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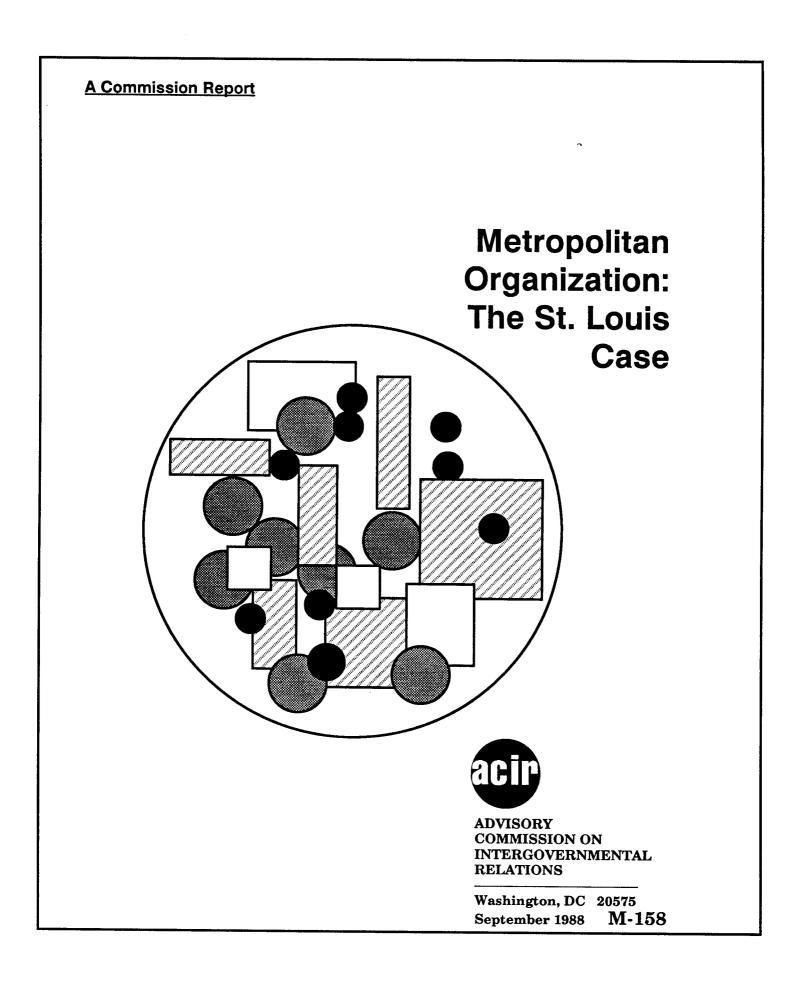
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Preface

This report marks the first publication in a series of case studies being undertaken by ACIR in an effort to learn more about how complex metropolitan areas are organized and governed in our federal system. This study focuses on the metropolitan area of St. Louis, Missouri, and, therein on St. Louis County. This area and county were selected for study precisely because of a governmental structure that is among the most complex in metropolitan America. St. Louis County, organized separately from the City of St. Louis, now contains 91 municipalities, 23 school districts, and 25 fire protection districts, and continues to grow and develop.

The research presented here follows a different approach from typical metropolitan area studies. Instead of adopting a reform perspective, the approach in this study explicitly seeks to describe and understand the organizational dynamics of a complex set of local jurisdictions in a metropolitan county. No effort is made to measure St. Louis County against the standard of a single metropolitan government. Instead, a multiplicity of local governments is viewed as a potentially productive "local public economy," in the terms of ACIR's recent report The Organization of Local Public Economies (A-109), and is judged according to functional criteria. No such system is perfect, and this report has some criticisms to offer and improvements to suggest. The focus of the report, however, is on the lessons to be learned from the creative energies of a productive metropolitan community of communities.

Among these lessons are some of the positive aspects of a jurisdictional pattern long characterized as "fragmented." These positive aspects include both the potential for and realization of more accessible representation of local citizens, more economical patterns of accountability, and greater local responsibility for community problems. The report also notes that jurisdictional fragmentation need not lead to functional fragmentation. A variety of organizational "overlays" can knit jurisdictions together at key points. Economies of large scale can be captured without sacrificing the economies of small scale. None of these good things, of course, come about without paying a price-in this case, the costs consist of the time and effort needed to bring about multijurisdictional coordination and development. The best evidence that these activities are worth the price, however, is that citizens and officials voluntarily make the effort. The costs, however great, are not prohibitive. A system that keeps the cost of improving the human condition low enough that people choose to make the effort is a system that is dynamic and workable over the long haul-a system that will tend to make things better, not make things worse, over time.

This report is likely to be controversial because it challenges many of the traditional approaches to metropolitan reform, which have been championed for many decades by those who sought to improve local and metropolitan governance. ACIR, of course, shares in this enduring quest to improve local governance. One must, however, seek continually to learn and be willing to rethink long accepted points of view if necessary. ACIR offers this report in that spirit—seeking to learn, through discussion and debate, as well as through systematic analysis and inquiry, how to improve the ways in which we choose to govern ourselves.

The American tradition of self-governance is, as Alexander Hamilton put it in *Federalist* 1, a process that joins "reflection and choice." The American people remain dedicated to a tradition of self-governance and local liberty that is much older even than the U.S. Constitution. No less dedication is expected from all of us who work in intergovernmental relations to continue linking reflection with choice in the practice of American local democracy.

> Robert B. Hawkins, Jr. Chairman

Acknowledgments

This report is the product of collaborative research by Roger B. Parks, Director of the Center for Policy and Public Management, School of Public and Environmental Affairs, Indiana University, Bloomington, who was principal investigator, and Ronald J. Oakerson, ACIR Senior Analyst, who was project director. Other assistance was provided by John Shannon, former Executive Director, and Lawrence A. Hunter, former Director of Research, during the early phases of this project. The report was edited by Joan Casey. Secretarial assistance was supplied by Anita McPhaul and Lori O'Bier.

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Preliminary plans for this study were reviewed by an Academic Advisory Board consisting of the following persons: Louis de Alessi, Robert Bish, James Ferris, Bryan Jones, Ted Kolderie, Daniel Mandelker, Stephen Mehay, Elinor Ostrom, Paul Peterson, Derek Shearer, and Richard Wagner. Initial findings were reviewed at a critics' session on April 22, 1987, attended by Ann Cole, William Colman, Edwin Connerly, Lawrence A. Hunter, Susan Lauffer, Michael Libonati, Dolores Martin, James L. Martin, Richard Moore, Steve Moore, William Niskanen, Doug Peterson, Mark Schneider, John Thomas, and Louise White.

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Chapter One Metropolitan Organization: The Challenge of Understanding

INTRODUCTION

Metropolitan organization has for much of this century been viewed as a major challenge for American local government institutions. The focus of concern has been largely on the "fragmentation" of metropolitan areas by a host of governmental jurisdictions-municipalities, counties, special districts, and other governmental units-that often overlap, producing a pattern of organization frequently characterized as a "maze," a "jungle," or a "crazyquilt." Many students of local government have argued that there is a need to solve "the metropolitan problem" by means of areawide reorganizations intended to simplify the structure of local governments in metropolitan areas. This approach to metropolitan reform is predicated on an assumption that the people and economic enterprises located within any metropolitan area constitute a single, integrated community in need of a uniform pattern of organization. From this perspective, a metropolitan area ought to be organized with reference to a single, metropolitanwide unit of government and, if necessary, a uniform arrangement of subunits.¹

Alternative perspectives that view the fragmentation of local governments quite differently have also received considerable attention in recent years.² In this chapter, the traditional theory is presented and some difficulties with it are discussed. Jurisdictional fragmentation is distinguished from functional fragmentation, and the implications of this distinction are explored. Following this discussion, an alternative theory is outlined, and a body of empirical research, tending to support this theory, is briefly reviewed. Further research is clearly needed to explore the validity of competing theories. Propositions to guide such an inquiry are developed, as are a series of research questions and criteria for evaluating the results. The chapter concludes with a discussion of the St. Louis case study and its methodology, together with a preview of the remaining chapters in this report.

THE CRITIQUE OF FRAGMENTATION

Traditional Theory

In the traditional view of metropolitan organization, a number of specific pathologies are thought to affect metropolitan areas, including (1) fragmentation of authority, (2) overlapping jurisdictions, (3) duplication of effort, and (4) fiscal disparity and inequity. Metropolitan communities are viewed as fragmented among scores of separately organized municipalities and special purpose districts. As long as these various units of government have authority to act independently, coordinated action on the basis of metropolitanwide concerns is thought to be difficult-often impossible. Overlapping jurisdictions-such as counties, townships, and special districts that often overlap municipalities-are believed to sow conflict, confusion, and discord. Redundant service capabilities on the part of overlapping jurisdictions are thought to create wasteful duplication of effort on the part of local officials, managers, and service producers. In addition, a large number of relatively small, independent jurisdictions is identified with lopsided patterns of fiscal disparity, a mismatch between tax resources and service needs.

The lack of uniform, fully integrated patterns of metropolitan organization, it is argued, leads to ineffectiveness in service delivery, administrative inefficiency, lack of political accountability, and interjurisdictional inequities. Service delivery is considered deficient and often ineffective because some urban and metropolitan problems do not coincide with municipal boundaries. Spillover effects-ranging from fleeing criminals to stray dogs that elude animal control-may impede effective service delivery. At the same time, an inability on the part of a large number of small jurisdictions to take advantage of economies of scale may lead to inefficiency. Lack of political accountability stems from the confusion thought to be associated with overlapping jurisdictions, that is, citizens cannot pin responsibility on a single official or small set of officials; instead, officials are able to "pass the buck" and avoid taking responsibility for their actions or inactions. Metropolitan fragmentation is also believed to be a means of segregating the rich from the poor. Fiscal disparities among local jurisdictions are identified with serious inequities based on social class and on race.

Metropolitan reform proposals, which initially focused on the need for a single metropolitan government, have more recently been modified to include a two-tier arrangement-two levels of local government with a metropolitan level predominant.³ This modification was developed in response to growing criticism of big-city governments as unresponsive to neighborhood concerns and to a call for neighborhood governments to achieve community control of basic local services.⁴ The two-tier approach still insists on a metropolitan unit of government able to govern comprehensively. Although there would be overlap, the larger unit would be dominant, and the crazy-quilt pattern of fragmentation and overlap would be replaced by a uniform set of jurisdictions with functions neatly divided between the two tiers of a metropolitan government. The underlying theory was basically unchanged, and comprehensive reform remained the fundamental metropolitan challenge.

Difficulties with the Traditional View

Critics have pointed to a number of difficulties with the traditional theory of metropolitan organization. One difficulty derives from a primary emphasis on reform and action instead of inquiry and analysis. Little systematic evidence has been collected that supports the reform view.⁵ Another is the relative lack of success enjoyed by reform advocates despite repeated opportunities to adopt metropolitan reforms with the consent of citizens. To the contrary, jurisdictional fragmentation not only persists but also continues to develop in most metropolitan areas.

Institutional reform has been a basic part of the American political experience—a method by which institutions are adapted to changing conditions in a self-governing society, based on a diagnosis of pathologies associated with some set of problems experienced by citizens.⁶ Effective reform depends, however, on a discriminating analysis of the factors that lead to problems. Fragmentation, instead of being subjected to discriminating analysis and thorough study, has often been treated as a general malady to be eradicated, not as a configuration of variables that may or may not be related to a range of specific—desirable or undesirable—outcomes.

The term fragmentation itself is pejorative. While usually defined as the number of governments per 10,000 or 100,000 persons in a metropolitan area, fragmentation is hardly a neutral descriptor. It evokes an image of something that is broken down and cannot work effectively. The term itself invites the treatment of empirical propositions as selfevident. Thus, frequently, the only evidence offered of fragmentation amounts to a definition-a count of governmental units, or the ratio of governments to population. Enumerating the governmental units found in a metropolitan area, and then characterizing the result as fragmented, does no more than name and measure a variable; it does not establish even a single proposition that links one variable to another. The relevant empirical question is the extent to which jurisdictional fragmentation leads to functional fragmentation, that is, a lack of necessary and useful coordination among jurisdictions with respect to specific functions. This proposition has been widely accepted as self-evident.

The most prominent metropolitan reform proposals have taken the form of city-county consolidations. Proposed consolidations, with a few notable exceptions,7 have been put before a popular referendum. The acceptance rate, averaging about 20 percent, has steadily declined since the 1940s.8 Many of the consolidations approved have fallen considerably short of achieving a unified metropolitan government, either by leaving independent municipalities within the county or by allowing special districts to continue in operation.9 One two-tier system has been established, in Miami-Dade County, Florida. In the meantime, the number of special districts in the United States has increased by more than 50 percent over a 25-year period, from 18,323 in 1962 to approximately 29,487 in 1987. This number includes some 900 districts created on an areawide basis.¹⁰ Special districts are often created with the consent of local voters.¹¹ In many parts of the country, municipal incorporation has also continued as metropolitan areas grow. Nationwide, the number of municipal governments in the United States has increased from about 18,000 in 1962 to about 19,205 in 1987. Perhaps the major consolidation success, on the other hand, has been the drastic reduction in the number of independent school districts, reduced from 34,678 in 1962 to about 14,741 in 1987. (Most of the reduction occurred in the 1960s, with 18,897 school districts eliminated between 1962 and 1972; only about 1,040 school districts have been eliminated since 1972.) Often, however, the elimination of local districts may have been accomplished by weakening the authority of local communities to decide issues of school reorganization.

The repeated failure of metropolitan reorganization efforts over a period of several decades is a serious anomaly in a reform-centered theory. If metroreform addresses salient problems politan experienced by citizens, then why do citizens tend to reject reform proposals at the polls? This question has attracted the attention of numerous analysts.¹² In a careful review of the issue, Willis D. Hawley concluded that the way in which voters calculate the costs and benefits of "metropolitan integration" is a crucial intervening variable in determining the success of integration proposals, including not only metropolitan consolidation but also the establishment of metropolitanwide special districts and authorities.¹³ The creation of special districts and, to a somewhat lesser extent, the continuing process of municipal incorporation, indicate that local voters are not indiscriminately opposed to change. Rather, they selectively adopt those changes that often maintain, and even increase, the degree of both fragmentation and overlap within metropolitan areas.

In the traditional approach to metropolitan organization, metropolitan areas in the United States are a lot like a bumblebee. According to the laws of thermodynamics, it is said, a bumblebee can't fly. According to the precepts of traditional theory, a fragmented metropolis can't work. Yet fragmentation has not fallen, as it were, from its own weight. Why not?

JURISDICTIONAL FRAGMENTATION, FUNCTIONAL ARRANGEMENTS

A decade and a half of research has begun to suggest some answers as to why fragmentation persists in metropolitan areas.¹⁴ An extensive series of studies comparing the performance of police agencies in small jurisdictions with those in larger jurisdictions has consistently found that small agencies tend to be more responsive in the delivery of neighborhood-type police services, such as patrol and response to emergencies.¹⁵ A related study of the effect of fragmentation and overlap on the efficiency of police agencies in metropolitan areas found that areas exhibiting greater fragmentation with overlap out-perform both (1) areas with fragmentation but less overlap and (2) areas with less fragmentation.¹⁶ In terms of fiscal effects, studies have shown that highly fragmented areas tend to have lower expenditures per capita, even when controlling for the level of demand for services.¹⁷ One study found that, in terms of equity effects, the least advantaged jurisdictions in metropolitan areas tend to be brought into parity with the most advantaged jurisdictions by intergovernmental revenue transfers.¹⁸ The same study reports that, contrary to the prevailing image, fragmented suburban areas are not sharply divided along income lines. Instead, most suburban municipalities are heterogeneous with respect to income, and a growing number are heterogeneous with respect to race. Other studies have found mixed effects, ¹⁹ but, on balance, the hypothesis that decreasing fragmentation will lead consistently to greater efficiency, responsiveness, or equity has found little empirical support.

This line of research cannot yet be regarded as conclusive. Much of the research on fiscal effects (taxes and expenditures) employs measures of fragmentation that tend to perpetuate a shortcoming of traditional theory-assuming fragmentation to be a simple characteristic that can be represented by a single indicator. To study fragmentation in a more discriminating way, researchers must be able to distinguish metropolitan areas on more than a single indicator. Metropolitan areas with similar fragmentation scores can exhibit quite different patterns of organization.²⁰ Research must get "inside" a fragmented system and learn to understand it on its own terms. The metropolitan "bumblebee" has to be explained before it can be redesigned to make it fly better.

For these reasons, the Advisory Commission on Intergovernmental Relations has initiated a research program to investigate the operational characteristics of jurisdictionally fragmented metropolitan areas. The focus of inquiry is on functional arrangementsthe arrangements through which specific functions, such as taxation, service delivery, and governance, are actually performed. Functional arrangements can be distinguished from jurisdictional arrangements. Jurisdictional arrangements refer to authority patterns, while functional arrangements refer to action patterns. The problem of metropolitan organization is concerned with how authority patterns affect action patterns. Jurisdictional arrangements, by allocating authority, establish the legal capacity to create a range of different functional arrangements.

For this reason, jurisdictional arrangements do not *determine* functional arrangements, but instead create possibilities within limits. While some possibilities are foreclosed by jurisdictional fragmentation, among those left open are a wide variety of possible arrangements for interjurisdictional coordination.

Functional arrangements are crucial intermediate or intervening variables in an understanding of metropolitan organization—variables that intervene between (1) jurisdictional arrangements (some configuration of fragmentation and overlap) and (2) outcomes (efficiency, responsiveness, and equity). The range of possible functional arrangements includes both independent action by each jurisdiction (with potential duplication) and various forms of coordinated action by two or more jurisdictions. The decisionmaking processes related to the emergence of such functional arrangements 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 step beyond the traditional study of metropolitan areas. Rather than assuming that jurisdictional fragmentation inexorably leads to functional fragmentation, the relevant processes and arrangements become objects of inquiry. In this way, it should be possible to learn the basic organizational dynamics of a jurisdictionally fragmented metropolitan areain a phrase, to learn how fragmentation works or operates.

Such a research program is best conducted by means of a series of case studies—where each case is a metropolitan area—designed to study the linkages between jurisdictional patterns and functional patterns. The limitation of this approach is that it does not shed light directly on the comparative performance of more and less fragmented areas. The latter requires a focus on the final outcomes of service provision—how responsive are the police? how efficient is the trash collection?—based on performance measurements. Research that focuses on outcomes is better pursued through comparative analysis that draws on aggregate data from a large number of metropolitan areas.²¹

While not final outcomes, the functional arrangements that lead directly to outcomes are intermediate effects of practical, as well as theoretical, interest. One practical interest lies in being able, potentially, to improve the functioning of metropolitan areas in ways not usually considered in the traditional metropolitan reform approach. If, as aggregate research increasingly indicates, metropolitan areas that exhibit a high degree of jurisdictional fragmentation can perform comparatively well, it is important to learn how and why.

The basic methodological problems in a case study are knowing what to look for and how to interpret what is found. These research ingredients must be supplied a priori, through the use of theory. The explicit use of an a priori theory does not imply that a study lacks objectivity. Knowing what to look for does not mean finding it. The use of theory does imply self-conscious attention to the assumptions used to direct inquiry. A study that is well grounded in theory can be critically appraised by others, who may propose different assumptions and thus make different interpretations of findings. In what follows, a theory of metropolitan organization is described that shows how jurisdictional fragmentation and overlap can provide an institutional foundation for a productive system of functional relationships among jurisdictions.

A THEORY OF HOW FRAGMENTATION WORKS

One of the most prominent nontraditional theories of metropolitan organization and governance is presented in a paper published in 1961 by Vincent Ostrom, Charles M. Tiebout, and Robert Warren.²² Their approach is rooted in a theory of goods in the economic sense, distinguishing public goods from private goods as well as recognizing a range of goods and services with mixed public and private characteristics. Local public goods are basically of the mixed variety. A private good is one that individuals can be excluded from consuming and that is consumed separately by individuals or households, without affecting others. A public good is one that individuals cannot be excluded from consuming and that is consumed jointly by individuals. Private goods are sometimes characterized as packageable, public goods as not packageable. Ostrom, Tiebout, and Warren argue that local public goods can be construed as packageable, but not to individuals. Instead, local public goods are provided in community packages: individuals outside a community are relatively unaffected by provision, while those within the community enjoy a benefit in common.²³

These community packages come in different sizes. Some local public goods affect only a very small community of interest, such as a residential neighborhood. Others affect larger communities of interest—including subregions within a metropolitan area, the metropolitan area itself, and beyond. This diversity creates various problems of scale in local public organization. Ostrom, Tiebout, and Warren suggest four criteria to consider in choosing an appropriate scale of organization: control, efficiency, representation, and self-determination.

The criterion of control is used to establish the boundaries of a jurisdiction so as to be able to exer-

cise an appropriate degree of control over some set of circumstances. Metropolitan reform assumes that a metropolitanwide jurisdiction is required to exercise control over circumstances that encompass a metropolitan community. Examples include major highway developments, traffic control on thoroughfares, and problems associated with smog. The difficulty is that other circumstances that need to be controlled in order to produce local public goods (e.g., the control of street crime) involve neighborhood conditions that, considered on a metropolitan scale, exhibit great variety. A central problem of metropolitan organization, therefore, is to permit the control of some circumstances on the basis of uniform regulations across a metropolitan area, while permitting variation in the control of other circumstances that are experienced on a much smaller scale. Still other circumstances requiring control may embrace an intermediate community, not fully metropolitan, but bigger than a neighborhood (e.g., the regulation of a ground water supply).

The criterion of efficiency looks at scale in terms of production economies and seeks the most favorable economy of scale. Presumed economies of scale also underlie much of the metropolitan reform effort. Nevertheless, economies of scale differ dramatically among various types of goods and services. Labor-intensive goods (e.g., police or education) are understood to exhibit considerably lower economies of scale than capital-intensive goods (e.g., water or sewer supply). The most favorable economy of scale in production can therefore be expected to vary among different local public goods and services.

The criterion of political representation requires that those whose interests are substantially affected by some set of circumstances be included within the boundaries of a political jurisdiction able to act. This criterion also requires that those who are substantially unaffected be excluded from such a jurisdiction.²⁴

Finally, the criterion of local self-determination presumes that the persons directly affected by a particular set of circumstances are the appropriate decisionmakers to apply the first three criteria noted above. The choices of local citizens, rather than the decisions of external authorities, will control the basic structure of organization in a metropolitan area. This approach involves more than allowing citizens to make choices through popular referenda at a metropolitan level. Instead, it may allow various communities of interest (including the metropolitan community) to constitute themselves as separate jurisdictions.

Ideally, if the first three criteria coincided for all local public goods, the preferred pattern of local

government would be quite simple-single, general purpose local governments with mutually exclusive (nonoverlapping) jurisdictions. Perhaps these would be metropolitan jurisdictions, perhaps not. Frequently, however, the criteria suggest quite different scales of organization for different circumstances, involving different types of local public goods. This suggests the desirability of organizing different communities of interest in metropolitan areas with overlapping jurisdictions, some communities nested inside of others. The two-tier approach favored by some advocates of metropolitan reform recognizes a potential need for two different scales of organization. There is no a priori reason, however, to limit the number to two, nor to assume that the number should be uniform throughout a metropolitan area. The larger and more complex a metropolitan area, the greater the amount of overlap or nesting of jurisdictions to be expected, and the more complex the overall pattern may be.

Some complexity could still be avoided if the first three criteria were to coincide for broad categories of local public goods, even though a degree of fragmentation and overlap would appear to be optimal. Where the criteria diverge for the same good or service, however, local organization becomes even more complex. Suppose, for example, that the criterion of efficiency suggests one scale of organization while the criterion of political representation suggests a smaller scale or a larger scale. In this situation, the provision of public goods can be separated from the production of goods. Provision refers to decisions about whether to provide a good, how much to provide, what the quality standards ought to be, and how to arrange for production and delivery. Production refers to the actual transformation of resources into products or services. Provision can be constituted to reflect the criterion of political representation while production is organized to obtain the most favorable economy of scale. The nexus between provision and production may consist of a contractual or cooperative relationship.25

Overlapping jurisdictions can also be used to bring different communities of interest to bear on the same set of circumstances. In this case, the criterion of representation recommends that two or more jurisdictions, one nested inside the other, be used to make collective decisions. Larger, overlying jurisdictions can affect the decisions of smaller jurisdictions in two ways: (1) offering financial incentivesgrants-in-aid—to modify the allocation of resources by recipient jurisdictions and (2) regulating the provision and/or production of goods and services by making and enforcing rules that take into account a larger community of interest. In these ways, metropolitan governance can allow those directly affected by a set of circumstances to make some decisions autonomously, while at the same time allowing more inclusive jurisdictions to take account of indirect or spillover effects in their fiscal and regulatory decisions.

The foregoing theory can be used to derive a set of general propositions, as follows:

Proposition 1: The variable nature of local public goods, when combined with a reliance on local self-determination, will be associated with a complex pattern of jurisdictional fragmentation and overlap.

Proposition 2: A complex pattern of jurisdictional fragmentation and overlap plus a base rule of willing consent for constituting relationships among jurisdictions will be associated with functional arrangements that link multiple jurisdictions, including (to some degree) the separation of provision and production for specific services.

Proposition 3: A complex pattern of jurisdictional fragmentation and overlap that includes access to rulemaking authority on the part of an overlying jurisdiction will tend to generate areawide rules that constrain more localized provision and production activities in order to control potential spillover effects.

These propositions presume that the particular pattern of organization in a metropolitan area, including both jurisdictional and functional arrangements, can be explained by (1) the nature of those specific goods provided and (2) the specific rules of local self-determination.

Ostrom, Tiebout, and Warren anticipate that such a pattern of organization will engender both cooperation and competition among local jurisdictions. Cooperation among jurisdictions organized to reflect the criterion of political representation, and the formation of new overlapping jurisdictions, can be used to address problems that arise in relation to both the criterion of control and the criterion of efficiency. Thus:

Proposition 4: Depending on the rules of self-determination and the nature of specific goods and services, fragmented jurisdictions will tend to develop overlapping jurisdictions (to the extent the latter are not already present) and both will tend to develop patterns of cooperation on the basis of mutual advantage.

The ability to separate provision and production can also lead, however, to patterns of competition among producers, both public and private. These patterns are constrained by rules, which may not allow private production of a public service (e.g., often the case with police), and by economies of scale and/or the criterion of control, which may limit the number of service producers that can feasibly operate in an area. Competition is not always desirable, but competition among the producers of goods and services is generally understood as economically beneficial to consumers, in this case the collective consumers who comprise local government jurisdictions. Thus:

Proposition 5: Depending on the rules and the nature of specific goods and services, separation of provision and production will tend to engender patterns of competition among producers and, in turn, choices for collective consumers.

Competition can also occur to some extent among separately organized communities when citizen consumers search out their preferred tax-benefit packages.²⁶

Conflict is also expected to arise. The sources of conflict include spillover effects from one jurisdiction to another, in those situations where community packages are not "airtight," and disputes that arise from tax-service mismatch, where some taxpayers perceive themselves as unfairly subsidizing others or not receiving services commensurate with their tax bills. More generally, the circumstances that need to be controlled in order to produce public goods are not unchanging. Jurisdictional boundaries and the distribution of public authority have to be adapted to changing conditions. The critical question in such a system of government is not the presence or absence of conflict, or the ability to suppress it, but the maintenance of facilities to resolve conflicts. State and federal courts and state legislatures to some extent provide such facilities in the governance of metropolitan areas in the United States. The use of external decisionmakers, however, potentially threatens local self-governance. This possibility creates incentives for local citizens and officials to develop local forums for conflict resolution within a metropolitan area. External decisionmaking facilities (such as a state legislature) are used primarily to constrain holdouts, bring the relevant parties into negotiations, and ratify agreements negotiated locally. Traditional metropolitan reform theory frequently refers to a Balkanization of local jurisdictions, but this characterization presupposes an absence of conflict resolution arrangements. Thus:

Proposition 6: Jurisdictional fragmentation will tend to engender conflict and, depending on the rules of self-determination and the availabil-

ity of overlapping jurisdictions, also engender functional arrangements for conflict resolution locally.

RESEARCH QUESTIONS

The theory sketched above can be used to design a research program to search for characteristic functional arrangements in jurisdictionally fragmented metropolitan areas. Two basic sets of variables are involved: (1) the variable nature of local public goods and the circumstances surrounding their provision and (2) the rules of local selfdetermination or self-governance. Within these constraints, local citizens and officials are expected both to form a variety of jurisdictions and to work out various functional arrangements among jurisdictions for (1) solving problems of scale and (2) resolving conflicts. The precise arrangements depend on the independent and joint effects of the two sets of variables noted above.

In addition to functional arrangements, a case study can examine *fiscal patterns* among jurisdictions—relationships that can also be considered important intermediate effects of jurisdictional structure. Fiscal disparities among jurisdictions are a frequent source of conflict in metropolitan areas. An ability to sustain agreeable and equitable fiscal relationships may, therefore, be a critical factor in maintaining a framework of local self-governance.

A number of research questions can be suggested for investigating the operational characteristics of a jurisdictionally fragmented metropolitan area:

- What are the rules of local selfdetermination? To what extent do the rules allow citizens to organize themselves on the basis of various communities of interest, according to the criterion of political representation?
- To what extent have local voters created overlapping jurisdictions? Is the overlap congruent with the nature of goods provided?
- To what extent is production separated from provision? Is this separation explained by economies of scale?
- Do adjacent jurisdictions and overlapping jurisdictions regularly cooperate to obtain mutual advantage? Is there significant and needless duplication of effort among these jurisdictions?
- Are there significant patterns of competition among differentiated service producers? Do

service providers take advantage of potential competition?

- To what extent do metropolitanwide jurisdictions exist? Have multijurisdictional arrangements been developed to attend to metropolitanwide problems and circumstances?
- Are consistent patterns of fiscal advantage or fiscal disadvantage observed among local jurisdictions?
- What arrangements have been developed to resolve conflicts and facilitate agreement among local jurisdictions?
- What unresolved problems are present? Do these threaten the basic processes of metropolitan governance?

EVALUATIVE CRITERIA

Having produced a description of the functional arrangements associated with jurisdictional fragmentation, there remains the task of evaluating those arrangements. Ultimately, this task belongs to citizens and their elected officials. Research can contribute to evaluation only by carefully specifying criteria and indicating to what extent existing patterns and outcomes satisfy those stipulated criteria. The simple existence of jurisdictional fragmentation and overlap cannot be used as a criterion of evaluation in this study. Instead, the study must specify either functional-process criteria, to evaluate functional arrangements and associated decisionmaking processes directly, or performance criteria, to evaluate the products and outcomes of functional arrangements. Performance measurement, however, as discussed above, lies for the most part beyond the scope of this study.

Process criteria are used to evaluate processes directly rather than (or in addition to) evaluating the outcomes of those processes. Democratic government, for example, is usually evaluated according to certain process criteria, as well as according to outcome criteria. The functional arrangements associated with metropolitan organization can also be evaluated according to process criteria. The traditional and alternative theories of metropolitan organization approach these criteria somewhat differently. Some of the following functional-process criteria are acceptable to both schools of thought, while others are the subject of disagreement:

Self-Determination and Citizen Choice. This is a criterion on which a highly fragmented area is expected to perform well. To what extent are citizens as voters able to establish and control a variety of local governments, adjust their boundaries, and transfer authority among jurisdictions? To what extent can citizens as individuals choose among alternative jurisdictions to locate a residence or business? The question here is one of *process*, not just rules: to what extent do the rules of self-determination actually enable self-determination and citizen choice to occur? Disagreement among analysts is likely to be normative, with critics of fragmentation arguing that too much selfdetermination and citizen choice leads to adverse consequences in terms of other criteria.

- . Representation and Accountability. Can various 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 relevant communities of interest? Here again a fragmented system might be expected to perform well, except that the traditional approach to metropolitan organization would anticipate a deficiency of representation and accountability for areawide interests.
- Coordination. Are closely related services and service components produced in a coordinated manner? Traditional theory anticipates serious deficiencies in coordinationthe price, perhaps. of too much self-determination-while the alternative theory of fragmentation expects significant functional coordination to emerge from arrangements that cross jurisdictional boundaries.
- Competition among Service Producers. Do local jurisdictions "shop around" for the most economical mode of service production? Traditional and alternative theories differ on whether competition among producers is beneficial or detrimental in a system of local government. Shopping around implies occasionally shifting from one producer to another, which also may be costly.
- Metropolitan Problem Solving. Are genuinely metropolitanwide problems effectively addressed on a metropolitan basis? Traditional and alternative theories agree that this is an appropriate criterion, differing only in the institutional arrangements thought to be

necessary and appropriate for obtaining action on metropolitan problems.

These criteria do not directly answer performance questions, such as how good garbage pickup or police protection or street maintenance may be in any of the numerous jurisdictions of a metropolitan area. However, the criteria do identify processes or arrangements that are necessary to effective and efficient performance, even if they do not guarantee it. By focusing on the functional arrangements through which performance occurs, the criteria used in this study can illuminate metropolitan organization in a way that measuring the outcomes of performance alone cannot. This approach provides a basis on which to evaluate the working parts of an organizational mechanism rather than treating the inner "works" of public organization as a "black box" that cannot be known and understood.²⁷ Such a focus on process is especially important when an inquiry is expected to help decisionmakers "repair" those inner works by reforming the institutions of metropolitan governance.

In addition to process criteria, the study gives attention to intermediate effects measured in terms of revenues and expenditures. The fiscal relationships among local government units, like functional arrangements, do not fully determine the quality of performance, but clearly do affect performance capacity. Fiscal relationships can therefore provide clues to performance, using the following criteria:

- Economies of Scale. Are services and service components produced on a scale that captures significant scale economies? Are there significant uncaptured economies of scale that remain?
- Equity. Do fiscal differences among local jurisdictions reflect patterns of racial or income-class differences? To what extent are some types of communities relatively advantaged or disadvantaged in fiscal capacity?

Although fiscal data alone, without measures of performance, cannot establish a definitive assessment of either efficiency or equity, the relationships among fiscal variables can provide indicators in each case.

The orientation taken in this study presumes that problems will arise among a multiplicity of local jurisdictions. Efforts to solve these problems may not always be successful. The key difference between the approach taken here and traditional metropolitan research is that jurisdictional fragmentation per se is not presumed to be problematic. Instead, the inquiry searches for processes of problem solving that may operate among fragmented jurisdictions.

THE ST. LOUIS CASE STUDY

The selection of the St. Louis area as a research site was prompted by its status as one of the most jurisdictionally fragmented metropolitan areas in the nation, an area often cited as a prime example of perverse organizational patterns.²⁸ St. Louis County (which is separate from St. Louis City) was listed by the U.S. Bureau of the Census in 1982 as having 151 governmental units. Measuring fragmentation as the number of governmental units per 10,000 people, the county has a fragmentation score of 1.55. For purpose of comparison, Cook County in Illinois (which includes its central city, Chicago) has 516 governments, but is somewhat less fragmented by this measure, with a score of 0.98. Allegheny County, Pennsylvania (which includes Pittsburgh), on the other hand, is more fragmented, with 323 governments and a score of 2.81.

The selection of St. Louis represents, therefore, the deliberate choice of a "hard case."²⁹ The processes and arrangements that characterize the organization and governance of fragmented metropolitan areas ought to be writ large in St. Louis County. If jurisdictionally fragmented areas are marked by confusion, discord, and a lack of cooperation among independent units of government, St. Louis County and the greater St. Louis area should display these characteristics in abundance. The traditional view of fragmentation would suggest that the greater the fragmentation, the greater the discord and confusion.

Moreover, since St. Louis has frequently been a focus of study in the past, there exists a substantial base on which to build new research. In the 1950s, St. Louis was the focus of an extensive series of studies inspired by the challenge of metropolitan reform.³⁰ In the mid-70s, the St. Louis area was one of a number of metropolitan areas selected for an intensive study of police services.³¹ Later, Oscar Newman studied "private street associations" in St. Louis in a search for architectural and organizational arrangements conducive to the maintenance of residential communities.³²

The County of St. Louis, which has been institutionally separate from the City of St. Louis since 1876, is a metropolitan community of nearly a million people—973,896 according to the 1980 census. Sixty percent of the county's residents live in 90 municipalities;³³ the other 40 percent live in unincorporated areas (about the same population as St. Louis City). The largest municipality in the county— Florissant—had a 1980 population of only 55,372. The great majority of those who live within municipal limits reside in cities or villages of 5,000 to 25,000 people. Still, there are 21 municipalities with a population under 1,000, many of which are clustered closely together in an area of the county known as Normandy. All those who live outside municipal boundaries, and most of those who live in the smaller municipalities, receive their fire protection services from one of 25 independent fire protection districts. There is also a large, undetermined number of organized subdivisions, both inside and outside municipalities, that provide their residents with an array of local street services. The ACIR study counted at least 427 street-providing subdivisions in the incorporated area of the county alone. Public education is provided by 23 independent school districts, varied in size, and by a countywide special school district.

The study is strongly focused on St. Louis County, since the degree of fragmentation in the county is much greater than in St. Louis City and County combined. St. Louis County is a diverse metropolitan county that would qualify as a metropolitan area entirely on its own, containing almost half of the population of the St. Louis Metropolitan Statistical Area (MSA). The MSA had a total 1980 population of 2,356,460 and included three additional counties in Missouri and four in Illinois, plus the City of St. Louis. The MSA as a whole was actually more fragmented than St. Louis County, containing 663 governments for a fragmentation score of 2.81 governments per 10,000 people.

Although St. Louis County provides the principal frame of reference in this study, much of the analysis also includes reference to St. Louis City. The choice depends on what is being analyzed. In some cases, the frame of reference is St. Louis City and County, and, in a few cases, the MSA. The relationships among units of government within St. Louis County are quite different from relationships among all governments in the MSA. Somewhat different conclusions can be drawn about functional metropolitan arrangements depending on the frame of reference.

St. Louis City and County have been the focus of myriad recommendations for reform—principally for total or partial consolidation of governments. Efforts were made to reunite St. Louis City and County in 1926, and again in 1959 and 1962, without success. The 1959 and 1962 efforts were aimed at establishing different variants of a two-tier system. City voters approved the 1926 attempt, but it failed in the county. In 1959 and 1962, voters in both jurisdictions disapproved, although county voters disapproved by a much larger margin than did city voters. At the same time, however, St. Louis voters approved the creation of countywide and joint citycounty special districts. Like voters in metropolitan areas throughout most of the United States, residents of St. Louis were willing to address metropolitan problems, but only in ways that maintained and extended the type of system already in place. Most recently, the St. Louis County Executive has launched an effort to incorporate the entire county while reducing the number of municipalities by more than half. A new period of discussion centered on reorganization and consolidation is now under way.

METHODOLOGY: DISTINGUISHING PROVISION AND PRODUCTION

The ACIR field study collected data from both personal interviews³⁴ and published data sources, and included both legal and economic materials. Interviews were conducted in more than a third of the county's municipalities and school districts, usually with elected mayors and school superintendents, and with county government officials. Data were also collected from a sample of 53 organized subdivisions that provide street services. Some police and fire officials were also interviewed, in addition to a small number of private citizens active in municipal incorporation efforts. Most of the field work and data collection was completed in the summer of 1986. Extensive correspondence has also taken place with a number of local officials and academics.

The field research focused on three main areas of inquiry:

- Legal rules and functional arrangements for the governance of St. Louis County and the city-county region, as reflected in the basic "rules of the game" (found, for the most part, in state statutes) and accompanying rulemaking practices;
- 2. Fiscal relationships among local government units in St. Louis City and County; and
- 3. Functional arrangements for the provision and production of local public goods and services in St. Louis County, with a detailed examination of arrangements in four service areas: police, fire, streets, and education.

The inquiry into functional service arrangements was guided by a distinction between the *provision* of local public goods and services and their *production*. Provision and production are functionally quite different. Provision refers to collective choices that determine:

1. What goods and services to provide (and what are to remain private);

- 2. What private activities to regulate, and the type and degree of regulation to use;
- 3. The amount of revenue to raise, and how to raise it (whether by various forms of taxation or by user pricing);
- 4. The quantities and quality standards of goods and services to be provided; and
- 5. What arrangements to make for the production of goods and services.

The basic choice on the provision side is whether to make any sort of provision at all. If no provision is made, that activity remains private (excluding those activities tended to by other units of government). If provision is to be undertaken, how to provide is another basic choice. The two major alternatives are (1) taxing and spending to provide a public good or service and (2) regulating private activity in order to shape private decisions to a public purpose. Provision activities thus include, on the one hand, setting both tax rates and user charges and choosing how to spend public money, and, on the other hand, enacting and enforcing laws or rules that constrain private behavior according to public criteria. Finally, if goods and services are to be provided, then choosing to organize a production unit and/or selecting and hiring producers (both public and private), monitoring the quality and quantity of goods and services supplied, and representing the interests of consumers to producers all become significant provision activities.

Production, on the other hand, refers to the more technical processes of transforming inputs into outputs—making a product or, in many cases, rendering a service. Although production is often viewed as entirely the work of agents (public or private), it is frequently better viewed as "coproduction," a process whereby a specialized producer (such as a teacher) interacts with a citizen-consumer (a student) to produce a good (education).³⁵

The distinction between provision and production lays the conceptual foundation for a new understanding of the organization of local public economies.³⁶ Different considerations apply in the choice of an organizational unit to *provide* a service from those involved in the choice of an organizational unit to *produce* a service. The work of local government is increasingly viewed in terms of provisioning, and not necessarily in terms of producing. Although the organization of production can be, and often is, governmental, frequently it can become a private responsibility. Patterns of organization on the provision side can differ from those on the production side. Various functional arrangements can also be used to link provision units to production units:

- In-House Production. A provision unit organizes its own production unit. This is the traditional model of local organization. Municipalities organize municipal departments for police, fire, public works, and so forth.
- Coordinated Production. Two or more production units (organized by their respective provision units) coordinate their production activities, in whole or in part.
- Joint Production. Two or more provision units jointly organize a single production unit.
- Intergovernmental Contracting. A provision unit contracts for production with another provision unit, which assumes responsibility for organizing a production unit.
- Private Contracting. A provision unit contracts with a private vendor, who is responsible for organizing a production unit.
- Franchising. A provision unit sets production standards and selects a private producer, but allows individual citizenconsumers to choose whether to purchase the service.
- Vouchering. A provision unit sets production standards and decides on the level of provision (through its taxing and spending powers), but allows individuals (or groups) to engage different producers, public or private, at their discretion.

The potential variety in organizing both the provision side and the production side, and in relating provision to production, is much greater than is ordinarily suggested by the traditional view of local government. Public administration theory has long assumed that the best sort of local government was a full-service government—able both to make provision for and to produce a full range of local public goods and services. Small local governments, however, may regard their primary role as one of provisioning rather than producing, choosing to produce only when in-house production, through a government bureau or department, is the better alternative.

Frequently, more than one provision unit has authority to provide service to a particular community. When jurisdictions overlap, redundant authority is usually found in some service areas. Redundancy in authority does not, however, imply duplication of service. Duplication should instead be understood as delivery of the same service, at the same time, in the same place, to the same clientele.³⁷ Even if two or more provision units make some arrangement for service production, duplication can be avoided through a variety of functional arrangements: (1) *joint* service delivery by a single production unit (jointly established by two or more provision units); (2) *coordinated* service delivery on the part of two (or more) production units; and (3) *alternated* service delivery in which two (or more) production units alternate in delivering service on the basis of time, place, or clientele. Instead of assuming that overlapping jurisdictions necessarily imply duplication, the degree of duplication that exists can be subject to empirical investigation.

The argument that overlapping jurisdictions lead to duplication is loosely related to a companion argument that fragmentation among a large number of relatively small jurisdictions leads to inefficiency from a failure to capture potential economies of scale. This concept refers to a potential for decreasing average costs of production as the scale of production increases. The relationship is usually assumed to be curvilinear; that is, after some point in increasing the size of a production unit, diseconomies of scale result. One cannot assume, for example, that adjacent police or fire departments that engage in very similar administrative activities are duplicating one another in the sense of failing to take advantage of economies of scale.

METROPOLITAN GOVERNANCE

The governance of a metropolitan area is a function that need not be directly involved with either provision or production. Functionally, governance depends on a capacity to make and enforce rules, not to provide or produce services. Governance operates through arrangements that focus on (1) a choice of rules, within which patterns of provision and production emerge, and (2) the resolution of conflict among participants, including the maintenance of agreeable and equitable relationships.

The basic function of governance in a fragmented metropolitan area is to put together, and periodically adjust, a configuration of rules that, in turn, enables local officials and citizens to seek out and create mutually beneficial provision and production arrangements, among both individuals and communities. The relevant rules pertain to (1) organization on the provision side (which depends on collective choice capabilities, tax instruments, the use of police powers in regulation, elections, and referenda, and the public accountability of officials); (2) the organization of production, whether by public bureaus organized by provision units individually or jointly or by a wide variety of other alternatives; and (3) relationships among both provision units and production units, including attention to joint and contract arrangements, the use of overlapping jurisdictions to handle benefit or cost spill-ins and spill-outs, and mechanisms for conflict resolution.

When conflict occurs (as for example over municipal boundaries or tax incidence), governance arrangements must exist to apply general rules to specific cases and to constrain participants to reach settlements. If settlements cannot be reached on the basis of existing rules, new rules may be needed. Fiscal disparities among provision units are a potential source of conflict in most highly fragmented metropolitan areas. So, too, are benefit or cost spill-ins and spill-outs, and externalities in general. Adjustments in the fiscal rules governing revenue capabilities-in particular, the availability (and possible sharing) of various tax bases—are common responses to fiscal conflict. Appeals to the more inclusive collective decisionmaking capabilities inherent in overlapping jurisdictions are equally common responses to externality problems.

Metropolitan areas do seem to require *some* form of metropolitan governance, but it is a form of governance that can be exercised apart from both provision and production of public goods and services. "Metropolitan governance," in other words, is not identical to "metropolitan government."³⁸

CONCLUSION AND PROSPECTUS

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 selfevident. 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.³⁹ 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.

In what follows, Chapter Two describes the jurisdictional configuration of St. Louis City and County, with a strong focus on the county. Patterns of growth, political geography, representation, and basic fiscal relationships are described, as well as a history of reform efforts. Chapter Three analyzes the legal rules and functional arrangements of metropolitan governance, again focusing strongly on St. Louis County against the background of city-county separation. The concept of a "local government constitution" is introduced and applied to four sets of rules. Included are current controversies over municipal incorporation, special district formation, annexation, and sales taxation.

Chapters Four through Seven analyze functional arrangements in four service areas: police, fire, streets, and education. Each analysis uses the distinction between provision and production to map the service arrangements in St. Louis County and assess the implications of the patterns found. Chapter Eight is an analysis of fiscal relationships among the local government units in both city and county, including discussions of economies of scale, fiscal disparity and equity, and economic development.

Chapter Nine concludes the volume, summarizing the functional dimensions of metropolitan organization in the St. Louis area. The research questions and evaluative criteria discussed above are reviewed in order to ascertain what has been learned from the study. Evaluations made by others are also reviewed, alongside current reform efforts, and some conjectures are offered concerning the future of metropolitan organization in St. Louis.

-ENDNOTES-

- ¹See Committee for Economic Development, *Modernizing Local Government* (New York: 1966). For an extended discussion of metropolitan problems drawing on traditional theory, see Advisory Commission on Intergovernmental Relations, *Improving Urban America: A Challenge to Federalism* (Washington, DC: ACIR, M-107, September, 1976).
- ²See Robert L. Bish and Vincent Ostrom, *Understanding Urban Government* (Washington, D.C.: American Enterprise Institute, 1973).
- ³See the recommendations of the Committee for Economic Development, *Reshaping Urban Government* (New York: 1970); also, Joseph F. Zimmerman, *The Federated City: Community Control in Large Cities* (New York: St. Martin's Press, 1972).
- ⁴See Alan Altshuler, Community Control: The Black Demand for Participation in Large American Cities (Indianapolis: Pegasus, 1970); Milton Kotler, Neighborhood: The Local Foundations of Political Life (Indianapolis: Bobbs-Merrill, 1969); and Howard W. Hallman, Neighborhood Government in a Metropolitan Setting (Beverly Hills: Sage Publications, 1974).
- ⁶Reform proposals have often been based on presupposed relationships between fragmentation and urban pathologies, relationships that were believed to be so self-evident as to make empirical inquiry unnecessary. See, for an example in the St. Louis context, the discussion in Scott Greer, "Dilemmas of Action Research on the Metropolitan Problem," in Morris Janowitz, ed., *Community Political Systems* (Glencoe, Illinois: The Free Press, 1961), p. 193. See also Elinor Ostrom, "Metropolitan Reform: Propositions Derived From Two Traditions," *Social Science Quarterly* 53 (December 1972), pp. 474-493, and "Righteousness, Evidence, Reform: The Police Story," *Urban Affairs Quarterly* (June 1975), pp. 461-486.
- ⁶See the discussion by Vincent Ostrom, The Political Theory of a Compound Republic: Designing the American Experi-

ment (Lincoln: University of Nebraska Press, 1971, 1987), pp. 178-190.

- ⁷For example, the partial consolidation of Indianapolis-Marion County, Indiana-Unigov-which was accomplished by act of the Indiana legislature in 1969.
- ⁶Out of 85 such referenda conducted between 1921 and 1979, 80% were rejected. See ACIR, State and Local Roles in the Federal System (Washington, DC: ACIR, A-88, April 1982), p. 396.
- *ACIR, State and Local Roles, p. 400.
- ¹⁰Joseph F. Zimmerman, State-Local Relations: A Partnership Approach (New York: Praeger, 1983), p. 92.
- ¹¹For an account of special district formation and governance in California, which, alongside Illinois, leads the nation in number of special districts, see Robert B. Hawkins, Jr., *Self-Government by District: Myth and Reality* (Stanford: Hoover Institution Press, 1976).
- ¹²ACIR, Factors Affecting Voter Reactions to Governmental Reorganization in Metropolitan Areas, (Washington, DC: ACIR, M-15, May 1962).
- ¹⁹Willis D. Hawley, "On Understanding Metropolitan Political Integration," in Hawley, et al, *Theoretical Perspectives* on Urban Politics (Englewood Cliffs, N.J.: Prentice-Hall, 1976), pp. 100-145.
- ¹⁴This body of research is summarized and reviewed in ACIR, *The Organization of Local Public Economies* (Washington, DC: ACIR, A-109, December 1987).
- ¹⁶For a summary of this research program, see Elinor Ostrom, "Size and Performance in a Federal System," *Publius* 6 (Spring 1976), pp. 33-73.
- ¹⁶Roger 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, The Netherlands: Martinus Nijhoff Publishers, 1985), pp. 161-191.
- ¹⁷See Thomas J. Dilorenzo, "Economic Competition and Political Competition: An Empirical Note," *Public Choice* 40 (1976), pp. 203-209 and Mark Schneider, "Fragmentation and the Growth of Government," *Public Choice* 48 (1986), pp. 255-263.
- ¹⁰Mark Schneider and J.R. Logan, "Fiscal Implications of Class Segregation: Inequalities in the Distribution of Public Goods and Services in Suburban Municipalities," Urban Affairs Quarterly 17 (September 1981), pp. 23-37.
- ¹⁹David L. Chicoine and Norman Walzer, Governmental Structure and Local Public Finance (Boston: Oelgeschlager, Gunn & Hain, 1985).
- ²⁰See 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 Geographical Analysis (Cambridge, Mass.: Ballinger, 1976), pp. 463-53.
- ²¹This is so because 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 comparative 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 measure-

ment for goods and service such as police and education, the best one can do is to compare the performance of one institution with another. Examples of research taking this comparative performance perspective are cited in notes 15 through 19 above.

- ²²Vincent Ostrom, Charles M. Tiebout, and Robert Warren, "The Organization of Government in Metropolitan Areas: A Theoretical Inquiry," American Political Science Review 55 (December 1961), pp. 831-842. See also Robert L. Bish, The Public Economy of Metropolitan Areas (Chicago: Markham, 1971), and Bish and Ostrom, Understanding Urban Government.
- ²⁹Ostrom, Tiebout, and Warren, "The Organization of Government in Metropolitan Areas," p. 833.
- ²⁴To insist on a principle of inclusion—No Taxation without Representation—logically implies a principle of exclusion— No Representation without Taxation. "Regulation" may be substituted for "taxation" in these statements of principle.
- ²⁵The distinction between provision and production is discussed more fully in ACIR, The Organization of Local Public Economies.
- ²⁸This is the sort of competition usually associated with the work of Charles M. Tiebout, "A Pure Theory of Local Expenditure," *Journal of Political Economy* 44 (October 1956), pp. 416-424.
- ²⁷Paul E. Peterson, Barry G. Rabe, and Kenneth K. Wong explain their use of a similar methodology in When Federalism Works (Washington, D.C.: The Brookings Institution, 1986), p. 30.
- ²⁸See, for example, ACIR, Improving Urban America: A Challenge to Federalism.
- ²⁹Reynolds characterizes St. Louis as "the archtypical 'fractionated' metropolitan area of the 'reformer'," in "Progress toward Achieving Efficient and Responsive Spatial-Political Systems in Urban America," p. 466.
- ³⁰See John C. Bollens, ed., Exploring the Metropolitan Community (Berkeley: University of California Press, 1961).
- ³¹See Elinor Ostrom, "Size and Performance in a Federal System."
- ³²Oscar Newman, *Community of Interest* (Garden City, NY: Anchor Press/Doubleday, 1980), pp. 124-156.
- ³⁹A new city of Chesterfield (estimated population 33,000) began operation June 1, 1988, raising the number of municipalities in St. Louis County to 91.
- ³⁴A list of those persons who were interviewed and/or who contributed data to the study can be found at the beginning of this report, pp. v-vi.
- ³⁵See Gordon P. Whitaker, "Coproduction: Citizen Participation in Service Delivery," Public Administration Review 40, no. 3 (May-June 1980), pp. 240-246, and Roger B. Parks, et al, "Coproduction of Public Services," in Richard C. Rich, ed., Analyzing Urban Service Distributions (Lexington, Massachusetts: Lexington Books, 1982), pp. 185-199.
- ³⁶For a fuller discussion, see ACIR, The Organization of Local Public Economies.
- ³⁷This discussion is based on a typology of interlocal arrangements developed in Elinor Ostrom, Roger B. Parks, and Gordon Whitaker, *Patterns of Metropolitan Policing* (Cambridge, Mass.: Ballinger Publishing Co., 1978), pp. 30-31.
- ³⁸This idea is developed in ACIR, The Organization of Local Public Economies.
- ³⁹A similar case study of the Pittsburgh-Allegheny County, Pennsylvania, area is underway.

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St. Louis: A Variety of Jurisdictions

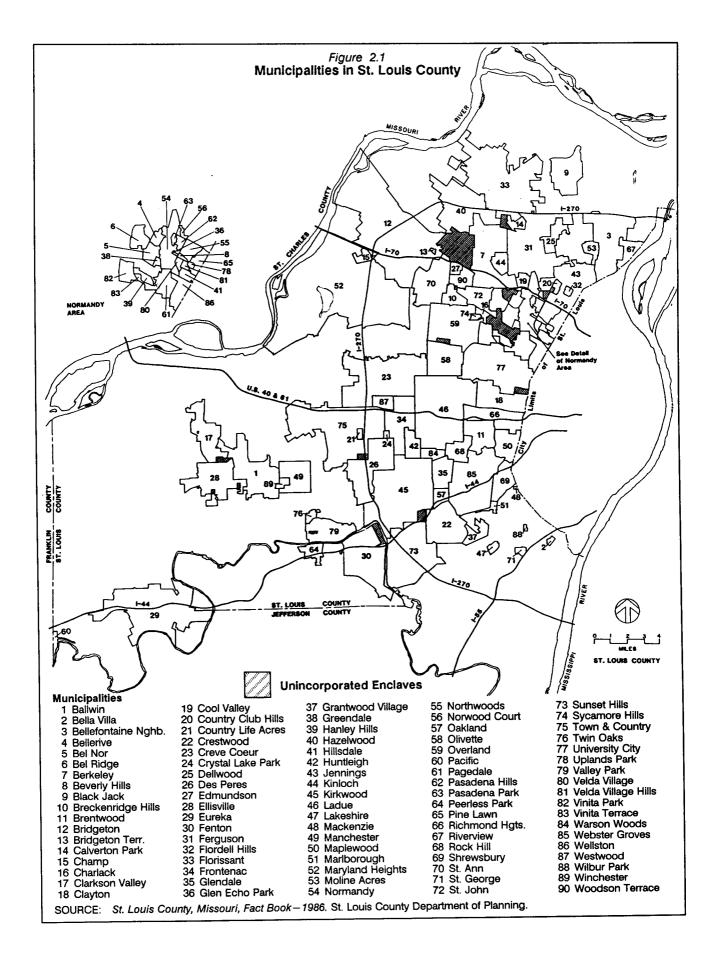
INTRODUCTION: CITY-COUNTY HISTORY AND THE GROWTH OF SUBURBS

The building of what was to become St. Louis began in 1764, with the construction of a fur trading settlement by French pioneers.¹ Its construction was ordered by Pierre Laclede Liguest, a principal in the Louisiana Fur Company, and initiated by Auguste Choteau, his stepson. Laclede named the settlement St. Louis in honor of Louis IX, the patron saint of the reigning French monarch, Louis XV. Laclede's plans for St. Louis went far beyond the establishment of a trading post for the fur company. In his words, "I intend establishing a settlement which, in the future, shall become one of the most beautiful cities in the world."² By 1804, when the Louisiana Territory became a part of the United States, St. Louis had grown to a city of some 1,000 inhabitants, and was chosen as the seat of the District of St. Louis. St. Louis was incorporated as a city under the rules of the Louisiana Territory in 1809 and again in 1822 within the recently admitted state of Missouri.

St. Louis County was first proclaimed as an administrative unit of the Louisiana Territory in 1812. It assumed most of its present boundaries in 1818, when Jefferson and Franklin Counties became independent units. Until 1876, the City of St. Louis was an integral part of St. Louis County, and was governed along with the rest of the county by a county court, later to become a St. Louis County Board of Commissioners.

As early as 1840, citizens of the City of St. Louis proposed the separation of the city from St. Louis County. As is common in America, the dispute arose over taxation. Residents of the city objected to dual taxation-city taxes levied to support the city government and county taxes overlaid on these to support the county government. Ninety percent of county residents lived within the city in the 1870s. They objected to taxes which they viewed as primarily benefiting the much smaller proportion of the population residing outside the city limits. In 1875, Missouri adopted a new constitution that included provisions authorizing the city to: (1) extend its boundaries westward, increasing its land area nearly three-fold, (2) frame a home rule charter, and (3) join with the county in selecting a board of freeholders whose task it would be to propose a plan to adjust relationships between the city and the county. The city's home rule charter and the freeholder's plan for separation of the city from the county were presented to voters in the county in August 1876. After substantial wrangling involving charges of vote fraud, St. Louis City became a separate entity with both city and county powers and offices in December of that year. It is ironic that noncity voters in the county were opposed to separation by a 3-to-1 majority. In later years, when proposals to reunite the city and county were presented to voters, substantial majorities of county residents voted in opposition.

At the time of separation, the St. Louis area had seven units of local government—the City of St. Louis, St. Louis County, and five incorporated municipalities in the county. By 1910, four more municipalities had been incorporated. At that time, five of the six municipalities with populations presently greater than 20,000 were in place. In the next two decades, ending in 1930, ten more municipalities were incorporated in the county, yielding a total of



19. A wave of municipal incorporation, however, was about to begin.

In the two decades spanning 1931 to 1950, more than two-thirds of the present set of municipalities in St. Louis County were incorporated, with half of these formed in the five years after the end of World War II. Virtually all of these municipalities began as subdivisions located in unincorporated parts of the county. The incorporation of these subdivisions into villages and small cities ensured their citizens a right to choose their own officials and to participate in collective decisions regarding local services, taxes, planning, zoning, building codes, and other aspects of community life. Faced with alternatives of leaving these decisions to county officials or of being annexed by other, adjacent municipalities,³ citizens of much of St. Louis County chose local self-government.

This pattern of subdivision incorporation was most prominent in the Normandy area, extending out along Natural Bridge and St. Charles Rock roads in the northwest corridor of the county, and in areas adjacent to Normandy. Of the 62 present-day municipalities that incorporated during this 20-year period, more than 60 percent lie in this corridor or immediately adjacent to it. Many small municipalities in this area maintain to this day the subdivision organizations that predated incorporation, while others have included preexisting subdivision rules regarding housing styles and other zoning provisions in their municipal ordinances.

The pattern of suburbanization during this period was not exclusively that of municipal incorporation and/or annexation, however. At the same time that the northwest corridor and some other parts of the county were incorporating as separate municipalities, much of South County was also growing rapidly, but without significant incorporation. Five very small municipalities were created in this area between 1940 and 1950, but most of the population chose to remain a part of the unincorporated county. Two parts of South County, Affton and Lemay, achieved sufficient identity to become recognized as urban places by the U.S. Bureau of the Census, yet they remain unincorporated today. Other suburbanized parts of South County, Oakville and Mehlville, for example, also have quite clear identities in socio-spatial terms, but have chosen, nevertheless, to remain unincorporated. The residents of these areas did choose, however, to retain small local school districts and to create small fire protection districts.

Ten more municipalities incorporated from 1951 to 1986, when the field work for this study was conducted. Eight of these incorporations occurred prior to 1960. The number of municipalities in St.

Louis County reached a high of 98 in 1959. Since then, nine mergers of small municipalities and one disincorporation (Times Beach), together with two incorporations, resulted in the 90 municipalities existing when this study was done. Fifteen years elapsed between the incorporation of Black Jack in 1970 and Maryland Heights in 1985. As the research for this study was under way, incorporation efforts were progressing in the Chesterfield area, culminating in a new incorporation approved on April 5, 1988, raising the number of county municipalities to 91. All of the analysis in this report, however, is based on a count of 90 municipalities, or as otherwise indicated.

BASIC POLITICAL GEOGRAPHY

"St. Louis" is composed of 92 general purpose local jurisdictions. The City of St. Louis and the unincorporated portion of St. Louis County are both quite large. Together they include 58 percent of the total St. Louis population-30 percent in the city and 28 percent in the unincorporated county.4 Eleven percent of the St. Louis land area lies in the city and 52 percent in unincorporated parts of the county. The remaining 90 general purpose units of local government are, for the most part, small. Only 6 have populations exceeding 20,000 persons, and 54 have fewer than 5,000 residents. Figure 2.1 depicts the municipal geography of St. Louis, illustrating the small areal extent of most of these municipal governments. Table 2.1 describes the distribution of local governments in population and land area.

Table 2.2 presents data on the distributions of race, poverty, and income in St. Louis City and County. For the municipalities in the county, average values for each population quintile are computed to illustrate municipal variations.⁵

The 1980 Census reported 22 percent of the St. Louis City and County population to be minority, with blacks comprising virtually all of the minority population. Approximately two-thirds of the area's black population resides in the City of St. Louis. Of the blacks who live in St. Louis County, 85 percent are residents of municipalities. About two-thirds of the county's black population is located in the Normandy area and in a few municipalities immediately adjacent to that area.⁶

Housing patterns by race in St. Louis demonstrate continuing segregation of blacks from whites. St. Louis City's population is approximately one-half black, but racial mixing in housing is limited. Most of the city's black population resides in predominantly black neighborhoods in the northern half of the city, while the southern half is predominantly white. Racial integration of residential areas is

N	umber	Population (1984 estimate ¹)	Percent of Total	Land Area (square miles)	Percent o Total
Municipalities in					
St. Louis County	90²	589,996	42.0%	208	37.0%
With Population of:	•				
0-1,000	23 ²	10,838	0.8	5	0.9
1,001-2,000	14	22,944	1.6	4	0.7
2,001-5,000	17	56,718	4.0	42	7.5
5,001-10,000	17	112,720	8.0	37	6.6
10,001-20,000	13	186,409	13.0	62	11.0
20,001-56,000	6	200,366	14.0	58	10.0
Unincorporated St. Louis County	1	397,213	28.0	291	52.0
Total St. Louis County	91 ²	987,209	70.0	499	89.0
City of St. Louis	1	429,300	30.0	61	11.0
Total City and County	92 ²	1,416,508		560	

¹1984 population estimates for the County are from *Missouri Population and Census Newsletter*, December 1985, cited in 1985 Fact Sheet: Police Services in St. Louis County, Bureau of Management Services, St. Louis County Department of Police. A few adjustments were made to reflect recent annexations, using data from the 1986 St. Louis County Fact Book, St. Louis County Department of Planning. The estimate of population for the City of St. Louis is taken from U.S. Department of Commerce, Bureau of the Census, Local Government Finances in Major County Areas, 1984-85, GF 85-No. 6.

²Includes the City of Pacific which lies primarily in Franklin County. Pacific has 12 residents in St. Louis County.

somewhat more common in St. Louis County. If one accepts a population mix of 30 to 70 percent black or white as an integrated community, nine county municipalities are integrated. The blacks living in these integrated communities represent about 10 percent of the black population of the city and

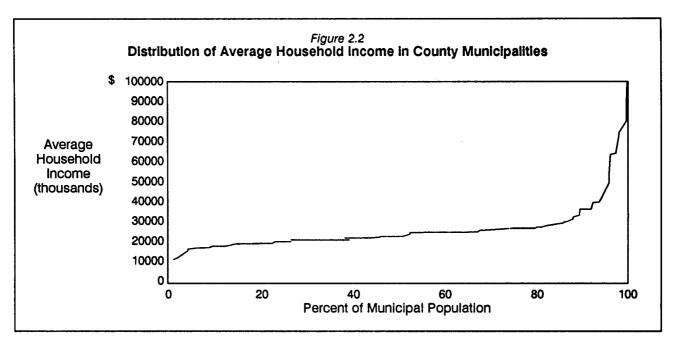
<i>Table 2.2</i> Distribution of Race, Poverty, and Income in St. Louis							
Municipalities in St. Louis County	Percent Minority	Percent Below Poverty 1979	Average Household Income				
Quintile 1 ¹ Quintile 2 Quintile 3 Quintile 4 Quintile 5	1.5% 2.8 6.5 17.4 56.2	2.3% 3.0 4.5 6.6 14.0	\$16,972 21,039 23,684 26,178 40,989				
Municipal Average Unincorporated St. Louis Coun	5	6.0 3.1	25,218 26,969				
Total St. Louis Coun St. Louis City Total City and County	ty 11.3 46.4 22.4	4.8 21.8 10.2	25,899 14,723 22,038				
			•				

¹Quintiles display average values for each 20 percent of the total municipal population in the county, ordered from lowest to highest on each data series. county, and about 30 percent of the county's black population. Seventy-three percent of black residents in the county live in communities that are less than 50 percent black.⁷

Separation by poverty status and income classes is also found in St. Louis, although the patterns are somewhat less pronounced than those for race. Approximately 10 percent of the area's population had incomes below the poverty level in 1979. Two-thirds of these persons resided in St. Louis City, which has a poverty rate of 22 percent. In St. Louis County, 72 percent of the poverty population resided in municipalities, with the remainder in the unincorporated county. Approximately half of the municipal poverty population was found in the Normandy area and immediately adjoining jurisdictions.

Average household incomes in St. Louis County were 75 percent higher, on average, than those in St. Louis City. Average income in the unincorporated county was slightly higher than the average in municipalities. The range of average incomes across municipalities is relatively flat (see Figure 2.2), with 60 percent of the municipal population residing in communities with average incomes between \$20,000 and \$30,000. About 4 percent of the municipal population lives in communities where the average income is below \$15,000, 3 percent in communities where it exceeds \$50,000.

One aspect of the population distribution warrants particular attention. While nearly 60 percent



of the local governments in St. Louis City and County have populations below 5,000, these communities in total include less than 7 percent of the total St. Louis population, including both city and county. In addition to the 58 percent of the St. Louis population found in the local jurisdictions of the two largest units, another 14 percent reside in the six municipalities with populations exceeding 20,000. Thus, while small local governments are common in St. Louis, most people in St. Louis City and County reside and work in the larger governmental jurisdictions.⁸ Roughly 40 percent of the county population, however, resides in municipalities with fewer than 20,000 people. The 90 St. Louis County municipalities are organized variously as villages, third and fourth class cities, and home rule cities. The 26 villages are all quite small—only one exceeds 5,000 population (Table 2.3). In total, villages contain approximately 6 percent of the population of county municipalities. The 45 fourth class cities, with 36 percent of the county's municipal population, have populations generally below 10,000. Third class cities tend to be somewhat larger and the 13 home rule municipalities are the largest in the county. Third class cities contain about 12 percent and home rule municipalities about 46 percent of the population of county municipalities.

Table 2.3 Municipalities in St. Louis County						
	Number	Population (1984 estimate)	Percent of Total	Land Area (square miles)	Percent of Total	
Villages	26	33,419 (31-5,696)'	6%	11	5%	
Fourth Class Cities	45	211,314 (360-19,049)	36	87	42	
Third Class Cities	6	69,786 (4,447-26,413)	12	34	16	
Home Rule Cities	13	275,476 (7,875-55,949)	46	76	37	
Point-of-Sale Municipalities	38	308,038 (67-27,990)	52	131	63	
Sales Tax Pool	52	281,957 (31-55,949)	48	77	37	
¹ Range of municipal populations.						

Table 2.4 Organization of Fire Protection in St. Louis						
St. Louis County Fire Departments and Fire Protection Districts	Population (1984 estimate)	Percent of Total	Land Area (square miles)	Percent of Total		
Municipal Fire Departments (19)	276,655 (4,112-49,929) [,]	20%	76	13%		
Fire Protection Districts (24)	710,553 (4,000-96,500) ¹	49	423	76		
Total St. Louis County (42)	987,208	69	499	89		
City of St. Louis (1) ¹ Range of populations served, including contracts.	453,085	31	61	11		

OVERLAPPING JURISDICTIONS AND SPECIAL PURPOSE GOVERNMENTS

In addition to the general purpose units of local government in St. Louis, a variety of special districts add an array of overlapping jurisdictions to the diverse pattern of municipalization. Most numerous are school districts and fire protection districts. Two districts related to education are countywide and two others—a sewer district and a museum-zoo district embrace both St. Louis City and County.

Elementary and secondary education is organized by 23 school districts in St. Louis County and one in St. Louis City. The county districts range in size from a few hundred to some 20,000 students. The larger districts are products of reorganization and consolidation. St. Louis City has a separately organized school district that, with an average daily attendance in excess of 50,000 students, is more than twice the size of the largest county district, the Parkway Consolidated School District. The St. Louis City district and four of the county districts have boundaries that are coterminous or nearly so with the boundaries of municipalities. The remaining 19 districts in the county cut across municipal boundaries and portions of the unincorporated county. All school districts, governed separately by elected boards, are autonomous governmental jurisdictions.

Overlaid on the county districts are the countywide Special School District, which was established to provide education for handicapped students and, later, vocational-technical education, and the Community College district. St. Louis City obtains special education through its regular school district.

Fire services in much of St. Louis County are also organized in part by special districts that are independent of general purpose units of local government. St. Louis City has its own fire department, as do 19 municipalities in the county. Eight county municipalities arrange for fire services through contracts with municipal or special district fire departments. More than 70 percent (710,000 residents) of the county's population, however, receive fire protection services from 24 independent fire protection districts (Table 2.4). Rather than making provision arrangements for fire protection through their general purpose local governments, residents of the unincorporated county and 62 incorporated municipalities provide for fire services through independently organized special districts governed by elected trustees.⁹

These separately organized school districts and fire protection districts add another 49 collective service provision units to the 92 general purpose governments in St. Louis City and County—mostly in the county. There are, of course, numerous other governmental and quasi-governmental units in St. Louis. Areawide special districts provide for sewer treatment and cultural facilities. A recently completed agreement between St. Louis City and County makes public health services a cooperative venture. There are also a few small districts for purposes such as roads and street lighting. The number is much greater, however, if more than 400 subdivision or homeowners' associations that provide for residential street services are included (see Chapter Six).

When these units are added to the large number of municipalities, the characterization of St. Louis as fragmented—in the sense of having a very large number of organized public jurisdictions—appears to be quite accurate. Fragmentation is accompanied by an extensive use of overlapping jurisdictions. In some portions of incorporated St. Louis County, a citizen may be served by the following governmental or quasi-governmental units:

- 1) Subdivision to provide streets and other neighborhood amenities;
- 2) Municipality (village or city);
- 3) School district;
- 4) Fire protection district; and
- 5) County government.

This count does not include countywide and city-county special districts. In other portions of the county, the functions of a subdivision and fire district may be performed by a municipality. The pattern is complex and far from uniform. As will be seen in the discussions of service delivery in Chapters Four through Seven, however, this large number and variety of units do not necessarily fragment the area in the pejorative sense of that term. Jurisdictional fragmentation does not necessarily lead to functional fragmentation.

MULTIORGANIZATIONAL ARRANGEMENTS

Cooperative endeavors among the extensive array of local governments in St. Louis County have created a multijurisdictional overlay of functional arrangements that span the boundaries of separate municipalities, school districts, and fire districts. The organization of St. Louis cannot be fully and accurately described without reference to these multiorganizational undertakings. If the large number of separate jurisdictions described earlier tends to fragment the metropolitan area, the multiorganizational overlay created by officials and citizens of these same jurisdictions tends to integrate the area, tying separate units together in numerous common efforts. These include administrative and contractual arrangements for producing services, as well as political forums for working out differences and seeking changes in state law affecting the region.

Joint Administrative Arrangements

Municipalities in the county cooperate extensively with one another for administrative purposes, especially in the production of police services. Many of the smaller municipalities have created joint dispatch centers, for example. There is also extensive cooperation between municipal and county police. (Police services are discussed in detail in Chapter Four.) Extensive intergovernmental cooperation also characterizes the delivery of fire protection services. Virtually every municipal and district fire department has signed formal mutual aid agreements with every other department. These agreements, for the most part, include first-response provisions, whereby the nearest fire company responds to a fire, regardless of jurisdictional boundaries. Most of the fire protection districts and several of the municipal fire departments have joined together to create fire alarm districts as well. These districts provide fire and emergency medical dispatch services for their members, thus facilitating the provision of mutual aid among them. (The provision of fire protection services is discussed in Chapter Five.)

All of the county's school districts, together with districts in nearby counties and the St. Louis City

district, are members of the Cooperating School Districts of the St. Louis Suburban Area (CSD), an organization that supplies its members with support services in the areas of audiovisual equipment and media and joint purchasing, and that articulates members' concerns to the state legislature. Most of the districts are also members of the Regional Consortium for Education and Technology (RCET). The St. Louis City school district and 16 of the county school districts are involved in an additional cooperative effort, the Voluntary Interdistrict Coordinating Council (VICC). The council, created in response to litigation charging racial discrimination in the city schools and between the city and county school districts, manages an extensive program of cross-district movement of students. Black students from the city are able to choose among the county districts that are a party to the agreement, while white students from the county districts are able to attend any of the various "magnet" schools in the city district. (These cooperative agreements are discussed more fully in Chapter Seven.)

Local Government Associations

Local governments and local officials in St. Louis County have also formed associations that serve as connecting tissue among jurisdictionsforums for sharing information, resolving differences, and developing solutions to common problems (obtaining state legislation when necessary). The St. Louis County Municipal League, founded in 1918,¹⁰ includes among its members all but a very few of the smallest municipalities in the county (see discussion in Chapter Three). The CSD (discussed above) represents all county school districts. In North County, a cluster of small municipalities have organized a forum called the Normandy Municipal Council with a small staff that provides its 16 municipal members with representation to county and state governments, as well as with planning and other support services.

Both elected officials and department heads in county municipalities have created additional forums through which they are able to meet and discuss common problems. The Mayors of Large Cities is one such group originally formed to meet with and advise the county executive. Another group, the Mayors of Small Cities, recently organized to provide a collective voice for officials not regularly consulted by county government. Administrators and bureau chiefs of the municipalities have also created forums for discussion and initiative on issues extending beyond the boundaries of their individual jurisdictions. Active groups include the Board of Governors of the Law Enforcement Officials of the Greater St. Louis Area (see Chapter Four), the [22Greater St. Louis Fire Chiefs Association (see Chapter Five), and the local chapter of the American Public Works Association (see Chapter Six). City administrators and managers of a number of the municipalities have joined together to create an insurance pool covering workmen's compensation and municipal liability for their communities.

At the city-county level, multijurisdictional forums are more limited. Two quasi-governmental agencies have areawide purview, but are limited in their abilities to take action. The East-West Gateway Coordinating Council, formed in 1965 as a "Metropolitan Planning Organization" required by federal law to qualify the area for continued federal highway funds, conducts an extensive array of statistical analyses on an areawide basis.¹¹ The council provides a forum in which local government officials from throughout the bistate (Missouri and Illinois) area can discuss regional issues, but has no independent authority or revenues to act with respect to areawide projects. A second organization, the Bi-State Development Agency, was chartered in 1949 with broad authority to act on issues of concern to the area as a whole, but lacks independent taxing authority. Functionally, Bi-State has become the operator of an areawide transit system, and is dependent for this and any other functions it might wish to undertake on voluntary contributions from local, general purpose units of government. In addition to these quasi-governmental bodies, local citizen organizations, such as Confluence St. Louis, provide forums for discussion of metropolitan issues, but are limited to the issuance of advisory reports.

PATTERNS OF POLITICAL REPRESENTATION

The legal classification of a municipality determines the pattern of representation afforded its citizens. Villages elect five or, in the largest, nine trustees. In all but two villages, the ratio of citizens to elected officials is less than 500. Fourth class citiesgenerally the next largest in size to villages-elect a mayor and four, six, eight, or, in one case, ten aldermen. Seventy percent of the fourth class cities have citizen-elected official ratios of less than 1,000, never exceeding 3,000. The six third class cities, with populations somewhat larger than the average city of the fourth class, elect a mayor and four, six, or eight councilmen. Citizen-to-elected-official ratios in these six cities are also small, with only one city's ratio exceeding 3,000. The 13 home rule charter cities in the county, generally the largest of the municipalities, elect a mayor and four, six, eight, or nine councilmen. Their citizen-elected official ratios are also small, with only two cities-Florissant and University City-having ratios that exceed 5,000 citizens per elected official. Overall, the residents of county municipalities have relatively high levels of per capita representation compared to the area's two largest jurisdictions. The ratios are much larger in both St. Louis City and St. Louis County, with more than 16,000 citizens per alderman in the city and approximately 140,000 citizens per council member in the county.

In interviews, many local officials pointed with pride to these low citizen-elected representative ratios, usually stating that local officials have to be responsive to individual citizens in the community because each citizen's vote weighs heavily in local elections. The contrast with county government is dramatic. Seven elected council members and one elected executive represent 987,209 county residents. County council members, with constituencies averaging in excess of 140,000 persons, are, municipal officials argued, unable to respond individually to their constituents and can, in fact, pay less attention to many citizen requests for council action because individual citizens are less consequential for their electoral success.¹²

Mayors and trustee chairmen in county municipalities argued that local bureau heads (such as police and fire chiefs), too, have to be more responsive to individual citizens. These bureau chiefs are, they said, exposed to council supervision and to individual citizen requests to a much greater extent than their counterparts in the two largest political jurisdictions. One reason that citizens of St. Louis County cling to their relatively small local governments, even in the face of repeated criticism from reform advocates and periodic proposals for consolidation, may well be the extraordinary opportunities afforded them for low-cost participation in collective choices regarding taxation, zoning and building codes, public service levels and costs, and other aspects of local community life. Citizens who are active in municipal incorporation efforts in presently unincorporated parts of the county often state their case in these same terms, focusing on one or another aspect of community life that citizens of a specific community want to be able to shape for themselves.

The existence of a number of very small municipalities, especially in the Normandy area in North County, highlights another aspect of representation for residents in fragmented areas. The Normandy area is the home of most of the county's nonwhite, mostly black, population. Many of the elected officials, bureau chiefs, and public employees in these communities are black. These small communities give black citizens access to political participation and representation that they have yet to achieve in county government. Many of these communities, which include a variety of income levels and life styles, are racially integrated.

In addition to participation in collective choices, citizens in many municipalities are active in the production of local services for themselves. This production ranges from active participation on local boards and commissions to physical production of beautification and maintenance services and police services through such mechanisms as neighborhood watches and citizen patrols. One can hypothesize that the relatively high level of citizen involvement in local service delivery results, at least in part, from the sense of community and individual efficacy afforded them by small local jurisdictions.

The men and women who serve as mayors (chairmen of trustees in villages), aldermen, councilmen, or trustees of the county municipalities are, for the most part, employed in other full-time jobs or are retired. Only one municipality, Florissant, has a full-time mayor. Legislative officials come together once or twice a month in most of the municipalities to conduct local business. Mayors and village trustee chairmen devote somewhat more time to their duties, usually attending to the duties of their offices at regular times during each week.¹³ Many of the smaller municipalities have no city hall or other building devoted exclusively to city business. Rather, they rent office space in existing structures or use space in recreation centers, police or fire stations, or schools. The part-time status of most elected officials has led some critics to characterize them as "amateur" politicians.

To refer to these officials as amateurs simply because of their part-time status, however, is an oversimplification. For the most part, the elected officials who were interviewed in the course of this research demonstrated that they are quite knowledgeable about the affairs of their communities. Many have served for a number of years in their positions and have developed high levels of skill at managing their respective municipality's business. Given the small size of many of the municipalities in the county, it is not surprising that part-time elected officials are able to function as effective managers. These officials have the advantage of knowing many of their constituents personally, an advantage not as readily available to officials in the largest county municipalities, or in St. Louis City and County.

In addition to their elected officials, almost all of the municipalities have at least one full-time administrator, ranging from a village clerk in the smaller jurisdictions through city administrators and managers in the larger. Nine municipalities, encompassing about one-fourth of the municipal population, employ city managers, and another 14 municipalities (encompassing another one-fourth of the municipal population) have city administrators.¹⁴ These administrators, together with others designated administrative assistant, assistant to the mayor, city clerk, and village clerk have, over the years, developed significant professional skills in managing the day-to-day affairs of their communities. Working in tandem with elected officials, they are able to provide continuity in local government management for their municipalities.

FISCAL PATTERNS

General purpose units of local government in St. Louis City and County raised \$527 million in revenues in 1985 (Table 2.5). In addition, \$34 million in revenue was raised by the fire protection districts in the county. Of these revenues, 44.5 percent accrued to St. Louis City, with the remainder distributed among St. Louis County government, county municipalities, and fire protection districts.¹⁵

In St. Louis County, revenues raised in the municipal jurisdictions vary with the class of municipality and status with respect to sales tax distribution (Table 2.5). Villages and the fire protection districts that serve them accounted for 3.7 percent of total local government revenues in the county.¹⁶ More than 40 percent of total local government revenues in the county was raised within the borders of fourth class cities, 6.5 percent in third class cities,¹⁷ and almost 50 percent in home rule cities. About twothirds of municipal and fire district revenues was raised in municipalities that receive sales tax revenues according to point-of-sale (which included 55 percent of the municipal population), while the remaining third was raised in municipalities that pool their sales tax revenues with the unincorporated county.

Revenue Sources

The largest single source of revenues for St. Louis County government and for the municipalities in the county is a countywide sales tax. A sales tax is also an important source of revenues for St. Louis City, but is outweighed there by an earnings tax collected from city residents (wherever they are employed) and from nonresidents who are employed within the city limits. Sales tax revenues in excess of \$27 million represented nearly 20 percent of total county revenues (including county government and fire protection districts serving the unincorporated county), while the \$61 million accruing to municipalities (and the fire protection districts serving some of them) represented nearly one-third of their revenues. St. Louis City's \$30 million raised from the sales tax was about 13 percent of its 1985 revenues.18

The local revenue source most directly subject to control by citizens is the property tax on real, per-

Powersee of Constal During	Table 2.5
	Governments and Fire Districts – 1985
(in thous	sands of dollars)

	General	Fire	Combined	Population
	Purpose	Districts ¹	Revenues	(1984 estimate)
All Units ^{2 3}	\$527,231	\$34,284	\$561,515	1,392,466
(per capita)	(378)	(25)	(403)	
City of St. Louis	234,059	-	234,059	429,300
(per capita)	(545)		(545)	
Percent of total	44.4%	-	41.7%	30.8%
Total St. Louis County ^{2 3}	293,172	34,284	327,456	963,166
(per capita)	(304)	(36)	(340)	
Percent of total	55.6%	100.00%	58.3%	69.2%
St. Louis County Government ³ (per capita) ⁴	118,453/76,263⁴ (192)	22,005 (55)	140,458/98,268 ⁴ (247)	397,2134
Percent of total	22.4%	64.2%	25.0%	28.5%
Municipalities in County ²	174,719	12,280	186,999	565,953
(per capita)	(309)	(22)	(330)	
Percent of total	33.2%	35.8%	33.3%	40.6%

¹Fire district revenues are those from the property tax only. In the municipalities these revenues are the product of the fire district tax rate and the total assessed valuation of the municipality. Fire district revenues in the unincorporated county are countywide fire district tax revenues minus those raised in the municipalities.

²Does not include Maryland Heights or Velda Village Hills.

³For revenues excluded from the city and county totals, see endnote 15.

⁴Unincorporated portion only, revenues estimated from *St. Louis County, Missouri, 1985 Annual Budget,* using methodology employed in "St. Louis County Revenue History, 1974-1983'" a briefing paper prepared for the County Annexation Study Commission in 1985.

Table 2.6 Revenues of Municipal Governments and Fire Districts in St. Louis County – 1985 (in thousands of dollars)

	General	Fire	Combined	Population
	Purpose	District ¹	Revenues	(1984 estimate)
All Units ²	\$174,719	\$12,280	\$186,999	565,953
(per capita)	(\$309)	(\$22)	(\$330)	
Villages ³	\$5,602	\$1,286	\$6,888	32,008
(per capita)	(\$175)	(\$40)	(\$215)	
Percent of total	3.2	10.5	3.7	5.6
Fourth Class	\$69,621	\$5,875	\$75,496	215,048
(per capita)	(\$324)	(\$27)	(\$351)	
Percent of total	39.8	47.8	40.4	38.0
Third Class ⁴	\$11,682	\$485	\$12,167	43,373
(per capita)	(\$269)	(\$11)	(\$280)	
Percent of total	6.7	3.9	6.5	7.7
Home Rule	\$87,814	\$4,633	\$92,448	275,524
(per capita)	(\$31 9)	(\$17)	(\$336)	
Percent of total	50.3	37.7	49.4	48.7
Point-of-Sale Cities	\$119,552	\$7,408	\$126,960	311,825
(per capita)	(\$383)	(\$24)	(\$407)	
Percent of total	68.4	60.3	67.9	55.1
Pool Cities2	\$55,167	\$4,872	\$60,039	254,128
(per capita)	(\$217)	(\$19)	(\$236)	
Percent of total	31.6	39.7	32.1	44.9

¹Fire district revenues in the municipalities are the product of the fire district tax rate and the total assessed valuation of the municipality. ²Does not include Maryland Heights or Velda Village Hills.

³Does not include Velda Village Hills.

⁴Does not include Maryland Heights.

Does not include maryland heights.

Table 2.7 Revenue Sources in County Municipalities1 – 1985 (in thousands)					
	Sales Tax	Municipal Property Tax	Fire District Property Tax	Licenses, Permits, and Utilities	Other Sources
All Units ²	\$60,616	\$18,671	\$12,280	\$45,885	\$49,547
Percent of total revenues	32.4%	10.0%	6.6%	24.5%	26.5%
Villages	2,558	442	1,286	431	2,171
Percent of total revenues	37.1%	6.4%	18.7%	6.3%	31.5%
Fourth Class	28,511	5,776	5,875	16,946	18,388
Percent of total revenues	37.8%	7.6%	7.8%	22.4%	24.4%
Third Class	3,751	1,708	485	3,147	3,076
Percent of total revenues	30.8%	14.0%	4.0%	25.9%	25.3%
Home Rule	25,796	10,745	4,633	25,360	25,914
Percent of total revenues	27.9%	11.6%	5.0%	27.4%	28.0%
Point of Sale	43,885	12,052	7,408	31,933	31,682
(per capita)	(141)	(39)	(24)	(102)	(102)
Percent of total revenues	34.6%	9.5%	5.8%	25.2%	25.0%
Pool	16,731	6,619	4,872	13,952	17,865
(per capita)	(66)	(26)	(19)	(55)	(70)
Percent of total revenues	27.9%	11.0%	8.1%	23.2%	29.8%
¹ Including revenues collected i ² Does not include Maryland He			cts, where relevant.		

sonal, and other property. In years past, this was a primary source of revenue for municipalities in St. Louis and elsewhere. In recent years, taxpayer "revolts," forcing reliance on alternative revenue sources, have reduced the property tax to a much smaller component of local revenues.¹⁹ Within the municipalities of St. Louis County, local property taxes (imposed by municipalities and fire protection districts) provided an average of 16.6 percent of total municipal and fire district revenues in 1985 (Table 2.7). The range of variation was broad, however. Eight municipalities had no municipal property tax on real property. Two-thirds of the municipalities raised less than 10 percent of their municipal revenues from the property tax, and only four municipalities raised more than 30 percent from this source. These four municipalities are upper-income communities composed almost exclusively of highvalue residential property. Home rule and third class cities were, on average, somewhat more reliant on the local property tax for municipal revenues than villages and fourth class cities, but this is primarily an artifact of the way that fire protection services are financed in the county.²⁰ St. Louis City was well below the average in its reliance on the local property tax, while the county government was somewhat above average because it collects this tax countywide.

Another cluster of locally generated revenues are derived from license, franchise, and permit fees and a tax on the gross receipts of public utilities. Countywide, this cluster provided approximately 29 percent of municipal revenues and 25 percent of total revenues including fire protection districts. Villages in St. Louis County are permitted to tax only electric utility gross receipts at a 2 percent rate, however, and this tax and the license and permit fees that they can impose supplied only about 6 percent of total revenues raised in their jurisdictions. St. Louis City derived 20 percent of its revenues from this combined source, while the county government obtained 22 percent.

Other sources of revenue for general purpose local governments in St. Louis include sales taxes on cigarettes and motor fuel, a property tax surcharge on commercial and industrial property implemented in 1985, the road and bridge tax (essentially an addon to the property tax that is distributed among local jurisdictions in proportion to assessed valuation), and intergovernmental revenues, principally general revenue sharing (until it was terminated in 1986) and community development block grants.²¹ Federal revenues have become increasingly less significant sources for most municipalities in recent years.²²

Among the municipalities in St. Louis County, the reliance on various sources of revenues varies with class of municipality and status with respect to sales tax distribution (Table 2.7). Villages and fourth class cities, generally the smaller units, rely more heavily on the sales tax than do their larger neighbors. Villages and fourth class cities are distinguished from each other, however, by their relative

reliance on property taxes and revenues from licenses, permits, and the utilities gross receipts tax. Villages are limited with respect to the gross receipts tax, and so this source provides much less of their revenue than it does for municipalities of the other classes. Villages do not have their own fire departments and, with a few exceptions, do not contract for fire protection services. Fire services for most villages are supported by the property taxes of the fire protection districts that serve them. The result is that, while property taxes are a relatively small percentage of the revenues raised directly by villages, when fire district property taxes are included, villages have the highest percentage of total revenues raised from the property tax. The larger, third class and home rule cities rely less on the sales tax than do their smaller neighbors, and somewhat more on license, permit, and gross receipts taxes.

County municipalities differ in how they obtain sales tax revenues. Some municipalities are point-ofsale, thereby obtaining all the sales tax revenue from sales within their borders, while others are part of a sales tax pool that includes the unincorporated portion of the county, with sales tax revenues distributed according to population. Point-of-sale cities are more reliant on the sales tax and less reliant on the property tax, when measured as a percent of total revenues, than pool cities. In point-of-sale cities, on average, 35 percent of total revenues are derived from the sales tax, compared to 28 percent in pool municipalities. In point-of-sale cities, about 15 percent of total municipal and fire district revenues come from property taxes. The comparable figure in pool cities is 19 percent. These percentages conceal an interesting additional difference, however. Per capita municipal and fire district property tax revenues raised in point-of-sale cities were approximately \$63 in 1985, but only about \$45 in pool cities. Although point-of-sale cities appear to be using sales tax revenues to offset property taxes when compared to pool cities on the percentage of total revenues raised this way, per capita property tax collections in point-of-sale cities are larger than those found in pool cities. Indeed, point-of-sale cities raise more revenues from all sources than do pool cities. Excluding revenues from the sales tax, total per capita revenues raised in point-of-sale cities in 1985 were \$266, compared to \$170 in pool cities.

Patterns of Revenue Variation

Per capita revenues in St. Louis City are substantially higher than those in most of St. Louis County. The city, with 31 percent of the estimated city-county population, raised 42 percent of the total revenues in 1985, for a per capita value of \$545 (see Table 2.5 above). The total revenues raised by county government, municipalities, and fire districts in the county were 58 percent of the combined total, while the county contained 69 percent of the combined population. On a countywide average, total per capita revenues of the county government, municipalities, and fire protection districts were \$340, approximately 62 percent of those found in the city.²³ On a per capita basis, the variation in revenues raised by municipal governments in the county is from slightly below \$100 to nearly \$1,700. With fire district revenues allocated to the territory of these governmental units where relevant, the range is from \$121 to \$1,901, a 1-to-17 range.

Stating total revenues on a per capita basis for each municipality, with residential population as the base, exaggerates the actual revenue variation to some extent. First, the combined population of municipalities at the very low and the very high ends of the distribution is a small proportion of the total population residing in municipalities. Five small communities containing 2.4 percent of the total municipal population lie at the low end of the range, while three communities, also with about 2.4 percent of the total municipal population, are found at the high end. If the revenues of these eight communities are excluded, the range of variation in per capita revenues, including fire district revenues, for 95 percent of the municipal population is reduced from 17 to 1 to 4.5 to 1, still a significant range, but much less striking. Second, using residential population as a base does not account for differences between daytime and night-time populations. In county municipalities where large commercial or industrial enterprises are located, this difference (like that found in St. Louis City) may help to explain their significantly higher per capita revenues.²⁴

Data presented in Table 2.8 provide some insight on these variations. Municipalities were ordered by total revenues (municipal and fire service) per capita, and then grouped into rough quartiles of the population in the incorporated county. Thirtytwo municipalities with total revenues per capita below \$224 contain the least advantaged 25 percent of county residents in per capita revenue terms. In total, the revenues of these municipalities and the fire districts that serve them constituted 15 percent of total municipal and fire district revenues. At the other end of this scale are 18 municipalities with per capita revenues in excess of \$423. These 18 municipalities, also containing about 25 percent of the municipal population, account for 39 percent of total municipal and fire district revenues, and are clearly most advantaged in this sense.

One significant factor separating more and less advantaged municipalities in the county, when advantage is measured in terms of per capita revenues, is their status with respect to the sales tax distribution formula. Among the 32 least advantaged municipalities, only one is a point-of-sale city. On the other hand, all but one of the 18 most advantaged cities have point-of-sale status. As the last 2 lines of Table 2.8 demonstrate, point-of-sale cities tend to have substantially higher revenues per capita than do pool cities, on average about 72 percent greater.

GOVERNMENTAL REFORM MOVEMENTS

Throughout its history, St. Louis has been the object of numerous studies and proposals aimed at changing the structure of local government in the area. The first reform was the aforementioned separation of St. Louis City from St. Louis County in 1876. Since that time, reform proposals have frequently been advanced to undo this separation. Additional proposals have focused on reducing the number of governmental units in St. Louis County. Some reform proposals have been successful, notably in reducing the number of special districts for the provision of sewer services and education. St. Louisans have also agreed to areawide special districts to fund the St. Louis zoo and museums²⁵ and the local junior colleges, and are currently implementing areawide provision of public hospital services. On the other hand, proposals to reverse the separation of city and county have not been successful; neither have proposals to reduce the number of municipalities in the county through general reorganization.

The first formal attempt to reverse the separation of city and county took place in 1926.²⁶ Residents of the city supported, by a margin of 7 to 1, a proposition that the city absorb the county and all its municipalities. County residents opposed the proposition by a margin of 2 to 1 and it was rejected. In 1930, an amendment to the Missouri Constitution was proposed that would have allowed the establishment of federations of local governments. St. Louis City residents favored the amendment, but county residents opposed it, and the amendment failed to receive a majority vote in a statewide referendum. In 1954 the first successful reform initiative created the Metropolitan St. Louis Sewer District, thus integrating the sewer systems of the city and of urbanized portions of St. Louis County. City and county residents supported the creation of this special district by a margin of 3 to 1. In the next year, however, city and county residents rejected the creation of a similar special district for the provision of transit services, and in 1959 rejected the creation of a multipurpose special district for the provision of sanitation, roads, transit, economic development, police training and communications, and civil defense.

Proposals for governmental reform in St. Louis, as elsewhere in America, have been similar to those discussed in Chapter One. The number of local governments in the St. Louis area has been taken as obvious, direct evidence of organizational pathology. In the late 1950s and early 1960s, for example, a consortium of scholars from local universities conducted a study of governments in the St. Louis area, including their capacities to provide urban services. The researchers approached the study believing that the "congery of heterogeneous and overlapping governmental units" in the St. Louis area must have adverse effects. The adverse effects they presupposed, to quote Scott Greer (a member of the group), included:

- 1) Great variation in output, or service levels, among the different units,
- 2) Great variations in the efficiency, or cost benefit ratio among the units,
- 3) A generally low level of some services throughout the area, due to the deleterious effects of poor services in one governmental unit on the services in other, interdependent units. . . .²⁷

<i>Table 2.8</i> Revenue Variations in County Municipalities – 1985						
Number of Municipalities ¹	Percent of Municipal Population	Percent of Total Revenues ²	Average Revenues Per Capita	Range of Revenues Per Capita		
32	25%	15%	\$196	\$121-224		
20	26	21	264	224-289		
17	24	26	348	293-422		
18	25	39	518	423-1,901		
Point-of-Sale Municipalities1 (37)	55	68	407	216-1,901		
Pool Municipalities ¹ (50)	45	32	236	121-423		

²Total revenues include those of general purpose governments and, where relevant, fire protection districts.

They also believed that there was no relationship between the vitality of local political processes and the size of governmental units. Nor did they believe these presuppositions to be subject to debate. As Scott Greer put it, the propositions "were not initially stated as hypotheses; their validity was assumed, for they were part of the overall ideology of the movement to save the cities." Given this point of departure, it is not surprising that they recommended governmental consolidation for the area even in the face of evidence that would have challenged their basic presuppositions.

In partial response to their recommendations, a city-county consolidation plan was advanced, known locally as the Borough Plan. Under this plan, the city and county were to merge, existing local governments were to be disbanded, and the resulting governmental entity was to be divided into several boroughs, most of which would have included portions of both the city and the county within their borders. This plan elicited widespread opposition from local government officials in both the city and the county, and from organized interest groups and black citizens of the city. Black residents of the city, for example, argued that the Borough Plan would greatly reduce their growing influence in city government. The plan failed to receive a majority statewide-failing in every Missouri county-and was rejected by margins of 5 to 4 in the city and 4 to 1 in the county. It was the last proposal to reverse the 1876 separation of city and county that has been presented to the voters.

After the defeat of the Borough Plan, reform proposals began to focus on governmental arrangements in the county. In 1968, county residents adopted a new home rule charter that greatly reduced the number of elected county government officials and, thereby, consolidated the government of the unincorporated county under a strong county supervisor with broad executive powers. In 1970, a county home rule amendment to the Missouri Constitution was adopted with majorities statewide and in St. Louis City and County. This amendment allows citizens of charter counties to decide what services will be provided by county governments in incorporated and unincorporated portions of those counties. Citizens of St. Louis County now have the capability of transferring functions from municipal to county government responsibility, but have so far not used this power.

In 1971, the last of the current areawide special districts was created. A proposal to create a cultural district to provide for the St. Louis Zoo and museums was accepted by a margin of 3 to 1 in the city and by a bare majority in the county. Voters in the city and county approved the addition of an historical district to the zoo-museum district in 1987.

Most recently, the St. Louis County Executive and the citizens organization Confluence St. Louis have proposed incorporating all of the unincorporated county and simultaneously reducing the number of municipalities by 50 percent or more.28 The proposal followed a number of recent municipal annexations, a new incorporation, and additional incorporation efforts-all having the effect of reducing the unincorporated territory taxed and serviced by county government. Fire districts would also be consolidated, and fire services removed entirely from municipal jurisdiction, leaving a total of four fire districts together covering the whole county. Counter proposals have also been advanced-one by the St. Louis County Municipal League-that would leave existing municipalities intact.²⁹ A new period of reform discussion has begun. (The various reform proposals are discussed further in Chapter Nine.)

CONCLUSION

St. Louis is a diverse area in terms of its subpopulations, and this diversity is reflected in its governmental jurisdictions, especially in St. Louis County. Many analysts would characterize the jurisdictional pattern in the county as a patchwork or maze that defies any rational order. If rationality implies uniformity, these characterizations are accurate. Yet the fragmentation represented by the large number of formal jurisdictions in the county has to be balanced against the integrating effects of numerous multiorganizational arrangements-political forums and joint administrative units created as an overlay on top of the jurisdictional patchwork. Efforts at comprehensive governmental reform, all aimed at simplifying the political geography, have failed to date. The patchwork not only persists, but also continues to develop, as does the elaborate overlay of multiorganizational arrangements. Fiscal disparities, especially between point-of-sale and pool cities, have been the greatest continuing source of conflict.

A possible new wave of annexations and incorporations, however, currently threatens to overshadow all other issues and to alter the political geography by taking county government largely out of its municipal-type service provision role. Once again, citizens are being asked to consider sweeping proposals to restructure the county. To examine these issues, however, first requires a closer look at the basic rules and functional arrangements for metropolitan governance in the St. Louis area—the subject of Chapter Three.

-ENDNOTES

- ¹This discussion of the early development of St. Louis and St. Louis County is derived in large part from the excellent monograph, *History and Growth of St. Louis County*, Sixth Edition, written by Robert A. Cohn and published by the St. Louis County Office of Public Information in 1973.
- ²Eugene M. Violette, *History of Missouri*, first published in 1918 and reprinted in 1953, pp. 14-15.
- ³Missouri law in this period gave no voice to residents who were the target of a proposed annexation, requiring only a simple majority vote among residents of the municipality proposing an annexation.
- ⁴Based on 1984 population estimates. See Missouri Population and Census Newsletter, December 1985, cited in the 1985 Fact Sheet: Police Services in St. Louis County, published by the Bureau of Management Services, St. Louis County Department of Police. The estimate of population for the City of St. Louis is taken from U.S. Department of Commerce, Bureau of the Census, Local Government Finances in Major County Areas, 1984-85, GF 85, No. 6.
- ⁵Quintile averages are a means of illustrating variance in a distribution. To compute these averages, data on the series of interest, percent minority for example, and municipal population are sorted in ascending order, from the lowest value to the highest. Then, an average value is computed for each portion of the resulting list that contains roughly 20 percent of the total municipal population. Table 2.1 shows, for example, that 20 percent of the County municipal population resides in municipalities having 1.5 percent minority population, 20 percent in municipalities with an average of 2.8 percent minority, and so on. The highest quintile, representing those municipalities with the highest percentages of minority population, has a minority population which averages 56.2 percent. The quintile averages in the Table are computed separately for each data series.
- ^eIn addition to the Normandy area municipalities, Berkeley, Ferguson, Jennings, Kinloch, and University City.
- ⁷Including the unincorporated portion of the county.
- ^eThis observation raises a question for those who argue that too many governments is *the* problem of the St. Louis area. It is difficult to see how the many small governmental units in the county, given their very limited populations and land areas, could constitute *the* metropolitan problem.
- ⁹Pacific and the Pacific Fire Protection District are not included in these counts.
- ¹⁰For a history of the League, see Charles W. Sisler, *History of the St. Louis County Municipal League* (Clayton: St. Louis County Municipal League, May 1986). For a discussion of recent League activities, see James M. Brasfield, "The Great Land Rush: Annexation and the Sales Tax in St. Louis County," a paper presented at the Annual Meeting of the American Political Science Association, New Orleans, Louisiana, August 1985.
- ¹¹See the East-West Gateway Coordinating Council Publications List, March 1985.
- ¹²Citizens who were concerned about local problems in the Chesterfield area addressed those concerns to their representatives in the Missouri legislature, each of whom serves a significantly smaller and more geographically focused constituency than do county council members.
- ¹³A benefit of having officeholders with full-time jobs in addition to their municipal responsibilities was evident across many jurisdictions. Village and city meetings were scheduled on weekday evenings or on weekends. Not only did this accommodate the full-time working schedules of officehold-

ers, it also made local government more accessible to residents, most of whom also hold full-time jobs. Rather than being forced to take time off from work to meet with local officials, citizens could attend city meetings at times that were convenient to them.

- ¹⁴Only one municipality, however, has a council-manager form of government in which there is no separately elected mayor.
- ¹⁵Certain revenues of St. Louis City and County are not included in these totals to maintain comparability with municipal and fire district revenues. For the city, revenues of the debt service, capital projects, expendable trusts, convention center, miscellaneous special, and hospital division special funds were excluded, as were revenues which were expended for health and welfare purposes. The county revenue total excludes revenues of the debt service and "other" funds, together with revenues associated with community health and medical accounts.
- ¹⁶In St. Louis County, some municipalities maintain fire departments with municipal revenues. Citizens in other municipalities and in the unincorporated county receive fire services from fire protection districts, and are taxed separately for these services. To place service-related revenues and costs on a comparable basis, fire protection district totals are included with municipal data for some analyses in this chapter. Where this is done, revenues and/or costs are referred to as total municipal and fire protection revenues-costs or total local revenues-costs.
- ¹⁷The new third class City of Maryland Heights is excluded from these data as it had revenues for only a portion of 1985.
- ¹⁸Total county and city revenues with the exclusions listed in Note 15 above.
- ¹⁹In 1971-72, property taxes comprised 27 percent of the general revenues of municipal governments in St. Louis County. By 1976-77 this percentage had dropped to 16, and in 1984-85 it was approximately 11 percent. Property tax revenues as a percentage of total municipal revenues nationwide decreased over this same period, from 31 percent in 1971-72 to 21 percent in 1981-82, although Missouri's rate of decrease was much greater. See Significant Features of Fiscal Federalism, published annually by the Advisory Commission on Intergovernmental Relations.
- ²⁰Third class and home rule cities are more likely to produce fire services with their own departments; villages and fourth class cities are more likely to receive such services from fire protection districts.
- ²¹In St. Louis County, some municipalities obtain significant revenues from the sale of services, principally police services, to other municipalities under contract. One municipality raised in excess of 30 percent of its revenues in this fashion. Several other municipalities, benefitting from their geographic locations astride heavily travelled traffic arteries, raised significant revenues from fines and fees—principally traffic related—imposed by their municipal courts. Three small municipalities obtained more than 30 percent of their revenues from this source, and an additional eight municipalities raised at least 10 percent of their 1985 revenues from court fines and fees. The general subject of local fees and charges is explored in ACIR, Local Revenue Diversification: User Charges (Washington, DC: ACIR, Report SR-6, October 1987).
- ²²Intergovernmental revenues are not insignificant for the City of St. Louis, however, which received nearly \$70 million in grants in 1985, principally from the federal government.
- ²³The higher revenues accruing to the City of St. Louis might be looked on as an example of inequity in the local political economy. Only six municipalities in St. Louis County, with a combined resident population of 28,502 persons, raised

total per capita revenues (municipal and fire district) in excess of the city's. Forty-five municipalities had total per capita revenues that were less than 50 percent of city revenues. But discussion of fiscal disparities in St. Louis has not focused on this comparison. The city is viewed as the locus of extraordinary service demands, requiring (and, in the sense of equity, deserving) extraordinary revenues. Certainly the city's status as an employment center for the area engenders additional service costs (and revenues) beyond those of primarily residential communities.

- ²⁴Indeed, as shown in Chapter Eight, revenues in St. Louis County are closely related to the presence of such commercial and industrial enterprises, and presumably with the population influx which they produce.
- ²⁵A referendum has just added an historic district to the zoomuseum special district.
- ²⁶This review of reform proposals in St. Louis draws, in part, from information compiled by the Center for Urban Pro-

grams, St. Louis University, published in Fostering Development in Metropolitan St. Louis, a report submitted to the City-County Task Force of Civic Progress in 1982.

- ²⁷Scott Greer, "Dilemmas of Action Research on the Metropolitan Problem," in Morris Janowitz, ed., Community Political Systems (Glencoe, Illinois: The Free Press, 1961), p. 193. For a broader discussion of the approach, see Scott Greer, Metropolitics: A Study of Political Culture (New York: John Wiley and Sons, 1963).
- 28See St. Louis County Department of Planning, A Comprehensive Proposal for Local Government Reorganization in St. Louis County, November 1987, and Confluence St. Louis, Too Many Governments? A Report on Governmental Structure in St. Louis City and County with Recommendations for Change, February 18, 1987.
- 29See St. Louis County Municipal League, Policy: Governmental Organization, June 4, 1987.

Metropolitan Governance in St. Louis: State Rules, Local Arrangements

INTRODUCTION

To understand the organization of metropolitan St. Louis, especially St. Louis County, the first subject to examine is not how local governments operate, but how they are created. No single organizer designed the present configuration of local governments in St. Louis County. Rather, each local jurisdiction is a product of community choice—an artifact that was locally created, albeit with legal tools supplied from the state capital. Local citizens, acting through processes of petition and referendum, make a series of incremental choices that, in the aggregate, produce and maintain a diverse pattern of jurisdictional fragmentation and overlap.

The study of local government law is often predicated on the idea that local governments are "creatures of the state." The functional arrangements for creating local governments, however, are radically different from the prevailing legal conception. Although local governments in every state are subject to state law and the state constitution,¹ state governments seldom *create* discrete local governments, except for basic legal subdivisions, such as counties and townships.² Instead, state constitutions and statutes provide a set of *legal tools* that citizens use locally to create and modify local governments. Functionally, local governments tend to be the "creatures" of local communities.³

FUNCTIONAL GOVERNANCE ARRANGEMENTS

The absence of a single determining center of power may explain the frequent presumption that

areawide governance is nonexistent, or chaotic, in fragmented metropolitan areas. Governance arrangements, however, depend not on a single center of power, but on a capacity to make and enforce general rules of law. The creation of a local government unit is, in functional terms, a "constitutional" choice-a lawmaking decision on the part of citizens that governs the processes of local government. Underlying this local constitutional capability is an elaborate structure of enabling rules embodied in state law. The choice of enabling rules-one step removed from the actual creation of local government units-can also be viewed as a constitutional function, a process that governs the establishment of local governments. These processes jointly provide a functional basis for metropolitan governance.

The basic theme that emerges from the constitutional history of St. Louis County is one of local freedom-not so much freedom of individual choice, but freedom of collective constitutional choice in a variety of local contexts. The freedom to organize local governments is sufficiently unconstrained that one student of metropolitan areas nominates the St. Louis County area as "one of the best examples of what suburban America would probably look like if city formation were left to the voluntary efforts of local residents."⁴ These efforts are not in the strict sense, however, voluntary. The choices made are collective choices, binding on the individuals who are part of the relevant community of interest. Individual freedom, apart from participation in collective choice, depends on relocation to a different community. The multiplicity of locally governed communities increases, to some extent, the opportunities for individual choice as well.

A Local Government Constitution

It is useful to think of St. Louis County as having a local government constitution, a body of rules for creating local government units and defining their powers.⁵ Even though the various constitutional rules are not derived from a single legal source, they can be understood functionally as a set. By providing legal instruments for the creation of new governments, a local government constitution is even more open ended than a single unit constitution.⁶ At least two levels of constitutional choice are implied:

1. At the first level, state legislators and citizens who participate in state constitution making choose a set of enabling rules designed to organize a process by which local communities can create local governments and to empower those local governments. These rules are found mostly in state constitutions and state statutes.

2. At the second level, local citizens choose to create (or otherwise modify or even terminate) local governments in their communities, adopting charters, or other organizing acts, that actually establish local government jurisdictions. This process generates a second set of rules found in county and municipal charters, as well as in the organizing acts of special purpose districts and residential subdivisions.

Both levels of choice are constitutional in a functional sense, adopting rules that govern future collective choices. Instead of making those collective choices directly, constitutional decisionmakers provide a set of rules that enable others to make those choices and, at the same time, constrain the choices they can make. Constitutions do not operate governments, but constitutions do establish the constraints and opportunities within which governments operate. The greater the number of relatively autonomous, yet interdependent, governmental units within a metropolitan area, the more salient such constitutional rules become.

The bi-level process of constitutional choice in metropolitan St. Louis depends on an institutional separation of the two levels into distinct decisionmaking processes involving different decisionmakers. The use of statewide instrumentalities—the state constitution and state law—to develop the enabling rules that comprise the local government constitution achieves such a separation. Yet the use of statewide decisionmaking processes does not in and of itself give the St. Louis area, and particularly St. Louis County, a unique local government constitution. Rather, it would appear to absorb St. Louis into a statewide jurisdiction that could be highly inflexible in relation to the specific problems of governance that arise in any particular metropolitan area. The fact that this consequence does not follow is due to functional arrangements that involve the use of "special legislation."

"Local Laws" and the Local Delegation to the State Legislature

Special local laws are prohibited by the Missouri Constitution of 1945. The state legislature, therefore, may not legislate for particular local communities by name. The device routinely employed by the state legislature to comply with this requirement is to use general language to create a class for which only one area or jurisdiction qualifies at the time. Thus, special legislation for St. Louis County refers to a "first class county operating under a charter form of government and not containing a city or a part of a city of over 400,000 inhabitants." No other county qualifies as a member of this class. The Missouri courts allow this form of legislation on the rationale that other counties may qualify in the future. Similarly, St. Louis City is characterized as "any city not within a county." Even though this class has only a single member, the state courts consider it to be a reasonable classification for legislative purposes.

The routine use of special legislation to maintain a unique local government constitution to govern metropolitan St. Louis casts the local delegation to the state legislature in a specific functional role, given the customary deference accorded local bills by other legislators.7 The St. Louis County delegation is composed of 7 senators and 31 representatives, all elected from separate districts. The City of St. Louis adds 3 senators and 15 representatives. Where state law is concerned, the members of the local delegation become, functionally, the keepers of the rules by which the diverse jurisdictions of St. Louis County are governed. Though not politically neutral, the state legislators do not-at least not directly-represent any particular unit of local government. Together they provide an institutionally separate locus of local decisionmaking, accountable by election directly to local citizens.

Legislative deference or courtesy tends to work only when the local delegation is in substantial agreement. Consensual decisionmaking does not imply the absence of conflict; on the contrary, achieving a consensus can be more conflictual, and involve more hard bargaining, than putting together a minimum-winning coalition. Nevertheless, the practical requirement of consensus may focus attention on widely shared common interests—those common to the many diverse communities of interest found in a metropolitan area.

Multijurisdictional Forums for Metropolitan Governance

Even though state legislators can be viewed as keepers of the rules, functional arrangements for metropolitan governance extend well beyond the legislature. State legislators are not the only, or even the primary, participants in local decisionmaking that pertains to metropolitan governance. As problems and opportunities develop locally that cannot be addressed satisfactorily within existing rules, local officials begin to give attention to possible modifications. Various countywide forums are available for the officials of the various local government units to work out their differences. The local delegation to the state legislature tends to reflect the consensus that develops among local leaders. In this manner, annexation rules have been changed, permissive tax laws developed, and authority to create special districts established in ways that are unique to St. Louis County.

One important forum for considering issues that cut across municipal boundaries in the county is the St. Louis County Municipal League, with membership including all but a very few of the smallest municipalities. The league has been quite active over the years in developing, lobbying for, and obtaining legislation pertaining to the county that modifies statutory rules affecting local government organization, in ways that accommodate changing local conditions. One of its most recent legislative successes was the development of a compromise plan for the distribution of sales tax revenues.⁸ Currently, the league is active in the debate over governmental reorganization in the county. The league's successes can be attributed to its ability to articulate a common interest that transcends the individual interests of its members, and on the basis of which the county delegation to the state legislature can often obtain legislative approval for modifications in the rules of local government bearing on St. Louis County. Other interlocal forums are also involved in developing state legislation that pertains to particular service areas. Legislation related to police, fire, or education is likely to be developed by associations that represent police chiefs, fire chiefs, and school boards and superintendents (see Chapter Two).

Through such associations, the local selfgovernance made possible by jurisdictional fragmentation can be extended to include metropolitan selfgovernance—the capacity to make rules that apply to multiple jurisdictions. Intergovernmental politics in St. Louis County is carried on, therefore, at two different levels. One level might be viewed as "ordinary politics," as multiple units of government both independently and often jointly make decisions that affect one another. When ordinary politics leaves participants dissatisfied, however, there is anotherconstitutional-level of decisionmaking available to them. Local community leaders can shift levels and attempt to work out an agreement for modifying the "rules of the game" under which they operate. At some point in this process, locally elected state legislators enter as necessary participants.

A Typology of Rules

The enabling rules that comprise the local government constitution of St. Louis can be grouped as follows:

- Rules of association—or how local government units may be formed by local citizens;
- Fiscal rules—the ways in which local government units are authorized to raise revenue;
- Boundary change rules—mostly pertaining to annexation;
- Contractual rules—the relative freedom of local government units to enter into agreements with one another.

For each type of enabling rule, there exists a corresponding set of constitutive and collective choices those which form a local government, adopt a tax, alter a boundary, or enter into contracts. These rules, as well as their development and use in St. Louis County, are explored in the remainder of this chapter.

RULES OF ASSOCIATION: MUNICIPAL INCORPORATION, COUNTY HOME RULE, AND DISTRICT FORMATION

The fundamental set of rules in a local government constitution are rules of association, those enabling rules that allow citizens to organize their communities as governmental units. Rules of association contain several distinct elements:

1. Provisions for creating different types of governmental units for different purposes—municipalities, school districts, fire protection districts, and other special purpose districts. Municipalities are usually further distinguished by population class and by various forms of government—mayor-council, council-manager, and commission. The broad purpose of this subset of rules is to enable local communities to select, within limits, the type of association they want to create, choosing from a somewhat open menu of possibilities.

2. The choice of collective decision rules by which local residents can act to constitute a new

local unit. These rules generally consist of (a) a petition requirement, by which some number of local citizens is able to initiate consideration of the creation of a new unit, and (b) an election requirement, together with a voting rule, by which the relevant local community is able to decide whether to create the new unit. Some local government constitutions also contain veto provisions that require a more inclusive unit of local government, such as a county, or a boundary review commission to approve a citizen petition or referendum decision to create a local government.⁹

3. Provisions for reconstituting an association and for disassociation. Local government units are created to be perpetual. They persist as initially created unless affirmative action is taken to modify or abolish them. A set of rules similar to those used to constitute a unit (i.e., petition and election) can enable local citizens to reconstitute a unit (e.g., changing the class or form of government of a municipality), to consolidate with other units, or to abolish the unit.

In the discussion that follows, the rules of association are described for St. Louis County and analyzed initially according to the type of unit created or empowered. A distinction will be maintained between St. Louis County as a basic legal subdivision of the state and St. Louis county government as a local service provision unit created by local choice. The types of local units include municipalities, school and fire protection districts, various special purpose districts, and county government.

City-County Separation

The development of local government in the St. Louis metropolitan area received one of its basic legal parameters in 1876, when the citizens of the City of St. Louis and those in the remainder of St. Louis County voted to separate, as authorized by the Missouri Constitution of 1875. Before separation, the land area of the city was increased more than threefold through annexation, sufficient, or so it was thought, to allow for future growth. In effect, the City of St. Louis became a city-county. The traditional panoply of separately elected county administrative offices, including for example a sheriff and clerk, continue to exist in the city today, alongside the mayor, council, and mayoral directed city departments. As its own county, the boundaries of St. Louis City were fixed, unable to expand further through annexation. St. Louis County, on the other hand, became a rural, soon-to-be-suburban jurisdiction, setting the stage for the significance of the county as an arena for the creation of new local governments. The flexibility available to communities within St. Louis County contrasts with the relativelyfixed governmental boundaries established for St. Louis City as a single unit.

St. Louis City and St. Louis County retain the capacity to reunite or otherwise adjust their relationship in whatever manner they might agree on. Under the Missouri Constitution, a board of freeholders may be appointed jointly by county government, city government, and the governor of Missouri. This board is authorized to propose changes in the existing city county relationship, including:

- Consolidation of St. Louis City and County as a single metropolitan government consisting of the City of St. Louis;
- Reentry of St. Louis City into St. Louis County;
- Annexation of county territory by St. Louis City;
- Establishment of special service districts; and
- Any other plan.

To be adopted, a plan proposed by the board of freeholders must be approved by concurrent majorities in popular referenda held in both the city and the county.

Municipal Incorporation¹⁰

The minimum requirement for municipal incorporation in Missouri is a contiguous residential population of an urban character. Initially, the class of an incorporation is determined by population size. Communities of no more than 500 people may incorporate as a village. Communities of more than 500 but no more than 3,000 residents may incorporate as a fourth class city;¹¹ those with more than 3,000 residents, as a third class city. Once incorporated, however, a village or city remains in its initial classification regardless of population growth or loss, unless it elects by popular vote to change its classification. Over time, therefore, the class of incorporation can become to some extent a matter of local choice.

Communities of more than 5,000 residents have still a third option: to incorporate as a home rule city under the Missouri Constitution.¹² Villages and third or fourth class cities incorporate under provisions of state law, while home rule cities derive their legal authority directly from the state constitution of 1945. Although still subject to state law, as any municipality is, home rule cities do not require specific authorization in state law in order to act. In contrast, villages and third or fourth class municipalities may only do that which they are authorized to do by state statute. Home rule cities remain subject to state prohibitions, thus permitting unlimited state preemption of local decisionmaking.

The initial organization of a city as a municipal corporation has been and remains a relatively easy process in Missouri. A three-step procedure is followed, as prescribed by state law. First, 15 percent of the voters in the area to be incorporated must sign a petition. (The cost of this effort obviously depends on the population of the area to be incorporated.) Second, county government organizes an election within the area. The role of county officials in this process is generally held to be nondiscretionary. Finally, if a simple majority of those who vote in the election approve, the city is created.

Villages follow a different procedure.¹³ Twothirds of the taxable inhabitants of an unincorporated town petition county government (in St. Louis County, the county council would hear the petition), which may declare the incorporation when satisfied that the petition is valid and the incorporation is reasonable. No election is held, and greater discretion is vested in county government to determine the final result. Presumably, the smaller size involved in the incorporation of a village makes an election unnecessary, since the costs of gathering signatures on petitions is determined by the absolute number required, not the percentage of the population involved.¹⁴

The structural choices available to incorporating communities vary by classification. Villages must elect a board of trustees who, in turn, elect a chairman who acts as chief executive officer-there is no other option.¹⁵ Fourth class cities may choose between a mayor-council form and mayor-council with administrator.¹⁶ Third class cities have as additional options the council-manager form and commission form.¹⁷ Thus, to incorporate as a village is to acquire a particular form of government; in becoming a city, a community chooses its form of government from among the legally permitted options, depending on population. On the other hand, incorporation as a home rule city allows a community to create and adopt any republican form of government. Several home rule cities in St. Louis County have used this capability to create a hybrid form of government that combines a separately elected mayor with an appointed city manager. Any community of 5,000 people or more potentially has this sort of flexibility.

To alter the legal status of a home rule city would apparently require an amendment to the state constitution. Ordinary state legislation is not sufficient. Home rule cities are therefore afforded extraordinary legal protection not extended to municipalities that incorporate under statutory provisions.

Disincorporation is considerably more difficult than incorporation.¹⁸ A petition is required, signed

by two-thirds of the legal voters in a fourth class city and by three-fourths in a village, and submitted to the county council, which decrees the disincorporation. No election is required.¹⁹ There is no established procedure for disincorporation of a third class city—an omission that apparently has not created a problem. Disincorporation of a home rule charter city can be accomplished by charter amendment or as otherwise directed by the charter. One disincorporation effort in the predominantly black City of Kinloch was under way as field research for this study was being conducted.²⁰

Special Purpose Districts²¹

In addition to municipalities, state law enables citizens to create a variety of special purpose governments, including districts that are subcounty, countywide, multicounty, and (in the case of a district including both St. Louis City and St. Louis County) city-county in scope. Special districts have the distinct advantage of being able to overlap municipalities, thus serving to supplement municipal service provision while at the same time extending the service provision boundary. Multicounty (or city-county) districts perform in a similar way by overlapping more than one county jurisdiction. Countywide districts, on the other hand, serve a different purpose-that of bypassing county government in order to create a separate collective provision unit to serve the same countywide community. Countywide districts are thus redundant (which is not necessarily to imply wasteful) in a sense that subcounty and multicounty districts are not.

Subcounty districts in St. Louis County include school districts, fire districts, street lighting districts, and road districts. All of these can be created (and modified) by citizens voting in a special election in a proposed or existing district. All are governed by elected boards. The school districts in St. Louis County originated as common school districts, basically matching a district with each school. Over time, population growth has enlarged some districts, while others have been reorganized or consolidated, under rules supplied by state law. These rules and the results of their application are discussed in greater detail in Chapter Seven.

Fire protection districts are of more recent origin, first authorized by state law in 1947.²² The formation procedure was simple: petition by 100 voters (originally taxpaying electors) followed by the approval of a majority of those voting in a referendum in the proposed district. The powers of the threemember board of directors include eminent domain; the adoption of fire protection and fire prevention ordinances, punishable as misdemeanors; and the imposition of property tax levies up to a ceiling provided by state law. In 1969, fire protection districts were authorized to provide emergency ambulance service, subject to approval by district voters. Fire districts may overlap municipalities, even though both villages and cities are also authorized to provide fire protection. Dissolution of a fire district may be accomplished on the petition of 100 voters followed by approval from two-thirds of those voting in an election.²³ Consolidation of fire districts can be initiated by the fire boards involved and approved by a majority of the voters in each district, and voters may use an initiative and referendum procedure to do the same.

The enabling rules for subcounty districts have an open-ended character that is lacking in the rules permitting creation of countywide districts, as well as multicounty and city-county districts unique to the St. Louis area. Subcounty districts are created in the same manner as municipalities and represent a continuing set of options available to local citizens, while the other special districts reflect unique authority to create a specific district. As constitutional choices, the two types are therefore quite different.

The two countywide districts are related to education. One is the Special School District authorized to provide special education for handicapped students and vocational-technical training for all students. The other is a community college district, authorized to provide adult and junior college education. Each was created by citizens voting in a referendum, and each is governed by an elected board.

Two districts have been organized that include both St. Louis City and County—the Metropolitan Zoological Park and Museum District and the Metropolitan St. Louis Sewer District. While created by popular vote, both are administered by appointed boards closely tied to city and county governments.

County Government

A county is different from most municipal units in that county boundaries are generally determined by state law rather than by local citizen action. One primary function of a county is to serve as a legal subdivision of the state. Locally, a county becomes a decisionmaking arena within which citizens can create other local units. To some extent-in Missouri to a large extent-local government constitutions can vary among counties or classes of counties. The degree to which counties undertake local service provision responsibilities, in addition to delivering certain statewide services locally, varies widely throughout the nation. This aspect of county government may also be subject to local citizen choice—as in the case of St. Louis County-by virtue of county home rule provisions in the state constitution.

In 1950, St. Louis County was organized as a first class home rule county under the Missouri Constitution of 1945.²⁴ A charter was framed and adopted by the voters providing for a single county supervisor (now county executive), elected at large, and a separate county council to replace the traditional county court. The county council is composed of seven members elected from districts. As a home rule charter county, the St. Louis County government has gradually developed as a single-executive organization, replacing the sheriff as a law enforcement officer with a county police department and, with the adoption of a new charter in 1968, eliminating all other separately elected executive officers except the prosecuting attorney.²⁵

The home rule charter provided St. Louis County, in effect, with a dual system of government. In the incorporated area, municipalities continued as the predominant providers of local services. The county government was not permitted to preempt their role because a charter provision required that any transfer of service responsibility to county government be approved by the voters in each municipality. This gave any municipality a veto over countywide assumption of existing municipal functions. In the unincorporated area, however, county government was given municipal-type powers with respect to public health, police and traffic, building construction, planning, and zoning. Functionally, but not formally, county government became a municipality for the unincorporated area.

The county reorganization effort, begun in 1950 and completed in 1968, established for the county as a whole a form of government characterized by vigorous political leadership in the office of the county executive. It has also supplied the county as a whole, but especially the unincorporated areas, with a large professional civil service. This development set the stage for a period of rivalry between two fundamentally different patterns of organization: (1) a noncentralized system based on the highly localized constitutive choices of citizens in various communities, which has resulted in a collection of relatively small municipalities and special districts, loosely tied together via a range of cooperative agreements and (2) a centralized system based on the energy of a single executive, areawide representation in a small local legislature, and a professionalized bureaucracy. The contest might also be viewed as one between two different conceptions of metropolitan order, personified on the one hand by a highly visible public official-the county executiveand, on the other hand, by hundreds of part-time mayors and other public officials.²⁶

For a time, the contest took the form of a sideby-side rivalry. St. Louis County was, in effect, divided into two sectors: incorporated and unincorporated. In the incorporated area, pluralism reigned supreme. There, county government was limited mainly to the provision of support services and arterial streets, in addition to the delivery of some municipal services under contract arrangements with villages and cities, chiefly tax collection and inspections—less frequently, police patrol. In the unincorporated area, a unified county government supplied arterial and residential streets, police patrol and police support services, as well as professional planning and land use control.

In 1970, the Missouri Constitution was amended to allow the citizens of a home rule charter county to determine what services shall be supplied to their incorporated and unincorporated areas by local and county governments. County government for the first time acquired general preemptive powers, subject only to countywide voter approval. However, efforts to transfer service responsibility from municipal to county jurisdiction, pursuant to this grant of authority, were not successful. In 1971, three proposed charter amendments would have established minimum qualifications for police officers countywide and performance standards both county and municipal police departments, a uniform countywide building and construction code, and a minimum housing code. All were defeated by a countywide vote.27

County home rule remains a limited grant of power, one that applies mostly to county government, and only marginally to the other units of government located within the county, some of which also enjoy home rule powers. Full county home rule would make the county charter functionally equivalent to the local government constitution. The 1970 amendment to the Missouri Constitution took a small step in that direction, but for the most part the local government constitution remains, at least formally, in the hands of state legislators.

Two basic issues have divided county and municipal governments in St. Louis County. One is concerned with partially competitive sources of revenue, especially sales taxation, and the competition between municipal and county governments, as well as among municipal governments, for this attractive revenue source. The other has to with appropriate procedures for municipal annexation and, especially, the role of county government in that process. These issues are explored below.

CONTRACTUAL RULES: INTERJURISDICTIONAL AND PUBLIC-PRIVATE AGREEMENTS

The voluntary relationships between local government jurisdictions and between local government and the private sector are also subject to regulation by the local government constitution. As with the rules of association, substantial freedom also characterizes the rules of contract with respect to all local government units. Freedom of contract has been crucial in the development of St. Louis County.

Contracting and other cooperative arrangements among all municipalities and other political subdivisions of the state were authorized by state law as early as 1939. This general authorization was incorporated into the new state constitution adopted in 1945. A second provision in the state constitution specifically authorized any home rule county to perform any of the services and functions of any municipality or other political subdivision of the county, except school districts. County contracting was conditioned, however, on approval by a majority of voters in the municipality or other unit receiving the contracted service. Contracting authorization was extended by state law in 1957 to include "any private person, firm, association, or corporation."²⁸

The principal limitation on intergovernmental contracting in Missouri is a requirement that each of the governmental parties to a contract have authority to perform the function or activity that is the subject of the contract.²⁹ This is sometimes referred to as the requirement of equal or common powers. Thus a fire district, for example, cannot contract to produce nonfire services-or any service it is not authorized to provide-for a municipality. County government cannot enter into public education via the contracting process. Contracting, in other words, requires overlapping jurisdiction in terms of substantive authority. It does not, however, require overlapping jurisdiction in territorial terms. While the latter would be a serious impediment to interlocal contracting, virtually prohibiting contracting among municipalities, the requirement of common substantive authority does not pose a serious obstacle to most intergovernmental contracting.

State law specifically provides for the establishment by contract of joint units of public administration (Section 70.260, *Missouri Revised Statutes*). Such units may be managed by boards or officers established under the contractual arrangement. Interlocal contracts thus are not limited simply to one unit performing a service for another unit, but extend to the use of joint service agreements that establish new administrative units to serve two or more jurisdictions at once.

Fire districts are limited when entering into contractual arrangements to supply fire service for a municipality to a charge equal to the tax rate of the district for fire (but not ambulance) service multiplied by the annual assessed valuation of all property taxed by the municipality (Section 321.21, *Missouri Revised Statutes*). Ambulance services supplied outside the district must be supported by user charges. This provision effectively prohibits bargaining over price by fixing the compensation at a determinate amount. The fire district must in effect charge its municipal customer the same as it charges its own residents.

Other units of local government are free, however, to employ whatever pricing policy they please. Frequently, the marginal costs of extending service to some additional population are considerably less than the average cost of service provision for everyone. This may give a municipality an incentive to agree to a price for service delivered outside the municipality below the average price per person served. Despite the appearance of inequity, all persons may be left better off as a result of this bargain.³⁰

BOUNDARY CHANGE RULES

Consolidation³¹

Under present state law, the consolidation of municipalities, school districts and fire districts can be accomplished in Missouri by concurrent majorities of those voting in an election held in each municipality, subject only to the requirement that the jurisdictions be contiguous.32 This procedure preserves self determination for those communities already incorporated. School districts, however, can also be merged under reorganization authority that requires only a simple majority across all districts included in the proposal (see Chapter Seven). Presumably the state legislature could directly consolidate municipalities without their consent, except (most likely) for those that have incorporated as home rule cities under the Missouri Constitution. A city-county board of freeholders, discussed above, may also have authority to propose consolidations, and other changes to existing relationships among municipalities and county government, in St. Louis County alone. Debate over this question has recently surfaced. A board of freeholders, recently appointed, was engaged in legal research on this point.33 If legal, such a proposal could bring about municipal consolidations if accepted by concurrent majorities in both the City and County of St. Louis, voting in a referendum (see Chapter Nine).

Municipal consolidations have occurred, infrequently, in St. Louis County, primarily in the form of the merger of a very small municipality with a larger neighbor.³⁴ (Eight of the current 23 school districts, however, were created through mergers, seven by means of reorganization authority.) Municipal consolidations have generally been noncontroversial, but boundary changes through annexation have been the source of significant, and continuing, controversy.

Annexation

One of the potential sources of substantial conflict among multiple jurisdictions in a metropolitan area is boundary adjustment through annexation. Municipal annexation always occurs at the expense of county government responsibilities and, potentially, at the expense of neighboring municipalities that might wish to annex the same area. The rules governing annexation are therefore among the most sensitive in the local government constitution. The history of Missouri annexation law as it affects St. Louis County reflect periodic efforts to adjust the rules.

An expansion of the boundaries of a municipality is equivalent to an incorporation decision for those subject to annexation, except that the municipality already exists and others are simply joining a previously constituted association. For much of the period of the development of St. Louis County, annexation was nonetheless involuntary, not just on the part of individuals, but on the part of the community being annexed. Later, a judicial procedure was established that allowed county government to represent the interests of those outside a municipality seeking to annex territory. This evolved into a virtual veto power wielded by the county council. As county government further developed its own service provision capabilities, it became a major competitor with municipalities for the service franchise of growing areas. This created a potential conflict of interest: county government was given the authority to represent the interests of citizens in an area proposed for annexation, when its own interests (mainly because of the potential loss of tax revenue) lay frequently with a denial of the annexation petition. In the meantime, state law was modified to require dual election, approval by a simple majority of voters in both the annexing municipality and the area to be annexed. Then, most recently, the state Supreme Court concluded that county government, given the requirement of dual election, no longer had legitimate interests to represent in an annexation proceeding.

The history of annexation rules in St. Louis County can be divided into four periods:³⁵

1. Prior to 1953, state law provided that cities of all classes could annex adjacent territory at their own discretion. All that was required was a resolution by the mayor and council, followed by approval by a simple majority of legal voters in the annexing city. No vote was required in the area to be annexed. This mode of annexation, unilateral action by the annexing city, was historically the legal basis for the expansion of America's major cities, closely following patterns of population growth. It was abandonment of this rule by many states early in this century that precipitated the growth of independently incorporated suburbs.³⁶

2. For a decade, between 1953-63, St. Louis County was governed by the terms of Missouri's Sawyers Act, which required that annexing cities file for a declaratory judgment in circuit court, seeking authorization to annex. The ability of the annexing city to annex unilaterally was left intact, subject only to a judicial finding that the reasonableness of the proposed annexation be fairly debatable. Once authorization was obtained, the procedure remained the same as before. The basic rule during this period might be termed unilateral annexation with judicial review.

3. In the early 1960s, the St. Louis County government successfully intervened in an annexation proceeding initiated by the City of Olivette. The Missouri Supreme Court in City of Olivette v. Graeler³⁷ held that the circuit court ought to weigh the interests of a county against those of the annexing municipality in determining the reasonableness of a proposed annexation. Over the next 23 years, county government used this rule to intervene and block municipal annexations in St. Louis County.38 In the meantime, in 1963, state law for the first time introduced a rule of concurrent majorities in first class charter counties only (St. Louis County is one of only two such counties in the state). In addition to the previous procedural requirements, a separate vote must be taken in the area to be annexed and approved there by a simple majority of those voting. This new rule introduced the principle of self-determination, long the governing principle of incorporation, into annexation decisions.

4. Beginning in 1977, the City of Town and Country sought to annex a substantial area that would have the effect of doubling its land area. County government opposed the annexation because it would deprive the county treasury of revenues, and described it as a land grab intended to enrich a city at the expense of the county. The Missouri Supreme Court in City of Town and Country v. St. Louis County, et al (1983) ruled that county government was no longer entitled to have its interests weighed in the circuit court determination of reasonableness. The reason given was that the residents of the area to be annexed could express for themselves the interest previously represented by county government in their acceptance or rejection of the annexation in a separate election.

When residents in the area proposed for annexation elected to become part of Town and Country, a new era in municipal-county relations was inaugurated. Municipalities began to prepare annexation plans for submission to the voters. Time is of the essence in these proceedings because state law gives priority to the municipality that is first in time with its proposal for annexation of any given parcel.

Fire protection districts, because the services they provide can also be provided by municipalities, may also find their territorial domain reduced by municipal annexation. Whether this occurs is determined by voters in the annexation election. When an area to be annexed is served by one or more fire districts-almost always the case-voters in each service area must elect whether to continue to be served by the district or to receive fire protection from the municipality. If the decision is in favor of the fire district, the municipality must rebate a portion of the property tax collected in that service area to the district in an amount equal to the district levy. Voters thus make separate decisions on the question of municipal annexation and the question of fire service provision.39

FISCAL RULES

The local government constitution is also a fiscal constitution.⁴⁰ Its fiscal rules, together with economic conditions that vary from community to community, constrain both the choices of revenue sources by local officials and their communities and the rates that they impose. In spite of these constraints, a significant range of revenue options remains. Local officials and communities also exercise a significant range of choice with respect to levels and patterns of expenditure.

With respect to property taxes, local fiscal rules in Missouri are based primarily on limits found in the state constitution,⁴¹ supplemented by state law. The state legislature may tighten, but not relax, the limitations required by the state constitution. The basic rule for authorizing local governments to raise tax revenue from other, nonproperty sources is a requirement of action by the state legislature. Whether home rule cities have legal authority to impose a tax without prior authorization by the state legislature is a matter of dispute,⁴² but the usual practice is to seek legislative permission before acting. State legislation may prohibit any local tax, before or after the fact, in any event. The practical effect is to place a primary political burden on those who seek additional taxing authority. Within the rules established by the constitution and laws of the state, municipalities and other local jurisdictions make collective choices with respect to their particular taxation and spending levels. The process of decisionmaking that emerges is one of building and maintaining a local consensus around a certain configuration of fiscal rules, while accommodating the revenue-authority preferences of a variety of local jurisdictions.⁴³

The Functions of Fiscal Rules

Fiscal rules serve at least three functions: (1) to encourage fiscal equivalence, matching the benefits received from local government activity to the revenue raised to support that activity; (2) to distribute and, if fiscal equivalence is relaxed, redistribute revenues among jurisdictions; and (3) to restrict the taxing and spending powers of local officials, while often empowering local citizens. These functions are explored below.

Fiscal Equivalence

One economic principle applied to the choice of fiscal rules is fiscal equivalence.⁴⁴ Public finance is understood to rest on both benefit-based taxes and ability-to-pay taxes. Local government finance, however, is frequently analyzed from a benefit standpoint. Fiscal equivalence in this context simply means that local citizens get what they pay for and pay for what they get. Where fiscal equivalence is found, local taxes can be construed as a collective expression of an economic demand for services, defined as willingness and ability to pay for a local package of benefits.⁴⁵

A critical variable in establishing fiscal equivalence is the incidence of a tax—who actually pays the tax as opposed to those from whom the tax is initially collected. The simplest sort of tax is a head tax or a flat tax per household or business unit; it is understood as a public benefit tax on the assumption that all members of the relevant public benefit alike. Property taxes are also generally understood as local benefit taxes where those who benefit from local services by virtue of property ownership pay the tax, and the level of benefit varies according to property values.⁴⁶

The assumption of equal benefit in the context of a flat tax or a property tax is more easily sustained in homogeneous than in heterogeneous communities.⁴⁷ As heterogeneity of population characteristics increases, or as the mix of interests in a community (e.g., residential interests vis-a-vis those of commercial or industrial concerns) becomes more diverse, it becomes increasingly less realistic to assume that collective choices represent a common preference for benefit levels in relation to costs, or that all community members benefit alike from a given level of service provision. Some members will find that they are paying for more services than they would prefer; others may prefer higher service levels than they are currently receiving and be willing to pay for them. Both deviations from a preferred tax benefit package are inefficient.⁴⁸

Citizens who prefer higher service levels may be able to express their preferences by augmenting public service provision with services purchased in the private sector (e.g., through the hiring of private security personnel to augment local police protection. purchasing additional street services from private contractors, or, in the case of educational services. opting to send their children to private or parochial schools). One option available to those who are forced to consume (and pay for) more public services than they would prefer is that of moving to a different community with a lower benefit and cost package. Another option for citizens who are dissatisfied with the current benefit cost package in their community is the exercise of voice, participating in the political realm and attempting to convince their fellow citizens that service levels and costs should be increased or reduced. The cost of exercising voice in such situations is likely to be higher in larger and more heterogeneous communities than in smaller, more homogeneous ones.

Sales taxes, collected from nonresidents as well as residents of a given community, are not directly amenable to analysis using the principal of fiscal equivalence. In part, sales taxes can be conceived as a fiscal device for capturing revenues from beneficiaries of local services who are not residents of a jurisdiction. This raises the question of whether nonresidents receive benefits that are proportional to the costs incurred in providing services to them and to the commercial and industrial enterprises they frequent. If this were true, sales taxes would exhibit fiscal equivalence. If, on the other hand, sales tax revenues exceed or are less than the cost of providing such services, they represent either a subsidy to residents by nonresidents or, in the case of insufficient revenues, a subsidy of nonresidents and business firms by residents. Income taxes are generally treated as a nonbenefit tax, but, again, can be employed in the form of an earnings tax (as in the City of St. Louis) to obtain revenue from nonresidents. Again the question of the proportioning of revenues to the cost of benefits provided is raised.

Under the principle of fiscal equivalence, local governments must be able to obtain revenue from the beneficiaries of local service provision. On the other hand, local governments can appropriately be prohibited from employing fiscal devices that shift the burden of supporting local public services to nonbeneficiaries. Drawing and policing the rather ambiguous boundary between these two types of revenue authority can be viewed as a basic fiscal task of the local government constitution.⁴⁹

Revenue Redistribution

Another important function of fiscal rules is the establishment of criteria for the redistribution of revenues among local governments. Redistribution of some sort occurs whenever relationships between taxes and services deviate from fiscal equivalence. Although redistribution is most frequently thought of in terms of a transfer of resources from those better off to those worse off, the transfer can also occur in the reverse direction. In a multijurisdictional setting, redistribution of revenues requires careful attention to fiscal rules. For example, where citizens of larger, overlapping jurisdictions (e.g., counties, a state, or the national government) decide collectively that the operation of a local public economy under a principle of strict fiscal equivalence places undue tax burdens on some members of this larger collectivity, they may decide to redistribute some of their own revenues to those in less fortunate circumstances.⁵⁰ Having made such a decision, they must incorporate rules appropriate to this redistributive goal into the fiscal constitution.⁵¹

Limitations on Revenue Authority

The primary constraints on the taxing and spending decisions of local officials lie within the body of fiscal rules enacted by state authority, both in legislation and in state constitutional provisions. Fiscal rules can be divided into tax rules and debt rules. Dealing first with taxation, five types of rules are present: (1) limits on the types of taxes that can be levied by each type of jurisdiction; (2) limits on maximum rates by type of tax and jurisdiction; (3) earmarking requirements that link some portion of a tax, when levied, to a specific category of expenditure; (4) procedural requirements, focused largely on voter approval of tax and fee increases; and (5) distribution rules, which come into play when a tax imposed by a larger jurisdiction is distributed among constituent jurisdictions. Debt rules involve an allocation of authority among different types of local units, limits on the amount of debt that can be incurred, and procedural rules that require voter participation. The tax and debt rules found in St. Louis County are discussed in detail below.

Tax Rules

All local jurisdictions in Missouri are authorized to levy a tax on real and personal property up to some limit. The county government, municipalities, school and fire districts, and other special purpose districts all have limited use of property taxation. Home rule counties and all municipalities over a population of 500 may also employ a sales tax of 1/2 or 1 percent, although sales tax authority has been specifically adapted to St. Louis County. Municipalities have authority to levy taxes in conjunction with the granting of licenses for various businesses and activities (the details vary with the class of municipality). In the St. Louis area, municipalities and the county government are able to use their licensing powers to levy a tax on the gross receipts of public utilities. Missouri's two largest municipalities—St. Louis City and Kansas City—have authority to impose an earning's tax on both residents and nonresidents.

Tax Rate Limits

Limits on the type of tax that may be employed by local government units are accompanied by limits on tax rates. Rate limitations regulate the use of a single tax base by multiple jurisdictions. A single household pays property tax in at least three local government jurisdictions in St. Louis County county government, a municipality and/or fire district, and a school district. Cities are limited to a maximum rate of \$1.00 per \$100 assessed valuation for general municipal purposes, and county government to a maximum rate of \$0.35,⁵² although voters may approve temporary increases. Villages may tax property up to a rate of \$0.50 per \$100.⁵³ School districts, however, have no effective tax ceiling as long as voters approve increases.⁵⁴

Variations in actual property tax rates among jurisdictions depend on a variety of factors, with cost of services being only one influence among many. The benefit base of the property tax is dependent on full capitalization of property taxes into property values; the *combination* of housing cost and property tax (and other, location specific taxes such as utility taxes) is the relevant number to use in comparing prices across jurisdictions. When examining price competition among municipal jurisdictions that rely on the property tax, the relevant price is a package price that includes both housing value and the value of local public services in the same bundle. Property tax rates alone do not disclose the full opportunity cost of locating in one jurisdiction as compared to others. Location shopping cannot occur, at least not rationally, on the basis of comparative property tax rates because these reflect neither the full value of service provided nor the full cost of those services to the citizen-consumer.55 Price comparison among local jurisdictions ought to be based on a comparison of total tax bills, not tax rates.

Property tax rates also vary with the yield from other tax instruments used by a jurisdiction. If a tax, such as the gross receipts from utilities tax, is skewed

to impact more heavily on nonresidential (i.e., commercial) taxpayers, then both property tax rates and property values are affected to the short-term advantage of current residents. Whether there is a long-term advantage from such skewing depends on the mobility of the capital investment being taxed. Sales taxes, too, can alter the equation. If, as noted above, sales tax revenues exceed the cost of services necessary to provide services to nonresidents and firms, tax revenues raised from resident taxpayers may be below the value of their benefits. In the opposite case, where sales tax revenues do not cover the cost of providing service to nonresidents or firms, the revenue raised from residents may exceed the value of the benefits received. Either impact would be undesirable from a fiscal equivalence perspective.

Sales and excise taxes in Missouri are subject to even more stringent limitation than the property tax, virtually determining the rate. Cities may choose, for example, between a 1/2 and 1 percent sales tax. In St. Louis County, however, the sales tax rate is set by state law at 1 percent countywide. Municipal license taxes, on the other hand, are not subject to rate limitation. As a result, municipal taxes on the gross receipts of public utilities in St. Louis County vary from 0 to 10 percent. In addition, the tax can be applied selectively to receipts from nonresidential users. Where present, this selective use of the tax suggests a tax on capital without regard to benefit received, implying a departure from fiscal equivalence. Villages are limited to a 2 percent levy on the receipts of electric utilities only, thus creating an incentive to alter the status of a municipality from a village to a fourth class city if the population standard (more than 200 residents) is met.

In addition to general fund revenues, certain portions of the property tax may be earmarked for particular categories of expenditure. These special levies are a means of dedicating revenues to specific purposes without creating special taxing and spending jurisdictions. Municipalities are authorized to levy a tax on property specifically to support libraries, public health and hospitals, museums, and recreational programs. The fiscal rules for these earmarked revenues generally specify a maximum rate-usually from \$0.20 to \$0.40 per \$100 assessed valuation. County government is authorized to levy special rates for roads and bridges (not to exceed an additional \$0.35 per \$100 assessed valuation), community health and medical care (up to \$0.38 per \$100 assessed valuation to support a public hospital and health center), and park maintenance (maximum rate of \$0.12 per \$100 assessed valuation). Fire districts may employ a special levy to support an ambulance service.

Voter Approval

Procedurally, voter approval is an integral part of the local fiscal process. Action by voters has been required in three ways:

1. Voters are asked to approve initial tax levies. Historically this requirement was not in place for general purpose property taxes, but it was and is required for earmarked (special) property levies and for sales taxes. Some special levies require simple majority approval; others, two-thirds majority approval.

2. Excess levies (i.e., levies that exceed the maximum property tax rate) also require voter approval. In this case, approval is for a limited period of four years, as well as in a limited magnitude—\$0.30 for third and fourth class cities, \$0.40 for a constitutional charter city. Two-thirds of the voters must approve. School districts, however, are different. Excess levies in this case may be approved by a simple majority of voters, with or without a time limit, up to \$3.75, and with the approval of two-thirds of the voters, no limitation on the rate.⁵⁶

3. As of 1981, with the passage of a citizen initiative known as the Hancock Amendment in November 1980, the state constitution requires approval by a simple majority of voters for any increase of taxes or fees. This requirement applies whether or not a jurisdiction is currently taxing at the maximum statutory rate.⁵⁷

Indeed, after Hancock and a supplementary bill passed in 1983 (Section 137.073, *Missouri Revised Statutes*), voter approval is required in certain circumstances even to hold tax rates at present levels. If, as a result of property reassessment or other factors, the assessed valuation of existing property in a jurisdiction increases in aggregate value at a rate that exceeds an increase in the consumer price index, that jurisdiction must roll back its tax rate, reducing it so as to hold nominal property tax revenues constant or must request voter approval to continue at its present tax rate, thus increasing revenues.

The local government constitution thus contains an important allocation of fiscal authority to voters that applies to all local government units. Prior to the Hancock Amendment, the fiscal rules worked a trade-off between constitutional-statutory restriction and voter approval. Local officials could tax up to some maximum rate ceiling, after which they had to face the voters to obtain further revenues by taxing at higher rates, whether by special levies or excess levies. After Hancock, the only remaining role for legal rate ceilings is to require two-thirds majority approval (in most cases) at four year intervals of any taxes that exceed the ceilings. No tax or fee increase may now occur, nor can local officials obtain additional revenues through property reassessment, without voter approval.⁵⁸ Voter approval is now the basic form of tax limitation with respect to local governments in Missouri.

The requirement of voter approval is consistent with the concept of benefit taxation. If voters benefit, they should be willing to approve tax measures. Indeed, if local voters approve, one might ask what need there is for any sort of rate ceiling (except perhaps to trigger greater voter scrutiny). In this argument, fiscal equivalence is assumed. However, if tax incidence instead places a burden on nonresidents, voter approval can no longer be assumed to represent an economic demand for services. Voter approval therefore cannot substitute for fiscal rules that limit the type of tax to be employed. Rate limits may also derive in part from uncertainties or reservations about tax incidence. Thus the rate limit on sales taxes could perhaps be construed as an effort to compel some level of reliance on the more explicitly benefit-based property tax.

Distribution Rules

Some local taxes have special distribution rules. In St. Louis County, this feature applies to those taxes levied on a countywide basis at a uniform rate, but distributed among local jurisdictions on a formula basis. Specifically, a special road and bridge levy, a cigarette tax, and a sales tax are countywide levies subject to distribution rules. The establishment of a uniform rate precludes competition among jurisdictions on the tax side, but not on the benefit side.⁵⁹

Both the special road and bridge levy and the cigarette tax are closely tied to the financing requirements of municipal-type services in the unincorporated portion of the county. The first \$0.18 of the \$0.35 authorized by law for the special road and bridge levy is divided between municipalities and the county government according to the place of origin and its assessed property valuation, with the county government receiving those revenues collected in unincorporated areas.⁶⁰ The county Department of Highways and Traffic maintains a separate account for the county road system, restricted to the unincorporated portion of the county, as distinguished from the arterial road system, which is countywide. All of the county government share of the first \$0.18 of the levy accrues to the separate account for unincorporated areas. The cigarette tax is distributed between the county government and municipalities on a population basis, with the county portion earmarked for police services that primarily serve the unincorporated areas.61

The use of distribution rules alongside a uniform tax rate thus provides a method of allocating revenues between the incorporated and unincorporated portions of the county to support the provision of municipal-type services. Another method used is to confine county government revenue authority to the unincorporated area. This is the case with the county license tax on gross receipts of public utilities, which, like the county's cigarette tax revenues, is earmarked by statute (Sections 66.310 and 66.370, Missouri Revised Statutes) for police. The county gross receipts tax rate, unlike the municipal rates, is determined by state law and set at 5 percent (Section 66.300, Missouri Revised Statutes). The county motor vehicle license tax is also earmarked for police and law enforcement in the unincorporated area (Section 66.330, Missouri Revised Statutes).

The effect of the fiscal rules governing distribution of certain countywide taxes and the limitation of other county levies and charges to residents of unincorporated areas is to create, informally, the functional equivalent of a municipal services district for the unincorporated portion of the county. The objective is to maintain fiscal equivalence between the incorporated and unincorporated areas. Ordinarily, the presumption is that services provided to residents in an unincorporated area are subsidized by taxpayers living in incorporated areas who do not benefit to the same extent from county government services. In St. Louis County, however, the principal services supplied by county government to residents of the unincorporated area, police patrol and residential street maintenance, are supported either by taxes collected only in the unincorporated area or by an earmarked tax source shared with the municipalities. If there is a subsidy, it may be from the unincorporated area to the incorporated area of St. Louis County.⁶²

Fiscal equivalence, nevertheless, does not imply political equivalence. While being treated in effect as a special tax and service district, the unincorporated areas have no special claim to representation in county government. Residents in unincorporated areas depend on county government as a provider of basic municipal-type services, and pay taxes to support those services, but they have no greater ability to articulate demand for county services than the residents of municipalities.

The Sales Tax Controversy

The most controversial fiscal issue in recent St. Louis history is the imposition of and distribution of revenues from the countywide 1 percent sales tax. A sales tax raises perplexing issues of fiscal equivalence due to the fact that nonresidents are frequently a major source of sales tax revenue. Nonresidents who do business within the boundaries of a unit of local government are to some extent beneficiaries of that local government's services, but they are not voters in the taxing jurisdiction. Their influence is strictly of the pocketbook variety; if dissatisfied, they can take their business elsewhere.⁶³ As the sales tax has become the single largest revenue source for most of the municipalities in St. Louis County, arguments over whether its distribution is fair, in the fiscal equivalence sense, have become increasingly vigorous.⁶⁴

Any Missouri municipality with a population of 500 or more, including those incorporated as villages, has been free since 1969 to enact a sales tax of 1/2 or 1 percent.⁶⁵ In 1977, at the urging of those cities without significant commercial sectors, the state legislature authorized a countywide sales tax in St. Louis County that preempted municipal sales taxes then in existence.66 The rate, approved by voters in a countywide referendum, is 1 percent. In a complicated piece of legislation, a new system was established that created two means of distributing the sales tax revenue: (1) point-of-sale and (2) pool distribution.⁶⁷ Point-of-sale cities receive all of the revenue from the 1 percent sales tax collected within their jurisdiction. Pool cities, together with the unincorporated portion of the county, combine their sales tax collections and distribute the revenue according to population.68

Initially, point-of-sale cities consisted of all those that had enacted a sales tax pursuant to municipal authority prior to the effective date of the new county tax (a period of time elapsed between the legislative action establishing the system and its implementation, allowing cities to choose to become point-of-sale cities). All others became pool cities permanently. Beginning with the census in 1980, and at ten-year periods subsequently, point-of-sale cities could choose to become pool cities, and subsequently, though only once, the same cities could choose again to revert to their point-of-sale status.

The lack of sharing by point-of-sale cities has created tension among the municipalities and between county government and point-of-sale municipalities. Pool cities and the county contend that their citizens contribute to the wealth of point-of-sale communities by shopping in commercial areas that only happen to be located where they are.⁶⁹ Pointof-sale cities respond that (1) the location of a commercial enterprise is not entirely happenstance, given that some municipalities discourage commercial development by means of restrictive building and zoning regulation,⁷⁰ and (2) commercial areas increase the demand for services, including police, fire, and streets and, therefore, entail higher service costs and the need for higher revenues. Both arguments have elements of validity, making the determination of a fair distribution of sales tax revenues difficult. Some point-of-sale cities are able to substantially reduce taxes on residences (property tax and utilities tax), relying heavily on sales taxes for municipal revenue. On the other hand, most pointof-sale cities raise substantially more revenues from all sources than do most pool cities (see Chapter Two). Further complicating the argument is the fact that a number of small cities in the sales tax pool that have no commercial or industrial activity within their borders obtain significant proportions of their revenues from the pool distribution. These small pool cities, even more than many point-of-sale cities, use sales tax revenues as substitutes for local property taxes.⁷¹

An ability to rely primarily on sales and other nonresidence taxes to supply services to residents can be interpreted as a subsidy of residents by nonresidents, a redistribution of revenues. On the other hand, residents may argue that the subsidy is better viewed as compensation for congestion and other nonamenities that accompany commercial development. From this latter perspective, suburban communities may fall into one of two types: (1) those that view themselves mainly as a place to reside and which, therefore, seek to maximize the livability of the community (subject to a cost constraint) imposing strict zoning restrictions, for example, to exclude commercial activity, and (2) those that view themselves, at least in part, as entrepreneurs whose product, offered "for sale," as it were, is business location, including a range of location-related services. The point-of-sale distribution rule provides some municipalities with an incentive to compete-to give up some residential amenities in exchange for tax sayings. These two types of communities will view taxes quite differently.

In Type One communities, taxes are collective payments for services rendered. The community is viewed as if it were a consumer cooperative for its residents. In Type Two, taxes are a device for capturing the proceeds from the sale of a product-business location and the community is viewed in part as if it were a for-profit enterprise, with the profits taken in below-cost services to residents. Type One cities complain that the profits enjoyed in Type Two cities derive mainly from locational rents, and that geographic location or prior development patterns (e.g., extensive residential development which leaves little or no room to accommodate commercial or industrial activity) prevents them from exercising the option available to Type Two communities. Type Two cities respond that they are, after all, in business: They provide a service-commercial locationand all parties to the transaction are left better off. They are likely to discount the locational rent aspect of their revenues, and the geographic and developmental factors which contribute to that rent.

In theory, a sales tax is tailor made for Type Two cities, especially if rates are uniform throughout a market area, as in St. Louis County. Jurisdictions that choose to compete for commercial activity then compete, not on the tax side, but on the benefit side for new business. To the extent that commercial development provides spillover benefits-both immediate job opportunities and future development opportunities-that accrue to a broader economic community, the entire county may be said to benefit from the entrepreneurial efforts of individual municipalities.⁷² The competition is not entirely fair, however, as some communities enjoy locational advantages and developmental opportunities (e.g., vacant land). Some communities that might wish to engage in this competition for commercial activity are unable to exercise that choice because they lack vacant land for development or are located at a distance from transportation arteries. Type One communities opt out of the competition entirely.

County government planners and officials argue that professional planning provides a more rational approach to economic development than does a competitive dynamic, and is able to achieve an optimal balance of development potential and residential amenities.73 A purported lack of balance in rapidly growing unincorporated areas of the county, combined with relaxed restrictions on annexation and renewed interest in incorporation, has in recent years given county government its greatest political problems.⁷⁴ If new annexations and incorporations occur, the predominant structure of economic development in the county will consist of competition among municipal jurisdictions, rather than central planning. County revenues have and will continue to decline if this pattern continues, forcing cutbacks in county service production.⁷⁵

In 1983, reaction to new efforts at annexation and incorporation in St. Louis County led to state legislation stipulating that all newly annexed and incorporated territory in the county would remain within the sales tax pool. This action protected the pool from potential erosion to the detriment of pool cities. Nevertheless, the basic dissatisfaction of the pool cities with the distribution formula remains. Further, while sales tax revenues are protected in the sense that per capita revenues of county government and municipalities in the pool will be unaffected, absolute revenues for the county will decline as annexations or incorporations occur. In addition, newly annexed or incorporated areas would subtract utility revenues and other revenues from the county government budget.⁷⁶

Debt Rules⁷⁷

To some extent the debt rules in the local fiscal constitution mirror the tax rules. Debt ceilings are couched in terms of a percentage of the total assessed valuation of a jurisdiction. The ceilings vary among different types of jurisdictions. Villages are limited to a total (general obligation) indebtedness of 5 percent of the assessed valuation. Cities and counties may incur an additional 5 percent debt. Fire districts are not authorized to incur any general debt beyond the current fiscal year. Additional debt is allowed, however, for specific, earmarked purposes. Cities may also incur a 10 percent debt for street and sewer improvements and another 10 percent for the purchase or construction of waterworks or electric plants.⁷⁸ Any municipality, moreover, may issue revenue bonds without affecting their debt limit if the principal and interest are to repaid from revenue produced by a municipal utility. The purposes for which indebtedness can be incurred are determined by state law in the case of counties and municipalities incorporated under state law, but by local charter in the case of constitutional charter cities.

Implicitly, going into debt is viewed as an extraordinary fiscal measure, presumably because it creates a long-term obligation that taxpayers must support. No unit of local government in the state may incur a debt beyond the current fiscal year, even within a statutory ceiling, except with the approval of two-thirds of the voters, as required by the state constitution.⁷⁹ The rule for revenue bonds is somewhat more relaxed. Approval is required by only four-sevenths of the voters.⁸⁰ These rules are consistent with the general approach of the local government constitution to give citizens an opportunity to veto new financial obligations.

RECENT ANNEXATION AND INCORPORATION ACTIVITY

The mid 1940s to early 1950s was a period of intense incorporation activity in St. Louis County. By the late fifties and early sixties, however, the rate of incorporation had slowed, virtually to zero. Between the *Graeler* decision of 1963 and *Town and Country* two decades later, only one new municipality was formed—the City of Black Jack in 1970.⁸¹ During the same period, few annexations occurred, largely because of county government opposition in court. Sometimes county officials lost, or did not challenge, but infrequently so. The rate of annexation is directly related to the *Graeler* precedent, but this case did not directly affect municipal incorporation. Drawing a connection between the two requires special care.

Those who argue that municipal incorporation is frequently defensive (i.e., to avoid annexation) might be inclined to draw a direct connection. Given that Graeler slowed the rate of annexation, the rate of incorporation dropped also-so the argument would go. However, as noted above, the incorporation rate had slowed—apparently approaching zero prior to Graeler. A more likely explanation is found in the development of alternatives to municipal incorporation. The advent of county home rule in 1950 brought an expanding service provision role for county government, including police protection and street services, as well as planning and zoning. Fire protection service was provided by established fire districts; sewerage, by the Metropolitan St. Louis Sewer District; and water, by a private water company. Virtually all municipal services were available, from one local government unit or another, without municipal incorporation. Counsel for the county government argued in Graeler that the county was a de facto municipality in the unincorporated area, a position that would have completely terminated all annexations and incorporations. The court, however, did not accept this line of reasoning, and both annexation and incorporation remained as legal possibilities. Recently, the abandonment of the Graeler doctrine in the course of a successful annexation of a large tract by the City of Town and Country coincided with a new burst of interest in municipal incorporation.

Annexation Activity

Many municipalities are apparently able to offer areas considered for annexation a tempting bargain, namely increased service levels at the same, lower, or only slightly higher tax burdens. Annexing municipalities often have low property tax and utility rates, and may be in a position to reduce trash collection expenses in areas targeted for annexation. Annexing cities with their own police departments can usually promise faster response times to residents in areas currently served by the county police.

Whether the difference in tax-service packages between the unincorporated county and municipalities proposing annexations is due to a lack of fiscal equivalence or to differences in the efficiency of service provision is difficult to determine. Mismatches between revenues and services may exist between different parts of the unincorporated area as well as between parts of the unincorporated area and a particular municipality. The annexation bargain may be explained by the status of annexing municipalities as point-of-sale cities, able to keep their own sales tax collections.⁸² To the extent that this is true, the continued enjoyment of these low-cost services (to households) depends in part on the continuation of the present sales tax distribution formula. Voters in an area proposed for annexation must accept some risk that the favored position of point-of-sale cities would be lost in the future. On the other hand, annexing municipalities may be more efficient units for service production and delivery than the more heterogeneous, somewhat sprawling unincorporated area of the county. If this is so, changes in the sales tax distribution formula would have a lesser effect on the bargain.

The county Department of Planning prepares a study and assessment of each proposed annexation. In addition to the projected impact on county government revenues, the planning department also points out features of an annexation it considers to be unreasonable. Town and Country was scored for its inclusion of a Western Electric Plant and McGraw-Hill Publishers and its exclusion of apartments. The annexation vote succeeded. In its review of a proposed annexation by the City of Florissant, the largest municipality in the county, the department concentrated on indicators of service quality alongside increased taxes, arguing that Florissant could not match county government's tax-services package. The annexation vote failed.

Cited by county officials as a prime example of the abuse of municipal annexation powers was a recent annexation plan directed at a largely undeveloped parcel by the small City of Valley Park. The area proposed for annexation bisected a subdivision under development, excluding the developed portion by annexing along one side of a road. The area included 22 registered voters, only one of whom chose to vote. The annexation vote succeeded on the basis of this one citizen's vote.⁸³ A proposed annexation by the point-of-sale City of Fenton was opposed mainly on grounds of current high-quality service by the county. The annexation vote failed.

Despite an initial rush to file annexation plans, successful annexation activity in the county has so far been modest. Town and Country added only 3,356 residents in its annexation. Nine other municipalities have annexed small parcels, but only annexations by Hazelwood and Florissant (3,057 and 1,382 persons respectively) have included in total more than 1,000 people. The remainder included approximately 400 persons added to seven communities.⁸⁴ Many proposed annexations have been rejected by voters in the target areas.

Several of the successful annexations, however, have involved the movement of commercial and industrial activity from the tax rolls of county government to those of annexing municipalities. County government is concerned that annexations (together with new incorporations as discussed below) will erode the county government's tax base for financing services in unincorporated areas, as well as diminish its ability to control new development. When an area is annexed (or incorporated), county government loses revenues that are distributed on a per capita basis (e.g., sales taxes, cigarette taxes, and state highway funds), as well as losing revenues from utility taxes in the area. The reduction in revenues and service areas has a direct impact on the county's urban service departments, police and highways in particular, and potentially an indirect effect on other departments that supply services countywide.

From a service provision standpoint, the county government position is not the bottom line. While revenues and service requirements do not match exactly, annexations and incorporations nevertheless withdraw both service responsibilities and revenues simultaneously.⁸⁵ One principal effect on the county is to require county government to make adjustments in personnel and, eventually, equipment as needed to meet its remaining service responsibilities. The net effect is a transfer of responsibility from county government to municipal governments. There is no *a priori* basis for judging this transfer to be detrimental, either to those populations directly affected or to the county as a whole.⁸⁶

The county government is also concerned that annexations and incorporations will leave isolated islands of unincorporated area to which it would be difficult to deliver services. The county has had a few such islands for a number of years (e.g., Elmwood Park and Meacham Park). In these particular areas, adjoining municipalities have assisted in service delivery, either without charge or through a contract with county government, but the creation of many more such areas, especially if they were to be low revenue, high service demand islands, could be detrimental to county government service provision.

Some municipal officials contend that the county increases its service levels in areas proposed for annexation, an accusation denied by county officials. Whatever the methods used, the county has not been without significant success in opposing annexations in the immediate post-*Town and Country* period. Yet county officials remain concerned. Clearly, the new annexation rules have exposed county government to greater competition. Even the best prospect for county government may be no better than a slow, gradual erosion of its municipal service role. The worst prospect stems not from annexation directly, but from the potential incorporation of the major portion of the county's direct service area.

Incorporation Activity

Interest in municipal incorporation has also increased in recent years. A new City of Maryland Heights was incorporated in 1985, as a third class city, with a population of 26,413. The first incorporation since 1970, it was adamantly opposed by county government, both in the incorporation election and in the courts. When the incorporation cleared its last legal hurdle, county government withdrew its services, including police, before the new city could organize. Initially, Maryland Heights was patrolled by the state police. Incorporation brought no tax increases. Maryland Heights has no property tax; its tax revenues consist mainly of a 5 percent utilities tax (equal to the county rate collected in unincorporated areas), its share of the sales tax pool (which the city was required by state law to join), and its share of other county and state revenues. Included in the new city's boundaries is a highly developed commercial area called Westport, previously a target of unsuccessful annexation attempts by two adjacent cities. With little doubt, Maryland Heights would have become a point-of-sale city had state law allowed it.

In November 1986, another incorporation issue appeared on the ballot, to decide whether to create a City of Chesterfield in the western part of the county. The incorporation issue was narrowly defeated, receiving 48.6 percent of the voters' support.

In December, however, the St. Louis Post-Dispatch reported that supporters of incorporation were again circulating petitions, but within a more circumscribed set of boundaries. In April 1988, voters approved creation of a smaller City of Chesterfield (estimated population 33,000) by a 3-1 margin. In South County, citizens of the Oakville area also were exploring the possibility of creating a city as the field work for this study was under way in 1986.

While this surge of interest coincides with a change in the annexation rules, it is difficult to characterize these new efforts at incorporation as mainly defensive. The queuing of incorporation and annexation proposals for a given parcel does create an incentive to move quickly and may offer the appearance of defensive incorporation. One could as easily argue, however, that proposed annexations are defensive, in anticipation of an incorporation. Incorporation and annexation proposals are interrelated phenomena. Instead of viewing either one as mainly a response to the other, a more plausible explanation is that substantially the same issues are driving both annexation and incorporation.

From this perspective, the overriding issue is growth. This was especially apparent in the case of the new City of Chesterfield. Rapid commercial development in this area clogged roads and eroded residential amenities. County government was perceived by many residents in the area as pro-growth. Incorporation gives municipal officials full control of planning and zoning decisions. County government, together with the state highway department, however, retains jurisdiction over arterial streets. Nevertheless, the pace and character of development falls under the regulation of the new city.

Citizen leaders in the Chesterfield area anticipated no need for residential tax increases to finance municipal services, even though the new city would be restricted to participation in the sales tax pool. In effect, citizens can simply choose to withdraw from county government service provision, take their tax revenues with them, and establish their own local government. From the county government perspective, incorporation is tantamount to secession—not secession from the county, but secession from the county-as-municipality (i.e., from the county government's municipal services area).

Proponents of the Chesterfield incorporation also argued that the new city would be in a better position to respond to growth by investing in appropriate infrastructure. County government efforts to raise money from countywide bond issues to finance infrastructure development were unsuccessful between 1977 and 1986, despite overwhelming support from voters in the rapidly growing areas of the county, such as Chesterfield. In effect, the county jurisdiction may be too large to aggregate the effective demand for service provision in the Chesterfield area. Voters can be expected to support new taxes when they derive a greater benefit, and oppose new taxes when the benefits flow primarily to others. Public demand is most easily aggregated when the jurisdiction able to act is closely matched with the population and territory where the demand exists. In 1986, the county was successful in obtaining voter support for a \$75 million road bond issue. Its success, after prior voter refusals to endorse such bonds, may be in part a result of having established special taxing districts and trust funds to finance road improvements in the Chesterfield area. If so, this is a case where citizens will support increased taxation in circumstances where fiscal equivalence is maintained.

The issues driving incorporation can also be understood in terms of service responsiveness. Community activity in the Chesterfield area initially focused on an effort to secure greater attention from county government for local concerns. County government was perceived by some community leaders as unresponsive to residents' desires to preserve the livability of their communities. In spite of their repeated protests, planning and zoning decisions proceeded as before. County government established a new service center in the Chesterfield area, but interest in incorporation continued.

Responsiveness may be related to patterns of representation. Citizen activists in Chesterfield reported little support from their county councilman in articulating their concerns and turned instead to their state legislators—who represent much smaller districts than a county councilman—to obtain political advocacy and support for their position. Incorporation brings with it an entirely different pattern of representation, with a much lower citizen-to-representative ratio. Citizens concerned about responsiveness can be expected to take this difference into account.

Organized opposition to incorporation in Chesterfield emerged in border areas of the proposed city. The collective decision rule for incorporation, recalling the discussion above, is a simple majority of those voting. Once incorporated, the procedures for disincorporation are much more exacting. The Chesterfield incorporation as initially proposed was quite large by St. Louis County standards and was not uniformly supported throughout the area.87 Some citizens in areas adjacent to existing municipalities may have preferred annexation, but the neighboring municipality had not initiated an annexation procedure in time. It could be argued that the incorporation of a city is too easy, and that an extraordinary majority ought to be required. Such a rule might lead incorporators to draw their proposed set of boundaries more circumspectly, not including fringe areas or subsections where majority support is perceived to be lacking (except where the contiguity rule would make exclusion difficult). Within such a smaller set of boundaries the Chesterfield incorporation was approved by a 3-to-1 margin.

CONCLUSION

Constitutional choice in St. Louis County is a bi-level process, consisting of an enabling level and a chartering level, linked by a set of rules of four types: rules of association, boundary change rules, contractual rules, and fiscal rules. In the enabling process, the county delegation to the state legislature, responding to local initiative and based on substantial public agreement in the county, employs the device of special local legislation to make rules governing the creation and empowerment of local governments. Local citizens as voters in various referenda are the principal decisionmakers in the process of chartering local governments, as well as modifying charters and boundaries.

Conventionally, the analysis of the rules treated in this chapter would be based on a conception of two levels of government-state and local-in which one level is dominant-the state. Rules such as those which establish tax ceilings or impose restrictive conditions on annexation are viewed as limits imposed by a higher level of government on a lower level. Two points are ignored in this conventional mode of analysis: (1) state legislators represent local citizens, not the state, and (2) most of the limits tend to empower local citizens while constraining local officials. Many of the limits on local government embodied in state legislation are in fact an allocation of legal power to local citizens acting in their local communities. The function of this empowerment is to condition the actions of local officials on their being able to satisfy the preferences of local citizens.

What would otherwise be viewed as a bewildering array of occasionally contradictory rules makes sense from a constitutional perspective. The basic rules of association in St. Louis County are relatively permissive, in the sense of allowing fairly easy incorporation of municipalities and formation of special districts-freedom to organize a local unit of government. At the same time, the fiscal rules are quite restrictive, in the sense of limiting the fiscal discretion of local governments, or at least making the process of raising revenue somewhat difficult. Freedom on the part of citizens to organize local governments does not imply freedom on the part of officials to tax. Similarly, ease of incorporation on the part of citizens is not accompanied by ease of annexation on the part of officials. The point of these rules is not to make life easy for officials, but to give citizens an opportunity to say no. Viewed as a single configuration with the purpose of empowering local citizens, the various rules in the local government constitution are coherent.

This configuration of rules, together with the processes that generate those rules, comprise the functional arrangements for metropolitan governance in St. Louis County. In this form, metropolitan governance is consistent with a highly fragmented pattern of local governments. By explicitly addressing the constitutional level of analysis, a metropolitan area that otherwise appears to be unorganized on an areawide basis is found to be organized according to a set of rule-ordered relationships established on a democratic basis. The local government constitution defines a decisionmaking arena in St. Louis County that is both highly salient and very active.

The rules of association and boundary change in the local government constitution consistently adhere to a principle of local self-determination or self government. Municipal incorporation and special district formation are organized through local citizen petition and election. Annexation requires majority approval in the area to be annexed. Consolidation may take place only when approved by concurrent majorities, including any modification in the relationship between St. Louis City and County. (The rule for school district reorganization is different, as discussed in Chapter Seven.) Especially since the 1983 Missouri court decision in effect removing a county government veto over proposed annexations, citizens throughout the county have been able to choose from a broad menu of possibilities for constituting and reconstituting local government arrangements. Whether a city-county board of freeholders may make changes within St. Louis County that would not require concurrent approval by citizens of the local governments affected is a subject of current controversy. As suggested in Chapter One, the principle of local self-government may be viewed as fundamental to the operation of a jurisdictionally fragmented metropolitan area.

While the legal tools for (1) transfer of municipal jurisdiction to county government, (2) consolidation of municipalities, school districts, and fire districts, and (3) dissolution of municipal and special district governments are available to local citizens, the chosen mode of adjustment in service provision arrangements tends to be cooperation among units, whether through contracting, joint service agreements, or the creation of new, overlapping special districts. These functional arrangements among units of local government are the focus of discussion in Chapters Four through Seven.

-ENDNOTES-

- ²A distinction can be made, however, between a legal subdivision and its government. One can be a state creation, the other a local creation. St. Louis County and St. Louis County government are not the same, though the boundaries are the same. Both St. Louis County and its government, however, can be viewed as local creations. St. Louis County was created with its present boundaries by the act of city-county separation, approved by local voters in 1876. St. Louis County government operates under a home rule charter adopted by county voters in 1950.
- ³David R. Reynolds, in his study of metropolitan St. Louis, Los Angeles, and Detroit, made this same point: "Although municipalities in the three areas derive their legal existence and powers from the constitutional and statute law of the respective states, it is not true in any literal sense that they are the *creations* of state government. Instead, it is more correct to think of state government as providing the legal milieu which enables the existence of municipalities or, for that matter, of any unit of local government. The actual creation of municipalities in California, Missouri and Michigan is reserved to the voluntary collective actions of

¹The original expression of this concept is widely known as Dillon's Rule. In 1868, Judge John F. Dillon wrote that "any fair, reasonable, substantial doubt concerning the existence of a power is resolved by the courts against the [local government]." Merriam v. Moody's Executors, 25 Iowa 163 at 170 (1868).

'citizens' in local areas." Reynolds, "Progress toward Achieving Efficient and Responsive Spatial-Political Systems in Urban America," in John S. Adams (ed.), Urban Policymaking and Metropolitan Dynamics: A Comparative Geographical Analysis (Cambridge, Mass.: Ballinger Publishing Company, 1976), pp. 470-471.

⁴Reynolds, pp. 485-486.

- ⁵Willis D. Hawley suggested that the procedures established by state law to govern changes in the powers and jurisdictions of local governments be thought of as "rules for constitution building." Hawley, "On Understanding Metropolitan Political Integration," in Willis D. Hawley, et al., *Theoretical Perspectives on Urban Politics* (Englewood Cliffs, New Jersey: Prentice-Hall, 1976), p. 133.
- ⁶See Larry Kiser and Elinor Ostrom, "The Three Worlds of Action: A Metatheoretical Synthesis of Institutional Approaches," in Elinor Ostrom, ed., *Strategies of Political Inquiry* (Beverly Hills, California: Sage Publications, 1982), pp. 179-222.
- ⁷This process, sometimes called "legislative courtesy," characterizes the consideration of local bills by state legislatures in perhaps one-third or more of the states. See Advisory Commission on Intergovernmental Relations (ACIR), *Measuring Local Discretionary Authority* (Washington, D.C.: ACIR, Report M-131, November, 1981).
- ⁸See James M. Brasfield, "The Great Land Rush: Annexation and the Sales Tax in St. Louis County," a paper presented at the 1985 Annual Meeting of the American Political Science Association, New Orleans, Louisiana, and the discussion of the sales tax controversy later in this Chapter.
- ⁹See the discussion of boundary review agencies in ACIR, *The Organization of Local Public Economies* (Washington, D.C.: ACIR, Report A-109, December 1987), pp. 39-40.
- ¹⁰Statutory rules pertaining to municipal incorporation are found in Chapter 72 of *Missouri Revised Statutes*. For a discussion, see Chapters 1 and 13 of *Missouri Local Gov*ernment Law (Jefferson City: Missouri Bar, 1975, supplement 1984).
- ¹¹A community of more than 200 residents already incorporated as a village may also choose to become a fourth class city.
- ¹²Article VI, Section 19, Missouri Constitution.

¹³See Chapter 80, Missouri Revised Statutes.

- ¹⁴The differences between cities and villages are worth noting. First, villages-the smaller unit-require a higher level of agreement within the constituting community. Secondly, county government can veto the incorporation of a village, but not a city. This can be construed as requiring a higher level of agreement outside the constituting community. Yet areas proposed for incorporation as cities are more likely to contain heterogeneous communities, as well as more likely to affect other units of government adversely. In general, the logic of constitutional choice suggests that higher levels of required agreement would tend to be associated with higher levels of potential controversy. See James Buchanan and Gordon Tullock, The Calculus of Consent (Ann Arbor, Michigan: The University of Michigan Press, 1962). The differences between villages and cities in St. Louis County do not seem to be congruent with this logic. Instead, the rule structure seems to introduce a bias in favor of city, rather than village, formation. If the same decision rule used for villages-two-thirds of the taxable inhabitantswere applied to cities, city formation would become much more difficult than village formation, due to the greater (probable) heterogeneity of an incorporating city.
- ¹⁵Chapter 80, Missouri Revised Statutes.

¹⁶Chapter 77, Missouri Revised Statutes.

¹⁷Chapter 78, Missouri Revised Statutes.

¹⁸The lack of symmetry between the procedures for incorporation and disincorporation deserves comment. Incorporation by a simple majority of those citizens voting in an election establishes a relatively low barrier to the entry of new cities. Yet constitutional decisions of this order, creating a government, are frequently associated with a requirement of extraordinary majorities in order to promote consensus, as in the case of villages. On the other hand, disincorporation is potentially a very costly step, requiring liquidation of a community's corporate assets. Petition by two-thirds or three-fourths of the legal voters can be a very high barrier to dissolution. Depending on the absolute number of voters involved, a petition rule creates a higher barrier than a voting rule. Gathering valid signatures on a petition is a timeconsuming, costly process. This means that a municipal government can continue to exist (except for the possibility of consolidation) with a relatively low level of support from its citizens. In St. Louis County, however, disincorporation might be viewed as a positive constitutional choice to associate with the unincorporated area of the county served by county government. The county would have no choice but to accept such a decision.

¹⁹Chapters 79, 80, Missouri Revised Statutes.

- ²⁰Aldermen in Kinloch were circulating a disincorporation petition over the objection of the city's mayor. The motivation for disincorporation is extreme community poverty, aggravated by Kinloch's location near Lambert International Airport. Recent airport expansion resulted in the relocation of hundreds of Kinloch residents out of the city and a further decline in the city's tax base. Those seeking disincorporation argue that the community would be better off as an unincorporated part of St. Louis County; those opposed argue that disincorporation alone would do little or nothing to address the community's problems and could result in a decline in some service levels, such as police protection. See Joseph Schuster, "Urban Suicide: A Depressed Kinloch Considers Taking Its Own Life," The Riverfront Times, July 16-22, 1986, p. 1.
- ²¹For a general discussion, see Richard R. Dohn, "Special Districts in Missouri and the Nation," in Richard J. Hardy and Richard R. Dohn (eds.), *Missouri Government and Politics* (Columbia: University of Missouri Press, 1985), pp. 173-184.
- ²²See Chapter 321, Missouri Revised Statutes. For a discussion see Chapter 12, Missouri Local Government Law.
- 23This could become relevant in a new municipality previously organized as a fire district.
- ²⁴County classification is based on the total assessed valuation.
- ²⁵See Robert A. Cohn, The History and Growth of St. Louis County (Clayton, Mo.: St. Louis County Office of Public Information, 1974).
- ²⁶In the language of contemporary political and administrative theorist Vincent Ostrom, the rivalry is between "bureaucratic" administration and "democratic" administration. Vincent Ostrom, *The Intellectual Crisis in American Public Administration* (University, Alabama: The University of Alabama Press, 1974).
- ²⁷Police training standards were adopted countywide, however, through cooperative efforts of area police leaders which resulted in state legislation applicable to St. Louis County. For an account, see James C. McDavid, Police Cooperation and Performance: The Greater St. Louis Interlocal Experience (University Park, Pennsylvania: The Pennsylvania State University Press, 1979), especially pp. 61-64.

²⁸Chapter 70, Missouri Revised Statutes.

²⁹See Chapter 11, Missouri Local Government Law.

- ³⁰If a municipality agrees to deliver service to another at a price that equals or exceeds its marginal cost, yet is below its average cost, the net effect is to reduce overall average cost of production. Such a situation would arise, for example, when there were remaining economies of scale which could be obtained by the municipality supplying service.
- ³¹See generally Chapter 72, Missouri Revised Statutes.
- ³²See discussion in Chapter 13, Section 13.8, Missouri Local Government Law.
- ³³Wayne Millsap, Chairman of the Board of Freeholders, personal communication, October 21, 1987. A board of freeholders was recently constituted in St. Louis, for the purpose of exploring local government consolidations within St. Louis County (see Chapter Nine).

³⁴Cohn, The History and Growth of St. Louis County, p. 62.

- ³⁵This account is based on Chapter 13, Section 13.9, Missouri Local Government Law, supplement 1984.
- ³⁶See the discussion in Mark Schneider, Suburban Growth: Policy and Process (Brunswick, Ohio: King's Court Communications, 1980), pp. 34-42.
- ³⁷There were two Graeler decisions, City of Olivette v. Graeler, 338 SW 2d 827 (Mo 1960) and City of Olivette v. Graeler, 369 SW 25d 85 (Mo 1963).
- ³⁸St. Louis County Department of Planning, Report of the St. Louis County Annexation Study Commission, July 1985, p. 1.
- ³⁹This procedure, like several other features of the local government constitution in St. Louis, applies to St. Louis County only (Section 321.650, *Missouri Revised Statutes*).
- ⁴⁰Geoffrey Brennan and James Buchanan, The Power to Tax: Analytical Foundations of a Fiscal Constitution (New York: Cambridge University Press, 1980).
- ⁴¹Article X, section 11, Missouri Constitution.
- ⁴²See Rhonda C. Thomas, "Recent Developments in Missouri: Local Government Taxation," UMKC Law Review 49 (1981): 491-533.
- ⁴³For a case study of interaction between the state legislature and local officials in the context of a change in local fiscal rules, see James M. Brasfield, "The Great Land Rush," 1985.
- ⁴⁴For a discussion of this concept, see Mancur Olson, "The Principle of 'Fiscal Equivalence': The Division of Responsibility among Different Levels of Government," American Economic Review 59 (May 1969), pp. 479-487.
- ⁴⁵The concept of fiscal equivalence, thus, is similar to the concept of individual economic choice. In the private economy, choices made by individuals are a function of their preferences for goods and services and of their budget constraints. In a collective choice context, fiscal equivalence implies that communities, through collective expressions of preference, choose public goods and services that they both prefer and can afford. Just as private choice is made under constraint, so too is collective choice.
- ⁴⁶See Bruce W. Hamilton, "A Review: Is the Property Tax a Benefit Tax," in George R. Zodrow, ed., Local Provision of Public Services: The Tiebout Model after Twenty-Five Years (New York: Academic Press, 1983). For an alternative point of view, see George R. Zodrow and Peter Mieszkowski, "The Incidence of the Property Tax: The Benefit View versus the New View," in the same volume.
- ⁴⁷One type of jurisdiction lies outside the scope of the fiscal rules described here, that is, subdivisions organized on the

basis of deed covenants to provide services to residents. In St. Louis County, and to some extent in St. Louis City, subdivisions are alternative providers of street services (see Chapter Six). Subdivisions have no tax powers; thus their only ability to derive revenue is from user fees and household assessments. While private covenants could be written to employ an equivalent to the property tax (by indexing the subdivision fee to assessed valuation), none of the subdivisions studied employ such a method. Instead, the most common method is a flat fee per household, followed by reliance on a frontage or acreage based fee. These "tax" mechanisms are unambiguously benefit based, i.e., the tax rate is determined by the cost of services provided. Variation in the rates among subdivisions can be interpreted as price differentiation based on real differences in the value of services provided.

- ⁴⁸See Robert H. Edelstein, "The Fiscal Crisis of Cities: An Economist's Perspective," in David Solomons, ed. Improving the Fiscal Performance of States and Cities (Reston, Virginia: The Council of Arthur Young Professors, 1979), pp. 139-160.
- ⁴⁹Whatever the choice of tax instruments, there may be important advantages when local government units within the same metropolitan region operate with substantially the same set of instruments. If proximate jurisdictions employ tax instruments with widely varying patterns of incidence, incentives are created for inefficient location decisions solely to take advantage of incidence effects. See Wallace E. Oates, *Fiscal Federalism* (New York: Harcourt, Brace, Jovanovich, 1972), especially pp. 145-147.
- ⁵⁰Many economists argue that revenue or income redistribution is best accomplished by jurisdictions with the broadest constituency possible, e.g., a national government (see Oates, Fiscal Federalism, p. 8, for a typical statement). The American reality, however, is that redistribution is a phenomenon that characterizes overlapping jurisdictions at all levels of government. In a recent paper, Robert M. Stein and Keith E. Hamm provide evidence that some state governments may do better at redistributing revenues among their local governments than has the federal government. See Stein and Hamm, "A Comparative Analysis of the Targeting Capacity of State and Federal Intergovernmental Aid Allocations: 1977, 1982," Social Science Quarterly 68 (September 1987): 447-465.
- ⁵¹Consumption taxes (e.g., sales taxes on goods, gasoline, or cigarettes in Missouri) can have redistributive effects even in the absence of explicit attention to such rules. For example, distributing sales tax revenues on a per capita basis, as in the pool distribution formula (see below), most likely results in a net transfer of revenues to lower income communities.
- ⁵²State law authorizes cities to tax up to these limits established by virtue of Article X, Section 11 (b), of the Missouri Constitution.
- ⁵³This limit is imposed by state law (Section 80.460, *Missouri Revised Statutes*).
- ⁵⁴Nominally, the tax ceiling is \$1.25 per \$100 assessed valuation. Any increase up to \$3.75, however, regardless of the current rate, requires approval by a simple majority of voters in the district. Moreover, as discussed below, two-thirds of the voters may approve excess levies without limit. See Section 164.021, *Missouri Revised Statutes*, and Article 7, Section 11 (c) of the Missouri Constitution.
- ⁵⁵Whether location shopping on the basis of housing cost and service package is a reality is controversial. The first exponent of this view, Charles Tiebout, in his article, "A Pure Theory of Local Expenditures," *Journal of Political Econ*omy 64 (October 1956): 416-24, argued that this mechanism would allow citizens dissatisfied with a given jurisdiction's package to "vote with their feet"—move to a different

jurisdiction with a more satisfactory package. If there were a large number of local jurisdictions, Tiebout argued, a sorting process would be available to enhance fiscal equivalence. Another view is that this "exit" option, while present to a degree, is less important in understanding local government finance than is the exercise of "voice," whereby dissatisfied citizens can lobby for tax or service changes and attempt to select local officials who will reflect their preferences when making provisioning decisions. In reaching this conclusion, we take into account the relatively low proportion of the housing service cost package which local service costs represent in most local jurisdictions, the barriers to mobility caused by income differences and real estate markets, the many extra-service cost factors which influence citizens' locational choices, and the relative inefficacy of exit threats as opposed to the exercise of voice when attempting to influence local officials. For a development of this argument, see Ronald J. Oakerson, Roger B. Parks, and Henry Aaron Bell, "How Fragmentation Works," a paper presented at the 1986 Annual Meeting of the Midwest Political Science Association, Chicago, Illinois. The argument, in summary, is that citizens are more likely to attempt to influence service benefit-cost bundles by remaining within their communities and exercising their voice in conjunction with like-minded residents than they are to move to an alternative jurisdiction in search of a more attractive package. Given this, opportunity to exercise voice becomes a critical factor in understanding the workings of a fragmented area.

⁵⁶Section 164.021, Missouri Revised Statutes.

- ⁵⁷Article X, Section 22, Missouri Constitution. For a discussion, see Thomas, "Recent Development in Missouri: Local Government Taxation." Also see, Chapter 4, Missouri Local Government Law, supplement 1984.
- ⁵⁸It is interesting that the Hancock Amendment applies to fees as well as to taxes. The immediate motivation was to preclude local officials from shifting from tax finance to fee based finance. Fees, of course, are the most precise form of benefit financing available. But in cases where individuals have no choice in using public facilities, or where individuals lack close substitutes, fees take on a coercive character much like taxes. Simply because a government employs a user charge, it does not follow that the price charged is market regulated. Voter approval of fees may therefore impose a useful constraint on local officials. The prohibition of fee increases without voter approval has had mixed results in Missouri, with marked increases in fees in some cities (e.g., St. Louis and Kansas City) and relatively little growth in others (e.g., St. Joseph, Independence, Florissant, and, especially, Springfield). See Elaine B. Sharp and Dennis Elkins, "The Impact of Fiscal Limitation: A Tale of Seven Cities," Public Administration Review 47 (September-October 1987): 385-92, especially Figure 2, p.388.
- ⁵⁹An argument can be made that uniform rates across multiple jurisdictions represent a form of economic collusion among local government officials to hold tax rates at an artificially high level. Of course all of the taxes in question, and any tax increases, require countywide voter approval. Still, this requirement is not nearly as stringent as separate approval from voters in each jurisdiction.
- ⁶⁰Section 137.558, *Missouri Revised Statutes*. This formula applies exclusively to St. Louis County.
- ⁶¹Section 66.340, *Missouri Revised Statutes*. This section applies to first class charter counties only. A cigarette tax is not, of course, a benefit tax, but is simply a politically expedient way to augment revenue.
- ⁶²The collection of specific taxes in the unincorporated area and the earmarking of particular revenues for services in the

unincorporated areas does not guarantee fiscal equivalence. One would need to carefully analyze both revenue sources and expenditure patterns to reach a determination on whether such equivalence is being maintained or whether redistribution between the unincorporated and incorporated parts of the county occurs—and in which direction. The St. Louis County Annexation Study Commission reported that, in 1983, the unincorporated county contributed 37 percent of county revenues while service expenditures there were 28 percent of the total, indicating that the unincorporated areas were disproportionately supporting countywide services in that year. Report of the St. Louis County Annexation Study Commission (Clayton, Missouri: St. Louis County Department of Planning, July 1985).

- ⁶³Further, the level and quality of local public services are generally small influences on their decisions. Only in cases where shoppers feel unsafe or are unduly burdened by traffic congestion are local public service packages likely to have a significant influence on their choice of where to shop.
- ⁶⁴The sales tax has increased in importance as a revenue source due to the limits placed on other revenue sources by the Hancock Amendment and by roll back provisions in state statutes. Sales tax revenues increase as prices and/or sales volumes increase without a rate increase. Sales tax revenues can increase without voter approval in contrast to increases in revenues from most other sources.
- ⁶⁵St. Louis County, along with the City of St. Louis, is also authorized to impose a "transportation sales tax" up to 1/2 percent. Both jurisdictions use this revenue, in part, to support the mass transit services of the Bi-State Transit Authority on a metropolitan wide basis.
- ⁶⁶A description of the legislative process leading to adoption of the current sales tax distribution formula can be found in Brasfield, "The Great Land Rush," 1985. See also Andrew D. Glassberg, "The Management of Uncertainty: The St. Louis County Sales Tax," in Carol W. Lewis and A. Grayson Walker, eds., Casebook in Public Budgeting and Finance (Englewood Cliffs, New Jersey: Prentice-Hall, 1984), pp. 73-76.
- ⁶⁷Sections 66.600-66.660, Missouri Revised Statutes.
- ⁶⁸This system discriminates against county government acting in its capacity as a "municipality" for the unincorporated area. It is the only unit of government without a choice in the matter. The ability of pool cities to benefit in the aggregate from this arrangement depends upon a redistribution of revenue from the unincorporated area to the pool cities. Point-of-sale cities are not required to share their revenues as county government is.
- ⁶⁹Commercial or industrial location is, critics of the point-ofsale distribution argue, influenced by the location of highways, the airport, large parcels of land suitable for such activities, and other factors having little to do with the efforts of point-of-sale cities to attract such activity.
- ⁷⁰At least two of the larger pool cities explicitly rejected the location of regional shopping centers within their borders. See James M. Brasfield, "Follow the Money: Fiscal Structure and Metropolitan Reorganization in St. Louis County," a paper presented at the 1987 Annual Meeting of the American Political Science Association, Chicago, Illinois.
- ⁷¹Of the eight municipalities in St. Louis County that levy no property tax on residential property, seven are pool, not point-of-sale, cities.
- ⁷²The 1982 Censuses of Retail and Wholesale Trade and of Selected Service Industries report approximately 45 percent of jobs in these areas to be located in identified point-ofsale cities, nine percent in pool cities, and the remainder in the balance of the county.

- ⁷³St. Louis County has experienced very strong economic growth in the presence of this competitive dynamic (see Chapter Eight). Whether that growth has been "balanced" and whether it might have been even greater under a system of county planning remain as issues, however.
- ⁷⁴One of the salient issues has been the county's ability to support services, particularly road services, to unincorporated areas that have experienced rapid commercial growth. In response the county has been successful in obtaining voter support of a \$75 million road bond issue, and three road trust funds, financed from developer exactions, have been established in the Chesterfield area to provide road improvements.
- ⁷⁵The county will have to cut back, unless, as other counties have done when facing similar circumstances (e.g., Los Angeles County, beginning in the immediate post-World War Two era and continuing today), the county were to engage in a vigorous program of service production for municipalities through the medium of service contracts.
- ⁷⁶In part as a response to this, the county executive, the local citizen group Confluence St. Louis, and the St. Louis County Municipal League have advocated alternative governmental structures, including complete incorporation for the entire county. A board of freeholders, with representation from both the City and County of St. Louis, is currently considering this question, with the intent of developing a proposal to present to volers in a referendum during 1989 (see Chapters Two and Nine).
- ⁷⁷See generally Article VI, Section 26, Missouri Constitution, and Chapter 95, Missouri Revised Statutes. For a discussion, see Section 4.22, Missouri Local Government Law.
- ⁷⁸Counties, cities, and villages with a population of fewer than 40,000 persons may incur an additional 10 percent debt for the purpose of acquiring and furnishing industrial plants.
- ⁷⁹An effort in 1968 to amend the constitution, reducing the required majority to 60 percent, failed.

- ⁸⁰Article VI, Section 27, Missouri Constitution, and Section 91.010, Missouri Revised Statutes.
- ⁸¹The Black Jack incorporation was quite controversial, as it was in part motivated by a desire to exclude low income housing from the area. Without this partial anomaly, one could say that government organization in the county was essentially unchanged from 1960 to 1983.
- ⁸²Not all annexation proposals in recent years have been made by point-of-sale cities, but a significant majority appear to be so.
- ⁸³Shortly after the successful annexation vote, this citizen moved out of the annexed area (Donald Clark, personal communication, August 27, 1987)
- ⁸⁴St. Louis County Department of Planning, St. Louis County 1986 Fact Book, 1986, p. 114.
- ⁸⁵However, most annexations would not be proposed unless the annexing community believed that revenues from the annexed area were at least sufficient to cover service costs there. Where revenues exceed service costs by a significant amount, the annexing community may reduce taxes and other revenue generation in the annexed area, thus reducing total local government revenues countywide. This would represent a move toward fiscal equivalence (see the discussion of fiscal rules above) in that some revenues from the annexed area, prior to annexation and any reduction in local government revenues from this area, had been used to support service costs in other parts of the county.
- ⁸⁶To avert such adjustments in personnel and equipment, the county government might, as governments like that of Los Angeles County have done in similar circumstances, engage in a more vigorous program of service delivery to municipalities via contracts. If significant economies of scale exist in the delivery of some services (a point which is frequently debated by urban economists), then the county would appear to have a competitive advantage in such contracting.
- ⁸⁷The St. Louis Post-Dispatch reported that border areas opposed incorporation by as much as 73 percent.

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Police Services

INTRODUCTION

Police services are among the most important of all local public services to Americans.¹ Among local agencies, police departments rank second only to schools as public employers, and police budgets generally comprise the largest single expenditure of general purpose local governments that do not operate school systems. Making provision for police services is predominantly a local responsibility, and a significant majority of Americans report that their local police do a good job.² They also report a strong preference for maintaining local control of the police. In all of these respects, St. Louis area communities are typical.

St. Louis County municipalities have arranged for the production of police services in ways similar to most cities. A majority of the municipalities have organized their own local police department, with a bureau chief accountable directly to local elected officials. A substantial minority of the municipalities, especially the very small ones, contract for service with an adjoining municipality or with the county police. In these cases, local elected officials serve as purchasing agents for their communities.

Provision arrangements are somewhat different in both the unincorporated county and the City of St. Louis. Although in each case, police protection is produced by a locally organized police department, an intermediate body has been interposed between elected officials and the bureau chiefs in charge of police production. In both instances, the avowed intent of this interposition has been to separate the police from political influence.

Unincorporated St. Louis County is policed by the county police department, organized by county government and funded, for the most part, with earmarked revenues collected in unincorporated areas (see Chapter Three). The county police are governed directly by a board of police commissioners, appointed by the county executive with the approval of the county council and the circuit judges of St. Louis County. The commissioners select the superintendent of police, the department's chief executive officer.

The City of St. Louis is policed by the St. Louis metropolitan police department. Provision arrangements governing this department are quite interesting, perhaps unique in the United States. The department is governed by a board of police commissioners appointed by the governor of Missourithe mayor of St. Louis is an ex officio member of this board.³ Formally, the commissioners have authority to make decisions regarding the size and funding of the department, and submit a budget backing these decisions that must be funded by the city.⁴ Although the board of police commissioners may make policy decisions without formal need for agreement from city officials and citizens, such agreement is frequently sought and given. As in St. Louis County, the appointed commissioners select the city department's chief executive officer, the chief of police.

ARRANGING FOR THE PRODUCTION OF POLICE SERVICES

A basic decision for a local provision unit (e.g., a municipality) is to choose how to arrange for the production of a service. By far the most common arrangement in St. Louis is in-house production—the supply of police services by a full-time bureau of the local government (see Table 4.1).⁵ The City of St.

		Provision of P	^{ble 4.1} olicing in St	. Louis			
	Provi Number	ision Units Population (1984 estimate)	Units Wil	th Own Police Population (1984 estimate)		hat Contrac Other Muni- cipalities	ct With None
Municipalities ¹ in St. Louis County	89	589,983	62	566,810	72	17	32
With Population of:							
0-399	9	1,924	0	0	1	5	3
400-1,000	13	8,902	1	715	5	7	0
1,001-2,000	14	22,944	9	15,513	0	5	0
2,001-5,000	17	56,718	17	56,718	0	0	0
5,001-10,000	17	112,720	16	107,448	1	0	0
10,001-56,000	19	386,775	19	386,775	0	0	0
Unincorporated							
St. Louis County	1	397,213	1	397,213			
Total St. Louis County	90	987,196	63	964,023			
City of St. Louis	1	429,300	1	429,300			
Total City and County	91	1,416,496	64	1,393,323			
¹ Excludes Pacific. ² Two of these municipalities of	employ part-1	ime officers.					

Louis, the unincorporated portion of St. Louis County, and 62 of 89 incorporated municipalities in the county have chosen this arrangement.⁶ Missouri Law (Section 70.800, Missouri Revised Statutes), enacted at the behest of local police leaders, requires all municipalities in St. Louis County with a resident population of 400 or more persons to provide full-time police services. Of the 80 municipalities that fall under the jurisdiction of this statute, 62 make provision by organizing their own local police force, 12 contract for services from adjacent municipalities, and 6 contract for services from the county police. Among the 53 municipalities with populations exceeding 2,000 persons, all but one have organized their own police department. Of the nine municipalities that are not required to provide police services by state law, six have contractual arrangements for service delivery (and two of these six have part-time forces to supplement contract), two have part-time forces only, and one, with a population of 31, makes no explicit arrangement for the provision of police services.7

In the interviews conducted for this study, elected officials in municipalities with their own police forces were asked whether they had considered disbanding the local force and replacing it with a contract with a neighboring municipality or the county police. Several officials in the smaller municipalities indicated that they may favor such a change, but were quick to add that citizens of their communities would be reluctant to give up their local police. Their assessments are consistent with the expressed sentiments of county residents reflected in a poll conducted in 1982 by Market Opinion Research. In that poll, more than 80 percent of those interviewed said that "direct local control" of police was "very important" to them.⁸

Officials of the smallest communities having their own police felt that the loss of federal revenue sharing funds might force citizens to reconsider this stance, but that change would be difficult. If it occurred, they felt, it would come in the form of joint service production (i.e., functional consolidation creating one police department to serve two or more small municipalities).⁹ Contracting with a large municipality was, they felt, a less likely alternative, and contracting with the county police was unlikely.

Police Contracting

Most full-service police contracts in St. Louis County involve the supply of services by a larger municipality or by the county police to a small municipality that is an enclave within or immediately adjacent to its boundaries. Of the 13 full-service contract suppliers, 7 obtain less than 3 percent of their police budget from contract revenues, and only 4 obtain more than 10 percent. On an average cost per capita basis, all but one of the full-service contracts fail to cover costs. That is, residents of municipalities that receive services under contract incur a lower per capita cost for these services than do residents of the jurisdictions supplying services. However, while not directly calculable from the data available, it appears that the contract suppliers receive sufficient revenues to cover the marginal cost of supplying services to contracting municipalities.¹⁰

In this study, interviews with municipal and county officials whose police departments supply services to other communities under contract indicated one of two explanations for this activity, and occasionally both. Officials of larger jurisdictions supplying services to very small enclaves or bordering communities frequently expressed a sense of noblesse oblige. That is, the residents of their small neighboring communities needed police services, the larger community could supply them at little additional cost to itself, and it had an obligation to do so. If the contract reduced the per capita cost of police for its own citizens, all to the good, but this was not reported as a primary motivation.

Mayors of the smaller communities that supply police services under contract frequently articulated a different motivation. They argued that supplying services to adjacent municipalities allowed their community to have a larger police force than it could otherwise afford, and that their own citizens as well as those of the contract municipalities benefited from this larger force. In the Normandy area, where competition among several departments for police contracts was keen, mayors generally offered yet an additional explanation. They saw competing with nearby jurisdictions for police service contracts as a way of keeping their own departments efficient. That is, they had to hold their own costs down and maintain quality service in order to be competitive.

Officials of municipalities without their own local police were asked whether establishing a local force was a viable alternative to contracting. These officials, for the most part, argued that the start up costs required to establish a local police force were too high to give this option serious consideration. Their assessment is supported by data on police service expenditures in 1985. The highest expenditure for a full-service police contract in that year was \$58,000, while the lowest expenditure for a full-time police department was \$108,000. An analysis of per capita expenditures for police services in 1985 indicates that municipalities that arrange for service through contracts expend approximately \$12 per capita less than those that organize their own police departments.¹¹

Officials of contracting municipalities were also asked whether municipalities other than their current supplier made bids. Approximately one-third of the officials responded that this did occur, with several citing recent changes from one supplier to another. The viability of such "shopping" for police services is a function of proximate location vis-a-vis alternative suppliers. Municipalities receiving services under contract that had several adjoining municipalities with police forces reported such competition. This was common among the small municipalities in the Normandy area of North-Central St. Louis County, and was confirmed in interviews with officials of municipalities that were police service contract suppliers in that area. Officials of municipalities in other parts of the county, particularly those that are enclaves within larger municipalities or which had only a single bordering municipality, reported little or no competition for their contract.¹²

PATTERNS OF POLICE PRODUCTION

There are 63 full-time municipal police forces in the City and County of St. Louis, ¹³ and one full-time county police department. These full-time police departments range in size from a low of 4 officers in 2 municipal departments to 537 officers in the county police and 1,702 officers in St. Louis City. Many of these full-time departments are small. Twenty-one have between 4 and 10 full-time officers and an additional 20 have between 11 and 24 officers (Table 4.2). However, the number of small departments

	Number of Departments	Number of Officers	Percent of Total Officers	Population ¹ Served	Percent of Tota Population
Municipal Departments ²	62	1,368	37.9	580,425	41.0
With 4-10 Officers With 11-24 Officers With 25-77 Officers	21 20 21	146 347 875	4.0 9.6 24.3	53,535 119,459 407,431	3.8 8.4 28.8
St. Louis County Police	1	537	14.9	406,771	28.7
St. Louis Metropolitan Police (City)	1	1,702	47.2	429,300	30.3
All Police Departments	64	3,607		1,416,496	

		Table 4.3 I-Time Police Office ures per 1,000 Popu		
	Police Office	rs per 1.000 Popula	tion	
Department Size (full-time officers)	Median Department		Real Estate Asses Commercial-Indus 25-50 Percent	
Small (4-10)	2.93²	2.52	2.93	3.59
	(21)³	(11)	(4)	(6)
Medium (11-24)	2.71	2.38	2.71	3.37
	(20)	(6)	(8)	(6)
Large (25-77)	2.34	1.79	2.31	2.43
	(21)	(5)	(9)	(7)
	Police Expendit	ures per 1.000 Pop	ulation	
	Median Department		Real Estate Asse Commercial-Indus 25-50 Percent	
Small (4-10)	\$83⁴	76	80	126
	(21) ³	(11)	(4)	(6)
Medium (11-24)	91	63	99	102
	(20)	(6)	(8)	(6)
Large (25-77)	85	66	85	88
	(21)	(5)	(9)	(7)
¹ Resident and contract popul ² Number of full-time officers i		³ Number of depar	tments in this category. the median police depa	

belies the fact that most police officers in St. Louis work in, and most citizens receive police services from, larger departments. More than 85 percent of the full-time police officers in St. Louis City and county work in departments with 25 or more fulltime officers. These larger departments supply police services to 88 percent of the city and county population. The 21 full-time departments with 10 or fewer sworn officers employ only 4 percent of all officers and serve fewer than 4 percent of the city-county population.¹⁴

Department Size and Costs Per Capita

There is wide variation in the number of police officers per 1,000 residents served among the fulltime departments in St. Louis City and County. The two largest departments are quite distinct in this regard. The St. Louis metropolitan police department, serving the City of St. Louis, has 3.76 officers per 1,000 city residents. The county police department, on the other hand, has 1.32 officers per 1,000 residents of the unincorporated county and the municipalities it serves under contract. Among the municipal police departments in St. Louis County, the number of officers per 1,000 residents of own and contract jurisdictions ranges from a low of 1.29 to a high of 7.98. The smallest police departments in the county tend to have more officers per 1,000 residents of the communities they serve, though there is substantial variation in this ratio among departments of similar size. Differences in assessed valuation of real property, particularly differences in the proportion of assessed valuation of real property that is derived from commercial and industrial property, help to explain the largest portion of the remaining variation not explained by size.

Departments serving areas with relatively larger proportions of commercial and industrial property tend to employ significantly more full-time officers per 1,000 residents than those serving communities with little or no commercial or industrial activity (Table 4.3).¹⁵ A simple explanation for this is that communities with significant amounts of commercial and industrial activity have workday populations that are larger than their resident populations.¹⁶ Police services are supplied to persons working and shopping in a jurisdiction, as well as to its residents.

Police expenditures per capita also vary significantly among the police departments. The St. Louis metropolitan police department expends \$175 per city resident; the county police department expends \$76 per resident of the unincorporated county and its contract municipalities. The range of per capita expenditures among the municipal departments in St. Louis County is \$53 to \$267. Here, too, differences in the extent of commercial and industrial activity help to explain this variation. As shown in the lower portion of Table 4.3, higher expenditures per jurisdiction resident are found for police departments that serve communities with higher proportions of commercial and industrial activity. This effect is stronger for the smaller departments in the county, but is significant even among the larger departments. Higher police expenditures per capita are a significant contributor to the extra per capita costs of municipal government associated with business activity, as discussed in Chapter Eight.

An analysis of police expenditures indicates that some slight economies of scale or size are enjoyed by the larger police departments. In Table 4.4, the presence of size economies is indicated for total police expenditures when the equation has a positive and significant intercept, and for per capita police expenditures when the coefficient for population served is negative and significant.¹⁷ In the per capita equations, the coefficients indicate that, after adjustment for other factors affecting police expenditures, a 1,000 resident increase in the number of citizens served is predicted to yield a 50 to 70 cent decrease in police expenditures per capita, a decrease of somewhat less than one percent for an average department.¹⁸

The effect of size is relatively weak, however. As in the analyses of total revenues and total expenditures, the presence of business activity has the strongest effect on police expenditures. The equa-

Regression Coeffic	cients for Police Ex	Table 4.4 $xpenditures^1$ in C N = 61)	County Municipalities	- 1985
	Police Exper	nditures	Police Expenditu	ires per Capita
	Unweighted	Weighted ²	Unweighted	Weighted ²
Resident Population	54.21*	49.64*	-0.0007 +	-0.0005+
	(2.98 ³)	(2.31)	(.0003)	(.0002)
Median Household Income	7.01	7.82	0.001 +	0.001 +
	(3.94)	(4.68)	(.000)	(.000)
Percent Poor: 1979	-5,750	-24,346+	-0.59	-0.96
	(7,697)	(10,951)	(0.84)	(0.79)
Percent Nonwhite	2,562	7,562*	0.25	0.37 +
	(1,751)	(2,323)	(0.19)	(0.17)
Percent Over 65 Years Old	6,149	10,499	0.59	0.02
	(6,987)	(7,856)	(0.77)	(0.55)
Density (number per square mile	e) -18.62	-59.89 +	-0.001	-0.003
	(14.58)	(21.19)	(.002)	(0.002)
Percent Owner Occupied	-3,101	-10,281*	-0.30	-0.48+
	(1,959)	(2,919)	(0.21)	(0.20)
Percent Housing Built 1970-80	-1,496	-3,874	-0.008	-0.19
	(2,556)	(3,195)	(0.28)	(0.22)
Value of Commercial Property	* 8.54*	7.65*	7.64*	6.91*
	(1.34)	(1.36)	(0.92)	(0.94)
Village	-27,834	-130,273	0.19	-2.87
	(83,481)	(145,676)	(9.11)	(10.49)
Point-of-Sale	47,845	-17,538	7.07	0.22
	(67,297)	(79,747)	(7.24)	(5.75)
Intercept	196,292	1,057,953 +	73.74 +	106.34*
	(280,995)	(397,086)	(30.83)	(89.13)
R ²	0.94	0.94	0.75	0.75
* – Significant at p < .001. ¹ Includes expenditures and populatic ³ Standard error of regression coefficie		² Weig	ignificant at $p < .05$. Inted by total population, ind ssed value in \$1,000's (total	~

tions suggest an increase in police expenditures of \$7 to \$8 per capita for each additional \$1,000 of assessed value in commercial and industrial property.

Service Components

The range of services produced by area police departments in-house varies in rough proportion to their size. All departments produce local patrol and call response, traffic control, and initial investigations of most reported crimes. On the other hand, all departments in St. Louis County use the county police crime lab (the city has its own lab), and all departments in the county and the city use the Greater St. Louis Police Academy for training recruits and other training activities.¹⁹ In between these alternatives is a variety of other possibilities.

Among the smallest departments-those with ten or fewer officers-only one produces its own radio communications, doing so in conjunction with the local fire department and supplying an adjoining small department with communications as well. The remaining 20 small departments obtain radio communications under contract from a joint dispatch center (supplying 4 departments), from larger municipal departments (supplying 12), and from the county police (supplying 4 departments). Five of the 20 police departments in the 11-24 officer range produce their own radio communications. Two do so in conjunction with local fire departments, and one supplies dispatch for an additional nine officers in a nearby department. The remaining 15 departments obtain radio communications from a joint communications center (supplying five departments in this size range in addition to four of the smallest), from larger municipal departments (nine receive dispatch from larger departments), and from the county police (one department). All of the departments with 25 or more sworn officers produce their own communications, though several do so in conjunction with local fire departments.

Most police departments in the county, but particularly the smallest ones, frequently rely on mutual aid from adjacent departments to service peak demands. Such mutual aid is usually extended informally among departments that share radio frequencies, is quite common among the smaller departments in the county, and is not uncommon among the larger. Unlike patterns found in many metropolitan areas, where county or state police take responsibility for major traffic flows countywide (e.g., those found on Interstate highways),²⁰ in St. Louis County many municipal departments provide traffic patrol on major arterial highways.²¹ Investigation of the most serious crimes that occur, especially unresolved homicides in the jurisdictions of smaller municipal departments, frequently involves assistance from the county police department and, less frequently, from the major case squad, discussed below.

As discussed in Chapter Three, St. Louis County government developed the functional equivalent of an urban services district in the unincorporated county during the years where the borders of the area were essentially frozen by the *Graeler* decisions on annexation. The county police became the equivalent of a municipal police department for this area, the largest such department in the county by a substantial margin.

As a result both of this large size and of the county government's responsibility to provide services countywide, the St. Louis County police department became a supplier of many specialized services to the municipal departments. In addition to providing facilities for crime lab and training, a central registry for trained officers, the full county share of the 911 dispatch system and (initially) the REJIS information network, and assisting in investigations of unresolved homicides (indeed taking over such investigations for departments that lack skilled investigators), the county police assisted in sexual assault, drug, and arson-explosives cases, provided follow up investigation for other serious crimes in small jurisdictions, and supplied crime scene investigation, photography, identification, and prisoner assessment and transportation. This assistance was provided to municipal departments on request, without charge. Municipal departments could also request the assistance of the county's police helicopter if needed. While many of the larger municipal departments produced most of these services for themselves, cooperating with the county as approximate equals when such cooperation was warranted,²² the smaller and medium sized departments relied heavily on the county police for this assistance.

Since the Town and Country decision in 1983 allowing municipalities greater freedom to annex unincorporated territory (see Chapter Three), county government has moved to focus its resources on the unincorporated county, including its police department resources. The county police established new service centers in two parts of the unincorporated county, Maryland Heights and Chesterfield, where significant sentiment for new incorporation was manifest, and reallocated officers to increase its presence there.²³ Because of this reallocation and, especially, the loss of revenues that occurred as a result of successful annexations and the Maryland Heights incorporation,²⁴ the county police department has reduced services to municipal departments, virtually eliminating some (e.g., arson investigation) and switching to service contracts for others, such as crime-scene investigation, photography, and identification. Some of the departments that received such services free of charge from the county police are now contracting with the county police. Others are developing in-house capabilities, and still others are forming local consortia of departments to replace county services.

Production Efficiency: A Comparative View

A study of police organization in 80 U.S. metropolitan areas in 1975 found that in 13 of these metropolitan areas with populations between 500,000 and 1.5 million persons, the median area had 29 producers of police patrol services, and that 75 percent of these metropolitan areas had fewer than 39 patrol producers.²⁵ The comparable figure for the City and County of St. Louis is 73 patrol producers including, as the 1975 study did, patrol producers with specialized jurisdictions.²⁶ Only one of the 13 metropolitan areas similar in size to St. Louis (Paterson-Clifton-Passaic, New Jersey) had more producers of police patrol. In per capita terms, however, St. Louis is not as atypical. Dividing its 73 patrol producers by its population yields a ratio of 5.2 patrol producers per 100,000 residents. The comparable figure for the median metropolitan area in the 1975 study was 4.0 per 100,000. In terms of relative concentration of service supply, St. Louis, with 30 percent of its population served by its largest producer, falls slightly below the concentration found in the median metropolitan area in 1975, where 36 percent of the population was served by the largest producer.

In its arrangements for the production of auxiliary services, however, St. Louis exhibits substantially greater concentration than found in similar size metropolitan areas in 1975. In radio communications, for example, only 45 percent of St. Louis's local service producers have their own dispatch center. In the similar sized median area in 1975, 82 percent of the local service producers supplied their own radio communications. Entry-level training is also much more concentrated. In 1975, the median metropolitan area of St. Louis's size had eight producers of such training. In St. Louis, virtually all officers receive entry-level training from the Greater St. Louis Police Academy.²⁷ St. Louis's concentration in auxiliary service production reflects the extensive use of cooperative and contractual agreements.

Production arrangements for policing in the St. Louis area, therefore, differ from those in comparably sized metropolitan areas in two different directions. The St. Louis area has more local police service producers in absolute numbers and in proportion to its population than do most comparable metropolitan areas. However, St. Louis also exhibits substantially more concentration in the production of auxiliary services than do most similar areas. These differences can be traced to historical patterns of local growth and incorporation in St. Louis County, citizen preferences for local control of policing, and, in the case of auxiliary services, entrepreneurial efforts by police leaders.

The basic pattern of police production in St. Louis County is characterized by a relatively large number of small producers of police patrol and closely related services, combined with relatively small numbers of larger producers of specialized, auxiliary services. This pattern was compared to others in a study of the efficiency with which police departments in metropolitan areas convert resources (e.g., sworn officers, civilians, vehicles) into outputs-crimes cleared and units deployed for patrol and immediate response. Metropolitan areas that, like St. Louis, exhibited substantial diversification of the patrol function combined with substantial concentration of auxiliary services were found to be *more efficient* compared to other patterns. The less efficient patterns were those with fewer patrol producers or more producers of auxiliary services.²⁸ A possible explanation for this result is that smaller departments are much more efficient at deploying officers for patrol duties, while larger departments or overlying joint investigation units more efficiently clear crimes that are reported to them.²⁹ These findings do not provide direct evidence that policing in the St. Louis area is or is not efficient, but rather that the functional arrangements for policing in St. Louis, particularly those arrangements found in the incorporated part of St. Louis County, have proved to be comparatively efficient elsewhere.

COOPERATIVE PRODUCTION ARRANGEMENTS

St. Louis affords many examples of cooperation and coordination in policing. In relation to the patrol function, local police departments commonly supply backup capabilities to one another as needed. Backup is facilitated by coordination in communications, such as shared radio frequencies and joint dispatch arrangements, allowing officers in any one jurisdiction to know what is occurring in adjoining jurisdictions on a real-time basis. All of the police forces in both city and county are linked to the computer aided 911 emergency call routing system. Investigation services are also coordinated in various ways, including an areawide Major Case Squad that draws trained investigators from many separate jurisdictions to assist in the investigation of serious crimes. The Regional Justice Information System (REJIS) affords linkages to statewide and nationwide criminal information data banks. With respect to *training*, all area police departments receive recruit and in-service training from the Greater St. Louis Police Academy.

Many of these cooperative ventures-including areawide mutual aid plans, specialized investigation resources, a shared information system, and a single areawide police academy-are the fruits of initiatives undertaken by local police leaders in the St. Louis area. Local police officials from municipal departments, the county police department, and the St. Louis city department typically propose a plan, convince their colleagues to support it, and shepherd the necessary enabling legislation through the appropriate decisionmaking bodies including, in the case of training standards, the Missouri legislature. Prominent in this process has been the Board of Governors of the Law Enforcement Officials of the Greater St. Louis Area, a "peak" association of police chiefs from the largest departments in the area and from a selection of smaller departments. This group meets monthly to discuss issues of concern to local police leaders. Cooperative ventures of less than an areawide focus, too, have come about through the efforts of local police leaders who recognize the wisdom of providing one another with emergency backup, of coordinating investigations, and of sharing dispatch and other specialized services.30

Computerized Call Routing

Of major assistance to citizens needing police and other emergency services in the City and County of St. Louis is the availability of a 911 emergency telephone number combined with computerized routing of emergency service requests. A citizen needing emergency assistance anywhere in the City and County of St. Louis can be connected automatically with the appropriate supplier for his or her location by dialing 911. The 911 system routes requests for police, fire, and ambulance services, drawing on an elaborate geocoding system developed jointly by the city, county, and municipalities. A citizen's call is directed automatically to one of 29 Public Safety Answering Points (PSAPs) located in the 29 police agencies in the city and county that operate dispatch centers. On receipt at a PSAP, a call for police service can be dispatched immediately to an officer in the relevant jurisdiction. Fire and ambulance calls are dispatched from the PSAP for some jurisdictions, and switched to dispatch centers specialized to these services in other jurisdictions. The development and operation of this system have been funded by the county (two-thirds) and the city (one-third). In addition to its direct benefits to citizens with an emergency, the system, by concentrating dispatch operations, releases officers in many departments for on-street deployment.

Regional Justice Information System

This system, known by its acronym REJIS, provides a common data base for police relevant information to all of the police agencies in the St. Louis area. REJIS terminals are located in each of the PSAPs in the city and county, allowing dispatchers ready access for a variety of records checks requested by police officers. The REJIS system is linked to statewide and nationwide law enforcement information systems as well. In addition to information found in most law enforcement computer systems (e.g., outstanding arrest warrants, arrest and conviction records, stolen vehicle reports), REJIS maintains additional files on topics such as community social services and business firms throughout the area. The city, county, and municipal departments share the cost of maintaining and operating REJIS. County government pays 25 percent of the municipalities' cost share for REJIS operations.³¹

Mutual Aid among Police Agencies

Only the very largest police departments in the United States deploy sufficient officers for patrol and immediate response duties that allow them to handle peak demands unaided. Virtually all police departments that share borders with other police jurisdictions supply mutual backup aid. Such emergency backup is widespread in St. Louis, as in most other metropolitan areas. Among many of the police departments in the St. Louis area, backup is supplied informally, as officers sharing radio frequencies aid officers in nearby jurisdictions when a perceived need arises. A number of the St. Louis departments have formalized backup assistance in mutual aid compacts (a figure repeated by several local officials was that 30 departments were members of a mutual aid pact), but aid appears to be provided as needed with or without formalization.

Police departments in St. Louis County have developed a formal plan to deal with the most serious natural and man-made disasters. This plan, known as Code 1000, was developed originally to enable areawide police mobilization in the event of civil disturbances. It now serves as a means of mustering large numbers of officers to assist in the event of a disaster. Under the plan, St. Louis County is divided into five zones, each of which has access to between 300 and 400 officers from the county police and municipal departments in the zone and, if necessary, officers from other zones as well. The plan is initiated at the discretion of a local police commander needing aid. On his or her request, adjoining police departments switch from eight- to twelve-hour duty shifts to increase their available personnel and, if requested, dispatch all but the minimum force necessary to serve their own jurisdictions to the aid of the requesting department.

The Major Case Squad

The Major Case Squad of the Greater St. Louis Metropolitan Area, formed in 1964-65, was modeled on a similar organization-the Metro Squad-in the Kansas City area. It was organized under the auspices of the Board of Governors of the Law Enforcement Officials of the Greater St. Louis Area, and currently operates with its own board of directors. The squad consists of investigative officers from St. Louis County municipalities, the county police, the St. Louis metropolitan police, and from police departments in surrounding counties in Missouri and Illinois. Major case squad officers train together periodically, developing working procedures to be employed when needed to investigate a serious crime. Organizational details are prearranged so that the squad can be activated immediately on request by any police chief in whose jurisdiction such a crime occurs. Activation is subject to the approval of the squad's board of directors, and is usually for a limited time-five days-although extensions are possible if circumstances warrant. The squad's primary focus has been on homicides, although it investigates other serious crimes too.

The Major Case Squad is a response to a common exigency in policing—the fact that serious crimes requiring large numbers of trained investigators are rare events for a single department. Yet, in a large metropolitan area, these crimes do occur and call for the immediate deployment of many investigators. By drawing on officers from a large number of cooperating jurisdictions, police in St. Louis are able to meet this need.

POLICE PERFORMANCE

No attempt was made in this study to assess the service delivery performance of local governments in St. Louis. Performance measurement for local services is a complex and costly undertaking, and fell outside the scope of research. However, some indicators of police performance are available from public opinion polls, academic research on police services in St. Louis, and local police reports.

A 1982 survey conducted by Market Opinion Research found 79 percent of 1,000 respondents in the city and county to be either "very" or "somewhat satisfied" with their police protection.³² Citizens in the county were more likely to report satisfaction than those in the city but the differences were slight. In 1987, Attitude Research Corporation surveyed 2,500 county residents and found that 91 percent of the respondents reported either "good" or "excellent" police services.33 These reported levels of satisfaction with police services are characteristic of surveys conducted in St. Louis for many years. The St. Louis Sample Survey of Citizen Opinion and Participation, conducted in 1959, reported 76 percent of city respondents and 89 percent of county respondents to be "fairly satisfied" or "very satisfied."34 Surveys of citizens in selected neighborhoods in the city and the county were conducted by researchers from Indiana University in 1972 and again in 1977. In 1972, 58 percent of respondents in the city rated their police service as "good" or "outstanding"; in the county, 76 percent rated local police as "good" or "outstanding."35 In 1977, 51 percent in the city and 70 percent in the county gave these same answers.36

Public opinion polls and general ratings from citizen surveys should not be taken as complete assessments of police performance. One reason is that general ratings are usually more favorable than are assessments of more specific police actions—responding rapidly when called, providing assistance to victims and others, preventing crime and disorder in a neighborhood.³⁷ A second reason is that citywide or countywide averages can mask significant internal variations. The only studies available that go beyond general assessments and allow intracity and intracounty breakdowns are the 1972 and 1977 Indiana University studies, which focused on specific neighborhoods within the city and within county jurisdictions.

Table 4.5 presents data from the Indiana studies that illustrate intracity and intracounty variations in overall ratings of local police, perceptions of the speed of police response when called, perceptions of the trend of crime in the respondent's neighborhood, and whether the respondent has been the victim of crime in the neighborhood within the previous year. On each of these indicators, and in both years, residents of neighborhoods in St. Louis County reported, on average, more favorable perceptions of local police and fewer unfavorable experiences (being victimized) than did city neighborhood residents. However, substantial overlap in assessments and experiences was found in examining variations across city and county neighborhoods. That is, there were neighborhoods in the county where these assessments and experiences were more negative than the average in the city, and vice versa.

Within jurisdictions in these studies, assessments and experiences were patterned partially along racial and income lines. Neighborhoods with higher proportions of low income and nonwhite respondents reported assessments of local police that were, for the most part, below the average in their jurisdiction. Similar patterns were found across jurisdic-

A a a a a a a a a a a		Table 4.5				
Assessme	nts of and	a Experienc	es with Loca	al Police'		
	Neighborhoods Located in:					
Year of Survey	Ci	ty of St. Lo	uis	St.	Louis Cou	nty
	Lowest Score	Average Score	Highest Score	Lowest Score	Average Score	Highest Score
1972		[N=7]			[N = 37]	
Percent Rating Police						
"Good" or "Outstanding"	20	58	73	19	76	94
Percent Rating Response						
"Very Rapid" or "Quickly Enough		67	85	30	84	99
Percent Perceiving a Crime Increase		40	48	7	24	47
Percent Victimized in Previous Year	22	, 29	34	7	18	34
		N	eighborhoo	ds Located i	n:	
	CI	ty of St. Lo	uis	St.	Louis Cou	nty
1977	Lowest Score	Average Score	Highest Score	Lowest Score	Average Score	Highest Score
		[N=8]			[N = 17]	
Percent Rating Police "Good" or "Outstanding"	44	51	69	40	70	91
Percent Rating Response "Very Rapid" or "Quickly Enough"	53	61	69	50	82	94
Percent Perceiving a Crime Increase	24	32	41	6	20	29
Percent Victimized in Previous Year	26	37	49	14	26	43
¹ Data from studies conducted by Indiana Un	iversity – see	endnotes for a	attribution.			

tions. Such variations and patterning have been found in most research on local police and citizens' assessments of and experiences with them. One reason that the City of St. Louis exhibits lower satisfaction ratings in the opinion polls and scores lower on these performance indicators is that the city has significantly more low income and nonwhite citizens than does St. Louis County.³⁸

Looking at neighborhoods within county municipalities only, the two studies provide partial information on the question of department size and performance. Victimization rates were lower in both years in neighborhoods served by smaller departments.³⁹ Perceptions of crime trends reversed between 1972 and 1977, with residents of larger jurisdictions reporting larger increases in 1972, but residents of smaller ones reporting such increases by 1977. In both years, citizens from neighborhoods served by the larger municipal departments in the county were more likely to say that their police responded "very rapidly" or "quickly enough" when called than were residents of the smaller jurisdictions.⁴⁰ Speed of response when called is strongly correlated with citizens' perceptions of overall police effectiveness,⁴¹ and the pattern of citizens rating their local police as "good" or "outstanding" is the same as that for speed of response. Citizens living in neighborhoods served by larger municipal departments in the county were more likely to rate their police this way than were citizens served by the smallest departments there. In St. Louis County, neighborhoods with high proportions of low income and nonwhite citizens are more prevalent in small communities than in large ones. Like the city-county comparisons noted above, these size comparisons are, therefore, partially confounded by racial and income differences across neighborhoods, and some of the size effects noted in this paragraph are really those of race and income. In addition, the results reported here are general tendencies, and some small departments out-performed some of the larger municipal departments.⁴²

Neighborhoods served by the St. Louis County police were surveyed in the 1972 study, but not in 1977. In 1972 citizens in neighborhoods served by the county—two in the unincorporated county and two small municipalities served under contract—reported assessments and experiences right at the countywide average, somewhat less favorable than those in the larger municipal jurisdictions and somewhat more so than in the smaller.

In terms of crimes recorded by local police, St. Louis County, with 40 Part I (generally serious) crimes per 1,000 residents, has somewhat less serious crime than found in the average metropolitan county.⁴³ In the City of St. Louis, the recorded crime rate in 1984 was 104 per 1,000 residents, somewhat above the average for large central cities in metropolitan areas.⁴⁴ The recorded crime rate in the unincorporated county was 34 per 1,000 residents in 1985, while in the municipalities of St. Louis County, it averaged 44 per 1,000 residents. Among the county municipalities, recorded crime rates for jurisdictions with police departments of 4 to 10 sworn officers averaged 34 crimes per 1,000 residents, the same as the unincorporated county. Jurisdictions served by larger departments had somewhat higher recorded rates on average, with 44 crimes per 1,000 in those served by 11 to 24 officers, and 46 crimes per 1,000 in jurisdictions served by 25 or more full-time officers.

CONCLUSION

Organizationally, policing in St. Louis is complex. A large number of autonomous police departments produce a variety of services for the nearly 1.5 million residents of the city and county. Jurisdictional fragmentation has been maintained at the same time that a series of organizational overlays was created to address specific functional needs. The pattern that results is not unorganized chaos, but rather service delivery that is frequently coordinated among a group of independent agencies. This coordinated effort has resulted in service delivery that is, for the most part, highly rated by those most relevant to such an assessment-the citizens who live there. The pattern is also one that has been found to be efficient in a comparative study of metropolitan areas nationwide.

The evaluative criteria posed in Chapter One can be applied to police services in St. Louis as follows:

- Police services in St. Louis appear to be reasonably well *coordinated* among separate jurisdictions along a broad range of functional dimensions. Coordination between county and municipal police departments, however, has become somewhat more tenuous in recent years.
- Through cooperative functional arrangements, local police have captured economies of scale, especially in auxiliary service production utilizing joint dispatch centers and centralized crimelab and training facilities. Although some remaining economies of scale might be captured by moving to a larger scale of operation in the case of very small departments, the gains would be small. Local control of police is highly valued by citizens in the incorporated portion of St. Louis County and, perhaps, valued more

highly than any economies that might be captured by merging the smallest departments.

- Competition for police service contracts is found in some parts of the county, though not countywide. Competition might become more widespread if the county police department were to become more aggressive in seeking service contracts (adopting a strategy akin to that of the Los Angeles County Sheriff, for example).
- The Major Case Squad, the Code 1000 plan, and the areawide 911 and REJIS systems indicate that local police leaders have had significant success at *metropolitan problem solving*, adopting regional solutions to police problems that spill over municipal boundaries and, at the same time, remaining fully *accountable* to citizens in their local jurisdictions.

-ENDNOTES-

¹See, for example, the review of surveys by Jiri Nehnevajsa, *Crime in the Neighborhood* (Pittsburgh: University of Pittsburgh, Center for Urban Research, 1977).

²Ibid.

³This arrangement dates back to the time of the Civil War.

- ⁴The arrangement raises an interesting question in light of the Hancock Amendment to the Missouri Constitution (see Chapter Three). Among other provisions, the amendment requires the state to fund any costs of mandates imposed on local governments. If one interprets the St. Louis board of police commissioners, given its appointment by the governor, as an agency of the state, one could argue that the state, and not the city, is required to fund the metropolitan police. This argument, while not accepted in Missouri jurisprudence, does appear to have given the city some additional leverage in bargaining with the board.
- ⁵For the purposes of this chapter, the St. Louis metropolitan police department is treated as a bureau of the City of St. Louis. This is technically incorrect, as noted earlier. However, the distinction is more technical than real, and the metropolitan police are in all aspects relevant to this chapter a police department organized by the city.
- ⁶The City of Pacific, with only 12 residents in St. Louis County, is located principally in an adjacent county. It is not included in the discussion in this chapter.
- ⁷In this municipality, Champ, the county police enforce state law (but not local ordinances) and respond to requests for emergency assistance.
- ⁸Market Opinion Research, Public Opinion on Government Reorganization Alternatives for the City of St. Louis and St. Louis County (Detroit: April 1982), p. 54.
- ⁹Departments in the Normandy area experimented with such a system in the form of the North Area Municipal Police Association (NAMPA), which linked six small departments. While NAMPA is not presently active, it affords a model for such joint production arrangements. See St. Louis County Department of Planning, Normandy Area Consolidation of Services Study: Police Services Element (Clayton: August 1976).
- ¹⁰Competition among departments would explain this tendency toward marginal rather than average cost pricing.

- ¹¹This \$12 figure is the coefficient for a dummy variable that represents contracting in a regression equation predicting police expenditures while controlling for local service conditions. The full equation is not shown.
- ¹²Competition for police contracts in the Normandy area does appear to decrease per capita costs and increase service levels somewhat. The average per capita cost of a full-service contract from a municipal supplier in the Normandy area is 15 percent lower than the cost of an equivalent contract in other parts of the county, and the number of officers supplied per 1,000 residents of a contract recipient is 7 percent higher.
- ¹³The City of Pacific, located principally in another county, is not included in the following discussion.
- ¹⁴This skewing of the size distribution among local police departments is similar to that found in many U.S. metropolitan areas. While there are many more small than large police departments, most metropolitan Americans receive police services from departments of 20 or more sworn officers. See Elinor Ostrom, Roger B. Parks, and Gordon P. Whitaker, *Patterns of Metropolitan Policing* (Cambridge, Massachusetts: Ballinger Publishing Company, 1978), pp. 85-88.
- ¹⁵These comments are based on a regression analysis that uses total population served (own jurisdiction plus contract municipalities), assessed valuation of commercial and residential property, the number of Part I crimes reported in 1985, and indicators of dispatch and contract service supply to explain variation in the number of full-time officers employed by each department. Taken together, these variables explain 95 percent of the variation in number of full-time officers.
- ¹⁶Fenton's workday population, for example, is more than ten times its residential population.
- ¹⁷See Chapter Eight for a discussion of the methodology used here to test for economies of scale.
- ¹⁸The somewhat higher per capita costs in the smallest jurisdictions may also result from additional duties assumed by police there. In some small jurisdictions, police are the only full-time employees, and the police budget includes expenditures that are reported in other departmental categories in larger jurisdictions. See St. Louis County Department of Planning, Normandy Area Consolidation of Services, p. 7.
- ¹⁹This will change once the new St. Louis County Police and Fire Training Academy is built. See Note 27 below.
- ²⁰See Ostrom, Parks, and Whitaker, Patterns of Metropolitan Policing, Chapter Six.
- ²¹Several of the small police departments significantly augment municipal revenues with fines and fees collected in local traffic courts and, even for some of the larger departments, the revenues raised are not insignificant (see Chapter Two).
- ²²See St. Louis County Municipal League, "Annexation Study Commission Survey of Selected County Police Services to Large Municipalities," Clayton, Missouri, April 26, 1984, p. 2. Chiefs of the larger municipal departments felt that "certain county services should be categorized as municipal services that any municipal police department would make available to any other municipal police department."
- ²³Interview with James Hennessey, Director of Administration, St. Louis County Police, May 22, 1986. When, in spite of this reallocation, the Maryland Heights incorporation was successful, the county removed all police protection immediately, and the new city was patrolled by the

Missouri Highway Patrol until its own police department began operations.

- ²⁴The county government lost approximately \$2 million in revenues earmarked for police services when Maryland Heights was incorporated. As a result, the county police department reduced its personnel by 33 officers. Had the Chesterfield incorporation initially proposed in 1986 been successful, the county projected a further reduction of 60 officers. James Hennessey, May 22, 1986. The modified Chesterfield incorporation approved by voters in April 1988 calls for initial delivery of police services by the county police under contract to the new city.
- ²⁵Ostrom, Parks, and Whitaker, Patterns of Metropolitan Policing, Chapter Five.
- ²⁶The nine additional police producers with specialized jurisdictions are the Missouri Highway Patrol, the St. Louis County Park Rangers, the Lambert-St. Louis Airport Police, and campus police departments of Washington University, St. Louis University, the University of Missouri—St. Louis, and the junior colleges located in the area.
- ²⁷The Missouri Highway Patrol has its own training academy. All other departments used the Greater St. Louis Academy at the time of our interviews. However, St. Louis County was in the process of establishing its own police-fire training academy, a facility that would serve all departments in the county. The impetus for this new facility appears to be a low demand for training by the city combined with the county's desire to have a fire service training academy in addition to one for police training.
- ²⁸Roger 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.
- ²⁹On the deployment issue, see Ostrom, Parks, and Whitaker, Patterns of Metropolitan Policing, p. 89. In larger departments nationwide, nine or ten officers are needed to put one officer on the street 24 hours per day. In smaller departments, only four or five officers are needed. As a result, patrol presence is much higher in the jurisdictions of smaller departments. On the question of clearances, see Wesley G. Skogan, "Efficiency and Effectiveness in Big-City Police Departments," Public Administration Review 36 (May-June 1976): 278-286.
- ³⁰An excellent discussion of the emergence of cooperative police arrangements through the efforts of local police leaders in the St. Louis area can be found in James C. McDavid, *Police Cooperation and Performance: The Greater St. Louis Interlocal Experience* (State College: The Pennsylvania State University Press, 1979).
- ³¹This is a reduction from county government's original 100 percent funding of this service in the county. Whether this will continue is unclear at present. The county executive has announced plans to eliminate what he perceives to be a subsidy. Municipal, and some county, officials have argued that the county obtains benefits by having access to information supplied by the municipalities and that, rather than representing a subsidy to them, the county's 25 percent contribution to municipal costs is an appropriate recognition of these benefits. The county executive has also proposed elimination of the county's funding of the 911 system, shifting to a telephone tax to support this service.
- ³²Market Opinion Research, Public Opinion in Government Reorganization.

- ³³St. Louis Post Dispatch, "Chesterfield and U. City Lead in Supporting McNary Remap," November 27, 1987, Section A, pp. 1 and 6.
- ³⁴John C. Bollens, ed., Exploring the Metropolitan Community (Berkeley: University of California Press, 1961), p. 432.
- ³⁵For a description of the 1972 study, see Roger B. Parks, Assessing the Influence of Organization on Performance: A Study of Police Services in Residential Neighborhoods, unpublished Ph.D. dissertation (Bloomington: Department of Political Science, Indiana University, July 1979). See also Elinor Ostrom, "Size and Performance in a Federal System," Publius 6 (Spring 1976): 33-73. This study and the one conducted in 1977 focused on neighborhoods that, on average, had more crime and other police-related problems than did the city or county as a whole, thus explaining the somewhat lower ratings of police found in these studies.
- ³⁶The 1977 study is described in Stephen L. Percy, Citizen Coproduction of Community Safety and Security, unpublished Ph.D. dissertation (Bloomington: Department of Political Science, Indiana University, November 1981); Debra L. Dean, Comparative Models of the Social Services Production Process, unpublished Ph.D. dissertation (Bloomington: Department of Political Science, Indiana University, October 1982).
- ³⁷On this point, see the review by Mervin F. White and Ben A. Menke, "A Critical Analysis of Surveys on Public Opinions Toward Police Agencies," Journal of Police Science and Administration 6, No. 2 (1978): 204-218.
- ³⁸This is not the entire explanation, however. After careful adjustment for neighborhood differences in respondent characteristics, Elinor Ostrom reported higher performance levels in neighborhoods served by county municipalities than in neighborhoods in the City. See Elinor Ostrom, "Size and Performance in a Federal System."
- ³⁹Police-recorded crime rates show the same pattern. See below.

- ⁴⁰This is principally a result of those very small departments that deploy only a single patrol unit. Even with backup supplied by neighboring departments, their response can be delayed when the single unit is busy. See Roger B. Parks, "Linking Objective and Subjective Measures of Police Performance," Public Administration Review 44 (March-April 1984): 118-127.
- ⁴¹What police do after responding rapidly (or slowly) is also important. See Roger B. Parks, "Police Response to Victimization: Effects on Citizen Attitudes and Perceptions," in Wesley G. Skogan, ed., Sample Surveys of the Victims of Crime (Cambridge, Massachusetts: Ballinger Publishing Company, 1976), pp. 89-104.
- ⁴²For data from the 1972 study, see Elinor Ostrom, "Size and Performance in a Federal System." Data from the 1977 study were reanalyzed for this report. Neighborhood and jurisdiction-specific data are reported in Law Enforcement in St. Louis Communities (5 volumes) for the 1972 study and in Chief's Report for (name of jurisdiction) (12 volumes) for the 1977 study. These reports were sent to the police chiefs of all departments studied by the Workshop in Political Theory and Policy Analysis, Indiana University, Bloomington.
- ⁴³Crimes and rates for St. Louis County and its municipalities are from 1985 Fact Sheet: Police Services in St. Louis County (Clayton: Bureau of Management Services, St. Louis County Police Department, 1986). Data for the City of St. Louis are from Annual Report 1984-1985, St. Louis: St. Louis Metropolitan Police Department, 1985).
- ⁴⁴Recorded crime rates, and the underlying criminality they imperfectly reflect, result from a variety of factors only some of which are subject to police control. In addition to variations in criminogenic factors, crime rates reflect differences in the extent to which citizens report crimes to police and differences in the ways that police record those crimes that are reported to them. Thus, crime rates are quite imperfect indicators of police performance. Their inclusion here is only for purposes of rough comparison with other areas.

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Chapter Five Fire Services

INTRODUCTION

This chapter describes the ways that citizens of St. Louis City and St. Louis County provide for fire protection and organize the production of fire services, specifically the prevention and suppression of fires.¹ All municipalities in the St. Louis area are authorized by state law to provide fire protection services. Municipalities may choose between establishing a municipal fire department and contracting with another government unit for these services. Citizens in St. Louis County have an additional choice available, namely to create a separate fire protection district. These districts, which are independent of municipal governments, are governed by elected, three-member boards of directors, and have authority to levy taxes on local property to provide fire services. Fire protection districts, too, may choose between in-house production-the organization of a district fire department-and contracting with another government unit for the production of fire services. Citizens in unincorporated St. Louis County must organize fire protection districts to provide fire services for themselves, but the districts retain the option of contracting.

The City of St. Louis and 19 municipalities in St. Louis County have chosen in-house production, establishing their own fire departments. Eight municipalities in the county arrange for fire service production through a contract with a fire department in another unit of government. Five of these contracts are with adjoining municipalities, and three are with fire protection districts. In the remaining 62 municipalities in St. Louis County, and in all of the unincorporated county, citizens provide for fire protection through one or more of the 24 fire protection districts in the county.² All but one fire district produce fire services with a district organized fire department. The remaining district, Meacham Park, contracts with an adjacent municipality.

FIRE SERVICE PROVISION AND PRODUCTION

The provision and production of fire services in St. Louis are somewhat more concentrated than are police services. The number of provision units for fire service is 52, fewer than for police, yet still a substantial number (Table 5.1). There are 43 departments producing fire services and 9 provision units contracting for services.³

The City of St. Louis is the dominant provider of fire services in the area, serving just under onethird of the combined city and county resident population.⁴ The city has 670 fire fighters, 36 percent of the total employed in the city-county, making it the dominant producer also. St. Louis City expenditures for fire protection services in 1985, some \$30 million, constituted 40 percent of the total fire expenditures in that year.⁵

The municipal and fire district departments in the county are substantially smaller and, individually, serve fewer citizens. The boundaries of their jurisdictions are shown in Figure 5.1, together with the location of fire stations. The largest fire protection districts are Mehlville, with a resident population of nearly 100,000, and Florissant Valley, with more than 80,000. The largest municipality with its own fire department is University City, with a resident population of approximately 43,000. Fire protection districts serve approximately 50 percent of the city-county resident population and employ 38 percent of the full-time fire fighters. The fire district

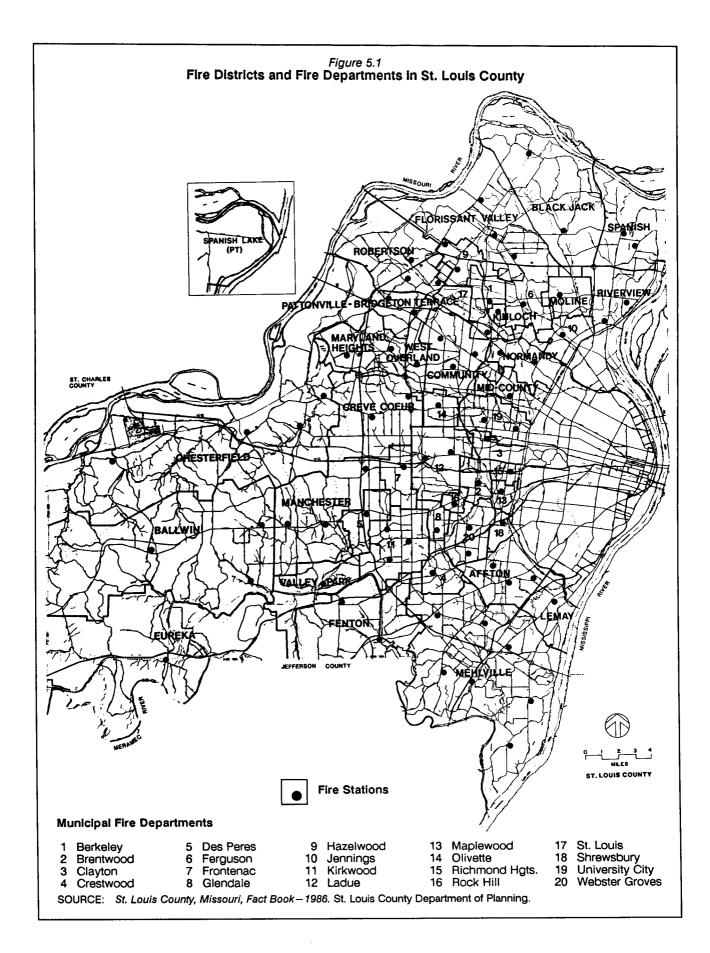


Table 5.1 Fire Services In St. Louis				
	City of St. Louis	St. Louis Municipalities	County Fire Protection Districts	
Number of Service Providers	1	27	24	
Number of Service Producers	1	19	23	
Number of Full-Time Firefighters	670	485	704	
5	(36%)	(26%)	(38%)	
Number of Fire Vehicles	`42 <i>´</i>	`52 ´	`78 ´	
	(24%)	(30%)	(46%)	
Number of Ambulances	23	15	30	
	(34%)	(22%)	(44%)	
Number of Fire Stations	30	27	52	
	(28%)	(25%)	(48%)	
Population Served ¹	429,300	277,000	710,000	
	(30%)	(20%)	(50%)	
Area Served ¹ (square miles)	61	76	431	
	(11%)	(13%)	(76%)	
Assessed Valuation in 1985 ¹	2,745	2,406	5,540	
(in millions of dollars)	(26%)	(22%)	(52%)	
Expenditures in 1985-fire Only ²	30.2	13.1	31.6	
(in millions of dollars)	(40%)	(18%)	(42%)	
¹ Including population, land area, and assessed ² Does not include expenditures for emergency	valuation of areas served u	under contract.	((=))	

departments range in size from Kinloch fire district, with five full-time fire fighters, to Chesterfield and Mehlville fire districts, with 59 and 75 full time fire fighters respectively. University City has the largest municipal fire department, with 50 full-time fire fighters, and Rock Hill the smallest, with 11.

The City of St. Louis employs approximately 1.6 fire fighters per 1,000 residents (see Table 5.2). Compared to St. Louis City, county municipalities with their own fire departments employ, on the average, slightly more fire fighters per 1,000 residents, but fire protection districts in the county employ significantly fewer fire fighters. Fire protection expenditures *per resident* are higher in the city than in either municipal or district departments in the county.⁶ Fire expenditures *per firefighter* in the city are approximately equal to those for the average fire protection district, but higher than the average municipal fire department. Expenditures per \$100 of assessed valuation are substantially higher in the city than the average expenditure for either municipal or district departments in the county.⁷

ECONOMIES OF SCALE?

A question of interest in St. Louis is whether multiplicity, namely, a large number of producing

Table 5.2 Fire Service Ratios in St. Louis					
	City of St. Louis	St. Louis Municipalities	County Fire Protection Districts		
Firefighters Per 1,000 Residents	1.56	1.75	0.99		
Firefighters Per Square Mile	10.92	6.38	1.66		
Firefighters Per Million					
Dollars of Assessed Valuation	0.24	0.20	0.13		
Expenditures ¹ Per Resident	\$70.40	\$47.30	\$44.50		
Expenditures ¹ Per Firefighter	\$45,000	\$27,000	\$45,000		
Expenditures ¹ Per Hundred	,				
Dollars Of Assessed Valuation	\$1.10	\$0.54	\$0.57		
Fire Stations Per 100,000 Residents	6.99	9.75	7.18		
Fire Stations Per Square Mile	0.49	0.36	0.12		
Fire Vehicles Per 1,000 Residents	9.79	18.77	10.99		
Fire Vehicles Per Square Mile	0.69	0.68	0.18		
	0.69	0.68			

units for fire services, is excessively expensive.⁸ Evidence from studies of fire protection found in the economics literature suggests that size economies may be found for fire services up to a population served of approximately 100,000.⁹ Table 5.3 presents some evidence on this question, displaying average per capita expenditures and expenditures per \$100 assessed valuation by departments serving populations in several size ranges.

Average per capita expenditures for fire protection generally decline as the size of the population served increases, from an average of \$66 per capita by departments serving fewer than 10,000 residents to \$34 per capita in those serving 50,000 or more. By this measure, size economies are present in fire protection, and economies might be captured by moving to larger service districts in St. Louis County. It is not clear, however, that population served is the best basis for such a comparison. Fire protection, unlike police or education, is a service focused somewhat more on property than on people per se, although population size is also an important factor. Expenditures per \$100 assessed valuation are not lower in larger jurisdictions. Jurisdictions that are smaller in population tend to have greater concentrations of property to be protected and, since fire services in much of the county are supported by property taxes, tend to have greater revenues from that property. On a property-protected basis, there is no evidence of size economies.¹⁰ The data available on arrangements for fire protection in St. Louis County, or rather the lack of data that would allow questions of service demand and quality to be addressed directly, preclude a definitive answer to the question of size economies. Earlier studies of fire protection in the county, conducted during the 1960s and, for a part of the county in 1981, found that economies could be achieved by merging smaller departments and jurisdictions.¹¹ Whether such economies remain to be captured today, and whether they are sufficient to overcome citizens' preferences for local control of fire services cannot be determined in this research.¹²

COORDINATED FIRE PROTECTION

Coordinated production of fire protection services is found throughout St. Louis County. Fire service providers, whether municipalities or fire protection districts, have adopted ordinances that enable their fire departments to respond to requests for emergency aid from another department. These ordinances authorize assistance to any jurisdiction that adopts a similar ordinance. All of the municipalities and districts with fire departments have adopted mutual aid ordinances, allowing mutual aid to be practiced in all parts of the county.¹³

Additional cooperative ventures have been worked out among the fire chiefs in the St. Louis area, including first-response agreements between adjacent jurisdictions; the enactment of uniform areawide recruit training standards; recruit training programs for entering fire fighters; joint training exercises for fire companies from different jurisdictions; joint dispatch centers for many of the departments; and the compilation of an inventory of apparatus and special equipment that can be requested in an emergency. This coordinated production of fire protection services has enabled the county to obtain more favorable fire insurance ratings than would have been obtainable otherwise.

With the exception of the St. Louis City Fire Department, all of the fire service producers in St. Louis are relatively small. Many have only a single fire company on duty at any one time and, therefore, could be exposed to service deficiencies in the event of a large fire or multiple small fires occurring simultaneously. Further, several of the fire service jurisdictions do not have a sufficient number of fire

	County Mu	Size Effect	Table 5.3 s in Fire Servio d Fire Protectio	ces: on Districts – 1	985	
Population Served ¹	Number of Departments	Totai Population (in thousands)	Fire Expenditures ² (in thousands)	Expenditures Per Capita ²	Assessed Valuation ¹ (in millions)	Equivalent Tax Rate ³
Under 10.000	11	74	4,866	66	888	0.55
10,000-20,000	12	173	9,755	56	1,700	0.57
20,000-30,000	8	184	6,458	35	1,230	0.52
30,000-50,000	8	314	14,634	46	2,711	0.54
More than 50.000	3	234	7,958	34	1,418	0.56

¹Including contract populations, land area, and assessed valuation.

²Does not include expenditures for emergency medical services. See discussion in text.

³Equivalent tax rate is the rate per \$100 assessed valuation required to raise the total fire protection expenditures of a department if the property tax were the only source of revenue.

stations, or do not have them located, so as to meet insurance industry standards with respect to distance to the nearest fire station. In the absence of mutual aid agreements, including first response where appropriate, citizens of these jurisdictions would pay significantly higher rates for fire insurance.

Mutual aid agreements alleviate service deficiency problems, especially in maintaining sufficient capacity to respond to emergencies. As phrased in one mutual aid agreement, "in the nature of firefighting work, it is always possible that a fire may rapidly grow so large that cooperation among different fire protection districts and fire services is a vital necessity to the public welfare."¹⁴ The agreements among the municipalities and districts in St. Louis County include provisions regarding compensation, liability for loss or damage, legal status of fire fighters and fire equipment when responding to a request for aid in another jurisdiction, command structures in multijurisdictional fire operations, and notification requirements. These agreements enable rapid response to requests for aid, avoiding the need for negotiation or obtaining authorization in emergency situations.

Calculations performed by the St. Louis County Department of Planning indicate that a number of areas in the county can be reached within three minutes from as many as four fire companies. These back-up capabilities provide extra fire-suppression capacity for fighting major fires.¹⁵ Substantial backup capabilities exist in areas of high residential densities and commercial-industrial concentrations (e.g., Lambert-St. Louis Airport).

The mutual aid pacts linking fire departments in St. Louis County have recently been extended to include St. Louis City. The extended plan, involving some 37 suburban fire departments in addition to the city department, received its first test early in 1988 when a major fire occurred in the city at the Royal Papers Building in midtown. Fire companies from St. Louis County and other surrounding Missouri counties responded, providing a force of 115 trucks to fight that fire, with additional trucks available to deal with another fire in one of the county fire protection districts at the same time.¹⁶

First-response agreements take mutual aid a step beyond responding to requests for aid only when another department has an extraordinary emergency. They are designed to place all citizens in the area within a reasonably close distance of a responding fire station, whether that station is in their own jurisdiction or not. These agreements specify areas where a fire company from an adjoining jurisdiction will respond automatically to a fire report, without the need for a request for aid, when that company is closer to the fire location than a station in the primary jurisdiction. As noted above, these firstresponse agreements also help to lower fire insurance rates. Through these agreements, fire service producers have extended their service delivery boundaries beyond their jurisdictional boundaries, thereby increasing their capacity to respond to service needs.¹⁷

Fire chiefs in St. Louis City and County as well as in adjoining counties, organized as the Greater St. Louis County Fire Chiefs' Association, have been instrumental in fostering cooperation and improvements in the fire services of the area. Recruit and in-service training has been a significant focus of this organization. Members of the association were instrumental in the adoption of an amendment to the St. Louis County charter that established minimum training standards for all recruits hired after January 1, 1984. These standards, recommended by the National Fire Protection Association, require ten weeks of training. In St. Louis County, the training must be completed within six months of employment. The standards are enforced by the St. Louis County Fire Standards Commission, a body that the Chiefs' Association helped to establish.

Association members arrange among themselves for the recruit training classes and in-service training, using the facilities of one of their members. They have been active in supporting the establishment of a St. Louis County Police and Fire Training Academy. The joint in-service training of cooperating fire companies from adjacent jurisdictions has contributed to the reduction of fire insurance rates in the county in recent years.

Another area of cooperation is the annual compilation of a Catalog of Apparatus and Special Equipment, prepared for the chiefs' association by Central County Emergency Dispatching Service. The catalog lists apparatus, equipment, and radio frequencies used by all of the departments in St. Louis (including departments in surrounding counties) and facilitates requests for aid and specialized equipment when needed in emergencies.

Yet another form of fire service cooperation has been the establishment of joint centers for the dispatch of fire and emergency vehicles. As discussed below, all of the fire protection districts and a few of the municipal fire departments are dispatched by one of three joint dispatch centers. These centers were established through cooperative agreements among the fire districts and departments involved.

FIRE AND EMERGENCY SERVICE DISPATCH

Dispatching of fire and emergency service producers in St. Louis City and County is linked by the areawide 911 emergency telephone system. Just as found in police services, this sharing of a common emergency network facilitates coordination of service production among the fire departments of the area. In addition, like the organization of police services, fire and emergency service dispatching is more concentrated than the production of basic services delivered directly to citizens. Twenty dispatch centers supply communications service to the 43 municipal and district fire departments in the city and county.

This concentration is most evident for the fire protection districts, none of which maintain their own dispatch centers. The districts are dispatched by one of three jointly established dispatch centers in the county. North Central County Fire Alarm Systems dispatches 13 district fire departments. Central County Emergency Dispatching Service dispatches five district departments and one municipal department, as does South County Fire Alarm. These joint arrangements for the production of dispatch services allow the districts to deploy more of their personnel for fire suppression activities, and contribute significantly to the implementation of mutual aid and firstresponse agreements among the districts.

The remaining seventeen fire and emergency service dispatch centers are located in municipalities that have their own local fire departments. With the exception of the City of St. Louis, which maintains separate dispatchers for police and fire services, these municipal dispatch centers are shared across police, fire, and emergency services and are, for the most part, operated by the local police departments. This enables municipal departments in the county, like their fire district counterparts, to deploy more of their personnel for fire suppression activities than would otherwise be the case. Three municipal fire departments do not use these arrangements. Crestwood and Frontenac are dispatched by joint centers shared with adjacent fire protection districts, and Shrewsbury, through a contract with its neighbor, Webster Groves.

FIRE SERVICE CONFLICT

Although cooperation and coordination among fire service producers in St. Louis County is widespread, conflicts arise occasionally. The primary source of such conflict is the revenue base of the fire protection districts—real and personal property. The districts rely on property taxes levied against this base for most of their revenues. Conflict can occur when the tax base is threatened by an annexation proposal from an adjoining municipality. Under Missouri law, citizens in an area that is the target of an annexation by an adjoining municipality must approve the plan by a majority vote. If the area to be annexed lies within the jurisdiction of a fire protection district, citizens vote separately to determine whether they will remain within the fire district or obtain fire services from the annexing municipality.

If the annexing municipality does not have its own fire department, conflict is unlikely because the annexed area will continue to be served by the fire district, and the district will continue to receive identical revenues, either from property taxes as before or in equivalent payments from the annexing municipality. If, on the other hand, the municipality proposing annexation maintains its own fire department, citizens may choose to receive services from that department, removing their property from the tax base of the fire protection district with no compensatory payment required of the annexing municipality. The boards of directors of some fire protection districts have opposed annexations when they feared that the voters would choose to change fire service jurisdictions. In other instances agreements have been worked out to avoid adverse impacts on the fire district, and its directors have supported the annexation.

A recent instance of opposition by fire district directors involved proposed annexations by the City of Hazelwood of territory within the Robertson fire protection district. It appeared likely that if the annexations were successful the voters in the annexed areas would switch to Hazelwood for their fire services, because Hazelwood's property tax rate of 34 cents per \$100 assessed valuation was less than one half of Robertson's rate, and Hazelwood provided fire protection service to its residents. The Robertson directors opposed the proposal vigorously, threatening to withdraw from their mutual aid agreement with Hazelwood if the annexations were successful. Hazelwood officials reported viewing this opposition as unwarranted, indicating that Robertson had "plenty of work and plenty of revenue increase in unincorporated areas," and that the small losses involved in the annexations should have little effect on the district.

The annexations by Hazelwood were successful and, as expected, the annexed area chose fire service provision by the city. The revenue base lost by Robertson led the district to close one of its fire stations. Robertson also followed through on the threatened withdrawal of mutual aid. According to some reports, Robertson was able to coerce an adjoining district to do likewise, threatening to withdraw aid from it if it did not break with Hazelwood. This conflict appears now to have been resolved, with restoration of mutual aid agreements, although there are still some harsh feelings.

A similar instance was resolved without acrimony when the City of Town and Country successfully annexed areas within the jurisdictions of the Manchester and the Chesterfield fire protection districts. Prior to the annexation, Town and Country had maintained its own combined public safety department, with officers serving both as police and fire fighters. Town and Country might have chosen to expand this department to supply all of the annexed area, substantially reducing the revenue base of the Manchester district and, to a lesser extent, the Chesterfield district. Had this been done, however, those districts might have been reluctant to continue mutual aid and first-response agreements.

To avoid this, officials of Town and Country advised residents in the newly annexed portions of the Chesterfield fire protection district to vote to remain in that district and advised residents in those portions of the Manchester district that were annexed to vote to have fire services provided by Town and Country. To prevent a major loss to the Manchester district, Town and Country officials proposed to disband the fire service portion of their public safety department and to enter into a contract for fire protection throughout the municipality. Two small municipalities lying within the borders of Town and Country would also contract with the Manchester district. New residents of Town and Country from the Chesterfield district chose to ignore the advice, voting instead to have fire service provided by Town and Country. Otherwise the plan was implemented as proposed, thus avoiding conflict with the Manchester district. An interesting feature of the contract is that Town and Country retained title to its fire station and equipment. Its mayor argued that this maintained the city's options in case of any future disagreement with Manchester.

While annexations of a fire district jurisdiction are a potential source of conflict, these examples indicate that conflict need not always occur. An agreement like the one between Town and Country and the Manchester district can avoid such conflict, allowing the maintenance of the vital mutual aid pacts in the county. To further protect mutual aid, officials might consider changes in the annexation laws that would require compensation of fire districts for capital investments made in service areas that are subsequently annexed, perhaps involving purchase of the facilities and equipment by the annexing municipality if it wishes to supplant the district as service producer for the annexed area.

FIRE SERVICE PERFORMANCE

Ideally, one would assess the performance of fire departments by comparing their fire incidence and loss records to those of other departments serving comparable areas. Practically, this is not possible, as data on fire incidence and/or loss are not maintained in any publicly accessible form.¹⁸ In the absence of such data, proxy measures of performance include the Insurance Service Organization (ISO) rating and evidence from surveys of fire service consumers.

A jurisdiction's ISO rating is based on water supply, equipment, personnel and their level of training, the distances fire trucks would have to travel to reach a fire, and the number of trucks available.¹⁹ The ratings range from 1 for the lowest risk jurisdiction to 10 for one with a high fire risk. Ratings of 9 and 10 indicate a lack of fire hydrants and more than five miles travel distance to the nearest fire station. Three-fourths of the fire jurisdictions in the county have an ISO rating of 4, considered a good rating in the fire service. The remainder have ratings of 5 or 6, with some areas rated 9 in the most rural portions of the county where there are no hydrants.²⁰ Ratings of most jurisdictions have improved during the 1980s, in part because of the new fire service training standards which have been adopted in St. Louis County and also because of enhanced mutual aid and first response agreements coupled with interjurisdictional training.²¹

Citizens in the St. Louis area appear to be well satisfied with their fire protection services. In 1982, 87 percent of city residents and 89 percent of county residents said that they were "somewhat" or "very satisfied" with fire services, the highest rating obtained by any service.²² In 1987, more than 96 percent of county residents said that their current fire protection is "good" or "excellent."²³ While not measuring service performance directly, these percentages suggest that fire services in St. Louis are very well thought of by their consumers.

CONCLUSION

A variety of jurisdictions are used to provide fire protection in St. Louis City and County. Citizens in different parts of the area have a different range of choices available to them-sometimes narrower, sometimes broader. The formation of the City of St. Louis was, implicitly, a choice to provide fire services through a large municipal unit. Conceivably, citizens could seek to alter this arrangement, perhaps by dividing the city into several fire protection districts, but such options are not currently available. New state enabling legislation would be required before citizens could exercise such a choice. Citizens of the unincorporated county, as long as they remain unincorporated, have no choice but to obtain provision by means of a fire protection district. District boundaries, however, are subject to citizen choice. In the event of an annexation proposal by an adjacent municipality, citizens in the area to be annexed retain a choice between district and municipal provision even if they vote favorably

for annexation. Citizens living in an unincorporated area may also decide on the incorporation of a new municipality that might provide fire services. Municipal incorporation does not necessarily entail provision of fire services, however. Citizens of county municipalities still may choose, collectively, between municipal and district provision. Given the opportunity to choose, citizens in different areas tend to make different choices, depending on their circumstances. The result is a complex, varied, and far from uniform pattern of jurisdictional arrangements.

In spite of, or perhaps because of, the complex set of jurisdictions found in St. Louis County, the functional arrangements for fire service production include a rich skein of coordination. Fire departments in the county regularly assist one another with personnel and equipment, arranging jointly to supply services where they are needed. Rather than finding themselves hampered by jurisdictional boundaries, fire service producers have for the most part agreed to work together across such boundaries. Most recently, fire service coordination has acquired a more extensive metropolitan dimension, with the addition of St. Louis City to suburban mutual aid agreements. The cooperative arrangements worked out by fire chiefs and municipal and district officials appear to be serving county residents to their satisfaction. In all but the most rural parts of the county, the functional arrangements associated with jurisdictional fragmentation have resulted in quite respectable fire insurance ratings.

-ENDNOTES-

- ¹Many producers of fire services in St. Louis also produce emergency medical services. The Chapter focuses on the fire protection activities of these producers only.
- ²Pacific and the Pacific Fire Protection District are not included in these counts, as Pacific has only 12 residents in St. Louis County. The reference to "one or more...fire protection districts" reflects the fact that several municipalities in St. Louis are bisected (and even trisected) by the boundaries of two or more fire protection districts.
- ³This count does not include as a separate department the fire district maintained at Lambert-St. Louis Airport by the City of St. Louis, nor fire companies organized by non-governmental entities such as the McDonnell-Douglas Corporation.
- ⁴If daytime population, including nonresidents employed in the city and persons entering the city for shopping and other purposes were included, as many as 250,000-300,000 additional persons should be added to the number served by the city fire department. Similar additions to populations served would be appropriate for major county employment and shopping areas. In 1980, county municipalities and fire districts with large daytime employment (in excess of 15,000 persons) included:

Area	Number of Employees
Berkeley	23,041*
Clayton	30,920
Community	21,675
Creve Coeur	31,715
Fenton	17,241
Hazelwood	19,706*
Maryland Heights	30,141

*Includes portions of Lambert Field and McDonnell-Douglas

SOURCE: Quoted from East-West Gateway Coordinating Council, "1980 Employment Data Base" in St. Louis County Department of Planning, *Fire Protection and Emergency Medical Services in St. Louis County*, a report prepared for the St. Louis County Annexation Study Commission, June 24, 1984.

- ⁵Of this amount nearly \$9 million was fire retirement payments. Direct expenditures for fire protection and associated communications were approximately \$21.5 million. The cost of EMS services in the city are not included in these figures.
- ⁶Expenditures discussed in the Chapter are for fire protection only, not including expenditures for emergency medical services (EMS) by those departments that produce them. EMS and ambulance expenditures were subtracted from total fire department expenditures for those departments (principally fire districts) which listed them separately. For the remainder, the percentage of total expenditures allocated to fire protection was taken as the same as that computed by the St. Louis County Department of Planning for expenditures in 1982 (see Note 4). This estimation process, while the best available, may not be wholely accurate, and readers should interpret results with some caution.
- ⁷Expenditures per \$100 of assessed valuation may be interpreted as an "equivalent tax rate," that is, the tax rate which would be required to support fire protection services if all revenues were raised by a tax on local property.
- ⁸See Confluence St. Louis, Too Many Governments? A Report on Governmental Structure in St. Louis City and County with Recommendations for Change (St. Louis: February 18, 1987), p. 22, citing 43 fire chiefs as "clearly inefficient" because of administrative costs incurred. However, fire chiefs of virtually all departments in the county are active fire fighters as well as administrators, more akin to fire company commanders in larger departments.
- ⁹See Werner Z. Hirsch, Urban Economics (New York: Macmillan Publishing Company, 1984), pp. 272-3.
- ¹⁰There is wide variation in expenditures per capita and per \$100 assessed valuation among the departments in each category. Expenditure and population estimates, together with actual assessed valuations are shown in the Appendix to this Chapter.
- ¹¹Analysis of Fire Protection Services: St. Louis County, Missouri (Westchester, Illinois: Gage-Babcock & Associates, December 1966); Douglas J. Harms, "Municipal Fire Service: An Alternate Approach," M.P.P.A. Exit Exam, University of Missouri-St. Louis, December 1981.
- ¹²On the issue of local control, see Market Opinion Research, "Public Opinion on Government Reorganization Alternatives for the City of St. Louis and St. Louis County" (Detroit: April 1982).
- ¹³St. Louis City has mutual aid agreements with municipalities and districts which surround the Lambert-St. Louis Airport, however. The city maintains a fire company at the airport (which is owned by the city), and this company co-

operates with surrounding jurisdictions and the private department maintained by the McDonnell-Douglas Corporation.

- ¹⁴Ordinance No. 2 of the Eureka Fire Protection District, dated October 18, 1984.
- ¹⁵For a graphic representation of fire service redundancy, see Confluence St. Louis, *Too Many Governments?* Appendix, p. 54. Confluence considered these back-up capabilities as evidence of service duplication rather than of valuable redundancy providing extra fire suppression capacity for major fires.
- ¹⁶"Mutual Aid Pacts Pass First Fiery Test," St. Louis Post-Dispatch, March 6, 1988, referring to fires that occurred during the evening of February 7, 1988.
- ¹⁷In the language of "public service industries," these agreements create "alternation in space" that transcends jurisdictional boundaries. That is, residents of a given fire jurisdiction may, as a result of such agreements, receive fire suppression services from one of two or more different fire producers, depending on their location in the jurisdiction. These producers do not duplicate one another's efforts, for they have agreed in advance on boundaries within which they will respond. In the case of major fires, where two or more companies from multiple jurisdictions respond, coor-

dinated production results, just as it would in a large jurisdiction (e.g., the city) that dispatched two or more fire companies to a major fire. For a discussion of the structure of public service industries, including both coordination and alternation patterns, see Elinor Ostrom, Roger B. Parks, and Gordon P. Whitaker, *Patterns of Metropolitan Policing* (Cambridge, Mass.: Ballinger Publishing Company, 1978).

- ¹⁸Such data might be available from fire insurers, but is not regularly compiled by any public organization.
- ¹⁹See St. Louis Department of Planning, Fire Protection and Emergency Medical Services, p. 5.
- ²⁰St. Louis County, Missouri Fact Book-1986 (Clayton: St. Louis County Department of Planning, 1986), p.89.
- ²¹On the latter point, see St. Louis Department of Planning, Fire Protection and Emergency Medical Services in St. Louis County.
- ²²Market Opinion Research, Public Opinion on Government Reorganization Alternatives. Approximately 1,000 citizens were surveyed, two-thirds of whom were county residents.
- ²³"Chesterfield and U. City Lead in Supporting McNary Remap," St. Louis Post Dispatch, November 27, 1987, pp. 1A and 6A. Approximately 2,500 county residents were surveyed.

		Fire Pro	Appendix T Otection Da	able 5.1 ata for St. Lo	ouis			
Municipality or District	Resident Population	Land Area	Assessed Valuation (thousands)	1985 Expenditures (fire only) ¹	Equivalent Tax Rate ²	Full-Time Fire	vnnel-Equi	•
City of St. Louis	453,085	61.37	2,744,652	30,208,208	1.10	670	42	30
Municipal Fire Depar			_,,					
Berkeley	16,491	4.87	124,698	781,674	0.63	20		
Brentwood	8,557	2.16	92,903	526.543	0.63	29 20	4 3	2 1
Clayton	14,022	2.54	276,546	756,563	0.27	33	3	i
Crestwood ³	12,198	3.15	112,571	544,654	0.48	28	3	1
Des Peres⁴	8,212	4.15	110,597	436,689	0.39	16	3 3 2	1
Ferguson	23,936	5.23	122,858	836,420	0.68	18	2	2
Frontenac ³	3,626	2.90	77,503	375,150	0.48	13	1	1
Glendale ³	6,113	1.32	47,771	374,695	0.78	22	2	1
Hazelwood	15,790	4.90	188,044	1,177,975	0.63	33	5	2
Jennings ³ Kirkwood	17,341 28,013	3.78 8.94	74,352 212,445	748,362 1,130,517	1.01 0.53	24 38	4	1
Ladue	9,380	8.57	203,125	952,064	0.55	38	4	3 2
Maplewood	10,498	1.55	60,570	409,129	0.47	19	3 2 2 2	2
Olivette	7,875	2.76	80,951	708,283	0.87	22	2	1
Richmond Heights	11,216	2.35	104,119	436,970	0.42	19	2	1
Rock Hill	5,567	1.08	33,110	248,578	0.75	11	1	1
Shrewsbury	5,081	1.42	44,700	196,053	0.44	17	1	1
University City	42,929	5.86	218,184	1,247,846	0.57	50	5	2
Webster Groves	23,149	5.79	168,927	918,486	0.54	41	3	2
Total Municipalities	269,994	73.32	2,353,974	12,806,652	0.54	485	52	27
Fire Protection Distri	cts							
Affton	39,000 5	8.005	243,604	984,543	0.40	32	4	3
Ballwin	41,000	54.00	376,537	2,223,493	0.59	39	6	3 3
Black Jack	37,000	26.00	235,041	1,175,205	0.50	25	2 5	2 4
Chesterfield	38,000	63.00	555,931	3,859,795	0.69	59	5	
Community	56,000	11.00	307,136	1,665,481	0.54	45	3	3 2 2
Creve Coeur Eureka	39,000	16.00 43.00	515,730	2,115,757	0.41 1.03	46 15	2	2
Fenton	10,000 16,500	43.00	51,149 250,421	524,901 1,521,856	0.61	31	4 4	2
Florissant Valley	81,000	22.00	386,913	2,092,086	0.54	42	5	3
Kinloch	4,500	1.00	8,324	36,859	0.44	5	1	1
Lemay	21,000	5.00	102,697	487,061	0.47	20	2	1
Manchester ³	36,500	16.00	268,813	2,062,340	0.77	43	4	3 2
Maryland Heights	21,000	9.00	316,265	1,158,515	0.37	36	5	2
Mehlville	96,500	47.00	724,024	4,200,956	0.58	75	8	7
Mid-County	17,000	4.00	94,274	867,321	0.92	24	3	1
Moline	24,000	4.00	89,413	620,729	0.69	14	1	1
Normandy Pattonville-	37,000	7.00	127,081	965,363	0.76	28	4	1
Bridgeton Terr.	14,000	16.00	181,373	848,989	0.47	28	3	2
Riverview	22,000	7.00	100,858	605,148	0.60	16	2	2 2
Robertson	14,000	16.00	164,675	1,136,258	0.69	33	4	3 2
Spanish Lake	21,000	15.00	116,782	700,692	0.60	20	2 2	
Valley Park	4,000	9.00	50,990	428,316	0.84	10	2	1
West Overland	8,000	3.00	102,716	582,584	0.57	18	2	1
Total Fire Districts (continued on next page)	698,000	421.00	5,370,747	30,864,248		704	78	52

Appendix Table 5.1 (cont.) Fire Protection Data for St. Louis								
Municipality or District	Resident Population	Land Area	Assessed Valuation (thousands)	1985 Expenditures (fire only) ¹	Equivalent Tax Rate ²	Full-Time Fire	nnel-Equi	•
Contract Cities								
Country Club Hills	1,357	0.17	4,934	46,694	0.95	NA	NA	NA
Country Life Acres	77	0.12	2,297	17,720	0.77	NA	NA	NA
Crystal Lake Park	485	0.10	5,030	15,777	0.31	NA	NA	NA
Flordell Hills	855	0.12	3,317	31,593	0.95	NA	NA	NA
Huntleigh	486	0.99	10,598	15,935	0.15	NA	NA	NA
Oakland	1,747	0.60	9,131	35,421	0.39	NA	NA	NA
Town and Country	3,460	9.38	162,472	689,012	0.42	NA	NA	NA
Warson Woods	2,239	0.56	24,382	129,272	0.53	NA	NA	NA
Total Contract Cities	10,706	12.04	222,161	981,423				

NA – Not Applicable. 1Does not include expenditures for emergency medical services. See discussion in text. 2Equivalent tax rate is the rate per \$100 assessed valuation required to raise the total fire protection expenditures of a department if the property tax ware the only source of revenue. 3Department produces for additional population under contract. 4Combined fire-police public safety department. Expenditure estimated for fire protection only. 5Population and land area from "Fire Protection and Emergency Medical Service in St. Louis County," Clayton, Missouri: St. Louis County Planning Department, June 25, 1984.

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Chapter Six

Streets and Street Services

INTRODUCTION

Four different types of jurisdictions are involved in street service provision in St. Louis: the state, the county, municipalities, and private subdivisions. Nearly all of the 90 municipalities in St. Louis County provide street services.¹ County government provides both residential street services in unincorporated areas and arterial street services countywide. The state is also a significant provider of street services in the St. Louis area by virtue of the numerous state highways routed into the region. When private subdivisions are included, the provision of street services is by far the most fragmented of any local service in St. Louis.

Subdivisions, although legally private jurisdictions, function as collective provision units in a manner very similar to a municipality. Ranging in size from a few to more than a hundred homes, subdivisions are governed by a board of trustees elected annually at a meeting of property owners. The legal basis for a subdivision is a "trust indenture" attached to each parcel of property. Besides providing for trustees, the indenture obligates each property owner to an assessment for the maintenance of "common grounds," which in St. Louis County, and to some extent in St. Louis City, often includes streets. Payment of the assessment is treated as a lien on the property, thus providing an eventual, though not immediate, enforcement mechanism.

Shared responsibility between overlapping jurisdictions for both residential and arterial types of streets, but not for particular streets, is the general pattern of provision. In the incorporated area of the county, subdivisions and municipalities share responsibility for residential streets, while in the unincorporated area, the same responsibility is shared (to a lesser extent) between subdivisions and county government. Throughout the county, arterial street responsibility is shared by state and county governments. In St. Louis City, residential street responsibility is shared by city government and subdivisions (though the city is the dominant provider), while arterial responsibility is shared by state and city governments.

Provision units frequently are not involved in street service production. Subdivisions and small municipalities tend to contract out privately for the production of most street-related services, while larger municipalities (those over 5,000 population) tend to produce most services in-house. Production units include the St. Louis County Department of Highways and Traffic, the state highway department, departments of streets or public works and departments of planning in most mid-to-large municipalities, and an undetermined number of private firms.

THINKING ABOUT STREETS

In economic terms, streets can be understood as a local public good and common pool facility. As a public good, streets are made available to all if made available to one. This implies nonexclusion—in the case of streets, due to the high cost of excluding individual users. Only a very weak form of exclusion can be maintained by means of vehicle licensing. Demand for streets therefore tends to be expressed collectively through various nonmarket institutions.

As a public good, streets also exhibit jointness: many individuals use the same facility together, at the same time. Streets are, however, a "congestible" public good, that is, there is some maximum number of users after which each user begins to subtract from the use of others. Once supplied, streets can also be considered common pool facilities, and, as such, present a number of problems affecting the ability of individuals to use street facilities jointly. Users can subtract from one another's welfare in a variety of ways, such as excessive vehicle weights and speeds. Rules of the road, adjusted for the type of street and its intended uses, are a response to the common pool problem inherent in street use. Depending on the rules, any one user-or any one type of use-can potentially dominate others. Somehow the interests of truckers, motorists, pedestrians, and street-side residents must all be accommodated to one another in the use of a street system.² Managing or governing the relationships among diverse users is an essential element in the provision of streets.

The uses of streets are more varied than is ordinarily supposed. Getting from one place to another by motor vehicle is a problem that varies somewhat between short trips and long trips. Different types of motor vehicles place varying demands both on the facility and on other users. Use by heavy trucks is different than use by passenger cars. It is also useful to distinguish access as a special problem distinct from traveling between two points. In the common law, the owners of "abutting property" enjoy a legal right of reasonable access to a public street system. A street that facilitates access, however, may not facilitate through-travel.

Streets are also used by pedestrians and nonmotorized vehicles, for whom the street right-of-way is frequently used to provide sidewalks or—in a more recent innovation—bicycle paths. Outside the rightof-way, but affected by its use, are those who reside or do business along a street. In the common law, these abutting residents or users may have rights to be free of nuisance (e.g., dust or noise) caused by the street and its users. More generally, a street has neighbors, and these neighbors can be the recipients of either positive or negative spillover effects as a result of street location, design, or use. From this perspective, one of the uses of a street, to be accommodated by providers, is to make a residence or place of business along its path.

Streets are characterized, therefore, by a number of interdependent uses—in part complementary, in part competitive. One response to the competitiveness of uses is to sort different types of users among different types of facilities. Between a limited access, median-separated highway and a residential cul-de-sac lies a considerable range of street facility types. Some streets are used mainly for the rapid movement of high volume traffic while others serve primarily for access to residences and to accommodate children at play. The separation of uses, however, has difficulties: (1) uses can never be completely separated in the absence of effective exclusion of individual users, given the interconnectedness of a street system and (2) the congestibility of streets means that street uses sensitive to high volume traffic can be threatened as motorists seek out less traveled streets to avoid congestion. Those who derive a benefit from high volume streets, such as commercial developers, may be in conflict with those who feel negative spillover effects from high traffic volume, such as abutting residents.

The provision of streets and related street services presents, therefore, a somewhat complex governance problem. Provision includes decisions about facility location, type, design, and subsequent regulation of use. Various communities of interest, from those quite small in scale (e.g., a group of neighbors) to those of wider scale (e.g., commuters), must be taken into account. The economic demand for streets is far from homogeneous in a metropolitan area such as St. Louis. Jurisdictional arrangements for the provision of streets might be expected to develop in a highly differentiated fashion, including both fragmentation and overlap, to the extent allowed by the rules for the formation of local jurisdictions.

Street provision can be sorted into five basic service components, each associated with somewhat different production processes:

- (1) Development, including design, location, and level of capital investment;
- (2) Surface maintenance—both preventive and repair;
- (3) Maintenance of the right-of-way, including services such as sweeping and cleaning, mowing, tree trimming, snow removal, and street lighting;
- (4) Reconstruction—rebuilding an existing street, sidewalk, or curb; and
- (5) Regulation of use, including access restriction, rules of the road, and parking.

Streets can also be sorted into three basic facility types:

- (1) Arterial streets—often limited access, usually higher speed and higher traffic volume;
- (2) Residential streets—specialized to local access, low speed and low traffic; and
- (3) Collector streets—that link residential streets to arterial streets.

Facility type and location serve as the primary basis for distributing street provision responsibilities among various provision units. Service components tend to serve as a basis for distributing production among production units. The analysis of street provision and production that follows is organized first by service component and, within service component, by facility type. Surface maintenance and right-of-way maintenance are collapsed in this discussion because the same provision units, and frequently the same production units, tend to be involved in both types of maintenance on the same facilities. Collector streets are also collapsed with either arterial or residential streets, while maintaining the distinction where salient to the discussion.

DEVELOPMENT

Arterial Streets

Arterial responsibility is shared between state and county (between state and city in St. Louis City). The state highways routed through the region and the county's arterial road system both serve a high-speed, high-volume, traffic function. State and county highway planners, while organized separately, also coordinate extensively out of necessity. The resolution of traffic congestion problems in particular locations frequently requires a joint statecounty effort, especially where county and state highways intersect. Because each jurisdiction may represent somewhat different communities of interest, the arrangement may also require negotiation.

Both state and county enjoy preemptive powers. Neither the county nor other local units can veto a highway location decision made by the state. The county government also can transfer a municipal street (but not a private street) to county jurisdiction by incorporating it into the county arterial system. In this sense, the wider scale interests associated with high-volume transit have a legally superior position. Yet other communities of interest also have influence in county government.

As provider of the county arterial system, the county government has an important role, alongside the state highway department, in highway planning and development. It is this function for which county officials have been heavily criticized in recent years with respect to increasing traffic congestion in parts of the county. Traffic congestion was viewed as a major issue in the recent Chesterfield incorporation. Moreover, a fatal traffic accident, plus perceived lack of responsiveness by county government to local demands for traffic regulation, was the impetus for incorporation discussion in Oakville, an area in South County, ongoing during the field research for this report in 1986.

Advocates of incorporation in the new City of Chesterfield argued that the entire county was an inappropriate collective unit to express the demand for arterial street development in parts of the county, especially the rapidly growing parts. Countywide bond issues to support highway development have sometimes been defeated at the polls while enjoying substantial support in fast growing areas of the county, such as Chesterfield. Countywide road bond issues were approved, however, in 1955, 1965, 1969, 1977, and 1986. Incorporation activists envisioned a significant highway development role for their projected city. Current law, however, gives a predominant position to state and county governments, although a municipality is not precluded from constructing new streets and roads or improving existing streets. The legal position of a municipality is weak if the effort is to oppose a new highway development, or to modify its design, but municipalities remain free to add their highway development efforts to those of the state and county, realizing that county government could assume jurisdiction over a newly constructed road. The immediate concerns of Oakville incorporation activists are somewhat less likely to be fully addressed by incorporation, insofar as county government would retain its present jurisdiction over arterial streets and roads in a newly incorporated city.

One way to conceptualize the role of a municipality in street development is as a specialist in collector streets. The newly expanded City of Town and Country is beginning to view itself in this light, and the newly incorporated City of Chesterfield could move in this direction. Collector streets, nevertheless, are closely related to arterial streets. As new municipalities are formed in the midst of rapid economic growth, the planning and development of arterial streets is likely to become a threeparty concern, with the resolution of problems negotiated among state, county, and municipal officials.

County government has begun to tie economic development to highway development by means of a "traffic generation assessment" fee, charged to developers as a condition for obtaining building permits. Although the legal basis for denial of a building permit on these grounds is unsettled, developers usually choose to pay the fee rather than litigate the issue. The county government recently came to an agreement with area developers (represented by the Home Builders Association) that stipulates assessment rates to be assessed uniformly on each development. The agreement was negotiated through the Road Development Advisory Board appointed by the County Executive. In this way, developers can be required to pay for extensive improvements to the highway system in the immediate vicinity of their project, based on the additional traffic being generated. County officials have unsuccessfully sought state legislation that would enable them to use the

revenue collected from traffic generation assessment fees anywhere in the county.

The federal aid urban highway program is a major source of funds for capital improvement projects. Other funding sources include countywide bond issues and a transportation sales tax. New highway development must sometimes compete with reconstruction of existing facilities for funding from these sources. Capital improvement projects include interchange and bridge improvements as well as resurfacing and concrete replacement.

Residential Streets

The development of purely residential streets is a much different problem from the development of arterial streets. The critical difference is that residential street development can be more closely tied to housing development. Those making the basic development decisions with respect to residential streets tend, therefore, to be housing developers. This generalization holds both historically and at present in St. Louis County. Initial decisions of design and capital investment are private, subject to market constraint and local government regulation.

These development decisions include a choice of subsequent provision arrangements for obtaining street services. It is the developer who initially attaches trust indentures to subdivision parcels and thereby establishes the subdivision as a legal unit with collective organization. Whether streets are public or private is also determined in most cases at the developer's discretion.

Various public interests in residential street development are represented indirectly by means of county and municipal subdivision regulation. The relevant production units are the St. Louis County Department of Planning (for the unincorporated county), the City of St. Louis Community Development Agency, and other municipal planning departments. In order for subdivision streets to be accepted by the county or municipality, construction has to be performed according to standard. Most standards now apply whether streets are to be private or public, including pavement thickness in unincorporated St. Louis County. If the streets are to be private, the county requires the developer to provide for a trust indenture and board of trustees. At least one municipality-Manchester-requires that all subdivision streets be constructed to the municipal standard for acceptance by the city, thus precluding the development of private streets.

MAINTENANCE

Arterial Streets

At the end of 1985, the county arterial system included 397.22 miles of streets.³ Maintenance serv-

ices are produced by the maintenance division of the county Department of Highways and Traffic. The major funding sources are county sales taxes. Local property taxes are not used to support the arterial system. State highways in the county also provide arterial service and are maintained by the state highway department.

Residential Streets

Responsibility for residential street maintenance is shared between subdivisions and municipalities in the incorporated portion of the county and, to a lesser extent, between subdivisions and the county government in the unincorporated portion. Subdivisions account for a major percentage of street mileage in only six municipalities, and are the dominant type of provider in two municipalities. Nine cities in the county spend more than \$1 million on street services (and other public works) annually.

The total number of subdivisions providing street services in St. Louis City and County is unknown. A total of 427 street-providing subdivisions are reported in 27 municipalities, but these figures are incomplete. Within the incorporated area of the county, the greatest number of subdivisions are concentrated in a cluster of municipalities consisting of University City, Clayton, Ladue, Richmond Heights, Creve Coeur, Olivette, Kirkwood, and Town and Country. Ladue and Olivette are virtually blanketed by street-providing subdivisions. Ladue (population 9,349) has 143 subdivisions; Olivette (population 7,952) has 90 subdivisions. Town and Country, prior to a recent annexation of additional territory. also consisted almost entirely of private streets in an estimated 90 subdivisions. University City, Clayton, Richmond Heights, Creve Coeur, and Kirkwood mix municipal and subdivision provision, but with greater reliance on municipal provision. The number of county (nonmunicipal) subdivisions that provide street services could not be determined, although county officials say that private streets are less common in the unincorporated area. A small number of street-providing subdivisions can also be found in St. Louis City. Many of the smaller municipalities in the county originated as subdivisions and are also entirely residential, having little or no state or county street mileage within their boundaries.

To study street provision by subdivisions in St. Louis County, data on 53 subdivisions were collected from a sample drawn from Ladue and Olivette, where private streets are dominant, and from University City and Clayton, where private streets are less prevalent. Information was collected by telephone interviews with subdivision trustees and mail-in questionnaires.

Table 6.1Percentage of Subdivisions thatProvide Common Street Services			
Service	Percent Providing	Sample Size	
Snow Removal	94	53	
Street Repair	92	49	
Sweeping	47	53	
Mowing	41	51	
Tree Trimming	36	53	
Street Lighting	31	52	
Other Street Services	* 17	53	
Nonstreet Services Access Restriction or	15	53	
Traffic Control Recent Capital	36	53	
Improvement	57	53	
*Entrance lights and signs provided.	are the major "c	ther" services	

Subdivisions as Street Maintenance Providers

The most common street services—indeed the most common services of any kind—provided by subdivisions are street repair and snow removal. More than 90 percent of the 53 subdivisions surveyed for this study provide these two services. Other street-related services include sweeping, lighting, tree trimming, and mowing. Although only a few subdivisions provide a full range of these services, the average number of different services reported is almost four per subdivision (including nonstreet services).

As indicated in Table 6.1, subdivisions make use of their ability to choose a mix of services in accordance with their preferences. The result is considerable variation in service bundles across subdivisions. Provision by subdivisions allows for greater variation in service bundles than would provision by an overlying municipality. By and large, subdivisions are not supplementary service providers, augmenting service provision by municipalities, but independent providers who either provide for themselves or do without. The only general exceptions noted are street lighting, which in University City is supplementary to municipal provision, and nonstreet services, such as a security patrol. A few municipalities provide selected services free of charge to subdivisions-snow removal by the cities of Creve Coeur and Webster Groves, a broader range of services including minor surface repair by the City of Kirkwood.

The mean annual subdivision assessment, for a group of 39 subdivisions, is about \$130 per house-

hold.⁴ The reported assessments vary widely, from a low of \$25 to a high of \$800. All but two cases, however, lie between \$25 and \$275; the mean assessment computed over this range is about \$103. In a small percentage of cases, subdivision assessments also support nonstreet services, such as trash collection, a private security patrol, or park maintenance. (Assessments may also vary substantially from year to year as subdivisions occasionally undertake extraordinary projects best understood as capital improvements and discussed below.)

Some interesting variation in subdivision assessments occurs among the four municipalities studied: University City (N=6), Clayton (N=6), Olivette (N=18), and Ladue (N=23). For this portion of the analysis, data for University City (population 42,690) and Clayton (population 14,306) are collapsed. Both cities are more urban than the others and have a more similar socioeconomic composition. University City is the more heterogeneous of the two; Clayton is upper-middle in income. Olivette (population 7,952), on the other hand, is a rather densely populated, but quite suburban, upper-middle income community, while Ladue (population 9,369) is a large-lot suburb considered to be one of the richest in America.

Subdivisions in Olivette tend to have the lowest assessments by far-averaging \$67 per household. Assessments in Ladue are almost twice that amount-averaging \$123 per household. Two factors may contribute to this difference: (1) the greater wealth in Ladue and (2) the lower density of population, probably increasing the ratio of street miles to households. The average assessment in University City-Clayton, however, is still higher-\$292 per household, though the mean score for this group is driven up by a single subdivision reporting an \$800 assessment.⁵ The average total number of services provided (not counting access restriction) also varies. It is highest in University City-Clayton-5.7 out of a possible 9, explaining the high assessments found there, and lowest in Olivette-3.3. Ladue, somewhat surprisingly, has a score of only 3.8. Perhaps the greater number of services provided in University City-Clayton is linked to the more urban character of those communities. Greater wealth in Ladue does not lead to a greater number of services provided, though it may lead to somewhat better street conditions. The state of street repair is reported to be somewhat worse in Olivette, better in University City-Clayton, and better still in Ladue, although the differences reported are not statistically significant.6

A difference also exists in service provision equity between subdivisions in Ladue and Olivette, where street-providing subdivisions virtually blanket the city, and those in cities such as University City and Clayton, where street-providing subdivisions cover only a portion of the city. In the latter cases, residents of street-providing subdivisions must pay to support municipal street provision from which they gain only a partial benefit. The subdivision assessment is paid on top of a municipal tax bill to support residential street provision elsewhere in the city. In order for a subdivision to be cost effective, the added benefit from subdivision control in University City and Clayton, as compared to municipal control, must be worth the entire amount of the subdivision assessment. By contrast, in Ladue and Olivette, virtually all residential street maintenance is private. In this circumstance, the cost effectiveness of private streets requires only that the subdivision assessment be worth the entire benefit gained from services provided.7

A multivariate analysis of the 39 subdivisions for which data on household assessments is available shows that two variables are significantly related to the amount of the household assessment:

- Whether or not the subdivision restricts vehicular access or traffic flow in any way;
- Total number of services provided.

Access restriction is included here as a proxy for the "urban character" of a subdivision. Together, these two variables measure the demand of residents for services—one somewhat more directly than the other. The age of a subdivision and the number of households, on the other hand, are not significant in this equation. Both of these variables can be used to reflect the cost of supplying a given range of services demanded. Subdivision age may increase the costs of supply while a greater number of households may decrease the costs of supply per household. These findings indicate that the level of subdivision assessments within this small sample tends to vary with the level of demand for services, and is explained more on the demand side than on the supply side.

The 53 subdivisions surveyed were asked to evaluate the condition of their streets. Their responses were coded on a four point scale: poor, fair,

•••••	<i>Table 6.2</i> sions' Evaluation eet Conditions	n of
Evaluation	Frequency	Percent
Poor	2	3.77%
Fair	8	15.09
Good or Average	28	52.83
Excellent	<u>15</u>	<u>28.30</u>
Total	53	100.00%

P Pro	Table 6.3 ion between Mu opulation Size a duction Arrange -Routine Street Maintenance	nd ment
Population	Number of Contracting Municipalities	Number of in-house Production Municipalities
500 or less	5	0
501-1,000	4	1
1,001-2,000	4	3
2,001-5,000	1	7
5,001 or more	Q	20
N = 45	14	31

good, excellent. As Table 6.2 shows, the responses are heavily skewed toward a favorable evaluation. More than 80 percent of the sample appears to be satisfied with the quality of street maintenance they are able to provide.

Subdivisions overwhelmingly tend to be pure provision units. Only a few of the smallest subdivisions produce street repair services for themselves, the vast majority choosing instead to contract with either a private firm or the overlying municipality. Those that do self-produce tend to do so not by organizing a separate production unit but by pooling their efforts as household "do-it-yourselfers." One large subdivision has a full-time employee, hired to do snow removal and mowing. Olivette produces both sweeping and snow removal for most of its subdivisions under contract, except a few of the larger ones. Clayton produces street sweeping under contract to all 11 subdivisions. For street repair, subdivisions usually contract privately.

Municipalities as Street Maintenance Providers

The smallest municipalities, like the subdivisions they closely resemble, also tend to produce few if any street services and instead contract with private producers. Analyzing data collected from 45 municipalities,⁸ there is a clear relationship between population size and the use of contracting. In this group, no municipality with a population of less than 500 produces street repair or snow removal in-house, and no municipality with a population greater than 5,000 contracts to obtain these same services. Table 6.3 displays a detailed breakdown of street repair production arrangements by the population size of municipalities.

For all street-related services, municipalities of more than 4,000-5,000 people employ a mix of con-

tract services and production by their own crews, but tend to favor in-house production. The vast majority of all municipalities for which data is available reported using contract production for resurfacing and major repairs. These services are followed, in the frequency of reported contracting, by street lighting and tree trimming (but among municipalities with a population greater than 5,000 only a few cases are found). The same group of municipalities reported no intermunicipal contracts for street services and only a few joint service agreements.

Municipal expenditures for streets or public works are reported annually to the state auditor. The average municipal expenditure for street services in 1985 (or the most recent year reported)⁹ was about \$104 per household for the 61 municipalities in St. Louis County that reported street expenditures separately from public works.¹⁰ The average expenditure for the 18 municipalities that reported all public works was about \$175 per household. The street expenditures figure is virtually equal to the average annual subdivision assessment, noted above, of \$103 per household.¹¹

Analyzing data available for 34 municipalities, those that contract out for street repair spend significantly less per household on street services than those that maintain their own street departments, controlling for the median household income in each municipality (which is positive and significant in its relation to street spending per household for this group). In other words, wealthier communities tend to spend more, but controlling for wealth, contracting communities spend less per household (though this finding should be treated with caution since data on contracting is not available for all municipalities in the county). Furthermore, no significant relationship exists between the population size of a municipality and street expenditure per household in a larger group of 61 municipalities for which comparable data are available.¹² Larger communities do not tend to spend more. These two findings are mutually supportive. Overall, size makes no difference in the level of spending per household, but in the smaller group for which data are available, contracting (exclusively by small municipalities) does make a difference. The lack of a relationship between population size and spending per household suggests no apparent economies of scale in street service production. The absence of size economies can perhaps be explained by the negative relationship between contracting and spending per household: small municipalities (and subdivisions) are able to take advantage of economies of scale in production by contracting out.

It is still possible, however, that the inability to distinguish among street service conditions, such as the original capital investment and traffic volume, in this analysis, as well as the inability to determine service quality, could mask the existence of size economies.

County Government as Residential Street Maintenance Provider

At the end of 1985, St. Louis County government was responsible for maintaining 1,142.46 miles of nonarterial county streets and roads. Its estimated maintenance expenditure on this system in 1985 was over \$14 million.¹³ This makes the county government by far the largest residential street maintenance provider in the county. Each of the largest municipal providers spent in the neighborhood of \$2 million on roughly 100 miles of streets, or less. County government was not, however, the highest level provider in terms of expenditures per mile. As an approximation, county government spent an estimated \$13,000 per mile to maintain the county (nonarterial) system in 1985.¹⁴ This compares to an average of \$10,694 per mile for 30 municipalities, over a broad size range, for which data were available. Considering only the seven municipalities with a population of 10,000 or more (for which data were available), the average municipal expenditure was \$18,424 per mile, ranging from a low of \$7,985 to a high of \$30,604. Clearly, a number of municipalities spent more per mile than did the county government to maintain residential streets, and a number spent less. Expenditures may be a weak indicator of service quality, however, and it is not known from this research what value in service county or municipal residents receive for their tax dollars.

The county Department of Highways and Traffic produces all maintenance services through its division of maintenance, except for some resurfacing projects and other projects classified as capital improvements and contracted out. The services produced by the maintenance division include preventive maintenance (selective seal coating and undersealing), snow and ice control, tree planting, bridge and culvert repairs, and storm sewer repairs. The division of traffic produces pavement striping, and erects and maintains signs and traffic signals.¹⁵

RECONSTRUCTION

The major problem that may face a street providing subdivision is the need for reconstruction. Sometimes the need for substantial reconstruction or replacement is an occasion for improving the streets to a municipal or county standard and transferring jurisdiction to the overlying municipality or to the county government. A number of subdivisions in University City have elected to do just that over the years, at the invitation of the municipal government.¹⁶ Nevertheless, many of the 53 subdivisions studied are willing and able to engage in substantial capital reinvestment. Fifty-six percent of the sample experienced some sort of extraordinary expenditure during the past five years, ranging from \$24 to more than \$2,000 per household. Thirty-nine percent have done major reconstruction during the same period, and 37 percent anticipate future expense of this sort. The average reinvestment-project cost, for those subdivisions with reinvestment projects, was just over \$650 per household. None of the subdivisions surveyed, however, report any indebtedness.

Reinvestment seems to be cyclical. If the subdivisions are sorted by age and cut into four categories, a definite pattern emerges. For those subdivisions 20 years old or less, only 20 percent (1 out of 5) reported reinvestment expenses. For those between 20 and 40 years old, 82 percent (14 out of 17) reported reinvestment. Yet for those between 40 and 60 years old, only 24 percent (4 out of 17) reported any reinvestment. In subdivisions more than 60 years old, however, reinvestment activity is again higher, with 62 percent (5 out of 8) reporting such an expense.

Relatively little interest was found among the 53 subdivisions studied for transferring their street jurisdiction to the overlying municipality. A little more than two-thirds of those responding either indicated no interest in such a change or expressed opposition to it. Those recently experiencing higher capital reinvestment costs per household, however, appear somewhat more inclined to want to shed jurisdiction, or at least entertain the possibility.¹⁷

Reconstruction can also pose special problems for municipalities, frequently requiring bond issues to be approved at the polls. Voters in the City of Webster Groves (population 23,097), for example, recently gave three-fourths approval to a \$15 million bond issue to improve its 103 miles of streets. Passage of the bond issue was a major community undertaking enlisting both municipal officials and citizen volunteers.

For county government, on the other hand, reconstruction is a routine responsibility. The division of construction supervised 28 completed projects in 1985, totaling approximately \$12.3 million. All were contracted out. Reconstruction projects are funded from countywide bond issues and the federal aid urban highway program.

REGULATION OF USE

Arterial Streets

The legal power of the county government to act as a provider of arterial streets is preemptive in nature. The county council is authorized by state law to transfer any street to its jurisdiction as part of the county arterial system. In so doing, the county not only takes on the responsibility of maintenance but also assumes full control over traffic regulation (e.g., speed limits) and the placement of traffic signals, as well as design. This capability on the part of county government potentially constrains traffic regulation by municipalities that would seek to restrict traffic flow. By removing the ability of municipalities to establish speed limits on certain high-traffic streets. the county can also limit the use of speed traps, although municipal police departments retain traffic enforcement powers over the arterial system within their jurisdiction and can maintain the level of enforcement they choose while keeping the revenue collected from fines for the municipal treasury.

Residential Streets

One of the major services provided by subdivisions that control their own streets is access restriction. Throughout much of University City and Clayton, streets that would otherwise provide access to subdivisions from city streets are chained off or barricaded. Residential streets within these subdivisions cannot conveniently be used for through traffic and become restricted to local access use. While not physically denying entrance to vehicle users, the effect is to protect neighborhood streets from potential congestion and high volume traffic. Subdivisions also may place speed bumps on their streets. Some also restrict parking. Small municipalities often provide much the same sort of access restriction.¹⁸

The ability of subdivisions to determine street regulations is, from the perspective of residents, one of their main advantages. An analysis of the 53 subdivisions sampled in this study indicates that subdivisions restricting access, or controlling traffic in other ways such as using speed bumps, are more likely to express a strong preference for retaining ownership and control of their streets. This capability is apparently of sufficient value to subdivision residents in University City and Clayton that they willingly choose to pay the added cost of a subdivision assessment.¹⁹

Oscar Newman, an architect and well-known advocate of "defensible space" as an approach to crime control in residential areas, studied street providing subdivisions in University City and nearby in St. Louis City, comparing "private streets" to "public streets." He found that private streets, with restricted access, had lower crime rates, higher perceptions of security on the part of residents, higher property values for similar housing, higher assessed valuations, and higher rates of home ownership. Three factors may contribute to these results: (1) street closure, (2) the existence of an association of which all residents are members, and (3) deed covenants that restrict the conversion of property to multifamily use.²⁰ The research was unable to sort out the effect of one factor from another. The City of St. Louis has recently instituted an extensive street closure program for the explicit purpose of controlling crime and promoting cooperation among neighbors. This program will offer an opportunity to study the effect of access restriction without formal association and community control through deed covenants. Municipal programs and policies, however, may come and go. When subdivisions own their streets, access control is an attribute of private property that cannot be taken for public use without just compensation. A municipality seeking to compel public access would be required to purchase an easement from the subdivision. Under subdivision ownership, access restriction is a private prerogative that cannot be taken away through public regulation.

Yet all municipal subdivisions do not engage in access control. Comparing across the four municipalities studied for this report, University City and Clayton-the more urbanized areas-report the highest rate of access restriction, 75 percent of the 12 subdivisions in the sub-sample. By comparison, 35 percent of the subdivisions in Ladue report access restriction, and only 11 percent in Olivette. Officials in the City of Creve Coeur report that only a few of its street-providing subdivisions restrict traffic on their streets. Of course, traffic restriction can also be achieved by means of the street pattern, without any need for closure. Most of the street-providing subdivisions in the City of Town and Country, for example, obtain restricted access through physical design and layout that avoids the grid pattern common in earlier suburban developments.

BASIC PATTERNS OF STREET PROVISION

No provision unit or single type of provision unit in St. Louis County has a monopoly over any street facility type or street service component. In these terms, responsibility is broadly shared among a variety of jurisdictions. At the same time, with only minor exceptions, no single stretch of pavement is the responsibility of more than one unit at a time. Overlapping responsibility occurs in relation to street facility types and service component types, not particular service components on particular streets.

Street provision, like many public services, involves a diverse set of problems perhaps best viewed as "Chinese boxes."²¹ Local access streets and their distinctive values—ease of access coupled with peace and quiet—are associated with a relatively smallscale community of interest, multiplied many times over wherever people live apart from commercial and industrial uses of land. The connection of local access streets to local commerce and industry defines a somewhat larger community of interest. Street connections to other parts of a metropolitan area and arterial highway connections to other centers of population define still larger communities of interest. Each "box" can be associated with a partially distinctive set of values; yet the boxes compose an interconnected set and therefore impose reciprocal constraints—limits as to how far certain values can be maximized without infringing unacceptably on others.

Still further, the system is not static, but growing and changing. New problems may arise that suggest new intermediate boxes. The general problem of street organization is not simply how to govern that which exists, but how to shape future growth and development. It is useful to summarize how the overlapping responsibilities for street provision are shared among the various provision units in St. Louis County. Table 6.4 contains such a summary.

Coordination is the dominant sharing mode only for arterial street development. The responsibilities of state and county in this service area clearly, and necessarily, overlap. If the state is to provide for arterial highways to connect population centers and the county is to provide for arterial streets within a population center, then development decisions within a county are inevitably going to involve the linkage between these two systems. Still, if agreement cannot be reached, decisions can be made separately. It is the high level of functional interdependency between the two road systems that makes coordination both necessary and mutually advantageous.

A somewhat different sort of coordination occurs between private developers and county government in relation to traffic generation assessment fees. The regulatory authority of the county is used to require developers to make a contribution to street (and other infrastructure) developments. In contrast to the basically complementary relationship between state and county, the relationship between county government and developers is somewhat adversarial.

Residential street development, by contrast, involves less direct coordination and is instead primarily a regulatory relationship between either the county or a municipality and private developers. Instead of coordinated decisionmaking, decisions are sequenced, with the relevant public jurisdiction establishing a set of rules and private developers making decisions within those legal constraints. Some coordination must also occur in order for developers to understand the applicable rules and gain approval for their proposals from county authorities. The linkage between residential and arterial street sys-

Service		
Facility	Provision Units	Sharing Mode
Development		
Arterial	State/County County/Developer	Coordination/Alternation Fee Assessment
Residential	County/Developer Municipality/Developer	Regulation Regulation
Maintenance		-
Arterial	State/County	Alternation
Residential	Municipality/Subdivision County/Subdivision	Alternation Alternation
Reconstruction	-	
Arterial	State/County	Alternation/Coordinatio
Residential	Municipality/Subdivision	Alternation/Transfer
Use Regulation		
Arterial	State/County	Alternation
Residential	Municipality/Subdivision	Alternation
	County/Subdivision	Alternation

tems is also handled mainly through regulation-by means of a county or municipal subdivision code.

While development responsibility is associated with high levels of coordination (in one form or another), maintenance responsibility is characterized mainly by alternation-dividing responsibility street by street on the basis of legal jurisdiction. Alternation characterizes both the division between arterial and residential street responsibility and, within each street type, between relevant provision units. While development decisions bearing on location and design characteristics tend to be highly interdependent between street jurisdictions, maintenance decisions are much less so. Maintenance schedules need not be coordinated in the way development plans are. In the few cases of overlapping service provision on the same streets-those few municipalities that provide selected right-of-way services to subdivisions free of charge-alternation still occurs, only by service instead of facility. Municipalities and subdivisions do not tend to duplicate snow removal and surface repair, for example, but alternate between these services. The coordination that occurs in residential streets (i.e., contracting between subdivision and municipality for selected street services) is a relationship between the subdivision as a provider and the municipality as a producer.

Interjurisdictional relationships with respect to reconstruction are somewhat more complicated than in the case of maintenance. This is because reconstruction may provide an occasion for transfer of responsibility from one provision unit to another. The division of maintenance responsibility between county or municipality and subdivision, in the case of residential streets, is based in some part on street design. The county, and larger municipalities, agree to accept responsibility for maintenance if, and only if, certain construction standards are met. If a subdivision chooses to improve its streets to the accepted standard of the overlapping jurisdiction, it may also choose to transfer all subsequent responsibility.

Use regulation, like maintenance, is mainly a matter of alternation. Subdivisions are sometimes characterized by municipal officials as "kingdoms unto themselves" on the subject of traffic and parking control. County and municipal police do patrol subdivision streets, but mainly for the purpose of more general law enforcement.

Notably absent from the modes of sharing responsibility for streets and street services is extensive duplication. Duplicate provision of the same service for the same street does not tend to occur. Duplication in a broader sense—duplication of effort—may occur, but it is difficult to show that it does. When two adjacent subdivisions or municipalities go through simultaneous processes of decisionmaking with respect to maintenance services, is this "duplication of effort?" What if preferences are different? What if one finds a better contractor than the other? What if street conditions differ between them? If the two jurisdictions share information, some degree of coordination is occurring.

The arrangement of street provision units in St. Louis County follows closely the image of Chinese boxes. From this perspective, the structure of street provision problems accounts for much of the pattern of street organization. The only major anomaly in this explanation is the extent of county government responsibility for residential street provision in the unincorporated area. The absence of municipal organization means that a large and heterogeneous provision unit—county government—is responsible for tending to a large number of small-scale concerns, the streets in particular subdivisions. A partial explanation of this anomaly is found in the annexation rules that protected the unincorporated area from municipal expansion (see Chapter Three).

ARRANGING FOR PRODUCTION

On the production side, the most interesting question concerns the choice by provision units either to organize their own production unit inhouse or to enter into contractual relationships with independent producers, whether private or public. The choice appears to depend substantially on potential economies of scale in production. The very smallest units-whether a subdivision or municipality-contract out for virtually all street-related services. Larger municipalities organize in-house production units for certain routine services-those for which equipment can be kept in continuous useand contract out for occasional services, such as major repairs, resurfacing, and reconstruction. County and state agencies contract out only for particular projects-mainly construction-that make both labor and equipment demands beyond their regular capacity. Much the same pattern prevails for the planning component of street development.

The frequency of private contracting for street services in St. Louis County is explained almost entirely by the size of provision units. Heavy use of private producers is found only in subdivisions and small municipalities (2,000 people or less). The emergence of a sizable private sector in the production of residential street services can be traced to the existence of small units of provision, including both subdivisions and small municipalities. Despite the availability of private producers, however, larger municipalities make relatively little use of private contracting, even on a selective basis (service by service). Aside from major repairs and resurfacing projects, only street lighting appears to be contracted out by the larger cities with any notable frequency, followed to an even lesser extent by tree trimming.

One relatively new forum has emerged with an interest in promoting greater cooperative ventures among the area's streets and public works departments. The St. Louis Metro branch of the American Public Works Association has organized a joint purchase of road salt for 20 communities (including one in Illinois). Equipment sharing possibilities are also being explored. Some equipment sharing is reported among municipalities in the Normandy Council area. Production arrangements in street services make much less frequent use of intergovernmental contracting and joint service production than in police, fire, and education. Small municipalities, and to a somewhat lesser extent subdivisions, seem to prefer contracting with private producers to contracting with municipalities. To some extent, the larger municipalities may discourage contractual relationships, in part because the more competitive nature of street service production, as compared to police and fire services, may lead to greater variation in production levels as purchasers, responding to price competition, shift their business among vendors.

CONCLUSION

The highly fragmented and overlapping jurisdictional arrangements for street provision in St. Louis County seem to have emerged largely for development reasons and seem to be sustained largely for reasons of street regulation and traffic control. The development factor can be seen in both the large role played by county government in arterial highway planning and the significant reliance on subdivisions to maintain residential streets. That subdivisions retain control of their streets even after municipal incorporation seems to be a function of traffic control—the ability to restrict vehicular access by closing streets to traffic. New municipal incorporation efforts are also motivated in part by both traffic control and highway development considerations. Such a diverse set of jurisdictions enables the citizens of St. Louis County to address widely varying interests simultaneously. County government provides for arterial traffic flow interests, while small municipalities and subdivisions tend to the interests of neighborhood access and residential amenities. The level of service provision-measured either by expenditure per household or expenditure per mile—appears to vary widely among municipalities, subdivisions, and the country road (nonarterial) system. Small units-the large number of street-providing subdivisions and municipalities with populations of less than 2,000 people-tend to function as pure provision units in street services, contracting privately to obtain production. Service contracting makes these small units economically feasible, increasing the degree to which small scale, neighborhood interests can be represented in street provision.

-ENDNOTES-

¹For 1985, three nonproviding municipalities were found (based on street expenditures of \$0 reported to the state auditor): Champ (pop. 28), Country Life Acres (pop. 77), and Huntleigh (pop. 428). A fourth municipality, MacKenzie Village, reported \$0 street expenses in 1983, its most recent report. The absence of street expenditure in a single year by municipalities as small as these should not neces-

sarily be construed as evidence of nonprovision over a longer period of time.

- ²See Robert Kanigel, "Improving City Streets to Death," City 6 (Winter 1972), pp. 45-47.
- ³Source: St. Louis County Department of Highways and Traffic, 1985 Annual Report.
- ⁴Assessments per household were not available for the remainder of the sample of 53 subdivisions.
- ⁵The differences among the three municipalities are statistically significant in an analysis of variance.
- ⁶The lack of statistical significance in an analysis of variance indicates that differences among subdivisions within municipalities are too great compared to differences across municipalities to conclude that the municipal location of a subdivision makes a difference in the state of repair.
- ⁷It should also be noted that subdivision assessments, unlike local property taxes, are not deductible for federal income tax purposes. This increases the relative cost of provision by subdivisions as compared to provision by local governments and is a consideration that applies to all subdivisions wherever located.
- ⁸ACIR mailed or delivered questionnaires dealing with street services to all St. Louis County municipalities in the summer of 1986, and received 45 responses—a return rate of 50 percent.
- ⁹Some discrepancy exists in the year of reporting for municipal street or public works expenditures, but the discrepancy makes little difference in the computation of mean scores. Of the 61 municipalities reporting non-zero expenditures separately from public works, 46 reported in 1985. Five reported in 1983, eight in 1984, and two in 1986. If computed for only the 46 municipalities reporting in 1985, the mean is \$109. Of the 18 municipalities reporting public works expenditures, 14 reported in 1985, while 3 reported in 1984 and 1 in 1986. If computed only for the 14 municipalities reporting in 1985, the mean is \$177.
- ¹⁰Excluded from this calculation are four very small municipalities that reported expenditures of \$0.00.
- ¹¹This comparison should be viewed with some caution. Considerable variation exists among both subdivisions and municipalities in precisely what services are provided. Some subdivisions also provide nonstreet services. Although some subdivision budgets would resemble a municipal public works budget, others are strictly a street services budget. Another reason for caution is the comparison of expenditures in the case of municipalities with revenues in the case of subdivisions. This comparison is, nevertheless, the best available. Subdivisions have no other source of revenue. Municipal street revenues are only partially earmarked for streets. The main source of potential distortion is the possibility that subdivisions do not spend all the revenue they collect.
- ¹²The statement should be qualified as no significant linear relationship. The largest municipalities do tend to cluster at

or just above the mean in the distribution of municipalities by street expenditure per household. In other words, the largest municipalities tend to spend about the same—or a little more—per household than the average-spending municipality, but a number of smaller municipalities spend considerably more per household than do the largest municipalities. The data include the 61 municipalities that reported 1983-86 street expenditures to the state auditor separately from public works and that report expenditures greater than zero.

- ¹³Source: St. Louis County Department of Highways and Traffic, 1985 Annual Report. The Annual Report lists expenditures on the county road system totaling \$13.9 million (p. A-7). This figure, however, does not include \$2.37 million in revenue sharing and transportation highway fund supplements (used for snow and ice removal), which were not allocated in the report between the county road system and the arterial system. The proportion of operating expenses allocated to the county road system exclusive of these unallocated funds was 57 percent. If the unallocated funds were allocated in the same proportion, expenses for the county road system would total \$15.25 million.
- ¹⁴Using an estimated figure of \$15.25 million in total expenditures (see note 13) as the base, the expenditure per mile is \$13,353. Using a figure of \$14 million as the base, the expenditure per mile is \$12,259. The true figure probably lies somewhere between these two estimates. As a rough approximation, \$13,000 per mile does not seem unreasonable.
- ¹⁵Source: St. Louis County Department of Highways and traffic, 1985 Annual Report.
- ¹⁶County government also stands ready to assume responsibility for private streets if improved to standard. One arrangement used for this purpose in the unincorporated county is to create a special road district for the purpose of levying a property tax to finance street improvements as a means of transferring maintenance responsibility to the county.
- ¹⁷Subdivisions that engage in access restriction or traffic control are more inclined to want to retain jurisdiction. See the discussion of use regulation below.
- ¹⁸Pasadena Hills, for example, has chained off its access streets along a traffic artery on one of its borders.
- ¹⁹One other factor found to have a significant positive relationship to expressed willingness to consider transfer of street ownership to the overlying municipality is the amount of recent expense per household on capital improvements.
- ²⁰Oscar Newman, Community of Interest (Garden City, New York: Anchor Press/Doubleday, 1980), pp. 124-156.
- ²¹Robert A. Dahl uses the "Chinese Box" imagery to characterize the relationships among overlapping territorial jurisdictions in After the Revolution: Authority in a Good Society (New Haven: Yale University Press, 1970).

Chapter Seven

Elementary and Secondary Education

INTRODUCTION

This chapter focuses on relationships among the 24 elementary and secondary school districts in St. Louis City and County and the emergence of multijurisdictional arrangements both for providing and producing education services. These functional arrangements include: (1) joint enterprises organized by separate school districts to produce auxiliary services; (2) coordination between regular school districts and a separate countywide district for special education, and (3) cooperative efforts for public school desegregation among the city and county school districts. The jurisdictional fragmentation of school districts in St. Louis County has not foreclosed the development of joint functional arrangements through coordination and cooperation. However, fiscal problems continue to frustrate efficient and equitable public education in some parts of the county.

PROVISION ARRANGEMENTS

In St. Louis City and County, public elementary and secondary education is provided through 25 autonomous school districts. (Figure 7.1 displays a map of the school districts.) Twenty-four of the districts are located in St. Louis County. One is a countywide Special School District organized to provide special education services and vocational-technical education. For regular elementary and secondary education, the county is divided into 23 school districts ranging in student population from less than a thousand to nearly 20,000. St. Louis City, by contrast, is served by a single school district with more than 50,000 students.

Local school districts are not, however, the only provision units relevant to public education in Missouri. The state constitution assigns responsibility for provision of public education to the state General Assembly [Article IX, Sec. 1(a)]. This presents a sharp contrast to provision arrangements for police, fire, and street services. The authority and responsibility of local school districts derive exclusively from state statutes, and the state legislature is directly charged by the Missouri constitution with a fundamental responsibility to "establish and maintain free public schools." State regulation of local authorities is greater in public education than in any other local function. Arranging for the governance of school districts-the enactment of rules governing provision-can be viewed as a state government function. The state also participates directly in the provision of education through state financing, providing roughly one-fourth of total funding for public schools in St. Louis County, and one-half in St. Louis City.

School District Development in St. Louis County

During the last half-century, public school districts across the nation have undergone extensive consolidation. In 1942 there were more than 108,000 public school districts in the United States; in 1987 there were approximately 14,741. Although school district consolidations have taken place for the most part in rural areas, a good deal of this consolidation has occurred in metropolitan areas. Between 1905 and 1985, the number of public school districts in St. Louis County fell from 88 to 24.

Public education in St. Louis County is markedly less fragmented than police, fire, and street services. In fact, school districts have developed in a pattern that is the reverse of development patterns



for municipal services generally. As the population of St. Louis County increased over the past century, the number of local units that provide police, fire, or street services grew as the number of school districts declined. This different pattern of development might be explained as simply a local manifestation of the larger, national pattern of public school consolidation that occurred over the last half-century. What the national trend may best explain, however, is not the pattern of provision that has come to exist in St. Louis County, but rather the pattern of governance created by the state legislature—the rules that govern the creation and dissolution of school districts.

Unlike the rules for the creation of municipalities in Missouri, rules for the creation of school districts have placed substantial authority in the hands of county officials (originally a county superintendent of schools) to initiate procedures for school district reorganization. The 23 regular school districts in St. Louis County are distinguished by state statutes as either common, reorganized, or consolidated districts. Common districts are those originally established to erect and maintain common schools throughout the state. To reorganize two or more districts into a single larger district, the county governing body (the county council in St. Louis County) may submit a reorganization plan to the state board of education. (Originally this power was vested in a county board of education, since abolished.) If the state board approves a proposed reorganization plan, the plan is then submitted to voters in the proposed new district. A simple majority of all the votes cast within the new set of boundaries, not necessarily concurrent majorities in each of the existing districts, is sufficient for approval of the reorganization. Common school districts may also be merged through consolidation, a different procedure than reorganization. Consolidation proposals must be initiated by citizens-at least 10 percent of the total number of eligible voters in each of the districts to be consolidated-and require concurrent majorities of the voters in each district for approval.

Seven of the 23 districts in St. Louis County were created using the reorganization procedure. There is only one consolidated district—Parkway formed in 1954, largely in an unincorporated area, but now the county's largest district in number of students. The remaining 15 districts are common districts. Most school district mergers, therefore, took place at the initiative of the county board of education rather than local citizens. Approval was not required from voters in each existing district before their district could be merged with others.¹

The rules for school district reorganization are significantly different from those that govern munici-

pal consolidation, which requires voter initiative and approval in each municipality. In some part, therefore, the less fragmented pattern of school district organization in St. Louis County, as compared to municipal organization, may be explained by the differences in constitutional rules between the two types of local organization.

The Special School District of St. Louis County

The Special School District to provide for education of the handicapped and for vocational-technical education encompasses all of St. Louis County. Each elementary and secondary school district in Missouri is required by state law (Section 162.670, Missouri Revised Statutes) to make provision for special educational services to any handicapped or severely handicapped child residing in the district. In St. Louis County, however, these services are provided in large part through the Special School District, approved by the voters in 1957. In that same year the special district began operating programs for educable mentally retarded children in the county. In 1965, St. Louis County voters approved the addition of vocational-technical education services to the special district's responsibilities.

The use of a countywide special district to provide education for handicapped students is consistent with the nature of the service. Special education for handicapped children is much more expensive than regular education, and it is provided for only a small minority of students. The Special School District spent \$16,737 per student in 1984-85 (this figure does not distinguish handicapped from vo-tech students), more than twice the expenditure level of the highest spending regular district in the county and more than four times the mean level of spending per student averaged over all students in the 23 regular districts. Efforts to increase the quality of education for the handicapped by any single school district in the county would significantly increase average costs per pupil, and increase tax bills within the district at the same time. Moreover, parents of handicapped children would be attracted to a school district that excelled in these services, thus increasing still further the average cost of education per pupil in the district. Districts that sought to improve education for the handicapped would in effect be penalized for their efforts. Moving to a larger scale of provision thus increases the feasibility of improving education for the handicapped. To some extent, the costs of special education in St. Louis County may still be affected by families that, attracted by high quality services, relocate from other parts of the St. Louis metropolitan area.² The broader the jurisdiction is geographically, however, the more difficult interjurisdictional mobility becomes, and the less severe the problem should be.³

Vocational-technical education also is more expensive than academic programs, although the beneficiaries compose a larger segment of the student population than in the case of the handicapped. The case for areawide provision is accordingly somewhat less compelling, and, not surprisingly, some of the regular districts have chosen to provide their own vocational-technical program. This type of training may also exhibit greater economies of scale in production than academic programs.

The St. Louis City School District

The City of St. Louis is organized as a metropolitan school district, legally defined as a school district in a city that is not also within a county. Because St. Louis City is the only city in the state that is not also within a county, the St. Louis school district forms a legal class of one and is the only metropolitan school district in the state. Since it is not a metropolitan district in a functional sense, it will be referred to here simply as the city school district.

In 1968 the board of education in St. Louis City suggested the merger of all school districts in the city and the county. This proposal was received unfavorably in both the city and county. Not surprisingly, the proposal was killed soon after its introduction in the state legislature. Although several of the school districts in St. Louis County have merged since 1968, no additional proposals for a unified citycounty school system have been advanced.

The St. Louis City district much more closely approximates the traditional reform ideal of largescale, comprehensive public organization than any of the county school districts. Besides providing regular elementary and secondary education, the St. Louis City school district has organized an internal special education division, although its scale of operation is not as large as the county Special School District. The scale of operation for regular elementary and secondary education in St. Louis City, however, greatly exceeds that for any single district in the county. Student population in the city district, just over 50,000 in 1984-85, was more than twice as large as in Parkway, the largest school district in the county. One would have to combine the student populations in each of the four most populous county districts to match the population in the city district.

Private Alternatives to Public Provision

Education also differs from police and fire and, to a somewhat lesser extent, from streets, in the extent of the opportunities available for private provision. Although production of street services by private contractors is common, and the subdivisions that provide street services are legally private, only education (of the four service areas studied) has an independent, fully private sector—a market that links individual households as consumers with private schools as producers.

Presently, there are more than 30 private, nonparochial elementary and secondary schools in St. Louis City and County, 22 of which participate in the Education Conference, an association of private schools. Numerous parochial schools are also operating in the area, among which are over 30 Lutheran elementary and high schools, consistently enrolling over 4,000 students each year during the past decade. Both nonparochial and Lutheran enrollments are dwarfed, however, by enrollments in Roman Catholic schools in the area. The St. Louis Archdiocese operates the largest school district in the entire metropolitan area (also in the state), serving students in six counties in addition to St. Louis City and County. During 1984-85, the archdiocese provided services through 123 elementary and 34 secondary schools for approximately 45,000 elementary and 18,000 secondary students.

Private school enrollments are substantial, but vary across the 23 county school districts. Table 7.1

<i>Table 7.1</i> Percent of School Age Children in Private Schools, by District, St. Louis County – 1980					
Districts	Percent K-8 Private	Percent 9-12 Private			
Merged Hazelwood Ferguson-Florrisant Pattonville Rockwood Kirkwood Lindbergh Mehlville Parkway	26% 25 21 19 35 32 27 19	15% 19 14 13 34 24 21 18			
Common Affton Bayless Brentwood Clayton Hancock Place Jennings Ladue Maplewood Normandy Ritenour Riverview Gardens University City Valley Park Webster Groves Wellston	36 43 29 22 26 17 29 33 16 18 31 18 10 34 0	27 27 39 17 17 14 38 26 14 15 22 18 19 28 2 2			

displays the percentage of all school-age children within each district who were enrolled in private or parochial schools in 1980. Private enrollment in elementary schools, averaged across the districts, was about 25 percent of all students, while private high school enrollment was slightly lower, at about 21 percent. The range is from 43 percent of all elementary students and 27 percent of all secondary school students in the Bayless district to no elementary school students and only 2 percent of high school students in the Wellston district.

The existence of an independent private sector has the potential to enhance responsiveness among the districts forming the public sector.⁴ State aid formulas based on enrollment potentially place public schools in competition with private schools for students.⁵ Whatever the degree of competition, the private sector in education generates alternatives that allow greater diversity of education services than the 25 public school districts in both city and county can provide alone. Since private schools are widely dispersed across the area, citizens need not necessarily move their residence in order to exit from the public schools. Of course, opting out of public school attendance does not entail opting out of tax support for public schools. Yet, for those willing and able to pay, the private sector in education increases the range of choices available to St. Louis residents.

School District Organization

Members of the board of education in the 23 six-director districts in St. Louis County are elected at large, two per year, for staggered terms of three years. School board elections are conducted simultaneously with municipal elections. Each board appoints a full-time professional superintendent who is in the broadest sense chief executive/administrative officer for the district, though specific duties are determined by the terms of a contract negotiated with the board. Superintendent contracts may differ across districts, but in accordance with state law no superintendent may be appointed for a term exceeding three years, subject to possible reappointment. School districts thus differ from St. Louis County municipalities in their greater and more exclusive reliance on professional managers, as compared to the citizen mayors who function to varying degrees as chief executive and sometimes chief administrative officer in municipalities. The board of education for the Special School District is also composed of six members, with one member elected from each of six regions of equal population. In St. Louis City, the board of education is composed of 12 members who serve six-year terms. Like the regular districts in the county, members are elected at large, despite the greater size and heterogeneity of the city district.

PATTERNS OF PROVISION

Provision refers to basic decisions of what service to provide, how much, and how to pay for it. Included are arranging for production (but not producing), monitoring service quality, and holding producers accountable for their performance. Provision of public education in this broad sense is shared between local school districts and the state government in Missouri. The basic unit of provision is, nevertheless, the local school district. This is so not simply because most (but not all) local districts supply the major portion of school funding but also because they have a primary role in all the basic provision activities. Local electorates approve or disapprove property tax rates. Locally elected school boards employ a superintendent whose job it is to link provision with production. Accountability for school performance is obtained primarily within each district. For most direct services to students, production is also organized by the local school district. Indirect services in St. Louis County, however, tend to be organized through joint production units that serve a number of school districts.

As provision units, the 23 elementary and secondary school districts in St. Louis County are quite different, varying in a number of measurable ways. This analysis will examine variation in the following respects:

- District size, measured by number of students in average daily attendance;
- School size, averaged by district;
- Student social background, by district;
- Level of district financial support;
- Total and current expenditures per student;
- Student-educator ratios for elementary and secondary schools;
- Percentage of district students attending private schools; and
- Percentage of eighth-grade students passing standardized tests.

The comparisons are among districts, not among schools. This should be kept in mind because larger districts will tend to have greater within-district variation, while smaller districts show greater variation from one district to another. That is, smaller districts can be expected to be "more different" from one another, while larger districts are "less different." Financial data are for 1984-85.⁶ District demographics are taken from 1980 census figures, except for the poverty measure, which is a 1979 figure.

Variation in Local Provision

There are several points of interest in examining the variation among St. Louis County school districts. One major source of interest is the variation in size. The total student body of the smallest district was 582 in 1984-85, while the largest was 19,259. The mean district size is a little more than 5,100 students. Only three districts have more than 10,000 students, while eight have fewer than 2,000. School district consolidation-although it has reduced the number of school districts in St. Louis County substantially over the years-has produced neither a single large district nor a set of districts similar in size. Do the differences in district size cause some parts of the county to be better served than others? Would a set of similar size districts, or perhaps even a single large district, serve the county better?

Answers to these questions depend on what is meant by better served. Educators are apt to look mainly at educational quality and to argue that communities with better quality schools, by some set of standards, are better served. Others might argue simply that those districts spending more per student better serve their students. On the other hand, there are questions of efficiency to be considered. Efficiency criteria suggest that education should be provided at a level at which the relevant communities are willing and able to pay for it; but are the relevant communities school districts, the county, the state, the nation, or all of these? Increasing marginal costs mean that, at some point, greater educational quality is not worth the price; but who should make this judgment? Finally, there are questions of equity. Those communities least able to afford good education may be those most in need of it in order to provide an opportunity for their residents to improve their lives. The analysis in this chapter can do no more than array some limited evidence and offer a few preliminary observations on these questions.

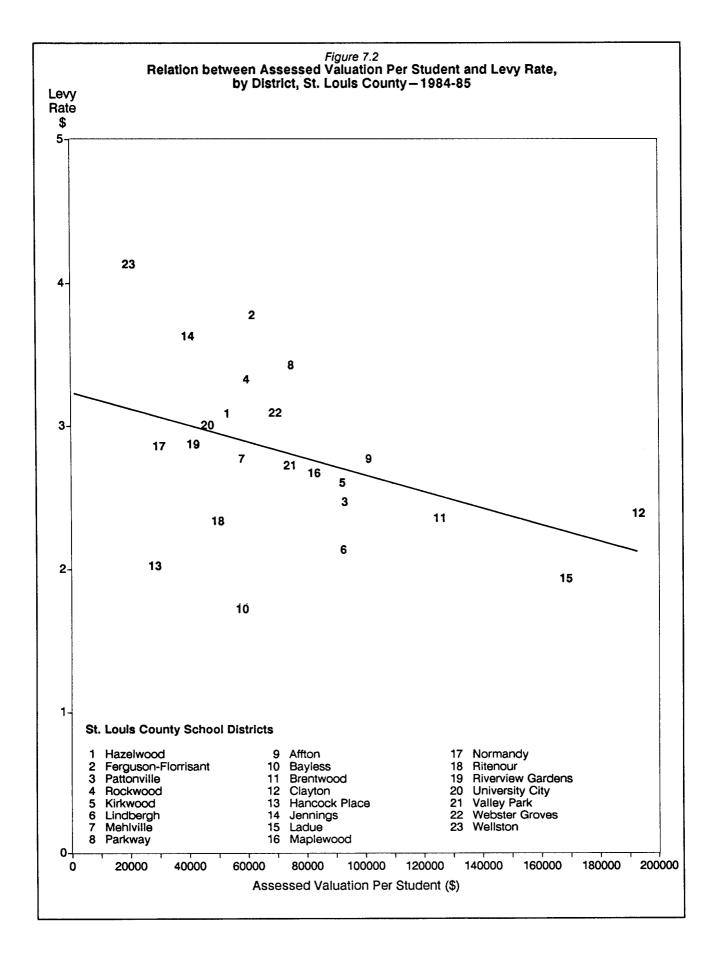
The districts also vary in their economic demand for education as indicated by willingness and ability to pay. The amount a district spends per student from its own tax sources is a function of the total assessed valuation of property in the district per student and the property tax rate. The relationship between total assessed valuation per student and the rate at which property is taxed in the 23 St. Louis County school districts is negative. The higher the assessed valuation per student, the lower levy rates have to be in order to raise the same amount of money, and the lower they tend to be. The relationship is far from perfect, however, and variation in this relationship provides an indicator of variation in the willingness of district taxpayers to spend money for public education.

Figure 7.2 plots each district on two dimensions: assessed valuation per student and levy rate. The solid line shows the predicted levy rate given assessed valuation per student. Districts above the line are, in effect, digging deeper into their pockets than districts below the line. These differences would appear to reflect differences in voter preference, given ability to pay. Some communities in St. Louis County seemingly want to invest more of their resources in public education, others less. One should point out, however, that individual families can express demand for education by choosing to live in a high property value district, as well as by voting for a higher levy rate in a lower property value district. This makes it impossible to completely sort out willingness from ability to pay.

No school district in the county is required to be completely self-sufficient because the state provides aid to local schools. Twenty out of 23 districts, however, raised more than half of their total spending in 1984-85 from their own sources. Four of the districts were self-supporting at a level of more than 80 percent. The smallest proportion of district funding was 48 percent.⁷

The 23 school districts in St. Louis County differ dramatically in the demographic characteristics of their resident populations, with important implications for the educational task each faces. These are extremely important variables because of the weight ordinarily attributed to the social background of students as a factor related to student achievement. Three indicators of student background are used in this analysis: (1) rate of poverty in the district in 1979 (percentage poor), (2) percentage of district residents who are white (1980 census), and (3) median household income (1980 census). The percentage of poor ranges from a little more than 2 to 35.5. The percentage of whites varies from 0 to 99.4, and median household income, from \$9,043 to \$38,874.

In still other ways, the districts encompass quite different communities. Parkway, the largest district in number of students, serves mostly an unincorporated, but developed, upper-income area. Rockwood, the far western district in the county, and the largest in geographic area, is the most rural. Some of the smaller districts-Brentwood, Clayton, University City, and Wellston-have boundaries that are coterminous, or nearly so, with municipal boundaries, but most of the school district boundaries do not correspond closely to the boundaries of cities and villages. Wellston is nearly all black, while University City is racially mixed. Ladue and Webster Groves are somewhat larger school districts that encompass the cities of Ladue and Webster Groves, respectively, but that also extend to include a larger area contain-



ing other small municipalities. Most of the small to mid-size, as well as some of the larger, districts serve a fairly homogeneous population, some (e.g., Ladue) more so than others (e.g., University City). Normandy district, on the other hand, encompasses 23 small municipalities, but is highly urban in character, as well as having a very heterogeneous population in terms of both race and income.

Total expenditures per student from all sources (excluding debt service) in 1984-85 varied among the 23 districts from a low of \$2,544 to a high of \$7,005-a range of nearly \$4,500. The mean is \$4,110 and the standard deviation, a measure of the dispersion of spending among districts, is \$1,145. The distribution of spending per pupil by school district is skewed positively-the distance from the mean to the highest funded district is much greater than the distance from the mean to the lowest funded district. If the distribution is shown by student, as in Figure 7.3, the positive skew is even more pronounced, since most students are found in larger, moderately funded, districts. The mean spending per student, when averaged over students rather than districts, is less-\$3,909. The standard deviation, considerably less, is \$746, indicating substantially less variation in spending levels among students than among districts.

The smallest districts-those with fewer than 2,000 students-include both the highest spending and lowest spending districts in the county. The greater variation among small districts is to be expected as a statistical property. There is some tendency for the smallest districts to be better funded (indeed all of the extremely well funded districts are quite small). One of the motivations commonly attributed to citizens who seek to maintain a relatively small school district is to preserve a higher than average level of school funding. The residents of small wealthy districts, however, cannot escape state taxation for the purpose of redistributing wealth to districts that are less well off. Smaller districts are also more homogeneous with respect to population characteristics. Some are wealthy; others are middle income or poor. Some are nearly all white; others are mostly black. One district-Wellston-is virtually all black and quite poor.

Table 7.2 ranks the school districts by median household income while also showing their scores on other demographic and fiscal variables. Considering the various factors that affect the provision of education, the most seriously disadvantaged district appears to be Wellston: 100 percent nonwhite, 34.5 percent poor, a median household income of \$9,043 (more than \$5,000 less than the second lowest district on this indicator), and a total assessed valuation per student of \$19,306 (more than \$8,000 less than the second lowest district on this indicator). Wellston also taxes itself at the highest rate in the county. In total spending per student (excluding debt service), Wellston ranks second from the bottom. The bottom district in terms of expenditure per student, Hancock Place, is 99.42 percent white, has a poverty rate of only 4.2 percent, and a median household income of \$16,353—fourth from the bottom. Its assessed valuation per student, however, is second from the bottom, and its tax rate, in sharp contrast to Wellston, is third from the bottom.

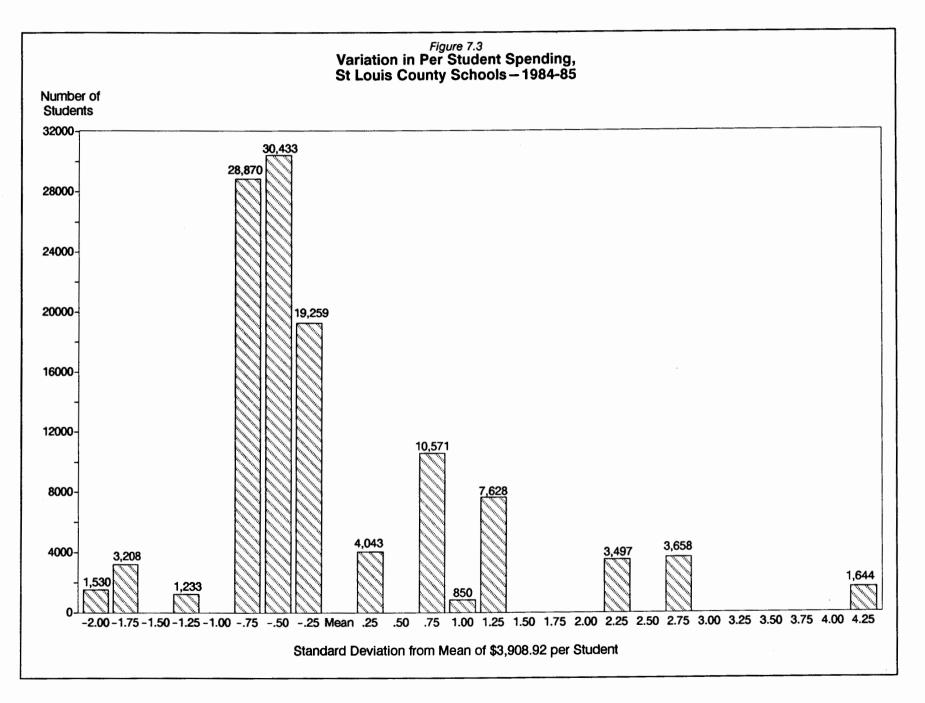
It is less clear that there is a single most highly advantaged district. In terms of assessed valuation and total expenditure per student, the answer is Clayton, followed by Brentwood; but in terms of the demographic indicators, Parkway, Ladue, and Lindbergh are the leaders.

The State Role in Provision

The provision role performed by state government is one of supplementing local funding, in part to maintain minimum funding levels (equalizing in the sense of making school funding more equal), and in part to support certain portions of the education budget. The Missouri Constitution (Article IX, Section 3(b) demands that at least 25 percent of state revenues be earmarked for support of public schools. State monies for public education are distributed to school districts through several different funds, which can be divided into two types: (1) allocative funds distributed primarily on the basis of daily attendance or student population,⁸ and (2)redistributive funds intended to correct for fiscal disparities among local districts. The most important state funds of the first type are the Missouri School District Trust Fund, the Fair Share Fund, and the Free Textbook Fund. The most important fund of the second type, and, in fact, the most significant source of state aid to local school districts, is the Foundation Program.

Allocative Funds. The school district trust fund was created when voters approved Proposition C in 1982, imposing an additional 1-cent state sales tax earmarked for education. Use of these funds was tied to local property tax relief. When a district receives money from this fund, the revenues are reckoned in the Missouri state budget not as state monies, but as local tax revenues obtained during the current year. Each district accepting funds must use 50 percent for local property tax reduction, and 37.5 percent must be applied to teacher salaries. The remaining 12.5 percent can be used for district operating costs.

The Fair Share Fund was also introduced in 1982 when the General Assembly approved a 4-cent increase in the cigarette tax, raising it from 9 cents



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to 13 cents per pack. Funds from the cigarette tax were previously earmarked for education, but revenues from the additional 4-cent tax are specifically earmarked for teacher salaries and are distributed to school districts strictly on the basis of the districts' average daily attendance. The state also provides revenues to school districts from a Free Textbook Fund that is generated through a foreign insurance tax. This tax is levied on all out-of-state insurance companies that operate enterprises within Missouri. Money from the fund is distributed to districts annually and must be used to purchase textbooks approved by the state board of education.

Redistributive Funds. Even though state allocative funds do not discriminate among districts on the basis of wealth, the effect is at least mildly redistributive. By collecting and distributing revenue on a larger scale, state government achieves a degree of redistribution by reducing the effect of variation in tax base on variation in spending per student. The preponderance of state aid to school districts, however, comes through the various funds, drawn from state general revenues, that comprise the state Foundation Program. This program is explicitly redistributive, its central purpose being to provide equity to public school students by reducing fiscal disparities across school districts.

Some of the funds within the Foundation Program—those designated for student transportation and to programs for gifted and exceptional students—are allocative, distributed to the districts generally according to cost per student. The largest part of the Foundation Program, however, is distributed on the basis of a complex equalizing formula that seeks to compensate for local factors that tend to advantage some districts and disadvantage others. This formula takes into account criteria estimating each district's ability (as reflected by assessed valuation) and willingness (as reflected by school-tax levy rates) to support public schools.

The formula first determines a minimum guarantee of state financial aid to school districts. The amount of the guarantee is calculated by adding one factor, based roughly on average daily attendance, to another factor, based on the number of AFDC (Aid to Families with Dependent Children) entitled and orphaned students in attendance. Deductions

District	Median Household Income ¹ (in dollars)	Percent Poor ¹	Percent White ¹	Assessed Valuation Per Student ² (in dollars)	Total Spending Per Student ² (in dollars)	Number of Students
Wellston	\$ 9,043	34.49%	.00%	\$ 19,306.43	\$ 2,634.77	1,043
Maplewood	14,520	7.97	85.52	81,487.46	4,565.98	1,268
Jennings	15,882	6.15	64.16	40,594.16	2,725.76	2,165
Hancock Place	16,353	6.76	99.42	27,660.31	2,544.43	1,530
Normandy	16,408	13.75	35.99	28,482.83	3,392.16	5,844
Brentwood	16,654	6.77	85.67	125,430.89	5,951.68	769
Valley Park	16,819	11.74	96.81	73,606.03	4,610.91	582
Ritenour	17,438	7.32	89.70	49,507.07	3,706.78	5,979
University City	17,941	10.36	55.26	46,253.22	3,639.92	4,682
Riverview Gardens	19,282	5.13	83.48	42,151.62	3,379.54	4,299
Affton	19,576	3.38	98.82	101,317.02	4,787.84	1,784
Ferguson-Florrisant	20,672	6.37	81.29	62,634.03	4,321.15	10,571
Bayless	21,024	4.04	99.33	58,364.74	3,127.10	1,233
Pattonville	22,068	3.44	96.51	90,674.40	4,789.67	5,844
Webster Groves	22,388	4.22	88.90	68,897.95	5,489.38	3,497
Clayton	23,036	6.47	94.11	193,075.74	7,005.94	1,644
Mehlville	23,618	2.94	98.40	56,578.22	3,488.09	8,870
Hazelwood	23,739	2.78	89.87	53,286.65	3,606.42	15,054
Kirkwood	24,813	3.59	92.80	90,616.93	3,920.62	4,043
Rockwood	25,277	3.96	97.79	58,628.19	3,445.20	9,857
Lindbergh	25,996	2.50	98.62	91,583.05	3,618.92	4,718
Parkway	31,197	2.15	96.02	74,643.37	3,832.26	19,259
Ladue	38,874	2.71	91.81	168,961.59	5,936.11	2,889

are then taken from each district's minimum guarantee that are intended to differentiate respective amounts of state aid to local districts on the basis of two criteria: (1) differences in district wealth taxable for public schools, or assessed valuations, and (2) differences in district tax efforts, or the rates at which districts tax themselves to support schools. Finally, a district entitlement is determined by adding the district's minimum guarantee (less deductions) to the amount of guaranteed tax base, which is the assessed valuation per pupil guaranteed each school district by the state in computing Foundation aid.

The terms "minimum guarantee" and "guaranteed tax base" are better for understanding the compensatory nature of the Foundation Program than is the term "equalizing formula." The purpose of state aid to education in Missouri is essentially to furnish a minimum provision standard for all public school districts in the state. This is different from a goal of absolute equalization, which could be accomplished only by stripping school districts of all authority to make key provision choices.⁹

Twenty of the 23 regular school districts in St. Louis County raised more than half of their total spending for 1984-85 from their own sources.¹⁰ Four districts raised 80 percent or more, and nine, more than 70 percent of the total funds spent. Three districts raised less than half-Normandy, a heterogeneous district with urban characteristics, Hancock Place, a small South County district adjacent to St. Louis City, and Wellston, a mostly black area between Normandy and St. Louis City. Wellston, however, also levies by far the highest property tax rate in the county, at \$4.13 per hundred, while Hancock Place is among the lowest taxing districts and Normandy is just above the median. Local funds are generated mainly from property tax revenues, including both residential and commercial-industrial property, within each district. There is also, however, a countywide railroad and utilities tax earmarked for schools, distributed on the basis of student population. Like the state allocative funds it resembles, the county tax (collected and distributed by county officials) is mildly redistributive.¹¹

The distribution of Foundation funds per student ranges from a low of \$268 and \$330 in Clayton and Brentwood, respectively, to over \$1,000 in Riverview Gardens, University City, Wellston, and Normandy. An indication of the responsiveness of the Foundation formula to differences in district wealth can be gleaned from Figure 7.4, which plots assessed valuation per student against Foundation funding per student in each district. The relationship is strongly negative. Districts that fall close to the regression line in the center of the figure are receiving Foundation aid in amounts that could be predicted with reasonable accuracy from a knowledge of the district's assessed valuation per student. Those that fall above the line are being treated more favorably than would be predicted from assessed valuation alone and those that fall below the line, less favorably.

The least favored district by this measure is Jennings, a small district adjacent to Wellston and St. Louis City. Its tax effort is relatively high—at \$3.66 per \$100 assessed valuation—and the taxable wealth per student is relatively low.¹² The most favored district is Normandy, a racially and economically heterogeneous district encompassing an urban-type area. Another apparently well-treated district is Ferguson-Florissant, a large middle-income district that includes most of the county's largest municipality (Florissant) and makes a high tax effort relative to its assessed valuation.

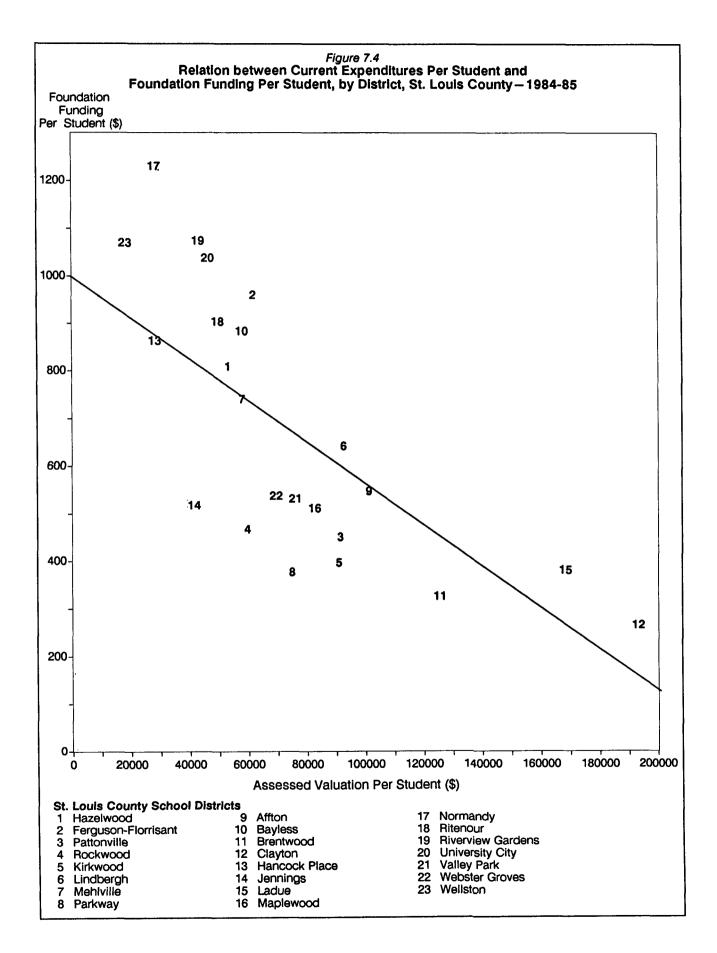
Overall, the Foundation Program seems to perform fairly well in terms of its redistributive purpose, as indicated by a strong negative correlation (-0.74) between assessed valuation per student and Foundation funding per student in each district. The standard error of the estimate in this equation, \$192.94, is also fairly small, indicating a low variation among the districts in how they are treated. This conclusion, it should be emphasized, relates to the way the program distributes aid and not to the total amount of aid distributed. Nor does this general conclusion address how any particular district is treated.

Fiscal Disparity – How Big a Problem?

Per pupil spending does not vary widely among the great majority of students in St. Louis County. Referring to Figure 7.3, 79.5 percent of the total county student population (in 13 districts) falls within one standard deviation (\$746) of the mean expenditure per student (averaged over students rather than districts, as discussed above). Only 6.4 percent (7,563 students in four districts) lie more than one standard deviation below the mean. Fiscal disparity does not adversely affect most county students to any great extent.

A small minority of the student population is, nevertheless, a source of concern. Three of the four districts whose students lie more than one standard deviation below the mean are also among the bottom four districts in terms of median household income, and two of the four are among the four districts with the greatest percentage of nonwhite population. Students in these districts are likely to be in greatest need of remedial education, yet they attend schools in districts least likely to be able to afford the extra attention to individual students.

Greater variation exists among students in schools that are above the mean, where 14 percent



fall outside one standard deviation and 7.5 percent are outside two standard deviations. Students in the Clayton school district, the most highly funded district in the county, lie 4.15 standard deviations off the mean.¹³

County, state, and federal funding reduces the variation in spending per student among districts, while increasing the level of provision in each of the districts. These extra-district sources increase the spending per student in the lowest expenditure district by \$1,425 and in the highest expenditure district by \$851. This more than doubles the spending level of the lowest expenditure district. Yet the mean spending level (averaged over the 23 districts) increases by \$1,299-almost as much in absolute dollars as the increase for the lowest expenditure district, though less than a 50 percent increase proportionately. Most of this increase is from state funding. Clearly, state policy reduces the variation in spending among districts below the mean. The distance between the mean level of spending and the lowest expenditure district decreases slightly in absolute dollars and substantially as a percentage of the mean, from 60 percent to 38 percent.¹⁴

Still, redistribution efforts have left a small lefthand tail in the distribution of spending per student. Virtually eliminating the left-hand tail of the distribution would be relatively inexpensive. To raise all students to a level of district spending no more than three-fourths of one standard deviation below the 1984-85 mean would cost about \$3.6 million, or about \$30.65 per student averaged over the entire county student population. Targeting funds on those districts where per-student spending is the lowest, however, entails certain difficulties. Such an approach would create an equity problem at the same time that it reduces disparities. Districts currently making a very high tax effort (e.g., Wellston) would be treated the same as districts making a relatively low tax effort (e.g., Hancock Place). In the long run, the equity problem could become an efficiency problem. Rewarding districts for low tax effort could encourage similar tax strategies in other districts. Thus, even though it would be relatively inexpensive to establish a funding floor, doing so raises an equity question, and maintaining that floor could become increasingly expensive.

The four districts involved fare much differently under the state Foundation program (see Figure 7.4). One of the four is Jennings, discussed above as the district least favored, in terms of assessed valuation, in the distribution of Foundation funds. In 1984-85, Jennings received \$321 per student less in Foundation money than its assessed valuation would predict. Simply bringing Jennings up to the level of Foundation aid predicted by its assessed valuation alone would bring its students to within \$302 of the hypothetical standard. Hancock Place, the most poorly funded district in terms of total spending per student, was much better treated in the Foundation program and fell only \$26 short of the amount of aid predicted on the basis of assessed valuation. Wellston, on the other hand, is relatively well treated by the Foundation formula, though not as well treated as one might expect.¹⁵ Bayless also currently fares relatively well in the Foundation program. Thus the four districts that end up at the bottom of an expenditure-per-student ranking are treated quite differently by the major state redistributive program. To address the diverse situations of three such districts by adjusting the formula would be a complex undertaking and one that would likely produce similar unanticipated consequences for other districts.

There is no approach to interjurisdictional redistribution that can guarantee that each dollar of assistance will help both students who are the lowest funded and taxpayers who have the heaviest tax burdens. This leaves policymakers in the position of deliberately following a mixed strategy: (1) targeting some assistance to those school districts with relatively high tax burdens and (2) providing other assistance across the board so as to provide assistance in some absolute amount to students in low-expenditure/low tax-burden districts. This is the basic strategy currently followed by the state of Missouri.

It is also impossible to define a permanent standard in statistical terms, any more than all students can be made above average. The discussion above, in terms of the 1984-85 distribution, is illustrative only. Fiscal standards ultimately ought to be defined in terms of performance (i.e., the amount of money required to attain some level of performance considered desirable). Unfortunately, as the discussion below suggests, both measuring performance and linking performance to expenditures are exceptionally difficult undertakings in the field of public education.

PATTERNS OF PRODUCTION

Student-teacher ratios are often used as a partial indicator of school quality, assuming that lower ratios facilitate greater individual attention to students. Although student-teacher ratios were not readily available for this study, the number of certificated personnel, that is, teachers and administrators as opposed to nonprofessional support staff, was used to compute a related index, here termed a studenteducator ratio. Considerable variation exists on this indicator, in both elementary and secondary education, among the 23 St. Louis County districts. Such ratios are, at best, however, only an intermediate indicator of school performance, since the ultimate product is an educated student, not the placement of professionals in schools or teachers in classrooms.

Student achievement might be considered a better indicator of performance, except that the level of achievement, as measured by standardized tests, is known to be related more to student background than to school-related variables. The school districts in St. Louis County also vary widely in the percentage of students who passed three basic skills tests (in mathematics, reading, and government) administered[®] to eighth graders in 1982. This variation should not be equated with variation in school performance, given the influence of student background on student achievement and the substantial variation in student background observed across districts.

Variation in Production

Many observers would expect that widespread variation in district size would be associated with differences in performance. Frequently it is assumed that larger districts are able to draw on economies of scale, including the services of specialized professionals, that increase productivity and efficiency. Figure 7.5 plots 1984-85 current expenditure per pupil against student-educator ratios in elementary schools, by school district. The downward sloping line on the graph is a regression line that statistically summarizes a linear relationship between current spending per pupil and student-educator ratios. The relationship is negative, as expected. The more districts spend per pupil, the lower the student-educator ratio. Eighteen of the 23 districts hug the regression line closely, lending credence to the hypothesis that districts strive to translate their financial resources into more educators per student.¹⁶ Included among these 18 districts is a broad size range, encompassing both some of the smallest and some of the largest districts in the county. Controlling for spending per pupil, size of district is unrelated to student-educator ratios.

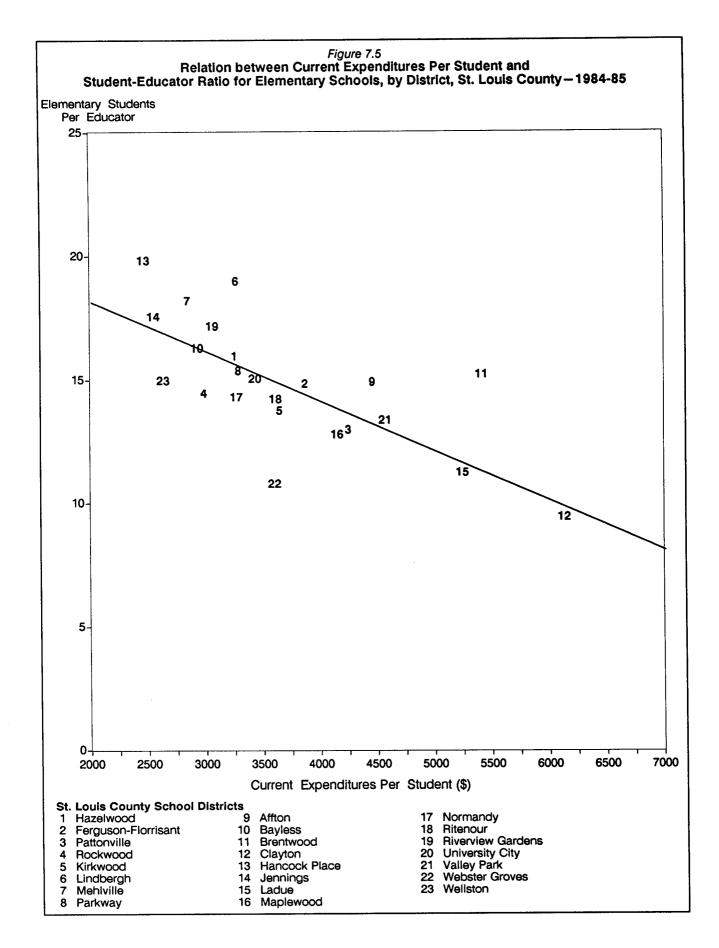
The vertical distance of each district from the regression line could be interpreted as a measure of the relative efficiency with which a district translates its fiscal resources into a favorable student-educator ratio, assuming this is what they strive to do. Outlying districts, it should be emphasized, should not be assumed to be more efficient or inefficient because we are unable to determine what accounts for their position relative to the others. Nonetheless, those districts falling below the line are relatively more successful with respect to this particular measure, and those above the line, relatively less so. The standard error of the estimate is 1.86 students per educator; the standard error is the average amount the districts diverge from the estimated values shown on the regression line.

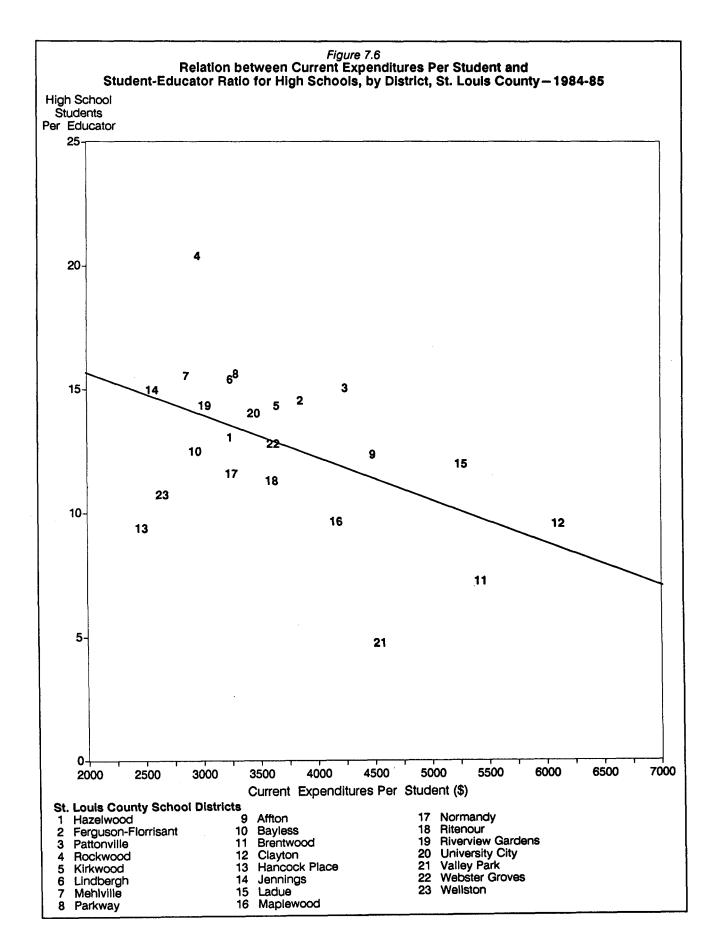
If the school districts in Figure 7.5 are distinguished by size, small and medium size districts appear to be as capable of translating their resources into favorable student-educator ratios as large districts, given various levels of spending. Neither side of the regression line is dominated by districts of a particular size range. There is no evidence from this analysis that even the smallest districts in the county necessarily suffer, with respect to elementary schools, from diseconomies of small scale. All districts in the county, however, benefit from a variety of joint production efforts that may account for the efficient performance of small and medium-size districts. These efforts are discussed in the next major section of this chapter.

Figure 7.5 can also be used to ascertain an estimated spending level required to produce, efficiently, a given student-educator ratio. To establish a funding floor at an amount estimated to produce 15 students per educator, for example, would require an estimated current expense of about \$3,600 per student. A ratio of 16 students per educator is estimated to cost \$3,100 per student.

Figure 7.6 plots spending per pupil against student-educator ratios for high schools, by district. A somewhat different picture emerges here. The fit of the scatter of points, each representing a district, to the regression line is not as good. While there is a relationship between spending per pupil and student-educator ratios in high schools, it is not as strong as the relationship in elementary schools.¹⁷ For this reason, the ratio is a less compelling indicator of performance in high school education. Breadth of program, for example, also deserves consideration, but no indicator of performance on this criterion was readily available.

Unlike elementary schools, a relationship between district size and student-educator ratios emerges among high schools. The very small districts tend to have fewer students per educator. All three of the districts positioned well below the regression line in Figure 7.6 are quite small, operating a single, small, high school. Valley Park, with a 142-student high school, reports a student-educator ratio of 5:1. The low ratios for very small high schools may, in some cases, suggest the presence of potential economies of scale not currently being captured. All high schools, in order to meet accreditation requirements, must maintain some degree of program breadth-some menu of courses. This means hiring teachers with diverse specializations. In very small schools, the result may be a decrease in the studenteducator ratio. Larger high schools with similar levels of spending per student do not seem to put their





money into matching the low ratios found in many smaller schools. Instead, they may invest in still greater program breadth, or in better educated faculty, while allowing the student-educator ratio to increase.

Two small districts, Hancock Place and Brentwood, shift from well above to well below the regression line between Figures 7.4 and 7.6, that is, between elementary and secondary education. Hancock Place is the most poorly funded district in the county, while Brentwood is one of the best funded. Both districts evidently trade off the student-educator ratio in their elementary schools in favor of a better ratio for their small high schools. (It should be noted, however, that Brentwood also ranks first among the districts in student achievement; see Table 7.3 and related discussion below.) A larger, more rural district, Rockwood, shifts in the opposite direction, apparently maintaining a more favorable elementary school ratio as opposed to reducing the ratio at its two high schools.

The school districts also vary in the average size of their elementary schools, ranging from 225 students to 611. One could argue that larger schools, by generating economies of scale at the school site, would allow districts to improve student-educator ratios. On the other hand, one might also expect that smaller schools, by allowing less flexible assignment of teachers to grade levels, would tend to produce smaller class sizes. Neither view is reflected in the data from St. Louis County. School size is not related to student-educator ratios in the case of elementary education. Small schools may of course be preferred for other reasons (e.g., a more intimate school community), and appear to be consistent with favorable student-educator ratios. Webster Groves, which reports the lowest such ratio for its level of current expense of any district, also operates relatively small elementary schools, averaging 286 students per school.

Variation in Student Achievement

Student achievement on standardized tests is an alternative indicator of school performance, displayed by district in Table 7.3. The major difficulty with this indicator is that variation in student achievement has been shown to be mainly a function of social background rather than school variables. To a large extent, therefore, differences in student achievement among school districts reflect variation in student population characteristics, rather than variation in school performance. In large data sets, it

Table 7.3 County School Districts Ranked by Student Achievement on Standardized Tests of Basic Skills – 1982					
District	Overall Percent Passing	Math Percent Passing	Reading Percent Passing	Government Percent Passing	
Brentwood	100%	100%	100%	100%	
Affton	97	98	100	97	
Clayton	95	96	100	99	
Lindbergh	93	94	99	96	
Ladue	92	95	100	96	
Kirkwood	89	93	98	92	
Bayless	86	88	100	95	
Parkway	86	89	98	94	
Mehlville	84	90	99	91	
Rockwood	83	87	97	90	
Hazelwood	82	89	97	88	
Webster Groves	81	88	96	86	
Ferguson-Florrisant	80	86	96	89	
Pattonville	79	88	97	87	
Ritenour	73	78	91	90	
Maplewood	70	77	92	87	
Hancock Place	70	74	95	87	
Jennings	68	78	97	79	
Riverview Gardens	66	71	95	86	
University City	64	71	94	78	
Valley Park	59	61	95	68	
Wellston	57	75	91	76	
Normandy	48	62	84	64	

is possible to control statistically for the effects of students' social background in order to estimate the effect of different types of schools and districts, but this approach can be used with only limited success in an analysis of 23 districts.

Nevertheless, student achievement in St. Louis County is clearly related to poverty. The percentage of the population of a district defined as poor accounts for more than half of the variance in the percentage of students who pass their eighth-grade tests of basic skills when the Wellston district, an outlier, is removed from the analysis.¹⁸ (Wellston is an outlier because it performs much better than its poverty rate would predict.) The three districts with the highest poverty rates, including Wellston, also have the lowest rates of student achievement overall. Poverty rate is a more consistent predictor of student achievement in St. Louis County than either race or median household income.

No relationship is evident between studenteducator ratios in the elementary schools and student achievement by district. Despite the evident strategy of most districts to use financial resources to secure a lower ratio, the differences in number of students per educator do not seem to account for much, if any, of the differences in student achievement among the districts. This result, while disappointing, underscores the complexity of educational processes and the difficulties of relying on any single indicator of school quality.

On the other hand, spending per pupil appears to be related to student achievement, although it is difficult to know how much weight to attribute to this factor. Spending is also correlated highly with student social background. The relationship does hold up, however, as statistical controls are introduced serially for students' social background, including race, poverty, and median household income in the district.¹⁹

Size of district is not consistently related to student achievement. The smallest districts, however, are clearly capable of performing quite well. The single best academic achievement of any district is registered by Brentwood, with a total student population of 729 students. Brentwood is a relatively low income community (median household income is \$16,654), but it enjoys substantial assessed valuation and is the second highest spending district in the county.

Wellston, discussed above as the most seriously disadvantaged district in the county, finished next to last in overall student achievement. Because its demographic standing is by far the worst in the county, it is significant that Wellston's academic performance is not the worst. Instead, it finished 9 percentage points ahead of the lowest achieving district. If Wellston's performance on the separate tests of mathematics, reading, and government is used as an indicator (see Table 7.3), its ranking is still higher. The nearly all-black district is also one of the smallest districts in the county, and one where taxpayers dig deeply into their pockets to support their schools.

JOINT PRODUCTION ARRANGEMENTS

The production of direct services to students. with the exception of special education and vocational-technical training, is organized separately by each school district and carried out, for the most part, independently. Education for the handicapped, vocational-technical training, and indirect services that benefit all students are organized, however, in a much different manner. Instead of acting independently, the 23 regular school districts and one special district have entered into a variety of joint production arrangements that enable each district to draw on the combined resources of all of them. These arrangements include both bilateral ties, such as those that link the special district to each of the regular districts in the county, and a number of consortia and similar associations, some of which include school districts outside the county as well as private school systems.

Special Education and Vocational-Technical Training

The Special School District engages in two basic production tasks with respect to handicapped students: evaluation and instruction. In performing these tasks, the special district is connected to each of the 23 regular districts in the county. These production arrangements entail patterns of both specialization by clientele and coordination with respect to the same clientele.

The referral and evaluation procedures through which a student gains access to special district services require coordinated performance on the part of administrators in the regular district where the student resides and the special district staff. Once a student is referred by his or her home district. special district counselors, the student, and sometimes the student's home district jointly produce an evaluation session. The regular districts vary in the extent to which they contribute to the production of evaluations. A few districts go so far as to complete all of the paperwork and some of the evaluation procedures before calling for special district intervention. Other districts wait for special district intervention after completing only the necessary referral and application procedure.

The evaluation session determines whether and to what degree a student is learning disabled, and signals commencement of instructional service, which may be either produced independently by the special district in its own schools or coordinated with the regular school districts, depending on the degree of a student's learning disability or handicap. Students are accepted by the special district if they are evaluated as being Phase I (mildly), Phase II (moderately), Phase III or Phase IV (severely) handicapped. Those who are evaluated as being Phase III or Phase IV handicapped are referred for enrollment in one of 12 schools operated independently by the special district. Students who are evaluated as being either Phase I or Phase II handicapped are mainstreamed, integrated into educational programs within their home districts. The special district is the only public school district delivering services to Phase III and Phase IV handicapped students in the area. However, with respect to Phase I and II handicapped students, the special district coordinates with the regular districts to produce direct services for students.

Within the regular district schools, a Phase I student, one handicapped with a milder form of learning disability, speech or behavior disorder, may spend no more than 50 percent of each school day in a resource room with a special education teacher. The larger part of the student's school day must involve him or her in the school's regular curriculum. Phase II students spend more than 50 percent of their time, but less than 100 percent, with a special education teacher. In both cases, the special education teacher is an employee of the special district who nevertheless works as part of an education team in a school operated by a regular district. Teachers with two different employers jointly deliver services to the same students on a coordinated basis. A special education teacher must work as part of a team of teachers and within a common facility supervised by a principal who works for a different school district.

The regular district superintendents interviewed for this study expressed overall satisfaction with their working relationships with the special district. Some voiced a concern over delays in evaluation and referral, but also noted improvement in this regard. Most saw no particular problem involving the placement of special education teachers in their schools. The Ferguson-Florissant district was seeking, however, to work out different arrangements for serving Phase I and II students who are speech and language disabled. Instead of using teachers employed by the special district, Ferguson-Florissant proposed that it hire its own special education teachers with special district funds and perform its own evaluation and referral. The objective of this plan is to decrease the lag time currently involved in evaluation and referral through the special district staff and to be able

to deal with administrative problems at the school site. The special district would become purely a provision unit in this case, and the regular district would become the only production unit.

In the current arrangement, regular districts contribute space and facilities for education conducted by the special district with their employees. The special district is obligated, at least in principle, to pay rent for the space it uses in any regular district school. At least one district, Clayton, does not collect the rent as a matter of policy, and another reports receiving no payment over a two-year period. On the other hand, the Riverview Gardens district rents an entire building to the special district for use in its Phase III and IV programs.

While the special district is an exclusive provider of special education services (in the public sector), several of the 23 regular school districts in St. Louis County offer vocational programs for resident high school students. The Clayton district, for instance, offers its students a part-time high school, and the Ritenour district operates a vocational preparatory school. Nonetheless, high school students from regular school districts may choose to pursue vocationaltechnical training at one of the three Special School District technical high schools. Admission to the technical high schools is granted on a first-come, first-served basis. However, under Sections 12B and 12C of the Voluntary Interdistrict Desegregation Agreement, discussed below, the special district must reserve at least 25 percent of the enrollment spaces in its vocational-technical schools for transfer students from St. Louis City high schools. The Special School District accepts students from school districts in surrounding counties as well, providing vocational and technical training to these students on a tuition basis. The special district also coordinates with the St. Louis County Department of Human Services to operate a summer occupational training program established under the auspices of the Job Training Partnership Act.

Indirect Services

Several types of production relationships link the school districts in the St. Louis metropolitan area. Although these districts are authorized by state law to engage in cooperative endeavors to deliver elementary and secondary education (Sections 70.210, 70.220 *Missouri Revised Statutes*), they nonetheless remain, for most purposes, autonomous production units. Production of direct education services to public school students continues to be organized by individual school districts. Yet, the ability of the local public school districts to function efficiently as autonomous units depends in part on their ability to develop joint, interdistrict arrangements, intended to capture economies of scale in the delivery of various types of indirect or auxiliary education services to public schools.

The Cooperating School Districts of the Suburban St. Louis Area. Perhaps the broadest arrangement involving public elementary and secondary schools, including the Special School District, is their joint participation in the Cooperating School Districts of the Suburban St. Louis Area (CSD). CSD originated in 1928 when the school superintendents in St. Louis County began holding informal meetings to discuss issues of common concern. Since that time, the member districts have expanded to include all of the districts in St. Louis County as well as a few districts outside the county. The services and facilities now include an extensive film library and audiovisual services, a cooperative purchasing program, a joint data processing service, a pre-college guidance program, and an annual countywide music festival.

Since the time of its formal creation, CSD has been a nonprofit organization funded entirely through dues paid by member school districts. Dues for full or participating members are determined annually on the basis of the district's assessed valuation (50 percent) and average daily attendance (50 percent). Associate (nonvoting) members (which include the St. Louis city school district) pay a flat \$250 that entitles them to participate only in the cooperative purchasing program. The CSD executive committee meets monthly, except during summer months, and makes all decisions that bind CSD contractually. The organization has a separate administrative staff and an executive director.

New members of the eight-member executive committee are selected annually during the conference of superintendents and school board members. Nominations for committee membership may come from the floor, but no nominations have been made from the floor since 1975. Instead, the executive director and the current executive committee draw up a slate of candidates and submit that slate to the superintendents in member districts before the conference. Generally the slate is composed in accordance with three criteria: geographic balance, district wealth (balancing wealthy and poor districts), and previous service on the committee (those who have not been represented in some time being favored over those who have).

Under the cooperative purchasing program, the executive committee and director of CSD arrange vendors for classroom, sports, office, and other types of supplies for which districts have a common demand. Once vendors are arranged, each school district receives information about the types of material vendors are supplying and about the discounted cost per unit for the supplies at various quantities purchased. Districts then decide whether they wish to purchase supplies from the vendor secured by CSD, and at the stated price. Once a district chooses to place an order, it is given a 10 percent margin for error in the number of units ordered. Suppose, for instance, that CSD arranges for a vendor to supply microscopes and other pieces of laboratory equipment at given prices per unit. If a particular district is not satisfied with the quality or price of the microscopes that are offered by the vendor, the district may look elsewhere, as it chooses. If the district does choose to purchase microscopes at the vendor's price, then it can submit an initial purchase order that varies as much as 10 percent from its eventual purchase without penalty.

Compared to many purchasing arrangements within large school systems, the CSD program has considerable flexibility. In 1974, the executive committee created an ad hoc committee to explore possible advantages of constructing a central warehouse for CSD educational supply purchases. The committee concluded that the costs, especially costs for maintaining a supply warehouse and for hiring additional administrative staff, were prohibitive. Instead CSD chose to retain the original, decentralized, bid/ no bid structure of the cooperative purchasing program.

The audiovisual education department of CSD is reported to be the largest such facility for grades K-12 in the nation.²⁰ Current library holdings are in excess of 26,000 programs with an estimated value of 6 million. Services to member districts and schools include instructional television, video duplication, and the delivery of instructional materials.

All of the districts in St. Louis County do not benefit to the same degree from their membership in CSD. The larger districts in the county-those with several thousand students and a dozen or more school buildings to maintain-can, in many instances, purchase in lots sufficiently large to capture independently any price discount available through joint purchasing. As is the case for all the school districts in St. Louis County, the largest districts continue to participate as full members of CSD, paying a fee based on enrollment and assessed valuation. One reason for this could be that even the largest districts in St. Louis County are not large enough to produce, efficiently, the other services supplied through CSD, especially the 26,000 volume film library and audiovisual services. The St. Louis city district does maintain its own audiovisual department, and may be large enough to maintain it efficiently, that is, large enough to capture separately any discount that it would receive by virtue of joint

purchasing through CSD. This would account for the decision by the St. Louis city district to hold only associate membership in CSD, allowing for selective participation in the cooperative purchasing program.

One of the services that is still produced for some of the districts by CSD, but that may revert to in-house production among many of the districts in the area, is data processing. As computer technology has become less expensive to purchase and operate, a number of districts in the area have purchased microcomputers and have begun to process their own payrolls and so forth, instead of using the data processing services offered through CSD. However, advances in computer technology, which have reduced the costs associated with in-house data processing, have created demand among microcomputer users for operator training, machine repairs, service support, and so forth. This demand is being met by another organization discussed below.

The Regional Consortium for Education and Technology. The Regional Consortium for Education and Technology (RCET) is a new organization that specializes in producing information about and assistance in the utilization of computer technology for educational applications. RCET integrates business interests with institutions for public and private education, being an organization open to public school districts, private schools, colleges and universities, nonprofit organizations, and private business enterprises. Currently, 20 of the regular school districts in the county, the special district, and the city district are members of RCET. Consortium members also include several public school districts outside of the St. Louis area, as well as the St. Louis Archdiocesan school district, the Lutheran schools of the St. Louis area and the Educational Confederation, an organization of 22 private schools in the area. The Cooperating School Districts (CSD) also maintains a separate membership in RCET.

School districts wishing to participate in the consortium may choose to join as either associate members or general members. Within each membership classification there are five levels of dues based on student enrollment. However, the services that a school district may receive under the alternative classes of membership differ only in terms of the fee that school districts must pay for computer repair services provided by RCET.

Besides repairing machines, RCET provides a cooperative purchasing program for computer hardware and software, a computer lab where members can receive instruction in using microcomputers, a resource center and software library where member districts may send individuals to preview hardware and software, technical workshops organized around topics of interest to users, and an electronic bulletin board for student users as well as teachers and school administrators. The consortium also sponsors a number of roundtables, conferences, and inservice workshops centering on the uses of computer technology for educational purposes.

Municipal and Community Relationships

Various arrangements link the regular school districts with the municipalities that they overlap and the communities they serve. The school superintendents who were interviewed described the general character of these arrangements as informal, but generally considered such relationships to be good.

Some districts do have formal contractual relationships with municipalities for specific purposes. The Jennings district, for example, in cooperation with the City of Jennings, operates an adult education program and a youth summer recreation program. As part of this arrangement, the district provides school facilities at no cost to the city. While the city hires employees, including district teachers, to operate both programs, the school district collects tuition fees for the two programs and turns these funds over to the city.

Several of the school districts in St. Louis County also permit municipalities to use school facilities for various types of public functions, including municipal elections, town meetings, charity events, and community service programs. The Hazelwood district, for instance, allows smaller municipalities within its boundaries to use school facilities for public meetings and as polling places, paying rent only to cover utility and clean-up costs. The larger municipalities that lie partially within the district-Ferguson, Hazelwood Florissant. and Hazelwood-have sufficient municipal facilities for public meetings and, therefore, do not rely on district facilities.

The Ritenour district permits several churches that have pooled funds to operate a meals-on-wheels program for the elderly to run their program from Home Heights, a closed elementary school. While the kitchen used by the church organization is located in the basement of the school, the Ritenour district also operates a community education center for GED, arts and crafts, and other courses in the classrooms above. The district buys the teachers' time and sells it for tuition.

The Ferguson-Florissant district is currently leasing space in a closed elementary school to the City of Florissant, which is operating a similar meal service for senior citizens. Ferguson-Florissant also leases school facilities to the smaller municipalities in its area for public gatherings. The City of Berkeley, which lies partially in the Hazelwood district and partially in the Ferguson-Florissant district, leases facilities for public meetings from both districts.

The most tightly knit and wide-ranging relationships between school districts and municipalities in St. Louis County seem to occur in those instances where a district is more or less coterminous with one or two municipalities. The superintendent of schools and city manager in University City, for example, meet regularly and share agendas for school board and city council meetings. The district and the city have a history of cooperating in a number of more substantive areas also. Around 1950 the city gave property to the school district to construct a high school, stipulating that the district would also have to build and maintain an indoor swimming pool. The school district did so, and continues to maintain both. The school district and the municipal street and maintenance department routinely share machine parts and some equipment. In addition, city maintenance crews remove snow from school entrances and lots during the winter. In 1986 the district and city began investigating the possibility of combining their separate grounds crews into a single unit.

Bilateral Arrangements Between School Districts

Only one formal interorganizational arrangement relating two school districts in the production of a direct education service was identified during interviews with 13 of the 23 school superintendents in St. Louis County. This relationship involves the Affton and Lindbergh school districts. Affton and Lindbergh cooperated for the first time during the 1985-86 school year to provide an early childhood education program. The program, which is headquartered in Truman, a closed elementary school in the Lindbergh district, enrolls regular preschool-age children. However, some special preschoolers, mostly with language disabilities, are enrolled in the program. The program has been well received by parents in both districts, and the districts planned to increase funding for the program in the 1986-87 school year. Although the early childhood program provided by these districts enrolls some special students, the program is not formally linked with the Special School District. While the preschool program employs its own special education staff, the director of the preschool program shares information with Special School District staff.

Many of the school districts, independently or in conjunction with municipalities, also provide adult education courses. School districts cooperate with the Community College district of St. Louis County to offer education services to adults. In the Clayton district, the countywide Community College district uses Clayton High school and pays a rent of approximately \$10-15 per classroom to the Clayton district for use of the facility. The Community College district also hires one of the Clayton district's assistant superintendents as building administrator during the evenings when classes are offered and employs some of the Clayton teachers as instructors for the adult courses. The Clayton district has also articulated community preferences for the types of courses to be offered by the Community College, shifting from a more academic type to arts and crafts and recreation.²¹

ARRANGEMENTS FOR PUBLIC SCHOOL DESEGREGATION

Article IX of the Missouri Constitution of 1945 originally required two sets of public schools throughout the state, calling for "separate but equal schools for children of African descent." Since the U.S. Supreme Court ruled in 1954 that legally sanctioned equal but separate public facilities are unconstitutional, the racial composition of public schools has been a source of conflict in central cities and metropolitan areas. In the St. Louis Metropolitan area, the Voluntary Interdistrict Coordinating Council (VICC) operates as the linchpin in an areawide plan for public school desegregation. Since 1981, school desegregation throughout this area has gone forth in two phases: first under an Intracity Plan, centering exclusively on the St. Louis city school district, then second, under an Interdistrict Plan involving the city district and 16 county districts.

The Intracity Plan

In 1972, a group of black parents residing in St. Louis City, who collectively have come to be called the "Liddell Plaintiffs," filed suit against the St. Louis City board of education. The parents charged that school board members were in violation of the Fourteenth Amendment to the U.S. Constitution by perpetuating a segregated school system in the city. When the suit was brought, black students outnumbered white students in St. Louis City schools by nearly four to one, and 92 of the 120 schools in the city district were attended exclusively by children of one race. At the same time, 30 of the city schools employed all white faculties, and more than 90 percent of the faculty members in the remaining 90 schools were black. After four years of litigation, the initial outcome of the suit was a court order requiring St. Louis City's board of education to propose some acceptable method for desegregating the schools under its charge. In doing so, the board proposed and began implementing its first desegregation plan in 1976, the centerpiece of which was the creation of 11 magnet schools in the City of St. Louis.

The 1976 plan, however, did not settle the case. The original plaintiffs continued to press, and even expanded, their case against the city board, finding support from both the Missouri Department of Elementary and Secondary Education and the U.S. Department of Justice. Finally, in 1980, eight years after the original suit was filed, the U.S. Eighth Circuit Court of Appeals upheld the plaintiffs claims and ordered the city board to launch a desegregation plan more expansive than its 1976 effort. Besides creating and allowing for voluntary student transfers to the magnet schools, the Intracity Plan called for the introduction of a new system of middle schools, mandatory reassignment of students for more uniform racial balance throughout the district, and the enrichment of compensatory and remedial programs in those schools having a predominantly black enrollment. However, because St. Louis City schools have so few white students compared to the number of black students, it was impossible to integrate every school in the district. In fact, 60 schools in the district still have enrollments that are wholly or predominantly black.

The Interdistrict Plan

Because the Intracity Plan left nearly 30,000 black students in St. Louis City enrolled in schools whose student populations remain wholly or predominantly black, the Court of Appeals informally proffered, but did not formally mandate, a more ambitious desegregation program involving voluntary transfers of students and teachers between the city and county school districts. When an early voluntary transfer plan was implemented in 1981, only five districts in St. Louis County participated. Subsequent to this initial effort at interdistrict desegregation, the case took an interesting turn when the St. Louis city district joined with its adversaries, the Liddell Plaintiffs and their supporters who had originally sued the city district, to bring suit against the school districts in St. Louis County. After a series of negotiations among the Liddell Plaintiffs, the NAACP, the Missouri Department of Education, the St. Louis city school district, and representatives of the 23 regular school districts in St. Louis County, a voluntary agreement for interdistrict desegregation was finally reached in 1983, precluding a court-imposed mandate. This landmark settlement, first instituted during the 1983-84 school year, is voluntary in the sense that no overarching authority unilaterally imposed a desegregation plan on the St. Louis metropolitan area. Nevertheless, the expressed willingness on the part of the Court of Appeals to design and impose its own interdistrict arrangement provided strong impetus for good faith negotiations among all the communities of interest—that is, the 25 school districts in St. Louis City and County.

The agreement explicitly established the Voluntary Interdistrict Coordinating Council (VICC) to monitor implementation of transfers of students and staff between the St. Louis City district and those districts in St. Louis County whose enrollments are less than 25 percent black. The agreement also requires the council's executive director, who is an ex officio member of the council, to report at least annually to the federal district Court of Appeals on the plan's performance. The council is composed of 27 members selected as follows: one school board member or administrator from the St. Louis City district and from each of the 23 districts in the county, one member representing the Liddell Plaintiffs, one member from the NAACP, and one member from the Missouri Department of Elementary and Secondary Education. VICC is organizationally partitioned into one standing committee-a magnet review committee-and four subcommittees-policies and procedures, staff development, staff exchange and transfer, and student transportation.

In terms of performance, the interdistrict agreement set a five-year time frame during which up to 15,000 black students in St. Louis City public schools may opt to attend any of 16 predominantly white school districts in St. Louis County. The agreement states that predominantly white school districts are those whose enrollments are less than 25 percent black. In accordance with the agreement, the seven county districts with black enrollments of 25 percent or more-Ferguson-Florissant, Jennings, Maplewood-Richmond Heights, Normandy, Riverview Gardens, University City, and Wellston-cannot accept students transferring from St. Louis City. The agreement also provides for voluntary transfer of a comparable number of white students in St. Louis County public schools to any St. Louis City schools, including the magnet schools. Altogether, during the 1984-85 school year, 5,317 students in the metropolitan area transferred across school districts, 447 from county to city schools and 4,870 from city to county. During 1985-86, the number of students transferring to different schools in the metropolitan area rose to 7,528-542 transferring from county to city, and 6,986 transferring from city to county.22

This arrangement, by allowing for voluntary student transfers across district boundaries, has some attributes of a voucher system, while at the same time avoiding an externally imposed system of busing as a remedy to desegregate schools in the area. The limiting factor in this arrangement is that not all students in the area are permitted to choose what school they will attend. Black students in county school districts (whether the district is Ladue, with about a 3 percent resident population of black students, or Wellston, with virtually 100 percent) cannot transfer under the interdistrict plan. This is also the case for white students in St. Louis City who might wish to transfer to a particular school in the county. The opportunity to choose is limited to black students in St. Louis City and white students in St. Louis County.

Several aspects of the plan are quite innovative. Included are the development and extension of a network of magnet schools, a transportation arrangement that permits students who are allowed to transfer to participate in extracurricular activities, and an arrangement authorizing voluntary teacher transfers and exchanges among any of the 24 districts in the metropolitan area.

Although most of its work is directed toward the school district in St. Louis City, since this is where the preponderance of magnet schools is located, the magnet review committee is charged with evaluating programs in a developing chain of magnet schools (27 city and 1 county). In 1984-85, the committee evaluated 12 magnet programs in the city district and one in the Kirkwood school district in the county. Students interested in specialized instruction may now choose from magnet programs that include a Center for Management, Law, and Public Policy; Junior and Senior Classical Academies; Centers for Visual and Performing Arts; a Naval Junior ROTC Academy; and Centers for Individually Guided Education. The magnet schools play a critical role in maintaining the reciprocal nature of the plan between city and county, that is, in maintaining a twoway flow of transfer students. More than 90 percent of all county-to-city transfers are transfers to magnet schools. Without the magnet program, it is doubtful that voluntary county-to-city transfers would have reached current levels.

Student transportation, or busing, remains the most complicated and controversial issue associated with programs for school desegregation. In some areas, absolute mileage of student transportation need not necessarily increase as a result of desegregative transfers. The complexity, though perhaps not the controversy, can be alleviated to a large extent under desegregation plans where students are unilaterally reassigned, and where bus schedules can be designed to transport students to school in time for the beginning of the regular school day and pick them up when the final bell has rung. One of the major problems associated with busing students, especially when buses carry students across district boundaries, is to give students who transfer to another school opportunities to participate in activities that do not coincide with the normal school day. When buses are scheduled to run exactly and only in accordance with the regular school day, possibilities for some students to participate in extracurricular activities at their new schools are foreclosed. If a transfer student cannot arrange for a ride home after the German club or student council meeting or after band, basketball, or drama club practice, then the student has less opportunity to become fully integrated into the activities of the new school and to take advantage of all that is offered.

These sorts of limiting circumstances were recognized as problematic during the negotiations over interdistrict desegregation. This recognition led to further negotiations between VICC and the Missouri Department of Elementary and Secondary Education, resulting in a transportation arrangement that is intended to encourage transfer students to engage in extracurricular activities. Each year since 1983, the state education department has allotted sufficient funds to provide for transportation of interdistrict transfers students who participate in extracurricular activities scheduled before or after regular school hours.

The organization of bus routes and schedules for transfer students is quite complex, especially since these routes and schedules are designed to facilitate both student choice among schools and student participation in extracurricular activities. During the 1983-84 school year, 46 percent of all transfer students reported participating in an extracurricular activity, and 27 percent reported participating in three or more activities. During 1984-85, the total number of transfer students reporting extracurricular participation rose to 54 percent, with 34 percent participating in three or more activities. The total cost of transportation for interdistrict transfer students, including transportation to part-time programs and extracurricular activities, amounted to approximately \$8 million during the 1984-85 school year, all of which has come from the budget of the state education department.

The State of Missouri also provides compensation to school districts that lose students by transfer. Districts that receive students by transfer also receive full state aid, distributed by enrollment, for that student. At the same time, the student's district of residence continues to receive half the amount of state aid to which the district would have been entitled had the student not transferred. These tuition incentives amounted to \$6.4 million for 1983-84 and, as the number of transfers increased, \$14.9 million for 1984-85.

One simple gauge of the effectiveness of the desegregation plan is the degree of conflict or cooperation that has surrounded its implementation. As noted before, most of the school districts in St. Louis County did not join the program until there was a strong likelihood that they would be subject to a court-ordered desegregation plan. Nevertheless, once it became apparent that the U.S. Court of Appeals would mandate school desegregation for the area, and probably design and implement its own plan, the districts in the area voluntarily entered negotiations to seek a mutual accommodation in designing a plan for the metropolitan area. VICC became the vehicle for working through conflicts to a point of resolution. That the 24 districts in the area were able, as independent jurisdictions, to negotiate a mutually agreeable settlement, and then to coordinate a highly complex and open system of school desegregation in the metropolitan area, would perhaps seem impossible to those who argue that interdistrict desegregation must be imposed from above-by state or national government-to be effective.23

CONCLUSION

It is not unreasonable to refer to the school districts in St. Louis City and County as forming a multijurisdictional system of public education, especially so with respect to the 24 districts in St. Louis County. The distinction between provision and production is helpful in understanding how this system works, as well as for examining the implications of the system for both efficiency and equity. Each school district functions both as a provision unit and as a production unit for direct services to students. The use of state government as a basic unit of governance, as well as a supplementary provision unit for special education in the county, help to tie the districts together as an interdependent system. Perhaps more importantly, joint production units for indirect or auxiliary services have been created to operate in addition to the separate school districts. The result is a system that is fragmented in a jurisdictional sense, but not uncoordinated in a functional sense.

Fiscal Relationships

The system of schools in St. Louis County is characterized by sharp fiscal differences. Still, most students are not extremely far from the mean level of district expenditure per student in the county. A small minority (roughly 14 percent) is extremely well off by this measure; fewer still (perhaps 6.4 percent) can be viewed as extremely disadvantaged. It is easy to discern how those who are extremely well off got that way—the cause is high assessed valuations of local property per student. How the least well off came to be so is a somewhat more complicated question. Low assessed valuations per student are only part of the answer. District tax effort (presumably reflecting local demand for public education) also plays a role, as well as how a district is treated by state aid formulas.

It should be noted that fiscal disparities also exist among schools within large, consolidated jurisdictions. Absolute equality in the distribution of resources is unattainable. One possible standard of equity is some limited degree of dispersion about a mean. In this sense, the fiscal equity performance of the St. Louis County system may be quite good, though it could be made even better with a small, highly selective program of support for distressed districts. One possibility would be to reserve a portion of the county railroad and utilities tax, already earmarked for public schools, to aid the most fiscally distressed districts in the county, or to convert the county tax distribution formula from an allocative (student population) basis to a redistributive basis. The county school fund in 1984-85 totaled almost \$10.5 million, just under \$90 per student countywide. Concentrated on a few distressed districts, however, this fund could be a much more significant sum of money. The greatest difficulty is in defining distressed districts. More than the level of spending per student must be taken into account in order to avoid treating districts inequitably. Local tax effort must also be a positive factor affecting redistribution. When this is done, some districts may still be left with significantly less to spend per student than others.

Students in wealthy districts do not necessarily cause students in poor districts to receive an inferior education. If there were a countywide school district, resources drawn from a few wealthy communities would be spread over the entire county student population, albeit unevenly. It is not clear that the resulting marginal increase in resources would be worth the loss of community control and accountability for even the poorest communities. This is a trade-off that local citizens must make when deciding whether to consolidate districts. The state Foundation program operates, implicitly, on the assumption that external resources are best combined with local community preferences and local accountability. Given its level of funding, the program appears to operate with substantial success. Increasing efforts such as these, and perhaps supplementing the state program with a county program, can increase equity without undermining the accountability of producers-education professionals-to the intended beneficiaries of both redistribution and the ultimate education product.

Patterns of Performance

Using the student-educator ratios predicted from each district's assessed valuation per student as indicators of performance in elementary schools, St. Louis County school districts are remarkably consistent performers. Size of district, measured by number of students in attendance, is unrelated to performance on this indicator. Districts from small to large perform much the same in translating fiscal resources into student-educator ratios. Neither economies nor diseconomies of scale are much in evidence in elementary education.

The picture changes somewhat for secondary education. Very small districts tend to perform better than normal with respect to student-educator ratios, but the relationship between expenditure per student and students per educator is much weaker than for elementary education. Such ratios are therefore less likely to be an accurate performance indicator in high schools. It may be the case that some of those schools exhibiting superior performance on this indicator are relatively inefficient, unable to capture potential economies of scale.

Some consolidation of small high schools in the county, therefore, may be worth considering. This would not necessarily entail a consolidation of school districts. One district could pay tuition for its students to attend high school in another district, or two or more districts could consolidate their high schools without merging the districts. Another possibility is for two or more districts to agree on a reciprocal open enrollment plan, allowing each district to develop different secondary school specialties. Of course, factors other than those considered in this analysis—such as the contribution of a high school to a sense of community in a residential area—may modify these conclusions.

Turning to levels of student achievement, it is clear that small district size is no bar to superior performance. Neither, of course, is small size a guarantee. Variation in performance among a diverse set of small, homogeneous districts is to be expected because student achievement is highly correlated with social background characteristics. Another variable, unmeasured and unexamined in this analysis, is the level of student achievement that a community finds acceptable. If it were possible to compare district performance in light of community expectations and standards, somewhat different results could emerge. A large number of small districts seems to generate what one would expect: diversity.

Indirect Services and Special Education

Despite the substantial variation in district size across St. Louis County, size is not associated with school performance on the indicator of student-educator ratios in elementary schools. This finding indicates few remaining economies of scale in the production of direct services to regular students in regular classrooms. The case of indirect or auxiliary services, or the case of services for special students in special classroom situations, however, present different situations. In these circumstances, the St. Louis County system features an organizational overlay of joint administrative units, maintained on a cooperative basis, and a special district that provides education for the handicapped (delivered to students in part on a cooperative basis) and vocationaltechnical training. These arrangements enable the separate school districts to pool their resources for those functions in which economies of scale are most likely to be present.

It is especially significant that a countywide district demand for special education can be combined with the resources of a regular school program in order to avoid duplication of facilities and give students the benefits of both experiences. Sharing of school facilities with municipalities and with the Community College district also achieves economies for citizen taxpayers. Even private and parochial schools have been able to benefit from some of the service arrangements initially developed for public schools. Functional coordination between overlapping jurisdictions occurs in St. Louis County, not through central direction, but on the basis of two principal factors: (1) mutual need and (2) service to a common constituency. As James Madison wrote about federal and state governments, "officials in overlapping jurisdictions are but different agents and trustees of the [same] people, constituted with different powers, and designed for different purposes."24 Different agents who faithfully seek to represent the same people in different, but related, matters have strong incentives to cooperate.

Faced with the prospect of a highly divisive legal battle over school desegregation, and the possibility of a conflict-laden implementation, the St. Louis system of public education responded with one of the more creative and cooperative metropolitan efforts in the nation. The number of school districts in St. Louis County was not a deterrent to this arrangement. The most telling criticism one might advance of the school transfer program now in effect is that transfer to St. Louis County schools is limited to black students from St. Louis City. The potential is there to do more, increasing opportunities for all disadvantaged students, not simply those now included in the program. Gradually increasing the ability of students to choose to attend schools outside their district has the potential to slowly transform public education, increasing both school responsiveness and equity.

ENDNOTES-

- ¹After the field work for this study was completed, a citizens movement was initiated to merge the Valley Park district the smallest district in the county—with an adjoining district. As of this writing, the matter is unresolved.
- ²One district superintendent interviewed for this study observed that many parents have deliberately relocated to St. Louis County in order to take advantage of its high-quality education service to handicapped students.
- ³Mobility does not pose a problem from an economic efficiency standpoint as long as it does not cause officials and citizens to reduce their provision effort in order to discourage migration.
- ⁴ Interestingly, the percentage of district students attending private or parochial schools is positively related to student achievement, measured by the percentage of students who pass an eighth grade test of basic skills. Private school attendance, measured at the district level, is also correlated positively, however, with those social background characteristics that contribute to student achievement. There are too few cases in St. Louis County to determine whether the effect of private school attendance on student achievement in public schools continues to be positive after controlling for the effect of student social background. The results obtained from analyzing the 23 districts in St. Louis County are not consistent in this regard.
- ⁶Whether there is a competitive effect depends on whether state aid per student exceeds the marginal cost of education per student for a particular district. The proportion of state aid varies roughly from 15 percent to 50 percent or more across St. Louis City and County school districts. Whether state aid is high enough and marginal costs low enough to engender significant competition is a question that lies beyond the scope of this report.
- ⁶Source: Cooperating School Districts of the St. Louis Suburban Area, St. Louis County Annual School Report, November 1985. Also, Missouri State Board of Education, 1984-85 Report of the Public Schools of Missouri. Data from the CSD report and the state report exhibit some differences, and adjustments were made to tabulated data for purposes of consistency.
- ⁷ Districts also vary in their reliance on deficit financing. The mean debt service per student in 1984-85 ranges from \$0 to \$656 per student; the mean is \$286. Districts that spend more per student from all current sources also tend to spend more per student on debt service. On the other hand, there is a slight tendency for districts that spend more per student to spend less per student on debt service relative to the amount spent from district sources.
- ^eThe only fund from which revenues are distributed on a simple average daily attendance basis is the Fair Share Fund. Each district's appropriation from the Free Textbook Fund is determined by dividing its "membership" for the month of September by the sum of the September membership for all districts in the state. September "membership" is half the sum of the number of resident full-time students and the full-time equivalent number of part-time students who were enrolled in the public schools of the district on the last Wednesday in September of the previous year and who were in attendance one day or more during the preceding ten school days. This distribution criterion is identical to that for distribution of funds derived from county railroad and utilities taxes. Money derived from the School District Trust Fund is distributed on the basis of a slightly more complex criterion. It is distributed monthly to each local school district in the same ratio that the number of "eligible pupils" in the district bears to the number of eligible pupils throughout the state. "Eligible pupils" is determined by adding the "membership" in a district to its average daily attendance and dividing by two. A district's "membership" is half the

sum of (1) the number of resident full-time students and the full-time equivalent number of part-time students who were enrolled in the public schools of the district during the previous year, (2) the number of full-time resident students and the full-time equivalent number of part-time students who were enrolled in the public schools of the district on the last Wednesday in January of the previous year and who were in attendance one day or more during the preceding ten school days, and (3) the full-time equivalent number of summer school students (Section 163.011 *Missouri Revised Statutes*).

- [•]The state board and commissioner of education recognized as early as 1984 that there were potential problems with the Foundation Program. In the annual state report on Missouri public schools for that year the board skirted this issue by arguing that "cutbacks in state funding have further weakened the equalizing effect of the Foundation Program—a major purpose of which is to reduce the disparity in spending among school districts." Nonetheless, the board concluded that "if these disparities are not corrected, our entire school funding system is subject to legal challenge." The commissioner and the board thus far have avoided such a legal challenge by continuing to make adjustments in this formula for distributing the largest portion of state aid to local districts.
- ¹⁰St. Louis City supplied 42 percent of its own funding for 1984-85, while spending a total of \$4,164 per student from all sources. The city district exceeds all county districts in the amount of support it obtains from the state Foundation program, \$1,314 per pupil in 1984-85. Comparisons between St. Louis City and the county districts are complicated, however, by the differences in functional responsibility between them. The city district collects state aid for handicapped students, for example, that, in the county, goes to the special district. Because of these functional differences between the city and county districts, the city is excluded from analysis of fiscal patterns among districts in the county.
- ¹¹The distribution formula is identical to that used for the state Textbook Fund, described in Endnote 8.
- ¹²One possible explanation for Jennings district's ill treatment centers on the mechanism which the Missouri Department of Education uses to equalize assessed valuation per pupil across local school districts. The Foundation formula may wrongly inflate some district tax bases, while it deflates others. The Jennings superintendent argues that in equalizing assessed valuations across districts, the formula tends to overstate the assessed valuation of commercial property in his district and, therefore, decreases the amount of Foundation revenue which he feels his district should actually receive.
- ¹³The Clayton district, it might be noted here, also excels in parent and citizen participation in district planning. In 1986 Clayton district formed a citizens committee, including not only parents but other citizens as well, divided into subcommittees, to evaluate the adequacy of school facilities in a building-by-building review. Citizens in the district were so enthusiastic in undertaking this review that the work was completed well ahead of schedule. In addition, parent participation is required in the process of curriculum review. Each curriculum (e.g., science, language arts) is reviewed for a two-year period on a five-year cycle by committees of parents, teachers, and administrators. The strategy for community involvement followed in the Clayton district does not involve standing committees. Instead, special committees are charged with addressing a particular problem in relation to a specific deadline. This strategy may allow citizens to focus their efforts and keep enthusiasm high.
- ¹⁴The reduction in fiscal variation among the districts is also evident from a comparison of the coefficient of variation (CV) for district spending per student and total spending per

student. (The coefficient of variation gives the standard deviation as a percent of the mean.) For the distribution of district spending per student (i.e., spending from district sources), CV = 42.69%. For the distribution of total spending per student (i.e., spending from all sources), CV = 27.85%. (The mean, standard deviation, and CV are here computed with respect to districts rather than students.)

- ¹⁶One might expect Wellston to be the most favorably treated district considering its seriously disadvantaged fiscal position and high tax effort. Wellston ranks third, however, in Foundation funding per student, although it does rank first in federal funding per student.
- ¹⁶The correlation coefficient between the two variables in Figure 6.4 is -0.70. R² = 0.49.

¹⁷The correlation coefficient is -0.47. $R^2 = 0.22$.

- ¹⁹The correlation coefficient is -0.75. R² = 0.57.
- ¹⁹The correlation coefficient between total spending per pupil (from all sources, excluding debt service) and the percentage of students passing the eighth grade basic skills test is +0.54. Using a multiple regression procedure, this relationship continues to be positive and significant when control-

ling, serially, for the district poverty rate (percentage poor), median household income, and percent white.

- ²⁰Audiovisual Education Department, Annual Report (Creve Coeur, MO: Cooperating School Districts of the St. Louis Suburban Area, June 1987).
- ²¹Researchers in this study focused on elementary and secondary education and thus are not certain to what extent the sort of relationship described here between the Community College district and the Clayton district extends throughout the county.
- ²²The source of these and subsequent figures is the Second Report to the Federal District Court by the Voluntary Interdistrict Coordinating Council (VICC).
- ²³This is essentially the point of view taken by Gary Orfield, who argues for a unified, national desegregation policy in Must We Bus? (Washington, DC: The Brookings Institution, 1978). Jennifer Hochschild concurs in The New American Dilemma (Princeton, NJ: Princeton University Press), 1984.
- ²⁴James Madison in *The Federalist* 46. See Alexander Hamilton, John Jay, and Madison, *The Federalist* (New York: The Modern Library, nd.), p. 305.

Chapter Eight

The Political Economy of Metropolitan St. Louis

INTRODUCTION

This chapter turns from a detailed account of four specific service areas to an analysis of the general fiscal and economic relationships among governmental units in St. Louis City and County. Three broad questions are examined:

- 1. To what extent are there uncaptured economies of scale among the small local governments of St. Louis County?
- 2. To what extent does the fiscal variation among county municipalities represent an inequitable distribution of resources?
- 3. To what extent has governmental fragmentation in the St. Louis area retarded economic growth and development?

Even though definitive answers cannot be provided to any of these questions on the basis of revenue and expenditure data alone, patterns of fiscal relationships can provide clues that point to potential efficiency and equity problems.

ECONOMIES OF SCALE

One of the evaluative criteria for systems of local government discussed in Chapter One is economies of scale—whether services are produced by units that are of sufficient size to produce them efficiently without being so big as to be inefficient. Fragmented local government systems are frequently thought to be inefficient on account of having too many governments that are too small—too many to coordinate their efforts and too small to capture economies of scale. $^{1} \ \ \,$

Economy of scale is a simple economic notion. For many industrial production processes, the per unit cost of output declines as the number of units of output increases. This decline commonly reverses itself at some level of output, and one refers to diseconomy of scale beyond that level, as per unit cost increases with more output. Scale economies are often found in the production of capital intensive goods and services where a large fixed cost must be incurred before any output can be obtained—this fixed cost can be spread over larger numbers of output units as scale of production increases. Common public sector examples include water supply and sewage treatment facilities.

Most local public goods and services are not of this nature, however. They tend to be quite labor intensive. Most of the cost of production of police, fire, refuse collection, and similar services consists of personnel-related expenditures, and the level of output is roughly proportional to the labor force employed. Empirical analyses of scale economies in the production of most local public services tend to find few, if any, economies of scale over a range of small and medium-sized production organizations. Diseconomies, however, tend to be found among the larger producers.² The belief in the existence of scale economies is, nevertheless, tenacious—such economies are frequently assumed in the absence of empirical evidence for their presence.³

Even labor intensive services, however, may yield limited economies of scale with respect to cer-

tain service-components. Police protection, for example, is highly labor intensive, but certain components of policing are more capital intensive, such as radio dispatch, information systems, forensics, and even training. If a fragmented system of local government is able to achieve coordinated production of certain service components, while retaining separate production of other, more labor intensive components, it can theoretically attain a higher level of efficiency than a large consolidated system that organizes all of its production on a single large scale.

The presumption that service production and delivery in a highly fragmented metropolitan area will be uncoordinated is not borne out in this study of St. Louis County. The presumption derives largely from the image of a jurisdictional patchwork, reinforced, perhaps, by looking at a map. What a map cannot easily show, however, is the organizational overlay created by the multiplicity of local jurisdictions for the purpose of coordinating certain service components. Similar patterns of coordination were found in all four of the service areas studied. In policing, joint production arrangements have been established for precisely those service components, noted above, that are expected to generate economies of scale beyond the scope of a small municipality. In public education, similar arrangements are found, thus extending the capabilities of small school districts. In fire protection, special districts have been established in those incorporated portions of the county where municipalities are too small to capture potential economies of scale. With regard to streets, the use of county government to provide an arterial street network, combined with the extensive use of private (and to some extent intergovernmental) contracting by subdivisions and smaller municipalities, allows the production of street services to be carried out in a manner more likely to be efficient from a scale-economy standpoint.

Previous chapters have explored the possibilities of uncaptured economies of scale in the specific areas of police, fire, streets, and education. This section investigates the general effect of population size on total local service expenditures in the municipalities of St. Louis County, employing regression analyses of total expenditures and total expenditures per capita.⁴ The results are shown in Table 8.1. These analyses include population size as a predictor variable, along with service condition variables representing socioeconomic characteristics of the population, the presence of commercial and industrial activity in each jurisdiction, and an indicator for whether the community was a point-of-sale city with respect to the sales tax distribution formula. The equations are estimated both with and without trash collection costs paid directly by households.⁵

In the total expenditure equations, the presence of size economies would be reflected in a significant, positive intercept term, and a relatively low coefficient for resident population.⁶ In the per capita expenditure equations, the presence of size economies would be indicated by a significant, negative coefficient for resident population.

In neither of the total expenditure nor the expenditure per capita equations is there any significant evidence of economy or diseconomy effects of size on expenditures, once service conditions have been taken into account. This finding is consistent with much of the empirical literature on size effects in recent years, which likewise finds little evidence of size economies or diseconomies among small to medium-sized communities.⁷ Rather than size economies or diseconomies affecting expenditure variations, the regressions indicate that, as with revenues, the strongest predictor of these variations is the extent of commercial and industrial activity in each jurisdiction.⁸

Of historical interest, these findings of no significant size economies and of expenditures related strongly to property valuation, are quite similar to the findings of the Metropolitan St. Louis Survey conducted in the late 1950s. The survey was a major collaborative effort of scholars at several universities in the St. Louis area, and was intended to provide evidence supporting reform of the local government structure in the city and county. The survey found no conclusive evidence with respect to scale economies or diseconomies. The survey concluded its analysis by stating: "If economies (of scale) could have been shown, support is implied for consolidation. However, since no major economies or diseconomies are apparent, this factor could not be used as an argument for or against consolidation." As in the present analysis, the Survey found that "per capita assessed valuation seemingly is the most important determinant of per capita spending."9

FISCAL VARIATION AND FISCAL EQUITY

Efficiency grounds alone are generally considered to be insufficient as a criterion for judging the performance of public institutions. In Chapter One, equity considerations are also given attention. Does fragmentation create a fiscal pattern that significantly advantages some communities at the expense of others? Perhaps more seriously, are certain groups, such as racial minorities, easily discriminated against in a fragmented system of local government? These questions are difficult to address because *inequality* in revenues or expenditures per capita cannot simply be assumed to be *inequitable*. One of the virtues of fragmentation is that it allows different communities to make different fiscal choices. The mere presence of high-tax/high-service alongside low-tax/low-service municipalities is evidence only of diversity, not inequity.

While some communities raise small amounts of revenue because they have small resources, others do so because they choose not to invest heavily in public services. Some communities raise large revenues from commercial or industrial activities that often involve large influxes of nonresident populations not reflected in per capita revenue comparisons and that entail extra service costs. By this argument, to show that variations in the amounts of revenues available to the different communities in a local political economy constitute inequity, one must demonstrate not simply that variations exist, but that the variations are patterned along "suspect" lines.¹⁰

Patterned Inequalities?

To what extent are variations in revenues available for local public services patterned in the same way as indicators of individual citizens' relative advantages or disadvantages? If, for example, poor citizens reside predominantly in communities with limited resources for the delivery of public services, this would be viewed as greater evidence of inequity than if wealthy citizens resided in such communities. In the latter case, one might assume that the wealthy had chosen to spend little on public services, where in the former the poor would be assumed unable to spend more for these services.¹¹ Variations patterned along racial lines would be similarly suspect on equity grounds.

To investigate the patterning of total per capita revenues in St. Louis County municipalities, consider the statistics presented in Table 8.2. These statistics are simple correlations (Pearson's r) between total revenues (municipal and fire service) per capita and indicators of socioeconomic status and other community features, and regression coefficients from equations including all of the factors simultaneously. Coefficients were computed treating each gov-

	population weighted)					
	Total Local E	xpenditures	Total Expenditu	res per Capita		
	Without Trash ²	With Trash	Without Trash	With Trash		
Resident Population	217.00*	249.53*	0.001	0.001		
	(9.35)³	(10.11)	(.001)	(.001)		
Median Household Income	32.72	40.82 +	0.002+	0.003 +		
	(18.76)	(20.28)	(.001)	(.001)		
Percent Poor - 1979	-83,137	-94,723 +	-3.39	-3.76		
	(43,941)	(47,500)	(2.65)	(2.69)		
Percent Nonwhite	41,280*	43,896*	1.59 +	1.55 +		
	(9,423)	(10,186)	(0.57)	(0.58)		
Percent Over 65 Years Old	128,226*	136,358*	3.54 +	4.00+		
	(30,185)	(32,629)	(1.78)	(1.81)		
Density (number per square mile)	-25.80	-41.28	-0.004	-0.004		
	(84.83)	(91.70)	(.005)	(.005)		
Percent Owner Occupied	-35,948 <i>+</i>	-40,129 <i>+</i>	-1.68 +	-1.76+		
	(11,438)	(12,365)	(0.65)	(0.66)		
Percent Housing Built 1970-80	25,046 +	25,942 <i>+</i>	1.80 +	1.79+		
	(12,438)	(13,445)	(0.74)	(0.75)		
Value of Commercial Property ⁴	42.71*	39.01*	34.81*	33.12*		
	(5.65)	(6.10)	(3.24)	(3.29)		
Village	-142,996	-223,738	-44.52	-50.89		
	(537,426)	(580,946)	(32.58)	(33.08)		
Point-of-Sale	726,145 <i>+</i>	478,044	61.20 <i>+</i>	49.12+		
	(319,185)	(345,032)	(19.27)	(19.56)		
Intercept	-60,896	146,636	231.58+	254.11+		
	(1.5E006)	(1.6E006)	(87.78)	(89.13)		
R²	0.94	0.94	0.83	0.81		

¹Includes expenditures by municipalities, fire protection districts, and (in two of the equations) households. See Table 8.3 ²"Without trash" and "with trash" are defined in note 1 on Table 8.3

³Standard error of regression coefficients

⁴Assessed value in \$1,000's (total or per capita)

* – Significant at p < .001.

+ - Significant at p < .05.

Correlation and Commun	ity Characteristic	lysis for Total Per s in County Munic (N = 87)	Capita Revenues a cipalities – 1985	nđ
	Correlation (Unweighted)	Coefficients (Weighted ¹)	Regression (Unweighted)	Coefficients (Weighted ¹)
Median Household Income	0.10	0.35*	-0.001 (.002) ²	0.002+ (.001)
Percent Poor – 1979	-0.03	-0.14	7.47 (4.40)	-2.82 (2.23)
Percent Nonwhite	-0.17	-0.16	-0.76 (0.98)	1.28 + (0.50)
Percent over 65 Years of Age	-0.26+	-0.10	-3.48 (3.22)	2.61 (1.45)
Density (number per square mile)	-0.46*	-0.49*	-0.009 (0.009)	-0.001 (.004)
Percent Owner Occupied	-0.02	-0.17	2.22 + (0.99)	-1.49 + (0.55)
Percent Housing Built 1970-80	0.26+	0.44*	-0.63 (1.09)	1.75 + (0.62)
Value of Commercial Property ³	0.77*	0.88*	38.12* (4.38)	39.04* (2.79)
Village			18.00 (35.57)	-56.61* (25.71)
Point-of-Sale			125.64* (38.02)	44.79 <i>+</i> (14.97)
Intercept			100.05 (144.0)	235.46* (67.12)
R ²			0.71	0.87
¹ Weighted by municipal population ² Standard error of regression coefficier ³ Assessed value per capita in \$1,000's	nt	•	ficant at $p < .001$. iificant at $p < .05$.	

Table8.2

ernmental unit as a single, equivalent unit of analysis and, to compensate for the gross differences in population among these units, recomputed with each governmental unit weighted by its resident population.¹²

Evidence of patterned inequalities in revenue availability and income or racial distributions would consist of strong positive coefficients for median household income (showing that those with higher incomes lived in communities with greater availability of revenues for public services), and strong negative coefficients for the percentage of the population below the poverty level in 1979 and for the percentage nonwhite.

In the unweighted correlational analyses reported in Table 8.2, no such strong coefficients were found. The signs of the coefficients are consistent with an hypothesis of patterned inequalities, but none of the coefficients approach statistical significance. Other community characteristics considered are the percentage of the population over 65 years of age in 1980, population density, percentage of housing which was owner-occupied, the percentage of the housing stock built between 1970 and 1980, and assessed valuations for commercial-industrial property. In the unweighted analysis, two coefficients are relatively strong in absolute value and statistical significance. These are coefficients for population density (negatively related to total per capita revenues) and commercial-industrial property valuation (strongly positive in its relationship with total per capita revenues). Both of these coefficients relect the effect of commercial-industrial activity on total revenues, as such activity is much less prevalent in densely populated communities which have less land available to accommodate it.

In the weighted correlational analyses reported in the table, the results are virtually identical for these two factors, and additional ones are significant. Total per capita revenues are higher in communities whose residents have higher household incomes, and in communities with more recently built housing. These coefficients reflect the fact that those with higher incomes tend to live in newer communities¹³ which tend to raise greater per capita revenues.¹⁴ Low income and racial coefficients remain insignificant, however.

The regression coefficients provide some additional insights. As in the weighted correlational analysis, median household income and proportion of newer housing are positively and significantly related to total revenues. So too are assessed valuation of commercial-industrial property and the community's status as a point-of-sale city. Village status is negatively related to total revenues. Somewhat surprisingly, the regression equation reveals that communities with higher percentages of nonwhite and elderly residents tend to have higher per capita revenues after adjustment for other predictors of those revenues. However, this finding, rather than revealing an advantage for these citizens, has a different interpretation (see the discussion of residential tax burden below).

These analyses, examining patterns with respect to total per capita revenues, do not reveal strong patterned inequalities, although there are some tendencies in this direction. The strongest predictor of variations in total per capita revenues is not household income, racial composition, or other socioeconomic characteristics of the population, but rather, the presence of commercial and industrial activity. Communities with greater amounts of such activity, particularly if they are point-of-sale communities, have substantially higher per capita revenues. These communities tend to be somewhat newer and less densely populated. Their residents have higher household incomes and tend to be predominantly white. Of these characteristics, population density is by far the strongest (negative) predictor of commercial and industrial activity.¹⁵ However, these data speak to total revenues, and not to revenues raised directly from residents.

Residential Tax Burden

A somewhat different view of revenue variations and patterned inequalities across county municipalities results when revenues raised directly from residential households are considered. These revenues include municipal real and personal property taxes, a portion of the county road and bridge tax that is returned to the municipalities, municipal taxes on the gross receipts of public utilities, and taxes on real and personal property imposed by fire protection districts in those municipalities that do not provide this service.¹⁶ An additional factor to be considered in these computations is the cost per household for trash collection, and whether this cost is paid by the municipality or directly by the householder.¹⁷

Residential or household tax burden can be conceptualized in two different ways: (1) as the dollar amount of taxes paid by the average household in a community and (2) as the percent of average household income which those taxes represent. Table 8.3 provides an initial view of these burdens. The left two columns display average dollar burdens for all municipalities, first without, then with the inclusion of trash collection costs.¹⁸ The right two columns display percentage burdens, without, then with, trash collection costs. With trash collection costs included, average per household burdens measured in dollars ranged from about \$60 to \$760 in 1985. In percentage of average household income, the range was from 0.14 percent to 1.8 percent. The average dollar burden was \$263, and the average percentage burden was 1.03 percent.

The table shows how these burdens vary by type of local government and by status with respect to the sales tax distribution. Residents of villages in the county have, on average, the lowest tax burdens by either dollar or percentage measures. This is true whether trash collection costs are included or not. Tax burdens are highest in home rule cities, again by either measure and with or without trash costs. Burdens in fourth class cities are higher in dollar terms than in third class cities, but lower in percentage

Tax B	7 urdens on Residential	^r able 8.3 I Property – County	Municipalities	
	•	r Burden on an ed Home	Burden as Percent o Average Income	
	Without ¹ Trash Costs	With Trash Costs	Without Trash Costs	With Trash Costs
All Municipalities	\$215	\$263	0.84%	1.03%
Villages	136	167	0.62	0.76
Fourth Class Cities	214	251	0.77	0.91
Third Class Cities	187	196	0.92	0.96
Home Rule Cities	229	294	0.92	1.18
Point-of-Sale Cities	221	249	0.80	0.90
Pool Cities	206	280	0.91	1.23

¹ "Without trash" burdens include utility taxes and property taxes of municipalities and fire districts, and do not distinguish whether trash collection is covered by general fund expenditures or by households themselves. "With trash" burdens include these taxes plus the estimated cost to the average household for trash collection in those municipalities where it is not paid from general revenues.

Table 8.4
Regression Coefficients for Residential Tax Burdens in County Municipalities – 1985
(N = 87, population weighted)

	Average Burden Per Occupled Household		Burden as a Percent of Household Income		
	Without Trash	With Trash	Without Trash	With Trash	
	Collection ¹	Collection	Collection	Collection	
Median Household Income	0.009*	0.010*	-0.000	-0.000	
	(.001) ²	(.001)	(.000)	(.000)	
Percent Poor – 1979	-4.85 +	-6.32+	-0.013	-0.017	
	(2.85)	(3.24)	(.009)	(.011)	
Percent Nonwhite	1.74 +	1.53 +	0.006 +	0.006 +	
	(0.64)	(0.72)	(.002)	(.002)	
Percent over 65 Years of Age	7.06*	6.84 +	0.021*	0.021+	
	(1.86)	(2.11)	(.006)	(.011)	
Density (number per square mile)	0.003	0.001	0.000	-0.000	
	(.006)	(.006)	(.000)	(.000)	
Percent Owner Occupied	-1.94 +	-2.25 +	-0.005 +	-0.006+	
	(0.70)	(0.80)	(.002)	(.003)	
Percent Housing Built 1970-80	2.09 +	1.69	0.008 +	0.008+	
	(0.80)	(0.90)	(.002)	(.003)	
Value of Commercial Property ³	-1.08	-6.35	-0.015	-0.030+	
	(3.58)	(4.06)	(.011)	(.014)	
Village	-73.30 +	-114.17 +	-0.399*	-0.560*	
	(32.91)	(37.39)	(0.10)	(.125)	
Point of Sale	-14.91	-61.51+	-0.078	-0.292*	
	(19.16)	(21.77)	(.061)	(.073)	
Intercept	41.46	160.74	0.97 +	1.49*	
	(85.92)	(97.62)	(0.27)	(0.32)	
	0.60	0.59	0.47	0.51	

* – Significant at p < .001.

+ -- Significant at p < .05.

terms, as average incomes are higher in fourth class cities. These correlations should not be interpreted as showing that governmental form affects residential tax burden. More likely, citizens choose a governmental form in accordance with their preferences for local services. Thus villages are chosen as a municipal form that facilitates the provision of relatively low service levels, while home-rule cities are considered more appropriate for the provision of high service levels.

The last two rows of Table 8.3 contrast burdens for point-of-sale and pool cities. If trash costs are not included, households in point-of-sale cities pay slightly higher dollar burdens but lower percentage burdens as average household incomes are higher there. With trash collection included, burdens are higher on residents of pool cities by either measure. Point-of-sale cities are more likely to finance trash collection out of general revenues, while pool cities are more likely to require households to pay directly for this service.¹⁹

Table 8.4 repeats the regression analyses of patterned inequalities, but with household tax burdens as the dependent variables. Income effects are not strong-households in wealthier communities pay more in dollar terms, but there is no effect when measured as a percentage of income. Burdens are somewhat higher in newer communities when the effects of the other variables are controlled. Tax burdens are lower in villages, principally because of these communities' limited use of the utilities tax. Tax burdens are also lower in communities with higher percentages of owner-occupied housing units. Homeowners are likely to be more sensitive to household tax burdens than are renters, as the latter's burdens are generally subsumed within the monthly rent payment, and thus homeowners may exert more pressure on officials to hold down tax burdens.

Unlike the equations predicting total revenues (Table 8.2), these equations for household tax burdens show relatively little effect from commercial

and industrial property valuation. The coefficients for this variable are negative, indicating lower burdens as the value of such property in a jurisdiction increases, but the coefficients are weak, and lacking in statistical significance in all but one equation. Looked at in this fashion, it appears that tax burdens on residential property are relatively unaffected by the presence or absence of commercial and industrial activities in a jurisdiction. Although this is clearly untrue in specific cases,²⁰ the countywide pattern shows no strong relationship. The influence of point-of-sale status is insignificant if trash collection arrangements are not considered, but is strong when trash collection costs are included, again reflecting the propensity of point-of-sale cities to finance this service out of general revenues.²¹

In terms of patterned inequalities that would point to inequities in the local political economy, the coefficients for the percentage of a community's population that is nonwhite and that which is over 65 years of age require attention. Both coefficients, in both forms of analysis, are positive and significant in the statistical sense. This means that, after adjustment for income differences and other community characteristics, residents of communities with higher proportions of nonwhite and elderly citizens pay higher taxes in dollar terms and higher proportions of their incomes in taxes than do residents of communities with fewer nonwhite and elderly citizens. Their communities, then, may find themselves in fiscal difficulties similar to those faced by some older, central cities-an aging and nonwhite population with public service needs that can be met only by relatively higher tax burdens directly on themselves and their residential property.

Among the cities with relatively high household burdens are some whose residents are quite poor-Kinloch and Wellston, for example. Others, such as Olivette, are comprised of more well-to-do residents who apparently are willing to pay higher burdens for the services they receive. Some, such as University City, Normandy, or Northwoods, combine a tradition of high service levels with populations whose average incomes have not kept pace with those in other parts of the county. Among the cities with relatively low tax burdens are those with well-to-do residents-Frontenac, Huntleigh, and Westwoodand others whose residents have incomes well below the county average, such as Breckenridge Hills or Hillsdale. There is no single, simple explanation for the complex variations in tax burdens found in the county.

Ways to reduce the inequalities in tax burdens across the municipalities in the county include raising new revenues countywide for this purpose, or redistributing revenues from existing sources, in either case targeting additional revenues on municipalities that are relatively disadvantaged. Proposals involving both of these methods are currently under discussion in St. Louis County. If St. Louis County residents were to pursue such redistribution, the dollar amount required to do so would not be large. The average household burden, with trash collection included, as a percentage of average household income in all municipalities is 1.03 percent (see Table 8.3). If citizens in the county agreed to supplement the revenues of all communities where the household percentage burden exceeded this average value, providing those communities with additional revenue that would enable them to reduce their average burdens to 1.03 percent, the total additional revenue required would be roughly \$8 to \$10 million annually.²² At the high end, this estimate represents less than 12 percent of the sales tax revenues collected in the county in 1985. Thus, a small addition to that tax, or a change in its distribution formula to target a portion of existing revenues to disadvantaged communities, could easily and significantly reduce this inequality in household tax burdens across the municipalities.23

The Case of School Districts

Revenues of the regular school districts in the City and County of St. Louis during 1985 totaled \$649 million, more than the total revenues of general purpose governments.²⁴ These revenues represented about \$3,850 per student in average daily attendance. The Special School District in St. Louis County had revenues of \$62 million.

The range of variation in the revenues of regular school districts is much less than that of general purpose governments. The least funded school district raised \$2,514 per pupil in 1984-85 and the highest funded raised \$6,889. This yields a variation of less than 3 to 1, contrasting with the 17-to-1 variation in general purpose revenues per capita. Although the City of St. Louis was among the most advantaged general purpose governments in revenue per capita terms, its school district is only somewhat above average in revenues per student in average daily attendance. Eight of the 23 county regular school districts had revenues higher than those of the city district.

Table 8.5 displays the variation in per pupil revenues found among the school districts in St. Louis City and County. There is no particular patterning of per pupil revenues by type of district. As the lower portion of the Table shows, the seven districts in St. Louis County with the lowest revenues per pupil receive, on average, about 68 percent of the revenues of the eight most advantaged county districts. School district revenues in Missouri have not been equalized; there is still significant variation

	Ta School Revenue V	ble 8.5 Variations in St. L	ouis	
	Percent of Average Daily Attendance (ADA)	Percent of Total Revenues	Average Revenues Per ADA	Range of Revenues Per ADA
City of St. Louis St. Louis County Districts:	30.4%	31.8%	\$4,030	_
Common (15) Reorganized (7) Consolidated (1)	23.2 35.0 11.4	22.7 33.8 11.7	3,757 3,720 3,936	\$2,514-\$6,889 3,256-4,423 —
Total County Districts: ¹ County Special School Distric	69.6 t —	68.2	3,767 15,022	2,514-6,889
S	chool Revenue Vari	ations in County	Districts	
Number of Districts ¹	Percent of Average Daily Attendance	Percent of Total Revenues	Average Revenues Per ADA	Range of Revenues Per ADA
Seven Lowest in Revenues Per ADA	21.3	17.5	3,097	2,514-3,256
Next Four Next Four	30.3 24.9	28.2 26.1	3,506 3,949	3,450-3,571 3,936-4,010
Eight Highest in Revenues Per ADA	23.5	28.2	4,521	4,054-6,889
¹ Not including Special School Distric	t of St. Louis County.			

from district to district. School revenues, however, exhibit much less variation than do revenues of general purpose local governments.²⁵

As argued above with respect to variations in general purpose revenues, variations in school revenues are not prima facie evidence of inequities. Residents of school districts, like residents of municipalities (and fire districts), can and do make choices about how much educational services they want for their children and how much they are willing to pay. In education, however, there are greater sources of extrajurisdictional funding, particularly from the state and, to a lesser extent, from the federal government. These extrajurisdictional sources attempt, at least in part, to reduce variations in revenues across districts.²⁶ Given this, it is interesting to

examine the extent of patterned inequalities in education funding.

In Table 8.6 the question of *patterned inequalities* is pursued with respect to low income and minority populations of school districts, as discussed above with respect to municipalities and fire districts. Are poor and/or minority students more likely to reside in school districts with lower revenues? Inequalities are measured by simple correlations (Pearson's r) between total and district revenues per student in average daily attendance and the following variables: median household income, percentage of the population below the poverty level in 1979, and percentage nonwhite.

Somewhat surprising is the fact that the data indicate greater patterned inequality among school

Correlati		s for Total a	ble 8.6 nd District Rev tendance – 19		Student in	
			e Per ADA County Districts	District Revenu City and County Districts		ie ¹ Per ADA County Districts
Weighted by ADA?	No	Yes	Yes ²	No	Yes	Yes ²
Median Household Income Percent Poor – 1979 Percent Nonwhite Per Student Assessed Value	0.29 -0.16 -0.29 0.89*	0.04 0.13 -0.12 0.62*	0.35 -0.19 -0.28 0.90*	0.42+ -0.33 -0.43+ 0.94*	0.61* -0.48+ -0.57* 0.92*	0.56+ -0.41 -0.48+ 0.92*
¹ District revenues without Propos ² Unweighted coefficients for Court		e virtually identio		gnificant at p < Significant at p		

districts than was found among general purpose governments. That is, in both the unweighted and weighted analyses shown in the Table, the total revenue per student coefficients for income, poverty, and race are larger than those found for total revenue per capita among general purpose governments (compare Table 8.2). District revenue per capita coefficients are even stronger. Both sets indicate tendencies for greater revenues per student in districts with higher median household incomes and lower proportions of poor and nonwhite residents. These results are surprising because state and federal governments have actively redistributed funds to reduce inequalities in school revenues, but have not, for the most part, tried to do so with municipal or fire district revenues.27

For comparison with findings for general purpose governments, correlations were also computed between revenues per student in average daily attendance and property valuation per student in the districts.²⁸ These coefficients are very strong, indeed even stronger than those computed for general purpose governments. School districts have become less dependent on local property taxes as state aid has increased, but they remain much more reliant on these taxes than do general purpose governments. This is reflected in the strong coefficients for property valuation. Variations in property valuation per district are strongly associated with revenue variations per district because a considerable portion of extrajurisdictional revenues is distributed on a per pupil basis rather than in a more redistributive fashion.

When total and district revenues are regressed on median household income, percentage poor, percentage nonwhite, and property value per student, only property value per student has a significant and very strong positive relationship with revenues.²⁹ The patterned inequalities shown result from the location of poor and nonwhite populations in school districts that have relatively lower assessed property valuations. State and federal aid, as currently distributed, reduces these inequalities—compare the district revenue coefficients to total revenue coefficients—but does not eliminate them.

The Sales Tax Controversy Revisited

The presence of commercial and industrial property in a municipality, indexed by its assessed valuation, is by far the strongest predictor of municipal expenditures in St. Louis County. This results from a combination of three factors:

 Commercial and industrial property generates significant revenues in the form of sales taxes, property taxes, licenses and permits, and utilities gross receipts taxes;³⁰

- 2) Most of the municipalities that have large amounts of commercial and industrial property are able to retain the revenues generated within their borders from the sales tax, because they are point-of-sale cities;³¹ and
- 3) The presence of significant commercial and industrial activity generates service demands over and above those found in predominantly residential communities, and servicing these demands requires higher expenditures.

The sales tax controversy in St. Louis County revolves around the interplay of factors 2 and 3. Are the higher sales tax (and other) revenues that accrue to point-of-sale cities windfall profits, attributable to locational happenstance, or are they equitable compensation for the added costs of providing services to support commercial and industrial activity, and for willingness to accept the loss of amenities that results from accommodating such activity within a jurisdiction? The answer seems to be a little of both.

Many of the point-of-sale municipalities have locational or other advantages—proximity to the airport, access to key traffic arteries, availability of undeveloped land, status as the county seat—that are not shared by pool municipalities. These advantages make them attractive locations for commercial and industrial activity. As such activity locates within their borders, multiplier effects may occur. Many types of businesses prefer to locate near similar or related businesses, and the revenues available to point of sale cities may allow them to offer attractive service-tax-cost packages to new or relocating firms.

On the other hand, there are clearly costs involved in providing services to commercial and industrial activity. A municipality that is the locus for such activity will often have a large nonresident population requiring services. Point-of-sale cities on average have 279 employees in the retail, wholesale, and service industry sectors for every 1,000 residents. Pool cities on average have 74 such employees per 1,000 residents.³² No data on numbers of nonresident customers are available, but it seems obvious that there are many more in point-of-sale cities than in pool cities. In addition to the services required by this extra population, negative congestion effects can occur. One indicator of relative disamenity for point-of-sale cities is their crime rate. The average crime rate in point-of-sale cities in 1985 was 51 per 1,000 residents, nearly 40 percent higher than the rate in pool cities of 37 per 1,000.33 A reluctance to accept such disamenities may help to explain why some pool cities that would otherwise be attractive locations for commercial and industrial activity have been unwilling to accept it.34

The most difficult aspect of the sales tax controversy from an analytic perspective is disentangling the revenue-expenditure effects of commercial and industrial activity. That is, to what extent do pointof-sale cities spend more for public services because such activity requires higher expenditures, and to what extent do they spend more because such activity provides higher revenues, which are then available to be spent? This disentanglement is particularly difficult because of the near equality of revenues and expenditures for most municipal governments. Still, an attempt can be made.

The method of disentanglement used is one that was developed as part of a program of state aid to offset fiscal disparities among municipalities in Massachusetts.³⁵ Per capita expenditures in each jurisdiction are regressed on three sets of factors. The sets represent:

- Environmental costs—factors largely outside the control of public officials, including such things as large, nonresident daytime populations, levels of crime, age of a jurisdiction's infrastructure, and population characteristics;
- Community resources—the type and size of revenue pools that can be tapped by a jurisdiction; and
- 3) Other factors—including resident characteristics that serve as surrogates for their public service preferences, and variables measuring population change in recent years.

For each community, a predicted cost is computed using the regression results, where this cost is "what each community would have spent if it had average resources, average demand (preferences for public services), and average population change, but retained its own values for the cost variables."³⁶ The predicted cost is then converted "into a cost index by dividing each prediction by the mean per capita expenditure for all . . . cities."³⁷

The variables used for computation of a cost index for St. Louis County municipalities are:

Cost Factors:

Number of employees in retail, wholesale, and service industries per capita, 1982.

Number of Part 1 crimes per 1,000 residents, 1985.

Population density (residents per square mile).

Percentage of housing built before 1940.

Percentage of the population with incomes below the poverty level, 1979.

Revenue Factors:

Per capita revenues from property taxes imposed by municipalities and fire districts, 1985.

Per capita revenues from the sales tax, 1985.

Per capita revenues from gross receipts taxes on the revenues of public utilities, 1985.

Other Factors:

Average household income, 1980.

Percentage of the resident population over 65 years of age, 1980.

Rate of population change (estimated 1984 population divided by 1980 population).

Rate of population change squared.

The cost factors and other factors were chosen for their similarity to those used in Massachusetts. The revenue factors are different from the Massachusetts analysis because of the difference in revenue structures between Massachusetts and Missouri.³⁸

Table 8.7 displays the mean values of each of the factors in all municipalities, in pool cities and in point-of-sale cities. Point-of-sale cities, on average, have higher expenditures, raise more revenues from each source, have residents with higher average incomes, and have experienced greater population growth than have pool cities. In terms of the cost factors considered, point-of-sale cities have more employees and more crime, lower population density, newer housing, and somewhat fewer poor residents than do pool cities.

Table 8.8 presents the estimated cost model for county municipalities.³⁹ It is no surprise that total expenditures per capita, including those by municipal government, fire district, and householder (where paying directly for trash collection) are strongly influenced by available revenues. Among the other, noncost factors, average household income is positively related to total expenditures, and the percentage of population over 65 years of age shows a negative relationship to expenditures.⁴⁰ Population growth is positively related to increased per capita expenditures, but at a decreasing rate as growth is larger.

Among the cost factors, the number of retail, wholesale, and service industry employees per 1,000 residents of a jurisdiction is strongly related to local service costs. This variable measures the effect of such employees plus the effect of customers who frequent the enterprises where they are employed.⁴¹ Inexplicably, the number of crimes per 1,000 residents is negatively related to service costs while, as expected, the percentage of residents with incomes below the poverty level has a positive relationship

Variables Used for Comp (N	Table 8.7 uting Cost Index of (=71, population weig		- 1985
Variable	All Cities	Mean Value in: Pool Cities	Point of Sale Cities (30)
Total Expenditure Per Capita	(71) \$338	(41) \$254	(30) \$406
Cost Factors:	4000	420	\$.00
Employees Per 1,000 Residents Part I Crimes Per 1,000 Residents Residents Per Square Mile Percent of Housing Built Before 1940 Percent Below Poverty – 1979	188 44 4,426 18% 6%	74 37 5,597 21% 7%	279 51 3,481 16% 5%
Revenue Factors:			
Property Taxes Per Capita Sales Taxes Per Capita Utilities Taxes Per Capita	\$54 104 62	\$ 45 66 46	\$61 136 75
Other Factors			
Average Household Income 1980 Percent over 65 Years of Age 1980 Population Change 1980-84 Population Change Squared	\$25,968 12% 1.02 1.07	\$22,986 13% 1.00 1.01	\$28,372 12% 1.04 1.12

with costs. Neither reaches statistical significance. Population density and percentage of housing built before 1940 have the opposite sign, negative, from what one would ordinarily expect. Both are usually found to be associated with increased, not decreased, cost. In the county municipalities, however, these two factors pick up additional effects of commercial-industrial costs not captured by the employment factor. That is, commercial and industrial activity is less prevalent in older, densely populated

	Table 8.8est ¹ Model for County Municipalities – 1985 $(N = 71, population weighted)$	
Cost Factors	Estimated Coefficient	t-Statistic
Employees Per 1,000 Residents	239+	3.25
Part I Crimes Per 1,000 Residents	-211	-0.63
Residents Per Square Mile	003	-0.87
Percent of Housing Built before 1940	287	-0.54
Percent below Poverty – 1979	1.70	1.22
Revenue Factors		
Property Taxes Per Capita	1.10*	4.17
Sales Taxes Per Capita	0.58+	2.67
Jtilities Taxes Per Capita	1.43*	6.10
Other Factors		
Average Household Income – 1980	.0003	0.44
Percent over 65 Years of Age - 1980	-1.45	-0.86
Population Change 1980-84	995	2.84
Population Change Squared	-345	-2.95
Including municipal, fire protection district, and - Significant at p < .001. + - Significant at p < .05.	trash collection expenditures.	

Table 8.9 Actual and Predicted Service Costs in County Municipalities by Sales Tax Status – 1985 (N = 71, population weighted)					
		Mean Value in:			
	All Cities (71)	Pool Cities (41)	Point-of-Sale Cities (30)		
Employment Cost Per Capita	\$45	\$ 18	\$67		
Sum of Cost Factors	26	-2	49		
Predicted Cost of Services Per Capita	338	310	361		
Cost Index	1.00	0.92	1.07		
Actual Expenditure Per Capita	338	254	406		
Indexed Actual Expenditure Per Capita	338	277	375		

cities, and the negative influence of these factors on expenditures is a result of this fact.

A predicted cost was computed for each municipality using the coefficients in Table 8.8 multiplied by the average countywide values for the revenue and other factors, and by the municipality's own values for the cost factors. This cost is what the municipality's per capita expenditure would be if it had average per capita revenues and average values of household income, older residents, and population change, but retained its present values for the cost factors.

Commercial and industrial activity is a net revenue generator in St. Louis County. For the 71 municipalities considered in this section, revenues from the sales tax, property taxes and gross receipts taxes on commercial property, and from licenses and permits totaled nearly \$94 million in 1985. The estimated cost of providing services to this activity was \$24.5 million.⁴² On average, each dollar spent providing service was replaced by nearly \$4.00 of revenue.43 The rate of return, the ratio of revenue from commercial sources to the predicted cost of providing services to them, is higher in pool cities than in point-of-sale cities. Many pool cities incur little or no cost, having little or no commercial-industrial activity, but obtain commercial source revenue from the sales tax pool-revenue collected in other municipalities in the pool and in unincorporated parts of the county.⁴⁴ However, the net revenue gain per capita from commercial-industrial activity is substantially higher in most point-of-sale cities because of the much higher volume of such activity in them.

Table 8.9 displays the employment cost factors, the sum of cost factors, predicted costs and cost indices, actual total expenditures, and expenditures deflated by the cost index for the average municipality and the average pool and point-of-sale city in the county. These data provide a basis for commentary on the sales tax controversy in St. Louis County. Based on predicted costs related to employment within municipal borders, the per capita service costs of the point-of-sale cities are estimated to be \$49 higher than those in pool cities.⁴⁵ Other cost factors add slightly to this difference, yielding a total difference of \$51 per capita in predicted per capita service costs between pool and point-of-sale cities. The average cost index for point-of-sale cities is 1.07, indicating 7 percent higher costs than the average for all 71 cities, while for pool cities the average index is 0.92, indicating about 8 percent lower than overall average costs. Several point-of-sale cities which are significant employment centers⁴⁶ have cost indices well above the 1.07 average-Clayton is the highest at 1.37, followed by Creve Coeur, 1.31; Frontenac, 1.29; Brentwood, 1.22; and Des Peres, 1.20. Pool cities with low cost indices are predominantly small, residential communities-Glen Echo Park with an index of 0.79 is the lowest, and Bella Villa, Mackenzie, Pasadena Hills and Park, St. George, Sycamore Hills, Uplands Park, and Wilbur Park all have indices below 0.85. Three of the largest pool cities-Ferguson, Florissant, and Webster Groves-have cost indices equal to or slightly above the average for all pool cities, but all have indices below 1.00, indicating that their predicted costs of providing services are slightly below the county average. University City's cost index is 0.89, below the pool average.⁴⁷ Thus, as representatives of point-of-sale cities have argued, their service costs are higher than those of pool cities.

On the other hand, point-of-sale cities obtain revenues from their accommodation of commercial and industrial activity which appear to significantly outweigh the extra costs they incur. While predicted service costs in point-of-sale cities are \$51 per capita higher than in pool cities, actual per capita expenditures are \$152 higher. After discounting actual expenditures by the cost index, adjusting them for differences in service conditions, the indexed total per capita expenditures in point-of-sale cities are still \$98 greater than in pool cities.

A significant portion of this positive difference between actual and predicted expenditures is the larger per capita sales tax receipts in point-of-sale cities, although differences in property taxes, gross receipts revenues, and other revenue sources contribute too.48 These estimates suggest rather strongly that residents of point-of-sale cities benefit from higher expenditures for public services in their jurisdictions as a result of these higher receipts, and do so even after adjustment for the extra service costs incurred by those jurisdictions.49 Since, as noted earlier, per household tax burdens of point-of-sale city residents tend to be lower than those of pool city residents, there is a lack of full fiscal equivalence. Point-of-sale cities are able to export a portion of their local taxes. They are able to spend more for local services while maintaining lower per household tax burdens because of taxes imposed on nonresidents directly by the sales tax and indirectly through property and gross receipts taxes on commercial-industrial enterprises, whose owners and managers may be able to pass those taxes along to nonresidents as higher prices and/or lower wages.⁵⁰

Reducing Fiscal Disparities

As noted earlier, revenue and expenditure variations per se need not demonstrate inequities, at least not to those who expect citizens to choose different tax and service bundles if permitted to do so. However, the analysis of variations in household tax burdens, together with that of the distinction between point-of-sale and pool cities and the effect of this difference on revenues and costs, suggest that a part of the fiscal variation in St. Louis County is patterned along suspect lines. This part of the variation reflects more than simply different choices by the different collectivities found there. Thus, one might wish to reduce these disparities, either by raising new revenues and targeting them to disadvantaged communities, or by redistributing existing revenues in favor of such communities. Assuming that it is likely to be easier to target new revenues than to redistribute existing ones, two estimates of the cost of doing so are provided.

The estimates differ in the way that disadvantage is defined. One definition is that a community is disadvantaged if its total revenues per household, divided by its average household tax burden, yields a ratio below the county average. This definition assumes that the household tax burden ought to yield revenues per household in each municipality at least as large as it does for the average householder countywide. The average ratio for the 71 municipalities considered in the previous section was 3.6 in 1985—a total expenditure per household of 3.60 for every dollar the household paid in direct burden. In 38 of the 71 cities, the ratio fell below this figure. To augment their revenues so as to reach this ratio would require an additional 34 million over and above their revenues in 1985. If one discounts the revenue data by the cost index developed above, reducing the amount of subsidy required for municipalities with low values on the index and increasing it for those with a high index, the average ratio drops to 3.5, the number of disadvantaged cities to 34, and the total additional revenue required to 28 million.⁵¹

The second definition of disadvantage draws more directly on the cost model developed above, and finds a city to be disadvantaged if its actual total revenues fall short of the cost of providing services predicted by the model.⁵² By this definition, more cities are disadvantaged-45 of the 71 instead of 34 with the first definition (and cost discounting)-but the total amount required to remove the disadvantage is less, approximately \$19.5 million.53 The primary reason for a reduction in total amount required is that this second definition does not recognize as disadvantaged several cities that have relatively high household tax burdens as a percentage of average incomes, but that also spend more than their predicted costs. These municipalities, including Clayton, Ladue, University City, and Webster Groves among the larger ones, can be viewed as those where residents prefer higher service levels and have been willing to incur higher tax burdens in order to pay for them.

The additional revenues that would be needed to reduce fiscal disparities by supplementing the revenues of disadvantaged communities represent between 10 percent (by definition two) and 15 percent (by definition one) of total revenues in the 71 cities in 1985. The amounts required are roughly comparable to what could be raised by a 0.22 to 0.32 cent addition to the countywide sales tax, a range that encompasses recent proposals for an increase in that tax. If that increase were earmarked for reducing fiscal inequities, most of those inequities could be eliminated.

ECONOMIC DEVELOPMENT

"Metropolitan problem solving" is another evaluative criterion for a system of local government introduced in Chapter One. Assessing performance on this criterion requires investigating whether problems that are metropolitanwide can be addressed on a metropolitan basis. Regional economic development frequently is cited as such a problem, and is said to require decisionmaking arrangements that can act decisively and comprehensively for a metropolitan

	Employ	ment in:		ent Change: 0-85
	1970	1985	Jobs	Percent
St. Louis City-County	613,540	734,883	+ 121,343	+ 19.8%
Atlanta-Fulton County	372,692	459,524	+86,832	+ 23.3
Baltimore City-County	518,187	576,935	+ 58,748	+11.3
Dallas-Ft. Worth-Dallas-Tarrant Counties	817,307	1,496,215	+678,908	+ 83.0
Denver-Denver County	253,696	352,714	+99,018	+ 39.0
ndianapolis-Marion County	318,683	380,398	+ 61,715	+ 19.4
Kansas City-Jackson County	307,836	328,760	+ 20,924	+ 6.8
Memphis-Shelby County	221,767	320,563	+98,796	+ 44.6
Pittsburgh-Allegheny County	554,125	572,764	+ 18,639	+3.4

region if the region is to be competitive economically with other metropolitan areas.⁵⁴

A Comparative Perspective on the St. Louis Development Experience

A common indicator of economic growth or decline in an area is the change over time of total employment. Job opportunities increase as an area's economy grows, and decrease as it declines. New job creation in St. Louis has lagged behind the national average during the past 15 years. That average, however, includes boom areas of the South and West, stagnant or declining areas in other parts of the United States, and central city, suburban, and rural employment changes. A better comparison of St. Louis' experience is with that of other metropolitan regions.

How employment change in St. Louis has compared with changes in other metropolitan areas depends on which other metropolitan areas one chooses for comparison purposes, and how those areas are defined. Table 8.10 provides a comparison of combined St. Louis City-County employment change with that in six metropolitan city-counties identified by the St. Louis Regional Commerce and Growth Association⁵⁵ as significant competitors for St. Louis-Atlanta, Dallas-Ft. Worth, Denver, Indianapolis, Kansas City, and Memphis-and two additional city-counties-Baltimore and Pittsburgh-that have the same population size as St. Louis and St. Louis County, but are polar cases with respect to governmental fragmentation. Baltimore City-County has 2 general purpose local governments; Pittsburgh-Allegheny County has 131. The comparisons are made for the central city(s) and county(s) of each of the regions only, not including surrounding counties that are part of each region's Metropolitan Statistical Area (MSA). Defining the comparison regions in this fashion affords the best equivalence to the St. Louis City-County portion of the St. Louis MSA.

The comparison regions in the South and West-Atlanta, Dallas-Fort Worth, Denver, and Memphis-had larger percentage gains in employment from 1970 to 1985 than did St. Louis. Atlanta's gain was slightly larger; gains in Dallas, Denver, and Memphis were much larger. The comparison regions in the Northeast and Midwest-Baltimore, Indianapolis, Kansas City, and Pittsburgh-added jobs at a slower or, at best, the same rate as St. Louis, and added many fewer jobs. St. Louis did not keep pace with regions in the South and West, but neither did any of the so-called rust belt comparison regions (or most others in the Northeast and Midwest, for that matter).

Memphis-Shelby County, which has entrepreneurial, countywide government leadership, out-performed St. Louis City and County in employment increase from 1970 to 1985. Indianapolis-Marion County, which has a consolidated city-county Council, a mayor elected countywide, a Department of Metropolitan Development with countywide powers, and a nationally acclaimed public-private partnership for economic development, performed about the same as St. Louis City and County. Baltimore-Baltimore County has had entrepreneurial governmental leadership (one of the most successful in the nation in securing UDAG funds) and has only two local governments; yet it performed less well than St. Louis City and County. Pittsburgh-Allegheny County has had entrepreneurial public and private sector leadership, has restructured its economy from steel production to service industries, has more local governments than St. Louis, and performed the least well of the nine regions. Perhaps most interesting is

	Employment In:				
	City	County	Combined	Missouri	
1970 1975 1980 1985	376,113 303,250 286,896 263,798	237,427 302,048 408,986 471,085	613,540 605,298 695,882 734,883	1,393,751 1,391,857 1,668,510 1,772,618	
Change 1970-85	-112,315	+ 233,658	+ 121,343	+ 378,867	
Percent Increase or Decrease 1970-85	-29.9	+ 98.4	+ 19.8	+ 27.2	

the fact that all four—Memphis, Indianapolis, Baltimore, and Pittsburgh—have national images of economic vitality, while St. Louis' image is generally not one of great vitality. Image, apparently, is not always correlated with reality.⁵⁶

Table 8.11 tracks total employment from 1970 to 1985 for the City of St. Louis, St. Louis County, the combined city-county region, and the State of Missouri. The combined city-county region has lagged behind the state in percentage of employment growth, adding about 20 percent to its employment base while the growth statewide over the 15-year period was 27 percent. On the other hand, the 120,000 plus employment increase in the combined city-county represented 32 percent of the total employment increase for the state, although the region has only 28 percent of the state's population. The city-county region has traditionally been a major employment center in the state, accounting for 41 percent of all jobs statewide in 1985. Given its high employment base in 1970, it would have been difficult for St. Louis to match the statewide percentage increase. Compared to its cross-state competitor, Kansas City-Jackson County, whose employment increase from 1970-85 was only 7 percent, St. Louis City and County's combined growth is not unimpressive. However, the data in Table 8.11 also document the disparity in economic development between the City of St. Louis and St. Louis County, and it is here that the region's image problem, together with real economic difficulties, are found.

Employment in St. Louis County almost doubled from 1970 to 1985, while the county's population grew only slightly, and the jobs added there represented 62 percent of all jobs added in Missouri during the period. St. Louis County is recognized as one of the major growth centers in the United States, and its growth is projected to continue for at least the next 15 years.⁵⁷ Employment in the City of St. Louis, on the other hand, declined by almost 30 percent. The city's job loss was about half of the county's job gain.⁵⁸ During this period, the city's population declined by nearly one-third, a loss of some 193,000 residents. Employment totals in the city and county were approximately equal in 1975, but 10 years later the county had nearly 80 percent more jobs than the city. When national media present an image of St. Louis as an area in decline, that image has reference to economic changes in the city.⁵⁹

What has occurred in St. Louis City and County is a phenomenon repeated in a number of older, "winter cities" in America, particularly those, like the City of St. Louis, which are prevented from increasing their size through annexation.⁶⁰ Most economic growth has occurred in their suburbs, with the central cities growing very slowly or declining. Between 1970 and 1980, all of the larger central cities in the Northeast and Midwest (except Indianapolis) lost population and jobs, while all of their suburban areas gained. However, St. Louis City's percentage population decline was the greatest among these cities, and its job loss among the worst. St. Louis County's population remained about the same, but its employment growth was among the very highest. One reason that St. Louis has a poor image while Baltimore, Indianapolis, and Pittsburgh do not, even though the economic performance of these three areas' core city-counties is no better and, for two, worse than St. Louis City and County, may be that their central cities have experienced job growth, not decline.61

Employment change in St. Louis County has exhibited a similar, although generally less dramatic pattern. Newer cities, particularly those located outside of Interstate 270, and unincorporated portions of the county in that same area, accounted for the bulk of the county's employment growth in retail and wholesale trade between 1972 and 1982. Older, inner cities in the county generally declined in retail

and wholesale employment in these years. Employment in service industries increased in most municipalities and in the unincorporated county, but percentage increases were greatest in newer, outer cities and in the unincorporated county.⁶² Several older cities—Jennings, Northwoods, Pagedale, Pinelawn, and Wellston—suffered percentage employment losses in retail, wholesale, and service industries at higher rates than those of the City of St. Louis.

Since 1970 some 24 million square feet of new office space has been built in the county. More than one half of that new space was built in the unincorporated county, and most of the remainder in newer cities or in Clayton, the county seat. Assessed valuation in the county increased by 85 percent from 1970 to 1984. Fifty-eight percent of the increase occurred in unincorporated areas and 42 percent in incorporated parts of the county.63 Although nearly 75 percent of all jobs in the county are currently found in the incorporated areas inside of I-270, local employment projections through 2000 show significant growth outside of I270, with employment remaining roughly constant inside that border.⁶⁴ Economic growth in St. Louis, having shifted from the city to St. Louis County, is shifting within the county from the older, inner suburbs to newer, outer ones and to the unincorporated county.

Economic Development and Fragmentation

Does governmental fragmentation limit a metropolitan region's capacity to develop economically? Many of those active in economic development efforts in St. Louis argue in the affirmative.65 They believe that St. Louis, as a region, has not been able to make its case effectively to relocating firms because the area has no single spokesperson to present that case. Further, they believe that new companies have been deterred from locating in the region, especially in the incorporated parts of the county, by the difficulties that firms confront when having to deal with public officials from multiple jurisdictions, and with variations in tax rates, zoning and permit procedures, and local attitudes toward business activity. While the data on employment change in the city-county region and comparable areas are not congruent with these arguments in all of their details, there are some points of agreement.

First, the incongruities. St. Louis City and County, as a combined region, either outperformed or performed as well as similar regions in the Northeast and Midwest. It seems unlikely, although possible, that the region would have experienced even greater growth if it had fewer local governments. No other large, core city-county region in the Northeast and Midwest outperformed St. Louis, although most have significantly fewer local governments. Very few large urban counties in the Northeast and Midwest even approached St. Louis County's employment growth, although virtually all have fewer local governments. An argument that governmental fragmentation limits (or, the other side of the coin, enhances) a region's potential for overall growth in employment must be given the old Scottish verdict, "not proven."

One might still advance an argument that fragmentation affects the locational pattern of employment growth and decline, but the argument must be carefully drawn to be consistent with the data. Growth in St. Louis County has been stronger in the unincorporated, less fragmented part of the county than it has been in the incorporated, more fragmented part. On the other hand, decline has been stronger in the unfragmented City of St. Louis than it has been in all but a small portion of the fragmented, incorporated part of the county. Major employment creation and major employment loss both occurred in parts of the city-county region where large populations and land areas were under the jurisdiction of a single general purpose government, where fragmentation was not present. Employment creation was slower in the fragmented, incorporated part of the county than in the less fragmented, unincorporated part, although some cities grew quite significantly, and decline in the fragmented, incorporated areas, where it occurred, was generally slower than in the unfragmented city. Centrifugal movements of existing economic enterprises, together with preferences by newly created enterprises to locate in newer suburban areas, appear to be the major factors explaining the pattern of employment change in St. Louis, not governmental fragmentation.

Where fragmentation does have an effect on economic development and patterns of employment location in St. Louis is in accelerating its centrifugal flow. Fragmentation in St. Louis, particularly the separation of city and county, prevented the city from expanding through annexation. When firms and population moved out of the city into the county, the city could not recapture them by annexing their new locations. Neither can inner-ring suburbs recapture firms and population that move to outer-ring suburbs and unincorporated parts of the county. Further, county government and county municipalities that aggressively pursue new enterprises are likely to find an enterprise relocating from the city or another municipality to be as attractive as one newly created or relocating from outside the region, and to encourage such relocations. In this way, fragmentation may affect the location of economic development activity in St. Louis, facilitating the centrifugal flow found in most metropolitan areas, and perhaps exacerbating it.

Another factor that must be considered is the earnings tax in the City of St. Louis. From economic theory one can argue that employers in the city must pay higher wages than comparable employers in the county in order to offset the effect of this tax on employees' take home pay. This provides city employers with an incentive to relocate outside of the city to avoid the tax. In an analysis of Philadelphia's wage tax and its effects on employment there, Robert Inman estimated that 60 percent of Philadelphia's total employment loss over the past 20 years could be attributed to its tax on the earnings of persons employed there.66 No attempt was made to estimate an effect of this nature on the City of St. Louis' employment decline, but it is reasonable to assume that part of the decline can be explained in this way.

The jurisdictional separation of city and county is an important aspect of the problem too. In most metropolitan regions, the core county contains the core city, and county planners are likely to consider the economic well being of the central city crucial to the county's development and its revenue base. Where core city and county are separated as in St. Louis, the city's economic decline has no direct, negative effect on county government revenues—indeed county government benefits directly when firms relocate there from the city.⁶⁷

One of the significant initiatives of the citycounty government of Indianapolis, operating through its countywide Department of Metropolitan Development, has been to combat this centrifugal flow by pressuring developers to locate new activities within the central city's downtown area. These efforts have had substantial success,68 thus preventing the development of an alternative downtown, such as the Clayton area in St. Louis County. Pittsburgh's Renaissance I and Renaissance II partnerships both involved Allegheny County government along with that of the city and private entrepreneurs, and Pittsburgh's location within Allegheny County made its economic redevelopment of crucial concern to county government there.⁶⁹ The focus on central city revitalization that occurred in both of these rust belt cities, which in each case involved close collaboration between the core city and county governments, has not been characteristic of St. Louis.⁷⁰ Although some cooperative city-county ventures exist, the incentive for the county to join in these ventures is weaker than in Indianapolis or Pittsburgh. As critics of St. Louis area fragmentation note, the region has no effective governmental mechanism that involves both city and county in joint economic development efforts.

CONCLUSION

This chapter has considered several issues related to the political economy of jurisdictional fragmentation in the St. Louis City and County area. One issue is whether a fragmented area fails to capture *economies of scale* in the production of public services. Chapters Four and Five reported limited economies that might be captured in the production of police and fire services respectively. In the present chapter, considering whether such economies existed for total local government expenditures, no effects were found among the municipal governments in St. Louis County. Consistent with most of the research findings of the past 30 years, no relationships could be found between the size of population served and local government expenditures.

The second issue addressed in this chapter is that of distributional equity. Local government and school district expenditures were related to indicators of local household income, poverty, and race to examine whether patterned inequalities existed among county municipalities and school districts. Little such patterning was found for total municipal expenditures. That is, relationships between local per capita expenditures and local incomes, presence of poverty populations, and presence of minority populations were weak or nonexistent. Some patterning was found across the municipalities when household burdens were examined, however. The data indicate that communities with higher proportions of minority and elderly populations tend to impose higher burdens on their households, whether measured in absolute dollars or by a percentage of household income. An estimate is provided of the additional revenue required to reduce these burdens. The amount required is relatively small compared to total local revenues, indicating that this inequity would not be difficult to erase if the citizens of St. Louis County chose to do so.

Patterned inequalities were more evident across school districts than across municipalities. This results from the significantly greater reliance of school districts on the property tax, greater than by municipalities, which have a variety of other revenue sources. Because property tax revenues are closely linked to district property valuations, and because those valuations are in turn linked to district income and racial characteristics, school finance is less equitable than municipal finance in the county. This is true in spite of the efforts by the State of Missouri to reduce inequalities in district per pupil revenues through a variety of distributive and redistributive programs. Reduction of the patterned inequalities in school finance would require a reduction in the reliance on property taxes by the districts, together with increased school aid from the state and/or adjustments in the formulas by which state aid is distributed.

One further aspect of distributional equity—the sales tax distribution process in the county—is examined by comparing expenditures of point-of-sale cities to those of the pool cities. Even after adjustment for service conditions that clearly demand higher expenditures in the point-of-sale cities—especially the much larger numbers of persons employed within their borders—the point-of-sale cities were found to be relatively advantaged by the current sales tax distribution system. Estimates are provided of the additional revenues needed to reduce this distributional inequity. These revenues, like those that would be needed to eliminate inequities in house-hold burdens, are relatively small.⁷¹

Lastly, the chapter examines *metropolitan problem solving* in the context of economic development in the city and county. On an aggregate basis the city and county area has performed well at economic development. Its growth in total employment has equaled or exceeded that of comparable areas in the Northeast and Midwest, including a number of areas that have metropolitan economic development authorities. One cannot find evidence that fragmentation is related to slow economic growth in such comparisons, because comparable areas that are much more consolidated as well as those that are more fragmented have both lagged the city-county area in new job creation.

At the same time, St. Louis lacks authoritative mechanisms for fostering economic development across the combined city-county area. Unlike most metropolitan areas, where a central county includes the central city and, therefore, a positive relationship exists between central city development and county development, in St. Louis that relationship is often negative. The county benefits directly when enterprises relocate from the city to the county. In part because of this and, most likely, due also to the city's earnings tax, the pattern of economic development in the city and county has been decidedly uneven. The City of St. Louis has experienced a significant decline in employment over the past 20 years, while the county has experienced extraordinary employment growth. This uneven pattern is most likely a result of fragmentation, though not municipal fragmentation in the county. Rather, the relevant source of fragmentation is city-county separation.

Summarizing the linkages of fragmentation to the political economy of St. Louis, the following generalizations can be made. First, fragmentation does not result in any significant failure to capture economies of scale across the municipalities in the county. Interorganizational linkages among service producers have emerged for most service components where such economies might be expected.

Second, fragmentation is related to limited inequities in local finance. Older citizens and minority citizens tend to reside in communities with relatively higher burdens on households. The economic geography of the county is such that merging these relatively disadvantaged communities with equally disadvantaged neighboring communities would do little to reduce these inequities. Some revenue augmentation for disadvantaged communities would be necessary to accomplish this. The amount required would be relatively small. The other local finance inequity found in the county is related not to fragmentation but to the sales tax distribution formulas. Here too, the amount of revenue augmentation for disadvantaged communities needed to reduce the inequity is small.

Finally, fragmentation does not appear to have slowed economic development in St. Louis. No relationship could be found between the number of local governments and economic development when St. Louis City and County were compared to similar city-counties. In fact, St. Louis out-performed most comparable areas in its region. However, one aspect of fragmentation does appear to have affected the distribution of economic development significantly. Fragmentation, in the form of city-county separation, appears related to an uneven pattern of significant decline in the city and very significant growth in the county. The extent of this uneven pattern exceeds that found in most comparable areas. St. Louis, unlike most of those areas, has no authoritative body with competence in economic development over the combined city and county. While the existence of such a body would not, in all likelihood, have prevented uneven development, it might have slowed the centrifugal movement of employment in St. Louis, as such bodies have been able to do in other similar areas.

ENDNOTES-

²Good summaries of research on scale economies can be found in 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, U.S. Department of Agriculture, Economics, Statistics, and Cooperatives Services, April 1979): Robin Barlow, "City Population and Per Cap-

¹See, for example, Reshaping Government in Metropolitan Areas (New York: Committee for Economic Development, 1970). Recent statements of this argument in the St. Louis context include the Report of the St. Louis County Annexation Study Commission (Clayton, Missouri: St. Louis County Department of Planning, July 1985), p. 27, and Too Many Governments? A Report on Governmental Structure in St. Louis City and County With Recommendations for Change (St. Louis, Missouri: Confluence St. Louis, February 1987), p. 21.

ita City Government Expenditures," Research in Population Economics, Vol. 4, 1982, pp. 49-82, and in Werner Z. Hirsch, Urban Economics (New York: Macmillan Publishing Company, 1984). Interestingly, much of Hirsch's early empirical work was done in St. Louis.

A difficulty with most research on scale effects in local government research is the lack of valid measures of output. Economy of scale means decreasing per unit costs as output levels increase, but most of the literature measures scale by size of population served rather than units of outputs produced. It is perhaps better to refer to such research as measuring size, rather than scale effects. In addition, simply relating per capita service costs to size of population served does not account for differences in service conditions among the units studied—differences that are likely to be related to the level of service demanded and the cost of service production.

³Those who argue the need for larger municipal jurisdictions to capture presumed economies of scale or size frequently base their arguments on standards of "good business practice" which could be employed by municipalities if only they were larger. The irony of this argument is that many quite competitive business firms are smaller than the government of a town of 5,000 people. See George J. Stigler, "The Tenable Range of Functions of Local Government," in Edmund S. Phelps, ed., *Private Wants and Public Needs* (New York: W.W. Norton, 1962).

⁴Total expenditures include municipal and fire protection district expenditures, where relevant and, in two of the four equations, expenditures by householders for residential trash collection.

⁵Trash collection is an important factor because in some municipalities its cost is roughly comparable to the tax burden for all other local services-municipal and fire protection. Some county municipalities collect residential trash with their own sanitation departments, others contract with trash hauling companies, and still others franchise one or more haulers. In some municipalities trash collection is not billed to a householder (i.e., it is paid for by the municipality out of general revenues), in others the municipality pays for a portion of the cost out of general revenues and the householder pays the remainder directly to the trash collector (whether municipal, contract, or franchise), and in still others, the householder pays the full cost of collection directly to the collector. The method of estimating the per household cost of trash collection in the municipalities is described in Roger B. Parks, "Revenue and Expenditure Estimation for the ACIR St. Louis Study," Working Paper CPPM 88-1, Bloomington, Indiana: Center for Policy and Public Management, School of Public and Environmental Affairs, Indiana University, 1988.

⁶This would be the linear approximation to a cost-size relationship that exhibited decreasing average costs as population increased—or economies of size.

⁷Fox, et al., Economies of Size . . .; Hirsch, Urban Economics.

⁸A further bit of evidence on the economy-diseconomy question as it relates to fragmentation can be offered. Using data published by the U.S. Bureau of the Census, total local government expenditures for current operations (excluding those for education) reported in 1984-85 for the fragmented St. Louis City and County area were \$548 per capita. Comparable data for Baltimore City and County area (which has only two general purpose local governments, separate from each other like St. Louis City and County, and a population virtually identical to that of St. Louis and St. Louis County) were expenditures of \$601 per capita. This comparison, showing slightly lower per capita expenditures for local services in a fragmented area (St. Louis) with many small governments, than in an area (Baltimore) with only two, relatively large governments is consistent with the view that economies of size are not an important factor in local government service delivery.

- ⁹John C. Bollens, ed., *Exploring the Metropolitan Commu*nity (Berkeley: University of California Press, 1964), Chapter 14, "Factors Affecting Local Governmental Expenditure Levels."
- ¹⁰See, for example, the argumentation in *Hawkins v. Town* of Shaw, and other cases before the U.S. Supreme Court where violation of "equal protection" was alleged on the basis of revenue and expenditure variations.
- ¹¹Whether such attribution of motivation and constraint is accurate cannot be ascertained through statistical analysis of revenue and wealth patterns. However, such analyses are frequently made, with accompanying discussion which suggests these factors as providing explanation.
- ¹²Greater credence should be afforded the "weighted" coefficients. Without such weighting, Champ (population 31) and Peerless Park (67), are treated as the equivalent of University City (42,929) and Florissant (55,949). Weighting by relative populations provides a more accurate picture of revenue patterns by adjusting for the gross population differences among these and other municipalities.
- ¹³The weighted correlation between median household income and percent of housing stock built between 1970 and 1980 is a positive 0.38 and is statistically significant at p < .001.
- ¹⁴Those with higher incomes also tend to pay higher direct tax burdens in the county (the correlation between household tax burden and median household income is 0.61—see the following section). The positive relationship between total per capita revenues and median income is in part a reflection of this fact.
- ¹⁵Significant correlates of the commercial-industrial assessed valuation per capita are median household income (+0.31), percent nonwhite (-0.22), percent of housing built between 1970 and 1980 (+0.33), and population density (-0.45). In a regression analysis predicting assessed value of commercial-industrial activity per capita, only population density is statistically significant [data not shown].
- ¹⁶Estimates of household tax burdens for each of the county municipalities are contained in the Appendix to this Chapter. The method for developing these estimates is presented in Roger B. Parks, op. cit.
- ¹⁷See the previous discussion of the alternative arrangements for provision of trash collection across the municipalities and how this affects the comparability of household burden estimates.
- ¹⁸"Without trash collection costs" in this context means that the burdens include utility and property taxes, but not direct payments for trash collection where these are required. "With trash collection costs" means that direct trash collection payments have been added to tax burdens in those communities where trash collection is not supported from general revenues.
- ¹⁹Twenty-four of the point of sale cities paid for this collection with general revenues. These cities contained about 60 percent of the point of sale population. Twenty-one of the pool cities also paid for trash collection with general revenues, but their population represented only 22 percent of the pool population. Thus, households in pool cities are likely to have higher dollar and percentage burdens than those in point-of-sale cities—in large part because of the cost of trash collection to them.
- ²⁰One has only to cite cities such as Fenton, Frontenac, Hazelwood, or Peerless Park, where residential tax burdens

are quite low as a result of large revenues from commercial and industrial activity.

- ²¹While commercial and industrial activity has only a small effect on household tax burdens, it does affect expenditures for local services quite significantly (see "The Sales Tax Controversy Revisited" below).
- ²²This estimate is reached by computing the excess percentage burden in those communities where it is found, multiplying that excess percent by average household income there and then by the number of households, and summing the results across those communities that have percentage burdens above the 1.03 percent average. The actual estimate is slightly below \$8 million, with the \$8-10 million figure in the text allowing for as much as a 25 percent underestimate of the amount required.
- ²³One reason why the amount required is so small is that the State of Missouri and its local governments raise quite small revenues from their citizens when compared to governments in other states. In 1985, Missouri's combined state-local tax collections per capita were \$1,091. Only seven states collected less per capita. Missouri's state-local tax revenue as a percent of personal income was 9.01 percent in 1985. Only New Hampshire had a lower percentage. See U.S. Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism, 1987 Edition, pp. 49-50.
- ²⁴Revenue data for county school districts is taken from the St. Louis County Annual School Report, November 1985, published by the Cooperating School Districts of the St. Louis Suburban Area. Revenue data for the city district is taken in part from St. Louis Public Schools: A Winning Year 84-85, published by the St. Louis (City) Public Schools and in part from Table 4 of the 1984-85 Report of the Public Schools of Missouri, published by the Missouri State Board of Education. Data from the Cooperating School Districts Report and the Missouri State Board of Education Report exhibit some differences. Adjustments were made to tabulated data for purposes of consistency, but comparisons of the city and county school districts must be considered tentative.
- ²⁵Recall from Table 2.8 that the least advantaged municipalities (and fire districts) raised, on average, about 38 percent of the revenues of the most advantaged.
- ²⁶Extrajurisdictional revenues are partially per-capita, distributed on the basis of enrollment, and partially compensatory, distributed according to a "need" formula. Both forms of distribution act to reduce revenue variations that result from differences in district tax bases and tax efforts, although the compensatory distribution has a stronger effect.
- ²⁷Federal funds, which in the past were distributed in part to general purpose local governments in a compensatory manner, have shrunk to a very small proportion of municipal revenues.
- ²⁸These coefficients were computed using total property valuation, unlike Table 8.2 computations, as the valuation of commercial and industrial property by school district was unavailable.
- 29 The regressions are not shown because only assessed valuation has any effect. The coefficient for assessed value per student in both total and district regressions, weighted or unweighted, is 0.02, indicating an average revenue per student of \$20 for each \$1,000 of assessed valuation. The regressions explain 90 percent of the variation in total and district revenues.
- ³⁰All municipalities retain the revenues generated within their borders from nonsales taxes and fees on commercial and industrial property.

- ³¹Quite obviously, the municipalities that chose point-of-sale status in 1977 or 1980 were those which had significant sales tax generating activity. See James M. Brasfield, "The Great Land Rush: Annexation and Sales Tax in St. Louis County," presented at the Annual Meeting of the American Political Science Association, New Orleans, Louisiana, August 29-September 1, 1985, and Andrew D. Glassberg, "The Management of Uncertainty: The St. Louis County Sales Tax," in Carol W. Lewis and A. Grayson Walker, eds., Casebook in Public Budgeting and Finance (Englewood Cliffs, New Jersey: Prentice-Hall, 1984), pp. 73-76.
- ³²U.S. Bureau of the Census, Census of Retail Trade, Census of Wholesale Trade, Selected Service Industries, 1982 and prior years. Data in this section refer to 71 municipalities for which retail, wholesale, and service industry employment figures were available or which had less than five percent of their assessed valuation in commercial and industrial property (employment was set to zero for the latter). These 71 municipalities contain approximately 97 percent of the municipal population in 1984. All averages and coefficients are computed on a population-weighted basis so as to more accurately reflect the average values in the county.
- ³³Data for Part I (serious) crimes taken from 1985 Fact Sheet: Police Services in St. Louis County (Clayton, Missouri: Bureau of Management Systems, St. Louis County Police Department, 1985), Table 3.
- ³⁴See James M. Brasfield, "Follow the Money: Fiscal Structure and Metropolitan Reorganization in St. Louis County," presented at the Annual Meeting of the American Political Science Association, Chicago, Illinois, September 3-6, 1987.
- ³⁵Katharine L. Bradbury, Helen F. Ladd, Mark Perrault, Andrew Reschovsky, and John Yinger, "State Aid to Offset Fiscal Disparities Across Communities," National Tax Journal 37 (June 1984): 151-170. The method is developed from economic theory and adapted for practical decisionmaking by Massachusetts' policymakers. The reader is referred to the article for the theoretical development.

³⁶Ibid, p. 158, parenthetical phrase added for clarification.

37 Ibid.

- ³⁸In Massachusetts, municipalities were limited almost exclusively to the property tax as an own-source resource. There, the equalized property tax base was used to index this resource. Missouri municipalities and fire protection districts which serve them rely on property taxes, but the municipalities also rely on the sales and gross receipts taxes for major shares of their revenues.
- 39The model is a powerful predictor of per capita expenditures, explaining 86 percent of the variance in these expenditures across the 71 municipalities.
- ⁴⁰I.e., cities whose residents are wealthier spend more for public services. In national studies the elderly generally are found to support lower levels of public expenditures. See Bradbury, et al., "State Aid"
- ⁴¹A recent analysis of expenditures by nearly 1,900 suburban municipalities found that the "strongest determinant," the variable which best predicted their expenditures, was the ratio of the number of persons employed in a community to the community's resident population, with a strong, positive effect. See John R. Logan and Mark Schneider (1982) "The Effects of Business Activity, Functional Responsibility, and Regional Context on Suburban Municipal Expenditures," in Richard C. Rich, ed., Analyzing Urban-Service Distributions (Lexington, Massachusetts: Lexington Books, 1982), pp. 235-250.

- ⁴²Computed as each city's per capita cost of retail, wholesale, and service industry employment multiplied by city population and summed across the 71 cities.
- ⁴³The St. Louis County Annexation Study Commission reported a similar ratio using 1982 data. See its report at page 17.
- ⁴⁴It was not possible to estimate the amount, but it is clear that the unincorporated county and Maryland Heights provide revenue redistribution to other cities in the pool by sharing their higher per capita sales tax collections.
- ⁴⁵\$67 in the average point-of-sale city minus \$18 in the average pool city. Cost factors and indices for each of the 71 cities are listed in Parks, "Revenue and Expenditure Estimation"
- ⁴⁶Significant here means employment per 1,000 residents well above the average, not necessarily high total employment.
- ⁴⁷Two pool cities, Normandy and Wellston, have cost indices above the average of the 71 municipalities. Four pointof-sale cities, Dellwood, Jennings, Kirkwood, and Shrewsbury, have cost indices below the 71 city average. Other than these, all pool cities have below average indices, while all point-of-sale cities have above average indices.
- ⁴⁸Recall that point-of-sale cities raise more revenues from all sources than do pool cities. As a rough estimate, about 60 percent of the point-of-sale cities' advantage is a direct effect of the sales tax distribution, while the remainder is a cumulative effect of property taxes, gross receipts, and other sources.
- ⁴⁹An economist would question how much of the extra expenditure represents added service to residents and how much might be attributed to possible inefficiencies encouraged by excess revenues. Absolutely no data were available to address this question.
- ⁵⁰This result suggests that a change in the sales tax distribution formula would be in order if achieving fiscal equivalence were to be pursued. Moving to a countywide pool distribution formula would not achieve this, however, as point-of-sale cities do incur higher service costs than do pool cities as a result of the commercial-industrial activities within their borders. A mixed formula, allowing all cities to retain sufficient revenues from commercial activities to cover the added cost of servicing them, with the remainder distributed on a per capita basis would be one way of moving toward fiscal equivalence. If redistributive goals were to be pursued as well, the distribution of net revenues from commercial-industrial activities might be tied to a formula which indexed each jurisdiction's "need"-perhaps using a cost index as developed here-and it's own tax effort as measured by household tax burdens. The State of Missouri uses such a mixed formula to allocate redistributive funds to local school districts under its Foundation Program.
- ⁵¹In the latter case, with discounting for the service cost index, approximately \$20 million would be allocated to 26 pool cities that are disadvantaged, while \$8 million would be allocated to eight disadvantaged point-of-sale cities.
- ⁵²Cities that are disadvantaged by this definition are not unable to pay for local services. Rather, current revenue bases and fiscal choices are such that they spend fewer dollars per capita for local services in relation to their service conditions than do other municipalities with similar conditions. They are disadvantaged in the sense that, while facing similar conditions, they are less able to raise revenues to fund local services.
- ⁵³Thirty-seven of the 45 are pool cities, needing \$14.5 million to eliminate their disadvantage by this definition. Eight are point-of-sale cities which, in total, would need about \$5 million. Of the 45 cities that are disadvantaged by this defi-

nition, 29 have tax burdens as a percent of household income below the county average—indicating that a portion of their disadvantage is the result of choosing lower burdens. If they were required to bring their own burdens up to the county average before receiving additional funds, however, the reduction in additional funds need would be only \$1.8 million, as most of these 29 cities are quite small.

⁵⁴This argument has been advanced by critics of local government fragmentation in St. Louis, who find that the large number of local governments there has prevented the area from resolving regional economic development problems, causing a relative economic decline. For example, Dana L. Spitzer, Fostering Development in Metropolitan St. Louis (St. Louis, Missouri: City-County Task Force of Civic Progress, December 1982):

... it (the Advisory Committee which prepared this report) does see [governmental] proliferation and fragmentation creating major problems related to area-wide issues, services and functions. Economic development is included among this latter realm of concerns.

In attempting to address issues of a metropolitan nature, St. Louis is seriously incapacitated. Many independent governmental units exist in an environment in which they (sic) are few clear, immediate inducements to cooperation and collaboration. There is a frequent perception that local jurisdictions are in competition. No strong, general purpose mechanisms for representing areawide interests exist, and the general orientation to addressing most issues is for a maze of separate jurisdictions to vie for what they perceive to be their individual advantage. (pp. 21-22).

This finding was repeated in Confluence St. Louis, Too Many Governments?:

Multiplicity affects economic development in three major ways: (a) indirectly, by inhibiting the region's ability to solve metropolitan problems that have a clear impact on economic development; (b) by fostering competition, which inhibits the development of a regional consensus on strategies for economic development; and (c) by complicating the process for those interested in relocating to St. Louis (p. 25).

- ⁵⁵In Spitzer, Fostering Development in Metropolitan St. Louis, p. 18.
- ⁵⁶Neither do these comparisons reveal any particular correlation between number of local governments in the regions and their relative successes in adding employment.
- ⁵⁷In a recent article, U.S. News & World Report identified St. Louis County as one of 46 "boom" counties in America, projecting a further increase of 126,000 jobs in the county through the year 2000 ("The Boom Counties," November 9, 1987, p. 108).
- 58Undoubtedly many of the new jobs in St. Louis County were jobs lost to the city, as firms moved out from the city to the county. Similar movements have been reported in many metropolitan areas, particularly older ones. No data were found by which to quantify this movement in St. Louis, however. If one were to assume that all of the city's loss was simply relocation to the county and, therefore, should not be counted in the county's growth, the county's employment increase from 1970 to 1985 would drop to 51 percent, still a very significant increase.
- 59For a compendium of negative national images of St. Louis, see Spitzer, Fostering Development in Metropolitan St. Louis, pp. A-1 to A-3. All those cited referred to the city as the locus of very serious urban problems, including loss of jobs.

- ⁶⁰"Winter cities," contrasted with those in the sun belt, have recently arrived as a subject of study. See, for example, Gary Gappert, ed., *The Future of Winter Cities* (Beverly Hills, California: Sage Publications, 1987). In an article in this volume (pp. 13-34), "The Cold City: The Winter of Discontent?" Seymour Sacks, George Palumbo, and Robert Ross identify the linkage between fixed central city borders and relative population and job losses. Cities without fixed borders (e.g., Memphis) have maintained or increased population and employment to a significant degree by annexing suburban areas to which population and employment has relocated.
- ⁶¹See Sacks, et al., "The Cold City," pp. 30-31. Central city growth in employment has been particularly significant in Indianapolis-Marion County, even though the combined city-county growth percentage there is equivalent to that in St. Louis City and County. Local economic planners in St. Louis foresee a reversal of the city's employment decline, projecting an increase of nearly 31,000 jobs there by the year 2,000. This projected increase will all occur within a few block area of the central business district, however, with the remainder of the city losing jobs or staying virtually the same. See Yesterday, Today, and Tomorrow: A Profile of Change for the St. Louis Metropolitan Area (St. Louis, Missouri: East-West Gateway Coordinating Council, November 1986), p. 122.
- ⁶²See U.S. Bureau of the Census, Census of Retail Trade, Census of Wholesale Trade, and Selected Service Industries for 1972 and 1982.
- ⁶³Data from Roger Grow, St. Louis County Planning Department, and Dee Joyner, Executive Director, St. Louis County Economic Council.
- ⁶⁴Data from East-West Gateway, Yesterday, Today, and Tomorrow, p. 122, project about one-third of the jobs in the county will be in the area outside of Interstate 270 by 2000. East-West Gateway's projections are not comparable with those cited earlier from U.S. News and World Report, nor are their 1980 base data comparable with the Census Bureau's County Business Patterns data for that year.
- ⁶⁵See the statements cited in Endnote 54 and additional ones in Civic Progress, Fostering Development in Metropolitan St. Louis, and Confluence St. Louis, Too Many Governments? In a personal communication, the Executive Director of the St. Louis County Economic Council stated that "... individuals who 'do' economic development on a daily basis feel strongly that government multiplicity does impede their efforts to attract jobs or create the kind of cli-

mate conducive to economic growth." She cites as specific difficulties those of "... presenting a united front to the state [of Missouri], ... reaching agreement on regional priorities and mustering the forces to carry them out, ... [in]ability to make commitments and close deals when trying to attract industries, and ... [in]ability to present a united front to outsiders ...". Dee Joyner, December 23, 1987.

- ⁶⁶Robert P. Inman, "Regression Analysis of the Wage Tax and Employment Trends," in Thomas F. Luce and Anita A. Summers, *Local Fiscal Issues in the Philadelphia Metropolitan Area* (Philadelphia, Pennsylvania: University of Pennsylvania Press, 1987), pp. 176-178.
- ⁶⁷The revenue base of county government benefits especially when firms locate in the unincorporated part of the county. There, the county can collect utilities taxes and other fees from them in addition to property and sales taxes. For this reason, county government benefits even from intracounty relocations if firms move from incorporated to unincorporated areas. County government has had an incentive to encourage business location in the unincorporated county whether new or relocating business—and this encouragement no doubt helps to explain the rapid growth there in recent years.
- ⁶⁸James C. Owen, "A Critique of Metropolitan Government: The Indianapolis Unigov Experience," in Roger C. Stough and Theo Toonen, eds., *Public Infrastructure Redefined* (Rotterdam, The Netherlands: Department of Public Administration, Erasmus University), forthcoming 1988.
- ⁶⁹Brian J. L. Berry, Susan W. Sanderson, Shelby Stewman, and Joel Tarr, "The Nation's Most Livable City: Pittsburgh's Transformation," in Gary Gappert, ed., The Future of Winter Cities, pp. 173-195.
- ⁷⁰Such focusing is not without cost. Owen reports that Indianapolis, by focusing on its downtown, is alleged to have slighted development in economically depressed areas surrounding the downtown. Berry, et al., indicate similar problems in the Monongahela Valley towns south of the City of Pittsburgh.
- ⁷¹Voters in St. Louis County turned down a proposed 0.275 percent increase in the county sales tax in June. The amount that would have been raised by this increase, if targeted to relatively disadvantaged communities, could have substantially reduced the inequities in household burdens and between point-of-sale and pool cities found in these analyses.

Appendix Table 8.1 Revenues and Expenditures in County Municipalities – 1985					
Municipality	Municipal Revenues	Fire District Revenues from Municipality	Total Revenues	Total Expenditures ¹	
Ballwin	\$5,838,512	\$667,568	\$6,506,080	\$5,040,125	
Bel Nor	309,194	96,103	405,297	375,323	
Bel Ridge	634,000	115,534	749,534	749,534	
Bella Villa	147,793	25,447	173,240	142,920	
Bellefontaine Nbrs	2,289,106	364,932	2,654,038	2,529,208	
Bellerive Acres	61,000	22,006	83,006	83,006	
Berkeley	7,000,000	0	7,000,000	7,608,339	
Beverly Hills	393,949	22,926	416,875	408,858	
Black Jack	552,000	146,710	698,710	706,710	
Breckenridge Hills	862,000	99,033	961,033	960,894	
Brentwood	4,205,159	0	4,205,159	3,977,352	
Bridgeton	7,250,170	1,283,205	8,533,375	8,313,837	
Bridgeton Terrace	52,617	8,020	60,637	58,398	
Calverton Park	207,464	43,738	251,202	221,559	
Champ	6,501	6,602	13,103	10,417	
Charlack	296,221	28,042	324,263	290,321	
Clarkson Valley	336,219	228,272	564,491	561,491	
Clayton	9,366,241	0	9,366,241	9,759,879	
Cool Valley	462,900	100,262	563,162	563,162	
Country Club Hills	304,748	0	304,748	296,791	
Country Life Acres	18,288	0	18,288	36,358	
Crestwood	4,344,101	0	4,344,101	4,022,928	
Creve Coeur	6,658,290	1,378,691	8,036,981	8,548,043	
Crystal Lake Park	114,255	0	114,255	93,247	
Dellwood	1,435,377	138,110	1,573,487	1,548,997	
DesPeres	3,463,088	0	3,463,088	3,404,692	
Edmundson	440,068	84,792	524,860	495,945	
Ellisville	2,845,918	440,248	3,286,166	3,549,512	
Eureka	1,324,180	330,878	1,655,058	1,569,355	
Fenton	2,549,707	505,065	3,054,772	2,424,480	
Ferguson	5,609,421	0	5,609,421	5,619,812	
Flordell Hills	159,389	0	159,389	147,424	
Florissant	9,784,098	1,811,938	11,596,036	11,192,200	
Frontenac	1,783,000	0	1,783,000	1,783,176	
Glen Echo Park	30,440	7,388	37,828	38,941	
Glendale	1,305,305	0	1,305,305	1,224,323	
Grantwood Village	195,000	64,747	259,747	259,747	
Greendale	115,000	38,162	153,162	141,752	
Hanley Hills	315,930	75,422	391,352	413,324	
Hazelwood	6,723,446	0	6,723,446	6,599,284	
Hillsdale Huntleigh Jennings Kinloch Kirkwood	375,882 88,953 4,970,964 866,517 7,034,281	64,667 0 0 46,670 0 vhere applicable. Fire district	440,549 88,953 4,970,964 913,187 7,034,281	443,825 68,774 4,688,674 1,010,251 8,398,390	

Appendix Table 8.1

¹Municipal expenditures plus fire district revenues where applicable. Fire district expenditures in each municipality could not be computed. NA – Data were not available.

(continued on next page)

Appendix Table 8.1 (cont.) Revenues and Expenditures in County Municipalities – 1985

Municipality	Municipal Revenues	Fire District Revenues from Municipality	Total Revenues	Total Expenditures ¹
Ladue	\$3,993,696	\$0	\$3,993,696	\$4,086,817
Lakeshire	266,523	49,550	316,073	321,325
Mackenzie	19,000	4,215	23,215	8,835
Manchester	2,316,152	305,337	2,621,489	3,078,630
Maplewood	3,800,000	0	3,800,000	3,400,000
Marlborough	463,474	81,010	544,484	487,796
Maryland Heights	NA	1,362,210	NA	NA
Moline Acres	490,590	70,301	560,891	560,891
Normandy	1,337,922	219,843	1,557,765	1,489,345
Northwoods	1,481,775	181,847	1,663,622	1,671,911
Norwood Court Oakland Olivette Overland Pagedale	95,000 242,553 3,485,647 4,948,355 1,590,885	40,839 0 551,361 187,634	135,839 242,553 3,485,647 5,499,716 1,778,519	96,839 211,994 3,347,070 5,452,179 1,584,667
Pasadena Hills	230,787	63,627	294,414	257,878
Pasadena Park	88,000	24,711	112,711	112,735
Peerless Park	112,094	15,296	127,390	131,921
Pine Lawn	1,132,087	115,662	1,247,749	1,159,841
Richmond Heights	3,684,144	0	3,684,144	3,620,560
Riverview	471,801	76,644	548,445	472,545
Rock Hill	1,373,609	0	1,373,609	1,369,767
Shrewsbury	1,817,882	0	1,817,882	1,772,414
St. Ann	5,250,000	491,530	5,741,530	5,734,230
St. George	256,378	40,190	296,568	321,042
St. John	1,277,000	159,500	1,436,500	1,435,769
Sunset Hills	1,906,673	451,467	2,358,140	2,306,385
Sycamore Hills	94,346	15,631	109,977	95,734
Town and Country	3,645,034	16,238	3,661,272	2,580,682
Twin Oaks	203,580	42,168	245,748	246,168
University City	13,216,828	0	13,216,828	12,856,656
Uplands Park	100,643	14,343	114,986	83,902
Valley Park	1,150,049	159,113	1,309,162	1,287,675
Velda Village	328,838	40,600	369,438	363,074
Velda Village Hills	NA	29,909	NA	NA
Vinita Park	685,298	217,102	902,400	988,781
Vinita Terrace	44,788	14,131	58,919	45,247
Warson Woods	700,000	0	700,000	650,000
Webster Groves	6,608,915	0	6,608,915	6,543,190
Wellston	1,137,000	118,910	1,255,910	1,255,990
Westwood	46,000	35,519	81,519	81,408
Wilbur Park	71,289	13,515	84,804	82,224
Winchester	406,138	61,649	467,787	512,855
Woodson Terrace	1,021,617	155,250	1,176,867	1,180,845

¹Municipal expenditures plus fire district revenues where applicable. Fire district expenditures in each municipality could not be computed. NA – Data were not available.

Service-Cost Burden on an Average Household – 1985						
Municipality	Property Taxes: Municipal [,]	Property Taxes: Fire District	Gross Receipts	Trash Collection	Total Burden	Average Household Income
Ballwin	\$70.80	\$125.25	\$113.97	\$74.59	\$384.61	\$25,941
Bel Nor	61.34	134.37	0.00	0.00	195.71	27,157
Bel Ridge	23.66	67.81	0.00	0.00	91.47	18,754
Bella Villa	45.86	74.94	47.01	74.40	242.21	18,860
Bellefontaine Nbrs	31.79	68.12	114.86	97.20	311.97	22,682
Bellerive Acres	280.52	201.62	16.23	0.00	498.37	53,707
Berkeley	70.19	0.00	98.43	30.31	198.93	19,207
Beverly Hills	20.78	59.74	83.11	0.00	163.64	16,228
Black Jack	19.15	79.78	0.00	86.40	185.33	27,975
Breckenridge Hills	24.78	36.76	0.00	0.00	61.54	16,836
Brentwood	90.87	0.00	77.44	0.00	168.30	21,897
Bridgeton	43.11	101.61	86.66	0.00	231.37	24,623
Bridgeton Terrace	41.04	52.76	83.59	72.00	249.38	17,442
Calverton Park	33.28	73.23	5.72	86.40	198.64	25,530
Champ	16.65	87.40	0.00	72.00	176.04	40,000
Charlack Clarkson Valley Clayton Cool Valley Country Club Hills	24.42 227.27 205.56 16.75 98.32	32.09 503.67 0.00 84.65 0.00	90.36 30.47 186.44 80.21 124.49	60.00 0.00 0.00 52.80	206.87 761.41 392.00 181.61 275.61	17,794 63,559 36,211 18,233 16,841
Country Life Acres	520.02	0.00	0.00	0.00	520.02	89,372
Crestwood	60.44	0.00	87.12	87.12	234.67	28,710
Creve Coeur	79.81	231.03	124.55	0.00	435.39	49,212
Crystal Lake Park	223.72	0.00	70.57	0.00	294.28	32,333
Dellwood	28.48	49.10	87.69	0.00	165.26	23,676
Des Peres	101.87	0.00	83.55	0.00	185.42	39,856
Edmundson	26.97	44.47	0.00	0.00	71.44	19,735
Ellisville	104.22	126.16	139.36	47.95	417.69	27,287
Eureka	63.48	118.58	66.80	34.80	283.66	21,776
Fenton	20.06	91.94	0.00	0.00	111.99	26,604
Ferguson	53.91	0.00	91.60	115.20	260.72	21,867
Flordell Hills	50.19	0.00	73.25	52.80	176.24	16,053
Florissant	47.23	82.02	61.49	86.40	277.14	24,712
Frontenac	84.64	0.00	15.74	0.00	100.38	72,323
Glen Echo Park	14.78	113.31	12.39	0.00	140.48	24,462
Glendale	93.12	0.00	113.07	100.80	306.98	31,172
Grantwood Village	110.51	174.26	22.44	72.00	379.20	40,720
Greendale	12.29	94.19	77.85	60.00	244.33	22,505
Hanley Hills	34.72	70.99	0.00	60.00	165.71	18,573
Hazelwood	72.59	0.00	0.00	64.80	137.39	22,542
Hillsdale	22.21	40.07	0.00	0.00	62.29	15,038
Huntleigh	300.66	0.00	0.00	76.80	377.46	99,469
Jennings	76.69	0.00	96.09	0.00	172.77	17,689
Kinloch	27.71	22.82	59.02	60.00	169.55	11,007
Kirkwood	89.16	0.00	122.52	77.76	289.44	26,605

Appendix Table 8.2 Service-Cost Burden on an Average Household – 1985

¹Including municipal real and personal property taxes and the municipality's share of the County Road and Bridge tax. Municipal and County Library taxes are excluded. NA – Data were not available.

(continued on next page)

Appendix Table 8.2 (cont.)						
Service-Cost Burden	on an Average I	Household – 1985				

Municipality	Property Taxes: Municipal [,]	Property Taxes: Fire District	Gross Receipts	Trash Collection	Total Burden	Average Household Income
Ladue	\$317.15	\$ 0.00	\$250.59	\$118.80	\$686.54	\$80,135
Lakeshire	45.58	126.61	74.49	74.40	321.08	20,718
Mackenzie	27.23	46.96	0.00	72.00	146.19	25,559
Manchester	94.94	105.69	74.26	0.00	274.89	29,266
Maplewood	80.84	0.00	73.95	0.00	154.80	14,703
Mariborough	19.14	50.36	0.00	78.00	147.50	16,158
Maryland Heights	NA	NA	NA	NA	NA	NA
Moline Acres	12.32	56.49	74.93	0.00	143.74	20,409
Normandy Northwoods	35.69 42.03	84.19	158.99	0.00	278.87	18,875
		87.89	161.09	0.00	291.01	22,243
Norwood Court	54.39	147.17	0.00	0.00	201.56	19,815
Oakland	58.33	0.00	93.09	78.00	229.42	29,696
Olivette Overland	190.48 21.47	0.00 49.37	190.30 81.81	0.00 0.00	380.78 152.64	33,120
Pagedale	19.44	49.37	83.00	0.00	152.04	19,929 16,698
-						
Pasadena Hills Pasadena Park	70.85 55.51	148.15 116.06	71.17 0.00	0.00 0.00	290.17	28,912 22,580
Peerless Park	25.82	48.20	0.00	0.00	171.57 74.02	22,580
Pine Lawn	18.72	52.19	100.11	0.00	171.02	16,751
Richmond Heights	150.58	0.00	65.40	0.00	215.98	24,853
Riverview	34.04	53.74	19.25	74.40	181.43	16,584
Rock Hill	50.25	0.00	79.55	90.72	220.52	21,036
Shrewsbury	104.68	0.00	93.62	0.00	198.30	21,116
St. Ann	21.68	49.27	55.51	0.00	126.46	18,929
St. George	38.03	82.67	0.00	74.40	195.10	19,389
St. John	37.37	41.92	26.05	0.00	105.34	18,944
Sunset Hills	42.83	145.14	86.40	0.00	274.36	30,119
Sycamore Hills	51.27	47.17	17.10	60.00	175.53	21,152
Town and Country	316.22	4.39	90.54	0.00	411.15	64,157
Twin Oaks	111.29	190.79	0.00	0.00	302.08	36,190
University City	145.46	0.00	152.99	93.60	392.05	21,759
Uplands Park	33.57	64.34	15.96	48.00	161.87	20,614
Valley Park	67.68	68.49	60.00	74.40	270.57	16,435
Velda Village	34.01	61.34	87.63	0.00	182.98	17,514
Velda Village Hill	NA	NA	NA	NA	NA	18,560
Vinita Park	23.56	74.74	72.74	0.00	171.03	17,955
Vinita Terrace	26.01	82.52	19.04	60.00	187.58	21,891
Warson Woods	158.92	0.00	176.54	100.80	436.27	3,435
Webster Groves Wellston	134.96 18.20	0.00 28.39	135.50 89.54	118.80 0.00	389.27 136.13	26,555 11,628
Westwood	88.97	271.84	42.18	0.00 74.40	402.98 156.20	74,326 21,760
Wilbur Park Winchester	15.83 48.36	65.97 86.47	0.00 95.52	74.40 74.40	304.75	21,780
Woodson Terrace	40.30 23.89	37.89	95.52 56.04	86.40	204.21	22,015
	20.00	07.00	00.04	00.70		

¹Including municipal real and personal property taxes and the municipality's share of the County Road and Bridge tax. Municipal and County Library taxes are excluded. NA – Data were not available.

Chapter Nine

Functional Dimensions of Metropolitan Organization

INTRODUCTION

St. Louis County is a classic case of the jurisdictional "patchwork" long criticized by advocates of metropolitan reform. Neatness and uniformity in the distribution of responsibilities among local governments are not to be found here. Alongside 90 municipalities, 40 percent of the county's residents live in unincorporated areas. Municipalities range in size from less than a hundred to more than 50,000 residents. Some municipalities provide fire protection, but others depend on overlying fire protection districts, as do all those who live outside municipal boundaries. Streets and street services are provided not only by the county government and 90 municipalities, but also by more than 400 organized subdivisions, many of which retain separate control over vehicular access. Twenty-three school districts, ranging in size from a few hundred students to nearly 20,000, provide elementary and secondary education, supplemented by the Special School District to provide education for handicapped students and vocational-technical education. Although a few school districts conform closely to municipal boundaries, most do not.

The variation in municipal sizes makes it difficult to sort out functions neatly between county and municipal governments, or between municipalities and fire districts, in the incorporated portion of the county. The presence of a large unincorporated area requires county government to maintain direct service capabilities that are not necessary in the incorporated areas. Neither the county government nor the municipalities are able to perform a uniform set of functions throughout the county. To many observers, this finding is a source of considerable distress. Whatever the particular reform proposal, advocates of metropolitan reform generally seek to create a pattern of organization that can apply uniformly throughout a metropolitan area. In this manner, every county resident would receive police services, for example, in substantially the same manner, not in one of several different ways.

Local self-determination tends to foreclose the development of uniform patterns of organization. A lack of uniformity, however, does not necessarily imply a lack of organization. To discover how St. Louis County is organized, one has to inquire into more than jurisdictional arrangements. Jurisdictional fragmentation within the county is associated with a productive political and economic process that gives rise to an elaborate organizational overlay-voluntary associations of governments, cooperative agreements, and general rules of law-that links, and often integrates, separate jurisdictions in complex patterns of functional relationships. Unlike the lines and boxes drawn on an organization chart, the functional arrangements that link multiple jurisdictions tend to be dynamic, created in response to particular problems and opportunities as they arise. Yet many of those arrangements have also acquired a considerable stability and regularity across jurisdictional boundaries.

If the frame of reference is broadened to include St. Louis City, the picture changes somewhat. The dominant feature of the governmental landscape is a jurisdictional boundary between two nonoverlapping, general purpose units—St. Louis City and St. Louis County. The only overlying jurisdictions, aside from the State of Missouri, consist of special purpose districts. Yet the City of St. Louis and the city school district participate in many of the joint service delivery arrangements that connect the county municipalities, school districts, and fire districts. The city-county border is clearly not impermeable to functional linkages. The absence of a general purpose overlying jurisdiction, however, may inhibit conflict resolution between city and county.

The immediate objective of this study was to describe the functional arrangements that coexist with jurisdictional fragmentation in a single, highly fragmented metropolitan area. Drawing on process criteria to evaluate these functional arrangements, the results of the study can also shed light on this additional question: Can a functional metropolitan order successfully be built on a jurisdictional base of fragmentation?

Using the theory of fragmentation developed in Chapter One, the discussion in this closing chapter first reviews the functional dimensions of metropolitan organization found in St. Louis County and, to a somewhat lesser extent, between St. Louis City and County. The discussion then moves on to the task of evaluation, requiring an assessment of functional arrangements on the basis of the functional-process criteria and fiscal criteria stipulated in Chapter One. The assessments of St. Louis made as a result of this study are then compared to the evaluations of others. Finally, the chapter takes up some of the problems that are currently being addressed in St. Louis County, and the possible solutions available.

FUNCTIONAL DIMENSIONS: HOW FRAGMENTATION WORKS

Certain generic processes and arrangements are characteristic of St. Louis County. Rather than being simply a collection of ad hoc accommodations, as the literature of intergovernmental cooperation often suggests, the processes and arrangements identified here are systemic: they fit together as the properties of a system that tends to function in a coherent and predictable manner. Each can be viewed as a working part in the mechanics of metropolitan organization.

A Local Government Constitution

The jurisdictions found in St. Louis County are for the most part products of local selfdetermination, as anticipated in the theory of fragmentation developed in Chapter One. The governance structure of the county, set out in state statutes and provisions of the state constitution, depends heavily on citizen initiative and consent to create, expand, and modify units of local government. With the exception of the county government, local jurisdictions have been formed at local initiative, and their formation approved by local citizens, according to various processes of petition and referendum. Even the county government has been substantially modified through local initiative by the adoption and amendment of a home rule charter.

It is incorrect to conclude that St. Louis County has no form of metropolitan governance (i.e., no governance arrangements that embrace all units of government in the county). Although lacking a single metropolitan government, the county has a coherent governance structure based on the principle of local self-determination. This structure consists of rules that allow citizens to make basic constitutional choices that create and govern their local governments through local charters. Although derived from numerous legal sources, together these rules create a functional arrangement, here called a local government constitution, that provides for metropolitan self-governance.

As explained in Chapter Three, a local government constitution is built on two levels of constitutional choice: (1) a choice of enabling rules that provide the basis for organizing units of local government (e.g., procedures for municipal incorporation) and (2) those choices involved in the actual creation of local units (e.g., municipal charter making). Both levels are constitutional in nature, insofar as both levels define mechanisms for governing the processes of government. It is at these constitutional levels that a framework of metropolitan governance is created and sustained.

The content of a local government constitution was analyzed, in Chapter Three, in four basic parts: (1) rules of association that allow local citizens to create specific types of local units with general or specific powers; (2) fiscal rules that empower local units to raise specific types of revenue; (3) boundary change rules, especially annexation rules that allow for adjustments in the boundaries of local units; and (4) interjurisdictional rules, especially contracting rules, that allow separate jurisdictions to enter into various joint arrangements.

Rules of Association

These rules are the institutional foundation of jurisdictional fragmentation, allowing citizens to create local governments, notwithstanding the legal fiction that all local governments are creatures of the state. In fact, throughout most of the United States, municipalities and special districts tend to be creatures not of state governments but of local communities. The constitution and laws of a state generally provide legal tools to local citizens who use those tools to create local governments.

In St. Louis County, state law empowers local citizens—and only local citizens—to create villages, third or fourth class cities, fire districts, school districts, and a number of other special districts. The typical procedure involves citizen petition and referendum. Cities over 5,000 in population may choose to incorporate under home rule charters, which enjoy the protection of the state constitution. County government also operates under a home rule charter adopted by citizens.

A local government constitution that enables citizens to make constitutional choices by creating (and occasionally abolishing) local units of government at their own initiative involves much more than obtaining the consent of the governed. This sort of constitutional arrangement directly taps the creative energies of citizens; it allows those most directly affected by local public problems to take *constitutive* action to address those problems. Instead of petitioning the government to take some action, citizens can literally create their own government or governmental arrangement.

Fiscal Rules

These rules specify the revenue sources available to different types of local units and provide for procedures to increase tax rates. The procedures require recourse to citizen approval—either by a simple majority vote or in some cases by a two-thirds majority—in a popular referendum. Having created their units of local government, citizens continue to hold the purse strings. The local public economy is one where local officials, as political entrepreneurs, find it necessary to persuade the local electorate that tax rate increases are desirable. This requires local officials to make a case that increasing costs and/or potentially greater benefits justify greater expenditure.

Boundary Change Rules

These rules are an especially sensitive part of the local government constitution. St. Louis County was among the first in Missouri to adopt (by means of special state legislation) a municipal annexation rule requiring approval by concurrent majorities in the annexing city and the area to be annexed. This rule has now been adopted statewide. A principle of self-determination thus came to govern municipal expansion as well as formation. Citizens can be expected to approve a proposed annexation when they believe they will be made better off.

The most controversial aspect of state annexation law as it applied in St. Louis County, however,

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was the special position enjoyed for many years by the county government. Because annexation was treated as a judicial proceeding, the county government was able to enter the proceeding as an interested party. The court was required, as a matter of judicial construction, to weigh the interest of the county against that of the annexing municipality. Usually, the county interest was deemed of greater weight, enabling county government to exercise a de facto veto over municipal annexation. Over the same period, county government was able to develop a legal and administrative capability to supply municipal-type police services—especially and streets-in the unincorporated sections of the county. Potential competition from already existing municipalities could be blocked in court.

In 1983, however, a decision of the Missouri Supreme Court deprived county government of its special position in municipal annexation proceedings.¹ For the first time in decades, the county government had to take its case to local citizens. Thus far, the results have been mixed, but county government has won more often than it has lost. In the landmark case, however, the small City of Town and Country more than doubled its size. Thus threatened, potentially, by a new wave of annexations and incorporations, county officials have called for a radical restructuring of local government throughout the county. St. Louis County again faces a basic constitutional choice, and the citizens of the county may have to decide.

Rules for Constituting Interjurisdictional Arrangements

These rules are very permissive. The basic constraint is that all jurisdictions that are party to some arrangement must have separate legal authority to engage in the relevant activity. Although this would prevent county government or a municipality from providing public education, for example, it does not seriously limit the development of both bilateral and multilateral arrangements among units of various types. Generally, all that is required to undertake interjurisdictional activity is mutual consent between the elected officials of the respective jurisdictions. Contracting authority extends to agreements with private parties as well.

The Use of Special Legislation

Important parts of the local government constitution in St. Louis County are unique to the county. Although some aspects derive from provisions of the state constitution and others from statewide provisions of general law, other aspects derive from the use of what might be considered special legislation that, in effect, applies only to St. Louis County. This device allows the county delegation to the state legislature, composed of 7 senators and 31 representatives, all elected from separate districts, to modify the local government enabling rules solely for St. Louis County. Functionally, when substantial local agreement regarding a change in rules emerges, the local delegation becomes a mechanism of constitutional decisionmaking for the county and all its jurisdictions. Yet the local delegation is confined to the first level of constitutional choice noted above—the choice of enabling rules. The second level of constitutional choice is reserved to citizens, acting with respect to their particular communities. It is they who decide whether to create a municipality or special district, increase a tax rate, or to consolidate two or more jurisdictions.

The ability to obtain special legislation for the county allows local jurisdictions to resolve intergovernmental conflicts, or to attempt to do so, by adjusting the enabling rules. The creation of a county sales tax pool among participating municipalities and county government, with exemption for those municipalities that chose to retain point-of-sale distribution, for example, is an arrangement unique to St. Louis County. It was adopted pursuant to an agreement worked out among the municipalities and the county government. Subsequent efforts to change the distribution system, initiated by pool cities, have not been successful; however, county government was successful in obtaining legislation that continues pool status for areas annexed by point-of-sale cities, as well as for newly incorporated municipalities.

Multijurisdictional Forums for Discussion and Negotiation

The local government constitution, despite being formally rooted in state law, is primarily a product of local decisionmaking processes. The local delegation to the state legislature provides a mechanism for implementing agreements reached informally among local actors. A number of multijurisdictional associations serve as forums both for the articulation of diverse interests and for negotiations to arrive at local settlements of issues. Members of the local legislative delegation frequently appear as guests before these groups. The St. Louis County Municipal League-representing nearly all cities and villages in the county-is the broadest of these groups, supplemented by an organization representing Mayors of Large Cities and a newly organized group for Mayors of Small Cities, as well as by various subcounty forums both formal and informal. Proposed adjustments in the local government constitution are intensely debated within these organizations. Substantial consensus among affected groups-though not unanimity-is the prevailing norm for obtaining a

modification in the fundamental rules of local governance.

In the realm of public education, the Cooperating School Districts of the St. Louis Suburban Area (CSD), an organization discussed below for its contribution to coordinated service production, serves a purpose similar to the municipal league with respect to school districts. Professional associations in other functional areas, especially police and fire, also serve as forums for maintaining and adjusting basic rules in their respective fields.

Public-private relationships are the focus of a number of groups, including the East-West Gateway Coordinating Council, Bi-State Development Corporation, Civic Progress, and Confluence St. Louis, which tend toward a broader city-county perspective. These groups, however, have been less successful as sponsors of legislation than those associations focused specifically on St. Louis County. The bilateral relationship between city and county is less formally organized than the multilateral relations among local governments in the county.

A Large Investment in Representation

In addition to the direct participation of citizens in metropolitan governance associated with incorporation, annexation, charter revision, and tax referenda, the majority of citizens in St. Louis County have invested in high levels of representation through elected officials (see Chapter Two). The county's 90 municipalities, containing some 600,000 residents, maintain a very low ratio of citizens to elected council representatives (aldermen or village trustees), most of whom are elected from local wards. In all but two of the 26 villages and in many of the smaller fourth class cities, the ratio is less than 500 citizens per elected representative. In none of these local government units does this ratio exceed 3,000. Of the larger third class and home rule cities, only two have citizen/elected-official ratios exceeding 5,000, and they only slightly exceed this figure. A total of 729 elected municipal officials (plus 144 school board members) gives the county a sizable infrastructure of local representation.

Municipal representation contrasts sharply with the seven members elected to the county council, each of whom must represent some 140,000 persons. Yet, for the incorporated area, members of the county council afford additional representation beyond the municipal unit. State legislators, discussed above, provide still further representation throughout the county, and in St. Louis City as well. In general, the system of representation is one that provides for redundant representation at differing geographic scales. This redundancy enables various communities of interest to be represented, allowing citizens with varying interests and opinions to find a public spokesperson, and facilitating the representation of interests that derive from interjurisdictional spillovers. Together with the multijurisdictional forums noted above, the system is one that seems to encourage a vigorous public exchange of views with respect to the basic issues of local governance.

Citizen Mayors

A pervasive feature of local government in St. Louis County is a reliance on part-time officials whose local government responsibilities are shouldered as a civic avocation rather than as a political or professional career. Except for the county's largest city, Florissant, which has a full-time mayor, and one community, Olivette, with a council-manager form of government, all of the county's municipalities have separately elected part-time mayors or, in the case of villages, board of trustees chairmen who act as chief executive officer for the municipality.² The majority of these citizen executives hold fulltime jobs outside of local government.

This report refers to these part-time chief executives as citizen mayors, stressing their nonprofessional orientation in both a political and administrative sense.³ To be sure, the role of the mayor varies somewhat with the size of the municipality. The larger cities tend to employ a city manager or administrator who has day-to-day responsibility for administration. Smaller cities and villages tend to rely on a clerk for the same purpose.

A number of advantages accrue from the use of part-time officials. For the smaller cities and villages, their use is, in part, a matter of economic necessity: the scale of operation does not warrant a full-time chief executive officer. The ability to rely on citizens to do the job is essential to the economic viability of the smallest units. The feasibility of using nonspecialists in this role is enhanced by the tendency of the smallest units to contract out for the production of all, or nearly all, the services provided. The chief executive officer, instead of functioning as a supervisor, is more nearly a procurement officer for what amounts to a neighborhood. The experience of many communities in St. Louis County is that highly specialized professional skills in public administration are not essential to this task.

Indeed, performance may be enhanced by the qualities that citizens bring to the office. This is an observation that runs counter to the conventional wisdom in an age of professionalism. To be nonprofessional in the eyes of many observers is to be an amateur, often assumed to be the equivalent of unprofessional. The mere presence of part-time officials may often be treated as a deficiency to be corrected. From this perspective, local governments too small to employ a full-time executive officer are, well, too small. Professionalism then becomes an imperative that drives local government reorganization rather than a necessary tool to be employed as needed.

Part-time mayors are found not only in the smallest municipalities but also in cities large enough to employ professional managers or administrators as many of them do. Yet these same cities also elect a mayor who takes an active leadership role in municipal affairs. A citizen-mayor can serve a useful role even where professional administrators are also employed, by holding professional employees accountable to the interests of ordinary citizens.

In an important sense, the citizen mayors interviewed in St. Louis County are themselves specialists. Aside from the fact that many of them are in fact career professionals in their full-time occupations, citizen mayors are not so much functional specialists as place specialists who specialize in knowledge of their own communities. Some serve their communities for a number of years. The focus of their specialization is more on specific time-andplace information than on abstract knowledge. They tend to be well informed about service conditions within their communities and about what is going on in adjacent communities and overlapping jurisdictions, including school districts and county government. They also tend to exhibit a high level of knowledge about the alternatives available within their local public economy, especially alternative producers of services and possibilities for cooperative efforts with other jurisdictions.⁴ Information is an important and scarce resource in the provision and production of public services. The close tie between information and responsibility that citizenmayors bring to their work can be viewed as a community asset.⁵

Nevertheless, after a city reaches some minimum size—perhaps around 50,000 people—parttime mayors, able to function effectively as a chief executive, become infeasible from the sheer scale of the enterprise. The advantages of using a part-time mayor tend to decrease as a city increases in size and heterogeneity. Therefore, the use of citizen mayors in the position of chief executive is probably limited to relatively small—though not only to the very smallest—municipalities.

The Use of Overlapping Jurisdictions and Special Districts

Overlapping jurisdictions and, especially, special purpose governments are frequently viewed, at least in the orthodox public administration literature, as a source of duplication, confusion, and inefficiency. Overlap, nevertheless, is one of the major tools of metropolitan organization in a fragmented metropolitan area. Without overlap, the frequent characterization of highly fragmented metropolitan areas as Balkanized would become a more accurate depiction. With overlap, however, a metropolitan area is able to address both common and diverse interests simultaneously.

The major overlapping jurisdiction in St. Louis County is county government. Two special districtsone for sewerage, another for the zoo and museums-overlie both St. Louis City and County. The countywide Special School District (overlying the 23 regular school districts in the county) provides for education of handicapped students and for vocational-technical education. The most significant subcounty districts are the 23 school districts and 25 fire protection districts, many of which overlap smaller municipalities, but also cover all of the unincorporated area of the county. A few miscellaneous districts exist for such purposes as street lighting and roads. In addition to formal units of local government, there are in excess of 400 organized subdivisions, both within municipalities and in unincorporated areas, which are especially active in the provision of residential streets and a wide array of street services.

Two basic types of overlap can be distinguished. One is overlap for the provision and/or production of specific services. Special districts often contribute to this sort of overlap. The other is overlap for the purpose of governance and conflict resolution. The county as a legal unit provides this latter sort of overlapping jurisdiction to arrange for the governance of the multiplicity of local governments, including county government, in St. Louis County. No such local unit exists to arrange for conflict resolution in the relationship between city and county.

Streets and highways provide a good illustration of the basic principles of overlap in service provision. Strictly residential streets are provided for in most instances by subdivisions and small municipalities; collector streets, by municipalities; arterial streets, by county government; and major thruways, by the state highway department. Specialization, rather than duplication, is the basic feature of this arrangement. Different interests are represented in the process. Subdivisions tend to impose access restrictions that control the flow of traffic through residential communities. County government, on the other hand, is oriented toward facilitating traffic flow, and preempts municipal regulation on a countywide arterial road system. That municipal and county governments engage in some very similar operations, such as surface patching, does not imply duplication. Different types of streets and highways tend to require quite different maintenance routines. Planning is even more specialized by highway type.

Larger jurisdictions are able to provide services that respond to a wider community of interest—such as arterial streets in the case of county government. Smaller jurisdictions are able to address concerns that are smaller in scale, affecting a more limited community—such as the maintenance of and control of access to neighborhood streets in the case of subdivisions and villages.

In education, the Special School District addresses a set of concerns that are more specialized than is the case with general education. Unlike preferences for general education, preferences for special education may not aggregate well on the basis of residential location. Because of the considerably higher expenditure per pupil in special education, residents cannot expect to secure a response to their demands by relocating to particular school districts. No single district has much incentive to specialize in the education of handicapped persons. Provision for special education by a countywide district makes sense in a way that countywide provision for general education does not.

The use of overlapping jurisdictions in fire services is somewhat different still. In the incorporated area of the county, fire protection districts overlap small municipalities which, separately, might not be able to economically maintain a fire station. In the unincorporated area, fire districts are a smaller scale alternative to provision by county government. Fire districts thus augment both municipal and county governments, though in different ways.

In terms of metropolitan governance, one of the basic organizational features that distinguishes St. Louis County as a metropolitan county from St. Louis City and County as a metropolitan area is the fact that the county is a general purpose local jurisdiction that overlies other general purpose jurisdictions. No general purpose jurisdiction, other than the state, overlies both St. Louis City and County. The significance of the county as a jurisdiction goes beyond county government and is rooted in the fact that a county is a basic legal subdivison of the state. As such, it is a convenient unit for legislative purposes. Yet the county, unlike the city, does not preempt the formation of general purpose subunits. The county provides a set of legal boundaries within which a variety of interlocal relationships can be created and adjusted. No similar unit exists to adjust the interests of city and county. City-county separation deprives the separated units of a common jurisdiction in which to resolve their differences and address interdependencies.

Separation of Provision and Production

One cannot readily understand the functional arrangements for metropolitan organization in St. Louis County without reference to the distinction (introduced in Chapter One) between provision and production of local public services.⁶ Provision refers in general to taxing and spending decisions, determining appropriate types of service and levels of supply, as well as arranging for and monitoring production. Production, on the other hand, denotes the process of transforming inputs into outputs. Provision activities include raising revenue and deciding how to spend it, while production is concerned with making a product or rendering a service in accordance with provision standards.

The separation of provision from production in St. Louis County can be illustrated with reference to police services. Ninety jurisdictions, including the county government, have authority to provide police services.7 Eighty-nine of these jurisdictions actually do make some provision for local police.⁸ The total number of police departments-those units that produce police services-is 65.9 Sixty-two municipalities and the county government have organized full-time police departments. Two more municipalities maintain part-time departments. Twenty-four municipalities that provide for police protection have not organized units in-house to produce police services. Seventeen municipalities have entered into contracts with adjoining municipalities, while seven contract with the county police. Ninety provision units are served by 63 full-time and two part-time production units.

Does this analysis indicate that the number of provision units might just as well be 63 as 90? Not at all. Provision and production are functionally distinct. Different criteria apply to the organization of provision and the organization of production. Provision units are based on the way in which individual preferences for services cluster in neighborhoods. Production units depend on limited economies of scale and a more specialized division of labor. The two sets of criteria need not coincide. Provision units that choose to contract out for production are not inactive. They may be very active-as providers. A degree of competition on the production side gives provision units some capacity to choose a production unit from among alternative producers. Evidence of this sort of comparison shopping is found in St. Louis County policing, as municipalities occasionally shift contracts from one production unit to another. Local officials in a provision-only unit (one that organizes no production in-house) function mainly as procurement officers, representing citizen-consumer interests. Their job is not to supervise a production

unit, but to evaluate its performance and remain alert to alternatives.¹⁰

Separation of provision and production is also pronounced in street services, but the independent production units tend to be private producers. Virtually all subdivisions and most small municipalities contract out privately for nearly all street services, although some subdivisions contract with an overlapping municipality for a few services (e.g., snow removal or sweeping). While this study did not collect data on the private production side of the local streets economy, the number of independent provision units and relatively limited economies of scale in most street services would point to the likelihood of a highly competitive market.

Separation of provision and production is much less prevalent in fire services, although there are instances of contracts between municipalities and fire districts. The reason is that the fire district arrangement tends to substitute for a contracting relationship. While a municipality may continue to function as a provision unit for police services, but contract for production, the same community may receive fire service from an overlying fire district, which functions as both provision unit and production unit. This relationship indicates a trade-off between contracting and the use of overlapping jurisdictions as provision units. A third alternative consists of coordinated service production, discussed below.

One of the most interesting results of the partial separation of provision from production that occurs in St. Louis County is the existence of a large number of pure (or nearly pure) provision units—small municipalities that organize little or none of their own production activities, but instead contract out for a wide array of local services. Street services may be contracted with a number of private suppliers, police with an adjacent municipality, refuse collection with a private firm, and so forth. The orthodox public administration literature has often treated such units as nonperforming and nonviable.¹¹

This conventional view neglects the distinction between provision and production. In an argument advanced by Anthony Downs,¹² a pure provision unit can be viewed as an ideal, insofar as in-house production may tend to distort planning and procurement decisions, introducing a producer's bias that inhibits the representation of citizen-consumer interests. Our interviews with part-time mayors and village chairmen of small municipalities in St. Louis County indicate a generally high level of provisioning activity—especially pronounced in those cases of pure provision—including comparison shopping among alternative vendors.

Yet even in the many provision units that have organized their own departments for in-house service production, officials frequently indicated awareness of and appreciation for the alternatives afforded them by a possible separation of provision and production. Without using this particular language, they indicated that the availability of alternative suppliers of local services-adjoining municipalities, county government, and, in some services, private firms-gave them additional leverage when negotiating budgets and service delivery expectations with their own bureau chiefs. As more than one mayor and bureau chief phrased it, the option of contracting out local service production keeps local producers "on their toes," and therefore increases service responsiveness.

Coordinated and Joint Service Production

In a fragmented system of local government, many occasions arise when the coordinated efforts of organizational units in different political jurisdictions become advantageous. Economies of scale in the production of particular components of a service (e.g., communications or training) often make joint production arrangements economically attractive.¹³ St. Louis County is the locus of many such cooperative ventures organized in every sector of public service.

In policing, a number of components in the supply of police services draw on coordinated or joint production:

- An areawide Major Case Squad draws investigators from many different police departments to bring personnel and expertise to bear on serious crimes.
- A countywide "Code 1000" plan provides for rapid mobilization and deployment of officers from multiple jurisdictions in the event of natural or man-made disasters, civil or labor disturbances, or any other occurrence requiring a large number of officers.
- The St. Louis County Police and Fire Training Academy supplies recruit training for all of the police departments in the county.
- The Regional Justice Information System maintains a computerized data base for police related matters, affording on-line access to police dispatchers and, through network lines, access to State of Missouri and FBI data bases as well.
- An areawide 911 system of call-for-service routing and dispatching is operated as a joint venture by municipal departments and the county police.

At less than an areawide scale, numerous joint operations are undertaken for police dispatch and sharing of investigative officers. The sharing of mutual aid among patrol officers crossing jurisdictional lines is found throughout the county.

Fire protection also exhibits substantial coordinated service production:

- Mutual aid agreements link all of the municipal and fire district departments in the county, and ensure needed backup capability or redundancy to respond in high demand circumstances, such as large or numerous fires.
- Many of these mutual aid agreements contain first response provisions that delimit areas within one jurisdiction where a fire company from an adjoining jurisdiction will respond immediately to a fire call. Firstresponse agreements add considerable flexibility to service delivery boundaries, enabling fire provision units to minimize response times.
- As in policing, county fire departments maintain a joint recruit training program.
- Equipment sharing is an important element of service coordination in fire services. The Greater St. Louis Fire Chiefs' Association sponsors the preparation of an annual Catalog of Apparatus and Special Equipment held by each of the departments, allowing quick identification of specialized equipment that may be needed in an emergency.
- Fire administrators in many jurisdictions have established joint fire and emergency vehicle dispatch centers serving several departments, enhancing mutual aid capabilities and increasing the deployment of personnel for fire prevention and suppression activities.

In education, a number of organizations have been created by consortia of elementary and secondary education producers:

- The Cooperating School Districts of the St. Louis Suburban Area supplies its members with extensive audio-visual capabilities, data processing, and joint purchasing of supplies and equipment, as well as a forum for uniting to develop—and lobby for—educational programs that require state action.
- The Regional Consortium for Education and Technology supplies its members with computer technology, software, training, and maintenance.

- The Special School District of St. Louis County engages in highly coordinated service delivery for mainstream students who require special education. Special district teachers work in the classrooms of each of the 23 regular public school districts in the county. Coordination also occurs in the diagnosis and evaluation of students for special education programs.
- County school districts have joined with the St. Louis City district to create the Voluntary Inter-District Coordinating Council to implement a desegregation plan linking the city and county schools.

Highly coordinated activity is less important in some service areas than in others. Street services, for example, exhibit more "alternation" than coordination. Alternation refers to a type of mutual adjustment among service providers or producers in which different organizations divide up service responsibility according to area, clientele, or time period. In this way, street responsibilities are divided among the county government, municipalities, and organized subdivisions. Private contracting tends to be more important than joint production for street service producers. Nonetheless, equipment sharing does occur, especially among smaller municipalities. The local chapter of the American Public Works Association organizes an annual joint purchase of road salt.

One of the most interesting facets of research on a highly fragmented metropolitan area, such as St. Louis County, is the relative paucity of what is called duplication of effort. Duplication, according to decades of reform and consolidation proposals, is the bane of a fragmented existence. Nevertheless, in one of the most highly fragmented urban counties in the nation, obvious and significant duplication is hard to find. Coordination and alternation are much more common. In fact, coordinated service production tends to occur in precisely those facets of service production where one would expect duplication. From our examination of St. Louis County, we conclude that jurisdictional fragmentation is not synonymous with duplication. Far from fostering duplication, a fragmented system can work-with substantial success-to reduce it.

Moreover, fragmentation minimizes duplication while enhancing backup capabilities through redundancy. Duplication is a characteristic of service *delivery* and is rightly considered wasteful and inefficient. Redundancy, on the other hand, is a characteristic of service *capacity* and, within limits, serves to enhance efficiency. Coordinated service production seeks to reduce duplication as it builds redundancy.

Public Entrepreneurship

Coordinated and joint service production does not happen spontaneously, but emerges from processes of discussion and negotiation-efforts to discern common interests among diverse communities. The development of joint ventures among the multiple jurisdictions of St. Louis County is the work of public entrepreneurs-those who take the initiative to propose ideas and carry the burden of ensuring discussion, compromise, and creative settlement. The ability and incentive to exercise initiative is the key to entrepreneurship. The potential for entrepreneurship increases with the number of possible sources of initiative. Counting the number of elected officials, police chiefs, fire chiefs, school superintendents, directors of public works, and city administrators or managers yields a rough measure of the potential for public entrepreneurship in a local public economy. The greater the number of possible sources of initiative, the more likely entrepreneurship becomes.¹⁴ Greater entrepreneurship is one of the advantages associated with area size when coupled with complexity.

Individual entrepreneurship is frequently exercised in the context of a professional association in St. Louis County. Such organizations as the Board of Governors of the Law Enforcement Officials of the Greater St. Louis Area, the Greater St. Louis Fire Chiefs' Association, the Cooperating School Districts of the St. Louis Suburban Area, and the local chapter of the American Public Works Association facilitate the work of public entrepreneurs by bringing relevant parties together on a regular basis. Each instance of coordinated service production noted above is a product of individual initiative in the context of a local service-specific association. Local elected officials, working bilaterally and through the auspices of the multijurisdictional forums discussed above, have also engaged in entrepreneurial activities that create functional links among jurisdictions.

Local public entrepreneurship, exercised through voluntary associations, is apparently preferred in a fragmented system to imposition by higher authority. Local agreement is the essential condition. Although sometimes local agreements require ratification by the state legislature or by voters in countywide or even statewide referenda, to view this process as one where a higher authority prescribes to subordinates is inaccurate. Codification in state law, in a number of cases, serves as a partial guarantor of agreements made locally, helping to ensure that parties to an agreement maintain their participation through changes in political administration and other changing circumstances. Agreements nevertheless remain flexible and, for the most part, subject to renegotiation when needed, with state ratification of changes proposed locally. Having recourse to state law may also constrain the occasional holdout among local jurisdictions that might seek a special advantage in relation to others; absolute unanimity is not required to obtain local consensus.

FUNCTIONAL EVALUATION

The discussion in Chapter One stipulated five functional-process criteria for evaluating the fragmented system of organization in the St. Louis area. A review of the findings from this study in view of these criteria can provide measures of both the achievements and shortcomings of metropolitan organization in St. Louis. Somewhat different conclusions apply depending on whether the frame of reference is St. Louis County or St. Louis City and County taken together. The county, as shown above, provides some valuable instruction in how fragmentation works. Yet, as always, there is room for improvement, both in relationships within the county and between St. Louis City and County.

Process criteria allow for an evaluation of functional arrangements-the patterned activities through which specific functions are performed-apart from an evaluation of the outcomes of performance. The focus of evaluation is process, not rules, even though rules provide the framework within which functional arrangements are developed. Instead of taking rules at face value, the question is what sort of process the rules produce. Do the rules of municipal incorporation and annexation enable people to practice effective self-determination? Do multiple local jurisdictions allow for meaningful citizen choices? Are services and service components appropriately coordinated? To what extent does competition among service producers affect service delivery to citizens? Do multiple local jurisdictions inhibit metropolitan problem solving?

Self-Determination and Citizen Choice

Local self-determination is the core principle of the local government constitution in St. Louis County. It comes as no surprise that St. Louis scores well on this criterion. As the rules now stand, citizens decide for themselves whether to form, or to join, a municipality or special district, or to merge their local government unit with another. Citizens in unincorporated areas decide for themselves whether to incorporate or to annex to an existing municipality. Self-determination also applies to potential adjustments in the relationship between St. Louis City and County, requiring approval by concurrent majorities in both jurisdictions.¹⁵

Self-determination is also the basic principle involved in most of the coordinated service arrangements that link different municipalities, fire districts, and school districts. Nearly all of these are cooperative, not coercive, arrangements. Departures from self-determination tend to be quite limited in scope and, in the instances found in this study, tend to support cooperation. Cooperative arrangements that involve a large number of independent actors may at some point encounter freerider or holdout problems.¹⁶ When this happens in St. Louis County, local governments look to the county charter or to state legislation sponsored by the local delegation for the legal tools to constrain potential holdouts. For example, minimum training standards for fire fighters were adopted by amendment of the county charter at the initiative of the Fire Chiefs Association (see Chapter Five). This requirement provides a basis for cooperation in the training of fire fighters. In another example, the state legislature implemented a statute applying only to St. Louis County that requires municipalities with a population of 400 or more to make provision for full-time police protection (see Chapter Four). This requirement helps ensure that police cooperation is reciprocal, instead of allowing a community to depend on county police without having to pay for the protection they receive.

Although self-determination is important as a base rule for organizing local governments, it works only within limits. An important issue is how far selfdetermination should be carried. When should the rule of self-determination for each local government be relaxed and an enforceable rule substituted that applies in common to all relevant jurisdictions? In some circumstances, a strict reliance on selfdetermination exacerbates conflict. For example, St. Louis County extended self-determination to the county fiscal structure by means of state legislation that allowed municipalities to choose whether to participate in a county sales tax pool or to collect the tax on a point-of-sale basis. The sales tax pool is basically a cooperative arrangement. Those who would have the most to contribute to a pool are thus able to stay out. An alternative arrangement, but one that would depart from self-determination, would provide for limited sharing of sales tax revenues among all municipalities and the unincorporated area. Each community would then be required to pool some proportion of its revenues to be redistributed on a per capita basis. At the same time, all communities could remain, to some extent, point-of-sale. Such an arrangement might provide for more agreeable relationships among county municipalities in the long run.

It is insufficient, by way of evaluation, simply to describe the rules of self-determination; as noted above, a process criterion must examine process. The functional arrangements that actually operate may deviate from those intended in the design of a rule structure. Such difficulties may indicate a need to reexamine the rules and make, at least, some marginal changes. There is some evidence of difficulty in the processes of self-determination with respect to annexation and municipal incorporation.

Annexation procedures, discussed in Chapter Three, have recently undergone considerable change in St. Louis County as a result of state court decisions. Although a judicial proceeding is still required to complete an annexation, the principal obstacle to municipal expansion is now an election held in the area to be annexed, with a majority of those voting required to approve the annexation. This requirement is consistent with local selfdetermination. County government is no longer able, in effect, to veto proposed annexations by opposing them in court. This, too, is consistent with local self-determination. In one case, however, an annexation was approved on the basis of one vote cast by a single resident (see Chapter Three). The annexation split a housing development, taking only the undeveloped portion. In this case, a municipality may have been able to use its legal power to propose an annexation strategically, in order to avoid genuine self-determination on the part of an inchoate community.

To address this possibility, annexation law could be modified to provide standards for judging the appropriateness of an annexation proposal (e.g., does the proposed tract divide a housing development or subdivision?), and allow the county government, or any affected citizen for that matter, to challenge an annexation in the judicial proceeding already required by law. Without such standards, it is difficult to see the point of a judicial annexation proceeding.

The process that led to the incorporation of the City of Chesterfield early in 1988 (see Chapter Three), increasing to 91 the number of municipalities in St. Louis County, suggested a potential problem with the procedures for incorporating a new city. The purpose of local self-determination is to obtain the consent of local communities; yet satisfying this criterion does not depend on the consent of each and every individual affected. Incorporation of cities, but not villages, requires only a simple majority of those voting. A proposed city of some 50,000 people, nevertheless, may include a number of distinct communities. Some of these communities may prefer to remain unincorporated, to incorporate separately, or to annex to an adjacent city or village. Initial efforts to incorporate Chesterfield barely failed to obtain the required majority because of large majorities against incorporation in communities on the fringe of the proposed city (see Chapter Three). When incorporators cast their net less broadly in a second attempt, the incorporation met with approval by 75 percent of the voters. Although this result represents a substantial consensus, the existing voting rule for incorporation did not initially lead incorporators to seek this consensus.

In a closely related matter, the opportunity for a community to vote to annex to an adjacent municipality is foreclosed by a valid incorporation petition. This ability to preempt an annexation vote seems to be inconsistent with a principle of local selfdetermination.

One way to address these difficulties is to increase the percentage of voters required to approve a municipal incorporation. The larger the percentage, the less the probability that an identifiable community will be included in a new city when a majority of that community is opposed. Another possibility is to establish a public body with authority to approve an incorporation proposal, and to modify the proposed boundaries on the basis of public hearings or counter-petitions, but not with authority to deny the proposal (for this would diminish, not strengthen, self-determination). Such a public body, if its members are selected in a way that reflects a broad spectrum of interests, could serve as a useful forum for exploring the reasonableness of proposed boundaries and allowing affected individuals and communities to air their views. Perhaps on petition, such a body could be allowed to waive the first-intime rule preempting an annexation vote or a village incorporation vote. Care would have to be taken in the design of this body, however, lest it acquire the ability to substitute its own preferences for those of the citizens affected.¹⁷

A legal framework based on local selfdetermination appears to be an essential mechanism of metropolitan organization in a fragmented system. The logic of the system derives from, and depends on, citizen choice. St. Louis has such a basic framework, but its maintenance in view of changing circumstances is no simple task. If one believes that citizen choices tend to be irrational, uninformed, or otherwise perverse, then any pattern of local government that emerges from this process might justifiably be viewed with a critical eye. If, on the other hand, one believes that citizens are capable of self-government-that if well informed about local matters that affect them directly they can make rational judgments taking into account both benefits and coststhen the jurisdictional and functional arrangements

created by citizens to govern a metropolitan area are deserving of careful study.

Representation and Accountability

The system of representation in the St. Louis area, as discussed above, features low citizen-toelected-official ratios in the incorporated portion of the county and, throughout the area, a reliance on redundant representation. Traditional metropolitan theory tends to view redundancy in representation among a variety of elected officials as a source of voter confusion. Yet the system is one that provides for an open public arena with multiple opportunities for the expression of diverse views.

Citizens in the incorporated portion of St. Louis County have chosen to maintain relatively small local governments as the basic units of representation and accountability, usually subdivided still further into wards. Although not the only units of representation, they are basic units in the sense of providing citizens with an easily accessible first recourse in part-time local officials and a readily usable method of accountability in local elections. Accountability has costs, mainly consisting of time and effort, but, in small jurisdictions, the ease of individual citizen access to part-time municipal officials, who often schedule meetings in the evenings, together with the relative ease of challenging a local official in an election, tends to minimize those costs. From the standpoint of an individual constituent, both representation and accountability are more costly in larger jurisdictions with higher citizen-to-elected-official ratios, often requiring group organization to be effective. In a redundant system of representation that rests on a sizable infrastructure of elected officials in small jurisdictions, however, the more costly channels of representation associated with overlying units can be reserved for a limited range of issues.

Municipal officials also provide their citizens with redundant representation in relation to county government, as well as other jurisdictions. The advantages of small municipal jurisdictions thus extend to citizens' relationships with other units of government. To be represented by one's mayor in these relationships can be a significant advantage. In this sense, the primary unit of representation—a municipality—acquires significance within a secondary unit—the county, and perhaps the state.

County government—including the county council, the county executive, and the county charter provide representation for countywide interests, as does the county delegation to the state legislature. Similar mechanisms to represent interests that are metropolitanwide or simply city-county in scope are not as readily available. City-county separation prevents the county council from filling this role, but the city and county delegations to the state legislature can do so to some extent. If either the city or county takes actions detrimental to the other, it is more difficult to find common ground for resolution, due to the lack of a common decisionmaking facility in which to talk and a common jurisdiction in which to take action—except for the state. The lack of a general purpose jurisdiction overlying both city and county, as discussed above, has the effect of diminishing the representation of metropolitan interests.

Coordination

The traditional theory of metropolitan organization, reviewed in Chapter One, expects jurisdictional fragmentation to be associated with functional fragmentation—a lack of necessary coordination in the production and delivery of related services and service components. Instead, however, jurisdictional fragmentation in St. Louis County coexists with high levels of functional coordination among jurisdictions. Whether a desirable or sufficient level of coordination has been attained is a more difficult question.

It is useful, in tackling this question, to consider the differences in coordination among functional areas and types of jurisdictions. High levels of coordination exist among police and fire departments both in the delivery of direct services to citizens and in the production of auxiliary services (see discussion of coordinated service arrangements above). Between the two, more police coordination is in auxiliary services and more fire coordination in direct services. This difference can be explained by differences in the nature of the two services. Some coordination is also observed between fire districts and municipal police departments in the area of communications, but less so. A high level of coordination is also found among regular school districts, but it is almost entirely related to the production of auxiliary services. Direct services to students are handled separately by each district, except for the education of handicapped students. In this service area, a high level of coordination is found between the county-wide Special School District and each regular school district in the delivery of services directly to students.

Less coordination is found in street services. Instead of coordination, county and municipal jurisdictions exhibit patterns of alternation, each taking separate responsibility for some separable piece of service responsibility. In the incorporated portion of the county, county government is limited to the delivery of services on the countywide arterial street system. Just like coordination, alternation inhibits duplication of effort. Horizontal coordination among municipalities in the production of street services is much less extensive than in police and fire, but the need for coordination in direct services is also less. Coordination in auxiliary street services is only beginning to emerge (see the discussion of cooperative purchasing of road salt in Chapter Six). There is also a significant degree of coordination between municipalities and subdivisions that provide residential street services.

The least prevalent form of coordination is between overlapping jurisdictions engaged in the production of different types of services, namely, between school districts (or fire districts) and municipalities. Coordination between school districts and municipalities seems to be greater when the boundaries of the two jurisdictions are coterminous, or nearly so. The most common types of coordination are related to recreation services and use of school facilities. Even less apparent is coordination between fire districts and municipalities. Although there may be little actual need for coordination (aside from street level coordination between police and fire units), there is still a possibility of much greater coordination-illustrated by the use of consolidated public safety departments in some municipalities. In fact, one of only two public safety departments in the county was dismantled when the City of Town and Country doubled its area by annexation and elected to obtain fire protection by contract with an adjacent fire district.

Other types of coordination also exist, but lie outside the four service areas studied for this report. Coordination occurs between county and municipal governments in relation to tax collection, assessment, and licensure, for example. Other types of coordination may occur that the study did not uncover.

The discussion thus far has taken St. Louis County as the frame of reference, but expanding the discussion to include St. Louis City changes the picture only in its details. Although the city is functionally more independent than any of the county municipalities and school districts, it is still an active participant in many of the functional arrangements for coordinated and joint service production organized in the county. Thus, St. Louis City is a member of the Major Case Squad that investigates serious crimes and is a party to mutual aid agreements with county fire departments. Police training is currently handled by a city-county academy, but this will soon change when the county opens its own police-fire training academy. The city's school district is an associate member of the Cooperating School Districts of the St. Louis Suburban Area (CSD), allowing them to participate selectively in the CSD's cooperative purchasing program, but not to receive its other services. The St. Louis school desegregation program (see Chapter Seven for details) is built on cooperative arrangements among county school districts and the city district. St. Louis City also coordinates bilaterally with some of the county municipalities on its borders. For example, the City of Wellston has developed cooperative arrangements with St. Louis City's community development agency.

Less coordination occurs between the city and county with respect to economic development. Competitive rivalry, rather than cooperation, seems to dominate in this area. Clearly, the city and county compete for the location of major commercial, industrial, and recreational facilities. As discussed in Chapter Eight, the county has enjoyed impressive growth while the city has experienced two decades of economic decline.

An explanation of the varying degrees of coordination found in different functional areas and among different jurisdictions must first take account of the nature of the service supplied. Police services relate to phenomena that are mobile, while street repair relates to facilities that are fixed in place. Fire services have unique peak load problems. Size of jurisdiction is also important. Smaller jurisdictions have a greater need to engage in coordinated activities of all types in order to secure economies of scale. A jurisdiction the size of St. Louis City or County, on the other hand, has exhausted most of its potential economies of scale.

The history of St. Louis County indicates a fairly continuous search for new areas of coordination. This implies that, at any point in time, the full potential for beneficial coordination has not been realized. There is no reason to believe that coordination among jurisdictions in the area has reached a saturation point. Purchasing is an area of potential coordination for nearly all services, but is most extensively practiced by school districts. Municipalities could perhaps explore the possibility of greater coordination in this area; the county government could facilitate such an effort. Street services generally seem ripe for greater cooperation; perhaps, again, the county government could assume a leadership role.

It is also important to realize, however, that if coordination among jurisdictions organized by place is imperfect, so also is coordination among administrative agencies organized by function within a single large jurisdiction. A large-scale metropolitan government substitutes fragmentation among functional agencies for fragmentation by place. Instead of fragmenting the responsibility for each function among a multitude of place-specific jurisdictions, a metropolitan government fragments the responsibility for specific places or communities among a multitude of functional agencies.¹⁸ Coordination among large functional agencies with respect to small communities is not necessarily better than coordination among small local governments with respect to specific functions.

In this context, the capacity to continue to seek out new and better mechanisms of coordination. and to adjust existing mechanisms to changing circumstances, becomes perhaps the critical coordinating capability in systems of public organization. In these terms, St. Louis County (and to a lesser extent the city and county together) performs well. The process of public entrepreneurship, discussed above, is one that works in a more or less continuous manner to improve coordination where it is perceived to be advantageous. It should also be noted that everything need not be coordinated with everything else. The problem of coordination is first to identify those aspects of otherwise separable activities that can benefit from coordination, and then to seek the means to achieve it. This sort of process is ongoing in the St. Louis area.

Competition

The principal evidence of competition among the producers of public services in St. Louis County consists of (1) widespread use of private contracting by small municipalities and subdivisions and (2) a degree of shopping for public producers by small municipalities. In the service areas studied, the greatest degree of competition is found in the production of street services, but it is limited mainly to very small municipalities and street providing subdivisions-those provision units that contract out privately for street repair and other street services (see Chapter Six). Private schools clearly compete with public schools for students, but it is unclear to what extent this competition, in the absence of a voucher system, constrains public school districts. Considerable state aid, however, is apportioned to districts by student enrollment; thus, the loss of students does affect school revenues and, at the margin, may or may not expose public schools to meaningful competition (see Chapter Seven). Some competition exists in the area of police protection, but only in relation to those municipalities too small to produce their own police services. The available contractors are other governments-adjacent municipalities and the county government. Contract municipalities show evidence of shopping around-by occasionally changing suppliers (see Chapter Four). Fire services appear to be the least subject to competition, with only a few fire service contracts among municipalities and fire districts (see Chapter Five). However, there is greater competition in emergency medical services, for which a number of municipalities use

private vendors. Another service area with considerable competition is trash collection, in which a number of private producers operate.

Market competition among producers is generally thought to be beneficial. Fragmentation does not automatically engender this sort of competition, however. Most of the competitive arrangements in St. Louis County are found in those areas where provision units are too small to produce a service in-house and capture sufficient economies of scale. Most of the services delivered to most of the county's population are not directly affected by such competition.

Two explanations for the lack of competitive arrangements can be advanced.

(1) Municipalities tend to move to in-house organization of service production as soon as economies of scale permit. Contracting out seems to be viewed as a second best alternative.

(2) Unlike Los Angeles County,¹⁹ for example, St. Louis County government has not actively sought out service contracts with municipalities except in relatively limited functional areas.

Interviews with municipal executives indicate that the county government is not considered to be a strong potential competitor with municipal departments. In part, this lack of interest on the part of county government may be due to its having concentrated on its role as a de facto municipality in the unincorporated areas. Now that the county government's municipal service domain is no longer legally protected from municipal annexation, county officials may perceive a greater advantage in pursuing municipal contracts.²⁰ If so, the competitive environment of local service production could improve.

Another sort of interlocal competition often thought to characterize fragmented metropolitan areas is competition among municipalities (and among school districts) for residents and businesses. To some extent, competition for commercial and industrial taxpayers is found among county municipalities (see Chapter Three). Although some villages and cities seek to keep commercial and industrial uses of property out of their jurisdictions, others actively encourage them to locate there. Competition of this sort has been especially prominent between the unincorporated county and St. Louis City. Competition for residents, however, is more difficult to document. Even if such competition occurs, it is unclear to what extent it affects the tax price of services and, therefore, the efficiency of municipal service producers.21

Metropolitan Problem Solving

If the frame of reference is St. Louis County, metropolitan problem solving is active and ongoing. The existence of the county as a legal subdivision of the state that may embrace autonomous subunits, including both general purpose and special purpose governments, is associated with the formation of a wide range of countywide organizations that seek in various ways to combine the efforts of multiple jurisdictions and solve problems of interdependency. The countywide organizations include county government, the County Municipal League, Cooperating School Districts, and numerous professional associations (e.g., police chiefs and fire chiefs), as discussed above. The usual process is for one or another countywide organization to raise an issue and provide a forum for discussion and resolution; formal enactment of rule changes needed to implement a local consensus is then obtained through some combination of changes in state law (sought by the county delegation), the county charter (amendments approved by the voters), and municipal (or fire district or school district) charters or policies.

Not all problems addressed are fully resolved. The resolution of problems frequently requires a considerable investment of time and effort on the part of public entrepreneurs. The greatest degree of success in countywide problem solving has been with respect to service delivery by established local governments. Once agreeable arrangements are worked out, interlocal service coordination is for the most part stable. Less stability is apparent with respect to local revenue-raising arrangements. The settlement that divided the county into point-of-sale and pool municipalities for the purpose of sales taxation, while still in effect, has not quieted those pool cities that oppose point-of-sale distribution (see Chapters Three and Eight). Even less stability has been achieved with respect to municipal annexation and incorporation, but this area is one in which the relevant parties are presently hard at work (see discussion of current problems below). One area in which there has been little countywide effort is fiscal redistribution aimed especially at the county's distressed communities (see discussion of fiscal evaluation on equity criteria below).

Shifting the frame of reference to St. Louis City and County, the record of metropolitan problem solving is somewhat less impressive, but still notable. The creation of city-county special districts has been the principal vehicle of metropolitan problem solving at this level. These efforts include a metropolitan district organized to support the St. Louis Zoo and other cultural activities and another to provide sewerage. Economic development within the city, however, can be viewed as a metropolitan problem that has not been effectively addressed on a metropolitan basis. To some extent, economic growth in St. Louis County has occurred at the expense of St. Louis City (see Chapter Eight).

FISCAL EVALUATION

In addition to process criteria, this study employed two fiscal criteria, that is, criteria that can be used in an evaluation based on fiscal relationships: economies of scale and equity. Neither attribute can be directly measured with fiscal data alone, but would require performance data as well. Fiscal relationships do, however, offer indications of performance capacity. The analysis of these fiscal data was described mainly in Chapter Eight. The results are briefly summarized below.

Economies of Scale

The basic question here is the extent to which there are remaining or uncaptured economies of scale in the production of services in the county. Chapters Four through Seven each took up the question of uncaptured economies of scale with respect to the four service areas studied. Evidence that relatively slight economies of scale remain to be captured by the smaller jurisdictions that provide police services is presented in Chapter Four. Similar evidence is found with respect to fire services in Chapter Five. No evidence of remaining economies of scale is found in street services (Chapter Six) or in public education, except perhaps for the smallest high schools (Chapter Seven). In Chapter Eight, a search for evidence of remaining economies of scale when all services are considered together turned up nothing.

The absence of remaining economies of scale, except for some slight economies in police and fire protection, can be explained by the widespread use of coordinated service arrangements, special districts, and both public and private contracting, created as an organizational overlay to supplement the basic set of municipal and school district jurisdictions. Intergovernmental cooperation has apparently left little additional cost savings to be realized from municipal consolidation. This is a general conclusion with respect to the county as a whole, and should not be interpreted to mean that further cost savings could not be gleaned from additional cooperation, contracting, or consolidation in particular instances. The method used to search for potential economies of scale is to compare service costs in small municipalities and special districts with those in larger jurisdictions. It still may be possible to improve efficiency and productivity in specific jurisdictions. Widespread jurisdictional consolidation alone, however, would be unlikely to result in substantial efficiency gains overall.

Equity

Evidence of equity problems in St. Louis County is most compelling in the circumstances of a few small, poor jurisdictions, including both municipalities and school districts (see Chapter Eight). Fiscal disparity among school districts, while exhibiting less range than among municipalities, is more likely to be patterned along lines of race or wealth. The greater dependence of school districts on the property tax is one source of this greater inequity. Despite the seriousness of the fiscal stress in particular jurisdictions, the magnitude of acute fiscal problems measured on a countywide basis is not overwhelming in its proportions. The financial wherewithal to address the county's most serious fiscal disparities would seem to lie within the county's means.

An interesting question—one that this study cannot fully answer—is why local governments in the county have not explicitly addressed and solved the equity problem. Thus far, the issue has been raised most prominently in an indirect manner through the efforts of pool cities to obtain sales tax revenue from point-of-sale cities. Disparities among school districts have been addressed entirely through statewide legislation. County government has no locally funded programs of targeted assistance for fiscally distressed communities.

Inequities between St. Louis City and County may present a greater challenge. One difficulty is that differences among communities in their economic conditions seem to be as great within the city as within the county. These differences, however, are not reflected in fiscal data aggregated for the city as a whole. To compare the city as a whole with the county as a whole is somewhat misleading. In revenue terms, the city as a whole is not especially disadvantaged. In economic development terms, the city as a whole is greatly disadvantaged. Yet, as communities, both the city and county are too heterogeneous for meaningful comparison. The equity issue cannot be satisfactorily addressed on a city-county basis without disaggregating revenue and expenditure data within the city, a task that lies beyond the scope of this study. Targeted assistance to specific communities is as essential within the city as it is within the county. Within the county, however, there are potential recipient jurisdictions that correspond closely to those communities in need.

The one major effort that has been made to address inequities on a city-county basis is the school desegregation plan (see Chapter Seven). By giving students opportunities to transfer between school districts, greater equity of treatment can result. Note, however, that this approach does not directly address the fiscal disparities among jurisdictions that are the focus of concern in this report. It is also significant that the desegregation plan was developed in the shadow of a federal court suit and the strong possibility of a judicially imposed solution.

OTHERS' EVALUATIONS

Although no new proposals for areawide reform have been presented to voters in St. Louis since 1971, reform has remained on the agenda of county government and of interest groups, principally the business community through its organization, Civic Progress. In 1982 a report to the City-County Task Force of Civic Progress stated that:

- Governmental structures and civic leadership in the St. Louis area are severely fragmented.
- Fragmentation results in an inability to act decisively on major problems facing the region.
- There is no coordinated system for financing areawide needs and functions, particularly those related to economic development.
- Many local governments are facing fiscal crisis and may not be able to maintain essential services.

The report went on to outline a variety of options to alleviate what it viewed as serious metropolitan problems resulting from governmental fragmentation, recognizing that "consolidation-merger and annexation do not currently appear to offer appropriate, politically feasible approaches to addressing the area's problems," but that additional special districts, reentry of the city into the county, and "any other plan" might be worth consideration.²²

In 1985 the St. Louis County Annexation Study Commission issued a report on local government in St. Louis. In a finding regarding "problems of municipal government disparity," the commission cited both positive and negative aspects of the system. On the positive side, the commission said:

The 90 municipalities, 24 fire districts and various other special purpose service districts, provide a great diversity of living environments in St. Louis County. The variety in size, development character, and local government organization is viewed by some as a positive attribute. Citizens have greater choice in the selection of a community which reflects their personal views and needs. They can find full-service cities and "no service" municipalities; small, neighborhood-type governments or larger, more centralized governments; municipalities with extensive park and recreation programs and others that offer free, twice-a-week, backyard trash pick- $up.^{23}$

Two major negative aspects were cited: inequities in access to revenues caused principally by the sales tax distribution formula and the resulting revenue differences between pool and point-of-sale municipalities, and inefficiencies in service delivery caused by many small service providers. While the commission acknowledged that "point-of-sale cities deserve some special considerations due to the added service costs and other disadvantages associated with the commercial development," and that "incentives are needed so that commercial and employment generating development will occur," it found the spread between revenues accruing to the average pool city (\$49 per capita in 1983) and the average point-of-sale city (\$115 per capita) to be overly large and to represent revenue importation by some point-of-sale cities.

With respect to inefficiencies, the commission found that

the problems resulting from the disparity in revenue sources are magnified by the costly duplication of services and inefficiencies resulting from many small service providers. Proponents of the current local government structure have argued that citizens have the right to those inefficiencies so long as they are willing to pay for them.

The annexation study commission went on to state, however, that "voters in some of the less wealthy municipalities may ultimately reject assuming even greater tax burdens" as "inflation driven increases in municipal expenditures force repeated returns to the voters for tax increases." This voter rejection would, in the commission's view, lead to a reduction of basic service levels in some municipalities. This would be a problem of countywide import because "crime, traffic congestion, the blighting influence of deteriorating buildings, and health hazards are but a few of the potential municipal problems that do not recognize municipal borders."

Based on its findings regarding municipal disparities and the threat posed to the county by new annexation activities, the study commission recommended legislation to the Missouri legislature that would have established a boundary review commission for St. Louis County. The legislation envisioned a boundary commission composed of county residents appointed by the governor that would review all proposals for "formation, consolidation, merger, or dissolution of a municipality or service district, as well as proposals for annexation and disconnection." The commission could exercise a veto over any proposal it found unwarranted, preventing the proposal or similar proposals from being considered again for two years. The commission could also "initiate proposals for incorporation, annexation, merger, or consolidation, and modify proposals submitted to it." The legislature declined to approve this proposal in 1985.

Another group active in proposing changes in local government organization has been Confluence St. Louis. Confluence emerged from activities of the local Danforth Foundation and its Leadership St. Louis program, an organization similar to the Citizens League in the Twin Cities Area. Confluence task forces have studied a number of issues of regional concern since its founding in 1983. One of the concerns addressed by Confluence is the number of governments in the area.

The "Too Many Governments?" Task Force of Confluence St. Louis recently issued its final report, reiterating many of the findings of the 1982 Civic Progress Task Force, supporting full incorporation and governmental consolidation in the county and recommending reentry of the City of St. Louis into St. Louis County.²⁴ The Confluence plan proposes the following structural changes:

- Incorporate all of St. Louis County and clearly divide responsibilities between municipalities and county government.
- Enlarge, merge, and form municipalities in St. Louis County until each has 25,000 to 75,000 residents.
- Reform revenue structures so that each unit of government has enough revenues to provide needed services.
- Plan for the reentry of St. Louis City into the county.

One proposed change, creating a two-tier structure of local government, would significantly reduce county government responsibilities, eliminating its role as an urban service provider for unincorporated parts of the county but retaining a number of countywide service responsibilities. At the same time, municipal consolidation would, in Confluence's view, ensure that municipalities would be of sufficient size to promote efficiency through economies of scale. The revenue restructuring, including the possibility of new revenues through a countywide earnings tax and/or revenue sharing from the state, together with the possibility of redistributing revenues from existing sources, would reduce disparities among revenues currently available to municipalities as well as provide additional revenues for the newly created and reorganized units. Reentry of St. Louis City into the county would "promote the resolution of city-county issues and create a strong sense of regional responsibility."

Confluence considered three mechanisms for instituting the recommended changes: (1) an intracounty board of freeholders, (2) a city-county board of freeholders, and (3) a boundary commission. The first would require an amendment to the Missouri Constitution and a statewide vote for adoption. The second is currently allowed under the state constitution. The third could be created by an act of the state legislature.

The Confluence report found local government multiplicity in the St. Louis area to have both positive and negative effects, but found the balance to be negative:

Although there are some advantages to multiplicity, the St. Louis metropolitan area has too many units of government, many of which are too small, and the advantages are completely outweighed by the disadvantages. Each of the facets of multiplicity (city-county separation, intracounty multiplicity, and special districts) produces negative effects.

The advantages cited by Confluence included the accessibility of small governments to their citizens and the ensuing responsiveness of officials in such governments. Confluence considered the enhanced citizen choice afforded by a system of many small governments, but concluded that few citizens actually exercise such choice. Disadvantages reported by Confluence included service difficulties caused by municipal boundaries, a perceived inability of the smallest local governments to provide services, the potential erosion of county revenues from incorporation and annexation, and an inability for the area to address regional service needs. Particular areas of concern to Confluence were regional planning and economic development (see Chapter Eight).

CITIZENS' EVALUATIONS

In support of its 1982 report, Civic Progress commissioned a survey of citizens in St. Louis City and County.²⁵ Along with many other questions, citizens were asked about their satisfaction with services provided by local government. On a scale ranging from zero (extremely dissatisfied) to 10 (extremely satisfied), survey respondents offered generally high ratings of local services in the area. Fire protection, libraries, parks and recreation, and police services received ratings of extremely or somewhat satisfied from 80 percent or more of those having an opinion, with ratings slightly higher in the county than in the city. Garbage collection and the sewer system received majority favorable ratings, while zoning, local taxes, and street and road maintenance fell short of a majority with favorable ratings.²⁶ Citizens also were asked for their ratings of the importance of local control over these services. For all services with the exception of libraries, the majority believing that direct local control was very important was 60 percent or more, and was above 80 percent for police and fire protection services.

An advisory committee report to Civic Progress, based partially on the survey findings, discussed local service delivery in these terms:

In the field of municipal service delivery, the existence of a large number of jurisdictions increases potential access to local governments and can expand the market basket of service packages and taxing levels available to residents. In such a setting, some duplication and overlap may occur, minor efficiencies may exist, and economies of scale may not always be realized; but the evidence suggests that the cost to taxpayers from these occurrences is likely to be relatively minimal. At the municipal level, deficiencies in the system of service delivery may only be technical or aesthetic. Costs to the taxpayers are likely to increase minimally or not at all, service quality is likely to be adequate, and citizens may, in fact, feel better about their access to government. From a structural and organizational standpoint, the advisory committee did not find major problems related to most municipal service levels caused by the government proliferation and fragmentation found in St. Louis.

At the level of municipal service delivery provided local governments can finance themselves and their services—no overwhelming, major problems were found to exist, and it can be demonstrated that some advantages may accrue. In certain instances greater cooperation (and even consolidation) might result in improved service quality or greater efficiency, but no current crisis was found. It would be difficult to build a compelling case for governmental reform at the current time based on a need for general improvement of municipal service delivery capability through elimination of governmental fragmentation.²⁷

The advisory committee found what others who have studied service delivery in St. Louis have found: local service delivery there appears responsive to local citizens, and citizens are quite pleased with the services they receive. In particular, given the strong desire evidenced by citizens for retaining local control of service delivery, the committee recognized that citizens were unlikely to accept governmental reform proposals that would reduce local control, and that arguments for reform based on local service delivery weaknesses would not be compelling to citizens. The committee instead found that the problems created by governmental proliferation and fragmentation were linked to areawide issues, particularly economic development.

In 1985 a local television station, KTVI, conducted a poll of St. Louisans that sought to assess public opinion on governmental reform.²⁸ In response to the general question "Would you favor the metropolitan consolidation idea for St. Louis County-St. Louis City?" 47 percent of the 647 adults interviewed answered yes, 24 percent answered no, and 29 percent were undecided. Opinions differed significantly between city and county residents. While 58 percent of city residents favored some form of consolidation, only 37 percent of county residents indicated their support. Even though consolidation was not favored by county residents, they, and residents of the city, were supportive of "the establishment of special metropolitan districts to provide public services common to the St. Louis County-St. Louis City area." The city and county are currently experimenting with just this approach for public hospital services. One might expect further initiatives along this line in the future.

St. Louisans' unwillingness to embrace proposals for significant changes in the structure of local government appears to be based on their assessments that the local government system, particularly in St. Louis County, works well. An interesting feature of the KTVI survey's findings was substantial agreement among city and county residents that "public services were 'better' to 'much better' in St. Louis County, except for public transportation." Eightyfive percent of county residents felt this to be true, as did 76 percent of city residents. Empirical support for this common assessment by citizens can be found in studies of police service delivery in St. Louis in 1972 and 1977. In both of these studies, residents of small and medium sized communities in St. Louis County reported lower levels of criminal victimization, more rapid police response when called, higher levels of assistance from local police, and more favorable assessments of local police on a series of additional indicators than did residents of comparable areas in the city and unincorporated county (see Chapter Four). While police services are only one component of the service packages provided by local governments in St. Louis, they are a component that is highly valued by citizens. In the KTVI survey, 87 percent of the respondents rated police and fire services in the county as better or much better than similar services in the city, a percentage equaled by public health services and exceeded only by educational services.

Most recently a poll was conducted for the local group, Citizens to Streamline Government—a group that initiated the petitions enabling the present Board of Freeholders to be formed (see the following section). The 2,500 county residents polled once again gave very favorable ratings to local service delivery there.²⁹ More than 90 percent reported fire, police, and trash collection services to be good or excellent. Other services received at least majority favorable ratings, most nearly 70 percent or above.

Thus, when surveyed, citizens of the area consistently give their local governments high ratings on many aspects of local service delivery. They appear, both from these surveys and from the reports of their elected officials, to be strongly wedded to the system of numerous, generally small, local governments that they have created over the years. Yet respected local bodies continue to argue to the contrary, finding the local government system to be a source of weakness, even in the area of local service delivery where citizens assert that they are well served.

On the service delivery issue, these findings are particularly difficult to reconcile with public opinion. How can a system that provides services rated so highly by citizens be a source of serious concern for local opinion leaders? Why argue for radical change of a system of service delivery that appears to be working quite well in the eyes of service recipients? This study found no ready answers to these questions. It would seem that concerns for regional or areawide issues, especially economic development, have outweighed the evidence with respect to service delivery in the minds of reform advocates. These concerns, and a perceived inability to address them given the current system of local government, have led these leaders to call for major changes in governmental arrangements. Regional issues, especially economic development, are important of course. The proposed solutions, which would significantly alter an apparently effective system of local government service delivery, might enhance regional planning and, perhaps, economic development (see the discussion of this latter issue in Chapter Eight). Whether citizens are willing to engage in such a trade-off, assuming the trade-off to be real, remains to be tested at the polls. Perhaps a stronger possibility is that St. Louisans will find alternative ways of addressing areawide problems-ways that are more consistent with their prevailing system of metropolitan governance.

CURRENT REFORM ACTIVITY

In the fall of 1986, St. Louis County Executive Gene McNary launched a new effort to reform local government in the county. His proposal, developed by the county planning department and quite similar to a plan proposed by Confluence St. Louis, sought to create new municipalities in the unincorporated portion of the county (thus incorporating the entire county), reduce the total number of municipalities to 21, and consolidate fire services in four fire districts that together would cover the entire county.³⁰ Although prompted by the uncertainties created for county government by the prospect of repeated annexation and incorporation efforts that, if successful, would erode the county's de facto municipal service area, the county government's proposal goes much further. By creating municipalities of similar size throughout the county, local government could achieve greater uniformity in service delivery arrangements. Police services, for example, could be produced uniformly in-house by municipal police departments, instead of relying on a mixture of inhouse and contract production as at present. Fire services could be produced uniformly through large fire districts, rather than through the mixture of municipal and fire district production found at present. County government would be largely taken out of the production of direct services, except for arterial streets, but might increase its role in the production of auxiliary services. Whatever the eventual role of county government, it would be uniform throughout the county.

This proposal was a topic of interest to many of the municipal officials in the county who were interviewed for this study. Opinions among these officials were mixed, with no clear pattern of support or opposition. They did consistently indicate, however, that they believed their constituents generally would be opposed to a widespread merger of existing municipalities.

The vehicle chosen to advance this reform proposal, and to consider alternatives, was the metropolitan board of freeholders provided by the Missouri Constitution as a mechanism for altering the arrangement between St. Louis City and County, separated in 1876 (see Chapter Three). One potential difficulty with this institutional vehicle was the mandatory participation of St. Louis City in its formation. The city would be allowed to name as many members of the board as the county. Mayor Vincent C. Schoemehl, Jr., however, announced his intention to cooperate with the county in its reform effort. Late in 1987, pursuant to citizen petitions, the board was selected and began operation.

The board of freeholders is composed of nine members appointed by the county executive, nine by the mayor of St. Louis, and one by the governor. The freeholders have potentially a very broad mandate under the constitution, enabling them to propose any plan for metropolitan reorganization on which they can agree. Such a plan would then be presented to voters in the city and county, with concurrent majorities in both required for adoption. The required majority in the county would be a countywide majority and, therefore, could allow merger of smaller municipalities even in the face of strong opposition from their citizens.

In response to this initiative, the St. Louis County Municipal League appointed a 19-member committee to develop alternative proposals. This committee has developed a policy statement on governmental organization in the county that differs in significant respects from the county and Confluence plans.³¹ The municipal league plan embodies some differences in functional assignments as between municipalities and county after full incorporation. It differs most significantly, however, in its stance toward existing municipalities and the mechanism by which their boundaries could be changed. The league supports a phased annexation and incorporation of unincorporated portions of the county:

The St. Louis County Municipal League endorses the concept of phased universal incorporation of all of St. Louis County. A phased approach over the next several years will allow existing municipalities to develop plans for orderly and systematic expansion through annexation. Groups of citizens may also wish to propose the establishment of newly incorporated cities with reasonable borders and sufficient size to provide services. The League concludes that universal incorporation does not require the dismantling of existing municipal governments.

Because the Municipal League finds that citizens of St. Louis County have a strong attachment to the municipalities they have created over the last century, we oppose a reorganization plan that would change the boundaries of an existing municipality without an affirmative vote of the residents or the governing body, where appropriate, of that municipality.

The league has proposed, as an alternative, the establishment of a commission representative of presently incorporated and unincorporated parts of the county to insure the orderly development of municipal government in the unincorporated areas.³² As the freeholders began consideration of alternative plans, county government substituted a 42-city plan for its original 21-city proposal. The freeholders also gave attention to issues of fiscal disparity among municipalities. One of the principal arguments made in behalf of the county government's proposals was the reduction of fiscal disparity (see the discussion in Chapter Eight). The freeholders were unable to reach a settlement of these issues by their original deadline in time for the May 1988 primary.

The municipal league also opposed the use of the board of freeholders mechanism on the grounds of the latter's constitutional mandate "to facilitate some type of city-county consolidation." It saw the board as

an inappropriate vehicle for the resolution of service delivery problems in unincorporated St. Louis County. We believe that the residents of St. Louis County will not support a reorganization plan developed by a Board of Freeholders with a majority of members who reside outside of St. Louis County.

The contending approaches to reform provide a contrast in attitudes with respect to the role of citizen choice in local government, and the appropriate communities of interest to make such choices. Under the county and Confluence plans, the appropriate community of interest is a countywide constituency.33 Viewing countywide issues as of overriding importance, advocates of these plans would be willing to have municipalities dismantled in the face of strong opposition from their residents.³⁴ The St. Louis County Municipal League's plan embodies a different perspective, one based on incremental changes with the requirement of majority acceptance by those most directly affected. This perspective gives added attention to the smaller communities of interest represented by existing municipalities, by groups of citizens in areas that might be annexed by existing municipalities, and by citizens who might wish to incorporate new communities in the presently unincorporated areas in the county. One can anticipate that these competing views will receive a full airing in the debates that will undoubtedly accompany the current reform efforts in St. Louis.

The process for obtaining citizen consent associated with the St. Louis board of freeholders-concurrent majorities in city and county-is consistent with local self-determination when this process is applied to changes in city-county relations. As discussed above, the principle of self-determination underlies metropolitan organization in the St. Louis area. Applied to reorganization within the county, however, the citizen consent procedures associated with the board of freeholders are not consistent with self-determination. Half or more of the county's municipalities could be eliminated, under this arrangement, without the consent of a majority of their citizens. The Advisory Commission on Intergovernmental Relations (ACIR) has recommended that municipal consolidations be approved by citizens voting in a referendum "by simple concurrent majorities in the governmental jurisdictions involved."35 While recognizing that this requirement makes consolidation more difficult, "the commission believes that concurrent majority approval gives added assurance to the residents of each city, town, or township that they will not be unwillingly included in a consolidated government and provides a salutary political basis for launching a new municipality."³⁶ It should be noted that the board of freeholders process would not even require approval from a majority of those voters within the boundaries of a proposed new municipality. In the ACIR's words, this procedure may not provide a salutary political basis for the creation of a new political community.

The proposals for revamping county governance have also found life in a more traditional forum—the county delegation to the state legislature. A version of the St. Louis County Municipal League's proposal was introduced in the recent session of the legislature, but failed to pass without county government support. The basic process of metropolitan governance in St. Louis County continues.

CONCLUSION

St. Louis County has developed an elaborate system of metropolitan organization. This organizational system includes a basic governance structure (embodied for the most part in state law), a diverse array of jurisdictions, and an overlay of multiorganizational arrangements associated with ongoing processes of intergovernmental relations. The system is a product of several decades of organizational development, a process that, given current problems and circumstances, is almost certainly not finished.

As a system of metropolitan governance, the organization of St. Louis County is based on arrangements that allow citizens to define and organize their local communities much as they see fit. If one asks the question, "Who governs?" in St. Louis County, the best answer is, "Citizens govern." State legislators—the local delegation—are merely the keepers of the rules that provide a framework within which citizens make the basic structural choices of local government. Those who might conclude that no one is in charge in this fragmented metropolis are looking past the basic processes of governance. In St. Louis County, citizens are clearly in charge.

Citizen choice leads to diversity, not to the uniformity desired by advocates of metropolitan reform. The formal jurisdictions that comprise St. Louis County, however, provide simply a point of departure for patterns of organization that span jurisdictional boundaries. This multiorganizational overlay, if it could be superimposed on a map of St. Louis County, would radically alter the popular image of fragmentation. To describe the organization of St. Louis County without reference to voluntary associations of municipalities, fire districts, and school districts is to leave out half of the picture. To discuss service production and delivery without giving attention to cooperative agreements and joint production arrangements among all types of local units is to tell half a story. Focusing exclusively on formal jurisdictions leads to a conclusion that citizens are hopelessly lost in a maze. Yet this conclusion is made possible only by ignoring those functional dimensions of metropolitan organization that connect, mediate, and partially integrate separately organized communities within a multijurisdictional metropolis.

Only limited evidence is found in St. Louis County of uncaptured economies of scale in service production. There is no compelling evidence that the elimination of small municipalities or small school districts would significantly increase the efficiency of service production in those communities.

There is evidence, on the other hand, of inequities in service provision. A small number of small municipalities and school districts in the county are disadvantaged, affecting disproportionately many of the county's blacks and elderly citizens. Yet the magnitude of this problem is not overwhelming in its proportions, either with respect to municipal services or elementary and secondary education. A concerned countywide constituency, organized through county government or through a special district or commission with authority to aid distressed communities selectively, would clearly be able to overcome the more serious inequities that exist. Reorganization of municipal or school district boundaries is neither necessary nor sufficient to address these equity concerns.

These conclusions with respect to St. Louis County as a metropolitan county apply with somewhat less force to St. Louis City and County as a metropolitan area. Although a few special purpose jurisdictions span city-county boundaries, the absence of a general, overlying jurisdiction may be an impediment to overall economic and political development. For fragmentation to work, it must be accompanied by a rich structure of overlapping jurisdictions. This structure is much more elaborate within St. Louis County than between St. Louis City and County. The separation of St. Louis City from the county is clearly a greater barrier to economic and social progress in the larger metropolitan region than is jurisdictional fragmentation within the county. A range of options for reconstituting the relation between city and county could be devised, including not only reentry of the city into the county, but also the possibility of some broader representational arrangement, such as a metropolitan council,

as a jurisdictional overlay in addition to city and county governments.

Even city-county separation, however, has not proved to be an insuperable barrier to cooperation. St. Louis City participates with county municipalities and school districts in a number of cooperative ventures. Two special districts have been organized that embrace both city and county, and more are in the works. A central problem with the city-county relationship is its bilateral nature. As more special districts are created, however, the relationship may begin to take on a multilateral character, and thus perhaps facilitate further cooperation.

The immediate problems affecting St. Louis County are transitional. County government may no longer be able to maintain its role as a municipal service provider for 40 percent of the county's population. The basic rules of municipal incorporation and annexation, however, remain sound, although some tinkering at the margins may be appropriate. A gradual period of incorporation and annexation would allow time for county government to adjust its role. One possible adaptation is for county government to shift much more toward contract production of municipal services. This step could increase the level of competition among local service producers and thus have a beneficial systemic effect throughout the county. Pockets of unincorporated territory can be dealt with by contracting with adjacent municipalities. Any problems that remain after a period of incorporation and annexation can be addressed at that time.

Local self-governance provides a solid foundation for metropolitan organization in St. Louis County. Extending the basic organizational dynamics of incorporation-annexation-cooperation to the presently unincorporated portion of the county will enable county government to become oriented more toward its role as an overlying, general purpose jurisdiction and less toward its role as a de facto municipality in the unincorporated area. County government clearly has important functions to perform-as the provider of an arterial street system, for example, and of important backup services to local police. Perhaps most significantly, however, the county government can play a much greater role in economic development, not only in the rapidly growing unincorporated area, but especially in the county's small number of seriously distressed communities. The entire county can benefit from such an effort.

The experience of the St. Louis area in metropolitan organization has much to teach the rest of metropolitan America. Jurisdictional fragmentation, when combined with overlapping jurisdictions, can provide an institutional framework for a dynamic of metropolitan organization that continually offers new opportunities for coordination and productivity improvement. Jurisdictional fragmentation, therefore, need not lead to functional fragmentation. Effective metropolitan governance can emerge from local self-determination and citizen choice, provided that the basic rules of governance lie within a local sphere of influence as well. Overall, such a process is necessarily complex, and difficult to capture in a snapshot case study. What is more, the process is never finished. Only by continuing to study the functional arrangements that emerge from different jurisdictional arrangements in various metropolitan areas, can we expect to improve the art of metropolitan and local self-governance.

-ENDNOTES--

- ¹ City of Town and Country v. St. Louis County, 657 S.W.2d 598 (Mo. banc 1983).
- ² In a council-manager form of government, the city manager is the chief executive officer, responsible to and serving at the pleasure of the council, and the mayor is elected by council from its members, not separately elected by the people. Some municipalities in St. Louis County have used home rule powers to create a position of city manager in addition to a separately elected mayor. Still other municipalities employ a city administrator, who reports to the mayor. The functional division of labor between mayor and manager or administrator varies from one city to another.
- ³ Randy H. Hamilton refers to a related, but more general, phenomenon in the extensive use of "citizen legislators" by American state and local governments. See his "Local Self-Government through Citizen Legislators: The Bedrock of Liberty" in Advisory Commission on Intergovernmental Relations (ACIR), Is Constitutional Reform Necessary to Reinvigorate Federalism? A Roundtable Discussion (Washington, DC: ACIR, Report M-154, November 1987), pp. 17-25.
- ⁴ See ACIR, *The Organization of Local Public Economies* (Washington, DC: ACIR, Report A-109, December, 1987).
- ⁶ An additional advantage can be cited. Because many, indeed most elected officials of county municipalities have other full-time jobs, most municipal meetings are scheduled to accommodate their work schedules, with evening and weekend meetings the predominant pattern. This pattern works to the advantage of local citizens as well. Most of them, like their officials, are employed full time. Not only are officials more accessible to citizens in the sense discussed in the previous section, but they tend to be more accessible in the conduct of their official duties.
- ⁶ This distinction is the conceptual foundation for ACIR's report The Organization of Local Public Economies.
- ⁷ This count does not include Pacific, only a small portion of which lies in the county.
- One potential provision unit, the Village of Champ, has chosen not to make explicit provision for police services, relying instead on the county police to enforce state law within its boundaries.
- This count excludes specialized police forces such as that serving Lambert-St. Louis Airport, County Park Police, and the Missouri Highway Patrol.
- ¹⁰For further discussion, see ACIR, The Organization of Local Public Economies.

- ¹¹See ACIR, State and Local Roles in the Federal System (Washington, DC: ACIR, Report A-88, April 1982), pp. 446-448. The Commission has rescinded a 1981 recommendation urging that small nonproducing local governments be dissolved. See The Organization of Local Public Economies, p. 55. The Commission has taken the position that units of local government too small to produce services in-house may, nevertheless, usefully serve their citizens as service providers, while contracting for service production with private vendors or other government agencies.
- ¹²Anthony Downs, Urban Problems and Prospects, 2nd ed. (Chicago: Rand McNally College Publishing Company, 1976), Chapter 12.
- ¹⁹See ACIR, The Organization of Local Public Economies.
- ¹⁴In a more consolidated system one would expect, all else being equal, less exercise of public entrepreneurship. While bureau chiefs in smaller jurisdictions may be in a position to be entrepreneurial, subordinate commanders in larger bureaucracies rarely are. The smaller number of elected public officials in more consolidated systems, too, reduces the potential for public entrepreneurship.
- ¹⁶School districts are somewhat less dependent on selfdetermination, insofar as concurrent majorities are not necessarily required to merge school districts. Still, voter approval districtwide is a requirement. How far this rule departs from local self-determination in practice depends on the number of districts included in a proposed merger. Extensive historical research would be needed to learn whether the configuration of school districts in the county was affected by this compromise of local self-determination.
- ¹⁶The classic discussion of freerider and holdout problems is found in Mancur Olson, *The Logic of Collective Action* (Cambridge: Harvard University Press, 1965).
- ¹⁷The reader may be interested in comparing this discussion to the treatment of boundary review agencies in ACIR, *The Organization of Local Public Economies.*
- ¹⁹See John Mudd, "Beyond Community Control: A Neighborhood Strategy for City Government," Publius 6 (Fall 1976): 113-135. For further elaboration of this point, see Ronald J. Oakerson, "How Governance Structures Can Enhance Accountability and Responsiveness," in James Perry (ed.), Handbook of Public Administration, American Society of Public Administration, forthcoming.
- ¹⁹See Robert Warren, Government in Metropolitan Regions: A Reappraisal of Fractionated Political Organization (Davis: University of California, Institute of Governmental Affairs, 1966).
- ⁸⁰The incorporation of the newly created City of Chesterfield in April 1988, was facilitated by the willingness of county government to enter into a set of contracts for service production, including police services, in the new city's first year of existence.
- ²¹For a discussion of the limits of interlocal competition, see ACIR, The Organization of Local Public Economies, pp. 38-39. See also Ronald J. Oakerson, Roger B. Parks, and Henry Aaron Bell, "How Fragmentation Works—St. Louis Style," prepared for presentation to the Midwest Political Science Association annual meeting in Chicago, 1987.
- ²²Dana L. Spitzer, Fostering Development in Metropolitan St. Louis, a report submitted to John W. Hanley, Chairman, The City-County Task Force of Civic Progress, December 1982.
- ²³Report of the St. Louis County Annexation Study Commission, prepared by St. Louis County Department of Planning, July 1985, p. 26.
- ²⁴Too Many Governments? A Report on Governmental Structure in St. Louis City and County with Recommendations for Change. Confluence St. Louis, February 18, 1987.
- ⁵⁵Market Opinion Research, Public Opinion on Government Reorganization Alternatives for the City of St. Louis and

St. Louis County (Detroit: Market Opinion Research, April 1982).

²⁶These generally high satisfaction ratings were also a feature of earlier surveys in St. Louis City and County, for example that of The Metropolitan St. Louis Survey conducted in support of reorganization attempts in the late 1950s and early 1960s. See John C. Bollens, ed., Exploring the Metropolitan Community (Berkeley and Los Angeles: University of California Press, 1964).

²⁷Spitzer, pp. 20-21.

- ²⁹Kenneth F. Warren, "KTVI's Survey on Metropolitan Consolidation: A Summary Report," 1985.
- ²⁹This poll, conducted in April 1987 by Attitude Research Corporation, was reported in the S1. Louis Post Dispatch, November 27, 1987.
- ³⁰St. Louis County Department of Planning, A Comprehensive Proposal for Local Government Reorganization in St. Louis County, November 1987.
- ³¹St. Louis County Municipal League, Policy: Governmental Organization, June 4, 1987.

- ³²An additional group has recently entered this debate. The Local Government Service Association, comprised of local elected officials from existing municipalities in the county, especially those which would be likely to be eliminated if the county or Confluence plans were adopted, is raising funds from municipalities to combat reorganization proposals (St. Louis Post-Dispatch, November 3, 1987, p. 3A).
- ³⁹Actually, the relevant constituencies are both citywide and countywide because affirmative votes would be required in both jurisdictions to adopt a freeholder's plan.
- ³⁴At least one advocate of the county plan, the county director of planning, indicates that a countywide vote is essential to its success. He, like municipal officials, believes that requiring concurrent majorities in existing municipalities prior to a change in their boundaries, would lead to voter rejection of many proposed mergers (personal communication, October 23, 1987).
- ³⁶ACIR, State and Local Roles in the Federal System, p. 448.

³⁶Ibid., p. 449.

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The Commission is composed of 26 members-nine representing the federal government, 14 representing state and local government, and three representing the public. The President appoints 20-three private citizens and three federal executive officials directly and four governors, three state legislators, four mayors, and three elected county officials from slates nominated by the National Governors' Conference, the Council of State Governments. the National League of Cities/U.S. Conference of Mayors, and the National Association of Counties. The three Senators are chosen by the President of the Senate and the three Representatives by the Speaker of the House.

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