	75.16	28.13	43.61	9.64	135.08	24.34	43.54
East Deer	218.54	110.27	70.54	29.53	108.27	21.45	280.89	71.14	99.61
Elizabeth	167.15	83.93	42.16	36.81	83.22	12.57	123.36	27.71	41.57
Harrison	174.56	124.24	83.43	28.75	50.37	15.43	177.43	50.18	46.64
Kennedy	227.74	116.86	53.82	42.88	110.93	9.69	223.43	34.30	49.53
Leet	259.46	159.76	99.15	47.33	99.70	16.23	229.73	58.36	46.77
Neville	745.48	560.20	487.77	44.20	185.29	41.22	763.71	314.45	83.22
North Versailles	170.61	124.49	82.76	28.56	46.07	21.21	193.05	30.24	87.39
Reserve	123.85	71.61	36.76	3251	52.24	8.64	125.72	25.56	24.85
Robinson	264.92	208.99	141.45	42.14	55.96	16.36	222.48	66.90	68.67
Ross	145.71	113.66	52.21	42.77	32.05	7.92	128.30	39.67	36.30
Scott	161.35	120.35	62.67	47.44	40.98	8.99	157.62	52.39	37.05
Shaler	137.02	95.17	43.70	46.98	41.82	9.21	144.95	36.84	37.12
South Fayette	235.21	118.24	80.20	31.02	116.97	21.98	184.08	37.11	57.24
South Versailles	107.91	69.95	43.80	22.81	37.96	9.15	79.89	23.97	24.01
Springdale	194.73	87.80	41.05	35.69	106.92	14.51	159.65	19.32	43.15
Stowe	159.91	118.42	84.91	25.13	41.51	14.41	159.91	34.16	57.29
Wilkins	199.85	160.87	76.86	46.81	38.99	11.10	180.30	66.97	50.75
Second Class Townships									
Fawn	100.65	70.63	39.22	25.16	30.02	9.43	92.99	24.21	19.75
Findlay	365.10	126.88	66.53	42.90	238.26	27.69	326.75	75.90	111.83
Forward	124.19	65.94	32.51	27.17	58.25	24.21	70.69	14.37	25.07
Frazer	105.32	69.21	27.44	3272	36.12	9.45	92.07	0.15	41.79
Harmar	308.42	152.00	115.96	23.92	156.39	19.51	236.22	0.00	59.20
Kilbuck	298.79	121.61	71.96	40.46	177.18	12.01	222.52	138.73	19.20
Marshall	196.02	128.43	60.88	4236	67.59	9.66	174.69	67.33	33.43
Moon	151.79	114.88	55.37	45.94	36.92	9.26	132.17	39.67	30.08
North Fayette	215.93	102.10	36.37	44.63	113.83	16.88	194.26	45.39	45.83
Ohio	191.17	140.90	74.45	48.93	50.27	10.37	189.53	53.46	59.76
Pine	139.21	98.68	34.42	38.72	40.53	6.02	118.01	42.97	27.17
South Park	217.79	109.55	61.34	38.59	108.17	13.46	199.62	52.74	26.04

Table A-3 *(cont.)*
Per Capita Revenues and Expenditures, 1985

Municipality	Per Capita Revenues in 1985—Excluding PSE's						Per Capita Expenditures in 1985		
	Total	All Taxes	Real Estate Tax	Earned Income Tax	Total Miscell-aneous	Intergov-ernmental Aid	Total without PSEs	Police	Streets
Home Rule Municipalities									
McKeesport	394.01	175.48	106.88	51.05	218.50	99.32	389.30	62.45	80.86
Bellevue	218.99	154.82	88.94	55.25	64.17	10.85	213.11	60.23	53.75
Bethel Park	235.86	143.77	52.04	70.57	92.12	13.55	181.08	35.74	20.67
Bradford Woods	148.38	114.04	31.94	72.06	34.33	4.18	140.01	43.95	39.63
Green Tree	350.48	246.50	145.63	49.72	103.99	16.68	334.35	78.80	111.78
Monroeville	341.76	249.75	79.12	59.89	92.14	15.54	303.21	54.38	75.13
Whitehall	210.07	167.64	69.74	91.24	42.42	6.28	186.63	46.22	45.58
McCandless	179.94	144.40	61.35	56.56	35.53	6.70	119.25	41.85	37.50
Mt. Lebanon	367.93	261.00	174.83	65.81	106.91	11.95	296.17	71.17	52.14
Ohara	333.78	227.63	103.29	107.84	106.24	24.84	275.89	63.29	71.94
Penn Hills	230.16	136.59	52.33	67.29	93.61	29.99	215.09	51.47	33.48
Upper St Clair	371.52	258.96	107.86	117.81	112.56	20.74	311.86	66.84	71.48
Hampton	265.02	121.72	59.90	51.39	143.24	10.18	218.99	51.88	42.85
Indiana	164.16	113.85	67.29	35.96	50.31	12.45	147.16	42.35	49.22
Richland	217.99	123.25	73.71	43.45	94.71	11.44	185.09	54.12	41.61
West Deer	136.10	90.08	46.76	36.47	46.05	10.16	139.39	32.92	45.35

Table A 4

Employment, Household Burdens, 1985

Municipality	Employees per 1,000 Residents—1985				Estimated Household Burdens From:				Burden as Percent of Household Income
	Retail	Manu-facturing	Government and Education	Other	Real Estate Tax	Earned Income Tax	Trash Collection /Disposal	Total Burden	
Pittsburgh	98.17	38.76	121.28	531.02	260	349	0	609	2.44
Third Class Cities									
Clairton	67.03	178.63	48.31	72.56	183	36	20	239	1.10
Duquesne	81.78	11.13	37.17	66.98	128	35	3	166	0.87
Boroughs									
Aspinwall	58.15	6.86	11.43	39.53	191	97	52	340	1.08
Avalon	79.72	19.80	39.94	353.25	148	68	22	238	0.99
Baldwin	27.76	6.14	21.83	36.42	169	102	0	271	0.90
Bell Acres	2.39	0.00	18.34	31.10	302	168	6	476	0.95
Ben Avon	24.18	2.08	38.77	8.34	251	131	0	382	1.03
Ben Avon Heights	0.00	0.00	0.00	27.93	541	214	0	755	1.33
Blawnox	32.84	255.36	40.88	159.52	143	83	35	261	0.97
Brackenridge	23.76	39.61	31.20	94.34	103	54	51	208	0.94
Braddock	41.10	198.57	57.54	269.74	63	37	0	100	0.63
Braddock **Hills**	70.61	0.00	26.18	262.99	119	51	0	170	0.74
Brentwood	73.61	3.28	44.04	101.81	195	91	0	286	1.05
Bridgeville	212.10	52.63	30.60	206.15	230	79	0	308	1.10
Camegie	126.12	12.89	26.10	134.75	135	74	7	216	0.84
Castle Shannon	79.12	4.78	38.83	180.56	178	96	0	274	0.90
Chalfant	9.93	35.75	15.89	55.61	120	85	6	211	0.79
Cheswick	51.02	24.09	49.13	171.00	181	100	42	323	1.01
Churchill	7.33	0.00	98.03	536.38	298	218	0	516	0.84
Coraopolis	226.62	14.06	45.39	213.78	177	63	28	268	1.10
Crafton	70.58	4.12	26.23	368.80	161	108	0	270	0.99
Dormont	54.70	3.91	52.80	144.76	202	81	0	283	1.10
Dravosburg	54.59	25.50	16.55	405.37	113	67	3	182	0.82
East McKeesport	48.04	26.61	31.78	91.65	168	63	0	231	0.99
East Pittsburgh	34.12	525.48	49.14	874.43	95	45	0	140	0.59
Edgewood	13.36	126.06	24.78	59.75	308	125	6	440	1.26
Edgeworth	59.10	0.00	26.27	79.40	782	258	0	1,040	0.97
Elizabeth	180.55	1.22	55.32	105.17	131	66	39	235	0.96
Emsworth	35.07	19.79	44.10	98.26	192	83	0	275	1.12
Etna	166.78	9.41	25.69	215.19	149	68	35	252	1.18
Forest Hills	38.08	2.43	24.44	156.92	277	138	0	415	1.16
Fox Chapel	0.00	0.00	47.71	13.00	638	446	0	1,085	0.81
Franklin Park	9.57	2.36	17.60	29.88	87	206	5	297	0.65
Glassport	26.96	98.74	31.15	73.24	127	56	0	183	0.80
Glenfield	65.42	84.11	32.71	182.24	126	103	0	228	1.02
Haysvile	45.45	0.00	0.00	100.00	48	52	0	100	0.58
Heidelberg	102.58	51.65	20.80	129.84	183	79	7	270	1.25
Homestead	111.09	550.52	66.01	225.59	118	26	0	145	0.92
Ingram	49.48	0.75	12.49	38.73	155	83	7	244	0.98
Jefferson	20.26	50.60	56.49	309.15	209	107	0	316	1.04
Leetsdale	136.54	544.20	102.90	327.84	228	70	0	298	1.13
Liberty	24.39	5.57	72.82	35.89	58	78	6	142	0.55
Lincoln	74.65	76.13	21.43	48.78	185	63	6	254	0.83
McKees **Rocks**	122.14	8.51	52.70	261.56	112	55	7	174	0.79
Millvale	56.45	30.60	56.69	599.86	123	52	30	206	1.08
Mt Oliver	74.96	3.65	48.67	64.49	106	119	52	277	1.27
Munhall	19.35	92.39	22.06	58.66	246	65	0	310	1.25
North Braddock	20.61	163.32	48.40	24.26	128	48	0	176	0.89
Oakdale	18.79	56.94	17.14	19.35	166	118	76	360	1.20
Oakmont	63.77	144.57	53.35	169.55	175	108	0	282	0.78
Osborne	0.00	0.00	203.52	178.08	456	156	0	612	1.41
Pennsbury Village	13.23	0.00	1.32	10.58	366	139	0	505	1.37
Pitcairn	40.20	0.00	29.95	47.56	83	43	42	167	0.77
Pleasant Hills	195.12	15.89	39.34	154.07	216	128	6	350	0.96
Plum	20.19	18.84	25.31	63.18	62	130	64	255	0.76
Port Vue	15.09	3.31	10.54	17.36	186	76	0	262	1.09

Table A 4 (cont.)
Employment, Household Burdens, 1985

Municipality	Employees per 1,000 Residents—1985				Estimated Household Burdens From:				Burden as Percent of Household Income
	Retail	Manufacturing	Government and Education	Other	Real Estate Tax	Earned Income Tax	Trash Collection /Disposal	Total Burden	
Boroughs *(cont.)*									
Rankin	7.91	9.89	12.65	10.28	100	28	61	189	1.03
Rosslyn Farms	26.86	289.26	64.05	289.26	739	260	0	999	1.48
Sewickley	130.27	0.00	77.27	450.41	236	95	0	332	1.09
Sewickley Heights	0.00	0.00	25.82	39.91	958	378	6	1,341	1.14
Sewickley Hills	14.43	0.00	2.06	22.68	38	169	6	213	0.51
Shsrpsburg	55.34	97.99	35.80	408.99	81	50	33	163	0.71
Springdale	45.76	14.33	67.71	151.61	75	57	44	176	0.69
Swissvale	41.99	36.13	39.28	77.17	176	68	0	244	0.96
Tarentum	78.95	47.64	45.41	139.66	102	44	46	191	0.92
Thornburg	0.00	0.00	44.09	26.05	756	310	0	1,066	1.38
Turtle Creek	53.21	192.59	36.23	85.85	121	58	46	225	0.98
Verona	67.39	84.41	38.12	169.16	156	61	0	217	0.88
Versailles	100.21	43.09	47.25	128.76	129	60	0	189	0.75
Wall	10.42	4.63	54.40	54.40	75	53	6	134	0.64
West Elizabeth	78.43	0.00	0.00	13.07	72	64	6	142	0.58
West Homestead	69.81	391.51	110.11	132.42	318	67	0	384	1.47
West Mifflin	185.58	98.89	46.41	146.40	163	88	0	250	0.93
West View	121.71	2.24	81.84	113.46	209	82	0	291	1.06
Whitaker	39.81	0.00	0.00	41.80	159	55	0	214	0.88
White Oak	49.44	3.22	27.56	71.85	248	96	0	343	1.06
Wilkinsburg	48.14	31.53	49.22	134.63	176	58	23	257	1.10
Wilmerding	72.34	30.30	52.79	177.91	111	54	0	165	0.85
First Class Townships									
Aleppo	7.47	0.00	7.47	136.77	198	104	0	302	0.58
Baldwin	38.28	15.85	5.41	157.00	182	108	0	290	0.92
Collier	208.68	73.23	128.05	514.61	192	85	0	277	0.86
Crescent	10.53	9.44	14.88	42.11	204	85	33	322	1.01
East Deer	23.89	75.90	91.36	64.65	84	71	107	262	1.20
Elizabeth	20.90	12.89	29.62	46.36	105	109	6	220	0.72
Harrison	113.75	217.51	43.35	167.43	152	74	24	249	0.95
Kennedy	50.40	0.00	16.08	131.96	126	123	6	254	0.78
Leet	6.50	3.25	8.12	116.95	293	150	0	443	1.25
Neville	24.87	1343.91	89.19	855.06	169	92	0	261	1.14
North Versailles	143.55	9.73	33.18	70.60	147	76	0	222	0.83
Reserve	16.72	0.00	11.64	67.10	99	93	24	216	0.75
Robinson	186.10	30.21	36.17	392.37	205	129	5	340	0.97
Ross	137.46	5.84	53.97	135.24	100	115	6	220	0.60
Scott	32.19	7.76	28.01	207.04	128	130	0	257	0.72
Shaler	29.16	8.88	21.14	62.32	115	141	5	262	0.75
South Fayette	25.02	34.44	15.31	265.23	175	94	15	284	0.96
South Versailles	8.06	209.68	182.80	88.71	106	62	6	174	0.70
Springdale	11.61	0.00	15.09	78.93	91	93	62	246	0.98
Stowe	22.93	88.75	55.25	222.29	143	63	0	206	0.85
Wilkins	125.20	12.67	19.06	362.32	128	119	0	247	0.73
Second Class Townships									
Fawn	20.37	1.85	13.70	98.89	93	74	6	172	0.60
Findlay	56.27	41.07	64.44	263.44	69	123	6	198	0.67
Forward	22.51	33.77	11.96	50.42	44	73	6	123	0.50
Frazer	14.99	15.74	10.49	29.99	69	93	6	168	0.62
Harmar	94.33	121.59	82.08	1092.50	98	59	7	164	0.60
Kilbuck	11.62	11.62	0.00	600.19	272	163	4	439	0.85
Marshall	161.29	136.83	257.00	219.07	106	122	6	234	0.58
Moon	65.07	21.96	90.22	353.08	106	138	6	249	0.66
North Fayette	73.44	65.47	38.92	70.71	71	124	44	238	0.81
Ohio	12.20	9.85	46.44	87.71	202	150	5	358	0.88
Pine	64.84	4.76	96.80	120.61	82	121	5	208	0.50
South Park	19.78	0.22	35.91	105.90	145	107	47	299	0.98

Table A-4 (cont.)
Employment, Household Burdens, 1985

Municipality	Employees per 1,000 Residents—1985				Estimated Household Burdens From:				Burden as Percent of Household Income
	Retail	Manu-facturing	Government and Education	Other	Real Estate Tax	Earned Income Tax	Trash Collection /Disposal	Total Burden	
Home Rule Municipalities									
McKeesport	84.45	26.09	88.57	249.83	192	127	43	363	1.69
Bellevue	72.79	1.37	29.72	148.72	145	118	0	263	1.10
Bethel Park	73.42	5.17	40.05	103.57	112	208	0	321	0.81
Bradford Woods	3.67	0.00	0.00	11.01	96	226	5	327	0.49
Green Tree	67.41	21.33	280.39	1353.53	153	139	0	292	0.76
Monroeville	231.85	7.51	52.01	339.54	105	165	0	270	0.77
Whitehall	19.55	4.30	50.26	106.42	123	194	2	319	1.02
McCandless	66.43	1.85	45.08	185.53	143	168	6	317	0.69
Mt. Lebanon	53.54	0.00	38.25	165.60	384	172	0	556	1.11
Ohara	116.22	141.98	82.41	495.24	194	335	0	529	0.99
Penn Hills	44.72	3.79	35.30	102.18	125	195	0	320	1.03
Upper St Clair	124.17	2.27	36.88	118.53	284	361	0	646	0.98
Hampton	79.29	9.10	38.90	91.17	149	156	5	310	0.79
Indiana	7.49	4.99	37.43	179.47	163	109	5	277	0.72
Richland	80.40	47.90	45.24	189.33	149	119	6	274	0.87
West Deer	12.36	7.14	12.26	48.42	119	106	6	230	0.79

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