

14

Synthesis of Transit Practice

Issues in the Shift from Regional to Local Provision of Bus Service



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Synthesis of Transit Practice

Issues in the Shift from Regional to Local Provision of Bus Service

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NATIONAL COOPERATIVE TRANSIT RESEARCH & DEVELOPMENT PROGRAM

Administrators, engineers, and many others in the transit industry are faced with a multitude of complex problems that range between local, regional, and national in their prevalence. How they might be solved is open to a variety of approaches; however, it is an established fact that a highly effective approach to problems of widespread commonality is one in which operating agencies join cooperatively to support, both in financial and other participatory respects, systematic research that is well designed, practically oriented, and carried out by highly competent researchers. As problems grow rapidly in number and escalate in complexity, the value of an orderly, high-quality cooperative endeavor likewise escalates.

Recognizing this in light of the many needs of the transit industry at large, the Urban Mass Transportation Administration, U.S. Department of Transportation, got under way in 1980 the National Cooperative Transit Research & Development Program (NCTRP). This is an objective national program that provides a mechanism by which UMTA's principal client groups across the nation can join cooperatively in an attempt to solve near-term public transportation problems through applied research, development, test, and evaluation. The client groups thereby have a channel through which they can directly influence a portion of UMTA's annual activities in transit technology development and deployment. Although present funding of the NCTRP is entirely from UMTA's Section 6 funds, the planning leading to inception of the Program envisioned that UMTA's client groups would join ultimately in providing additional support, thereby enabling the Program to address a large number of problems each year.

The NCTRP operates by means of agreements between UMTA as the sponsor and (1) the National Research Council as the Primary Technical Contractor (PTC) responsible for administrative and technical services, (2) the American Public Transit Association, responsible for operation of a Technical Steering Group (TSG) comprised of representatives of transit operators, local government officials, State DOT officials, and officials from UMTA's Office of Technical Assistance, and (3) the Urban Consortium for Technology Initiatives/Public Technology, Inc., responsible for providing the local government officials for the Technical Steering Group.

Research Programs for the NCTRP are developed annually by the Technical Steering Group, which identifies key problems, ranks them in order of priority, and establishes programs of projects for UMTA approval. Once approved, they are referred to the National Research Council for acceptance and administration through the Transportation Research Board.

Research projects addressing the problems referred from UMTA are defined by panels of experts established by the Board to provide technical guidance and counsel in the problem areas. The projects are advertised widely for proposals, and qualified agencies are selected on the basis of research plans offering the greatest probabilities of success. The research is carried out by these agencies under contract to the National Research Council, and administration and surveillance of the contract work are the responsibilities of the National Research Council and Board.

The needs for transit research are many, and the National Cooperative Transit Research & Development Program is a mechanism for deriving timely solutions for transportation problems of mutual concern to many responsible groups. In doing

so, the Program operates complementary to, rather than as a substitute for or duplicate of, other transit research programs.

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Each report is reviewed and accepted for publication by the technical committee according to procedures established and monitored by the Transportation Research Board Executive Committee and the Governing Board of the National Research Council.

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PREFACE

A vast storehouse of information exists on nearly every subject of concern to the transit industry. Much of this information has resulted from both research and the successful application of solutions to the problems faced by practitioners in their daily work. Because previously there has been no systematic means for compiling such useful information and making it available to the entire transit community, the Urban Mass Transportation Administration of the U.S. Department of Transportation has, through the mechanism of the National Cooperative Transit Research & Development Program, authorized the Transportation Research Board to undertake a series of studies to search out and synthesize useful knowledge from all available sources and to prepare documented reports on current practices in the subject areas of concern.

This synthesis series reports on various practices, making specific recommendations where appropriate but without the detailed directions usually found in handbooks or design manuals. Nonetheless, these documents can serve similar purposes, for each is a compendium of the best knowledge available on measures found to be successful in resolving specific problems. The extent to which these reports are useful will be tempered by the user's knowledge and experience in the particular problem area.

FOREWORD

*By Staff
Transportation
Research Board*

This synthesis will be of interest to transit administrators and planners as well as local and regional politicians and officials who may be contemplating using local bus service to supplement or replace service provided by a regional operator. Information is provided on the costs and other issues involved in this type of change in service.

Administrators, engineers, and researchers are continually faced with problems on which much information exists, either in the form of reports or in terms of undocumented experience and practice. Unfortunately, this information often is scattered and unevaluated, and, as a consequence, in seeking solutions, full information on what has been learned about a problem frequently is not assembled. Costly research findings may go unused, valuable experience may be overlooked, and full consideration may not be given to the available methods of solving or alleviating the problem. In an effort to correct this situation, NCTRP Project 60-1, carried out by the Transportation Research Board as the research agency, has the objective of reporting on common transit problems and synthesizing available information. The synthesis reports from this endeavor constitute an NCTRP publication series in which various forms of relevant information are assembled into single, concise documents pertaining to specific problems or sets of closely related problems.

Since 1975 a number of local governments have augmented or replaced transit service previously provided by a regional transit agency. This report of the Transportation Research Board describes the various issues that will have an effect on the decision by a local agency to operate transit service. The issues include funding and organizational environment, costs, quality of service, politics, and impact on the regional operator.

Because most of the shifts in service provision have taken place within the last six years, no conclusions as to their long-term implications can be drawn.

To develop this synthesis in a comprehensive manner and to ensure inclusion of significant knowledge, the Board analyzed available information assembled from numerous sources, including a large number of public transportation agencies. A topic panel of experts in the subject area was established to guide the researcher in organizing and evaluating the collected data, and to review the final synthesis report.

This synthesis is an immediately useful document that records practices that were acceptable within the limitations of the knowledge available at the time of its preparation. As the processes of advancement continue, new knowledge can be expected to be added to that now at hand.

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ISSUES IN THE SHIFT FROM REGIONAL TO LOCAL PROVISION OF BUS SERVICE

SUMMARY

Since 1975 a number of local governments have augmented or replaced transit service previously provided by a regional transit agency. There have been various reasons for making the change, but there is not enough evidence to draw conclusions on its long-term implications. In most places reducing costs and improving service have been the most important objectives. In addition, political issues have been an ingredient in the decision to move to local control of transit. In the three decades after World War II, the many private transit companies changed to fewer regional agencies administered by governments, transit service changed from a profitable business to a tax-subsidized operation, and suburban growth in both population and employment caused transportation congestion. These organizational, economic, and demographic developments have supported the move toward local control of transit service.

There are a number of forms that local service provision can take. A local jurisdiction could contract with a private company to provide all or part of the service. It could own the vehicles and contract operations. It could hire a staff and become part of the local government structure. It could replace transit service provided by the regional agency or simply supplement that service. Or it could use a combination of these options.

The funding and institutional environments that a local jurisdiction is part of will affect a decision to shift transit service from a regional to a local provider. Regional transit agencies are generally funded by either a dedicated tax or by a method related to the amount of service provided and the revenue collected. A dedicated tax that is required to go to the regional operator will leave little incentive for a local jurisdiction to provide transit service. However, if the local jurisdiction can retain the dedicated tax, there may be great incentive for local provision of transit service. Where there is a service-related funding method, a local jurisdiction may see a cost or service advantage in providing its own transit service in lieu of or in addition to the regional operator.

If transit service is provided by more than one agency in a region, the services may be offered completely independent of one another, with informal coordination, with formal coordination, or with integration. Usually there is a mix of these types of service coordination. The greater the degree of coordination, the better the riders are served.

Because cost-effectiveness is a primary motivation for most jurisdictions that consider providing their own local bus service, there is a need to carefully evaluate several

issues in making cost comparisons. These include labor costs, administrative costs, social-welfare goals, vehicle costs, service planning, and federal restrictions.

Labor costs are the largest part of transit operating budgets. Reduced labor costs may result when a local jurisdiction assumes responsibility for bus service. The lower costs can come from hiring lower-paid drivers and mechanics, changing work rules, hiring special category drivers, and hiring novice drivers. Although each of these will lower costs, there may be indirect impacts on social-welfare goals and service quality.

Administrative costs can be reduced by a local jurisdiction by combining transit administration with other administration; the local jurisdiction may have lower labor costs. Contracting for transit service may also lower administrative costs. Some administrative costs, such as legal services, customer relations, service planning, and press relations, may be higher. Costs of social-welfare functions that a regional operator provides may be avoided by a local operator that does not use federal funds, although providing these functions may save costs for the local jurisdiction in other ways.

Vehicle costs can be reduced by lower capital costs for smaller vehicles and the lower operating costs of those vehicles. Smaller vehicles can be used on routes where standard buses are underutilized. However, in computing the costs of the smaller vehicles, one should take into account that they will also have a shorter service life. Moreover, if it is necessary to use two small buses to take the place of a large bus, the savings will disappear. A local jurisdiction may also have more difficulty than a regional operator financing the purchase of buses. Operating costs for small buses (exclusive of drivers) are typically 10 to 20 percent lower than those for standard buses. However, a local jurisdiction may not be able to purchase fuel and oil at the same price as a regional operator.

If a local jurisdiction does not use federal funding, it can avoid the restrictions and requirements on how the agency operates. These include the Urban Mass Transportation Act Section 13(c) requirements for labor agreements and Section 504 requirements for accessibility, "Buy America" provisions and other federal procurement regulations, and other federal laws and requirements. These requirements were not developed arbitrarily, and all serve to achieve social goals for society; thus, a local jurisdiction may decide to follow some of these requirements even though not required to do so. However, if it does not accept federal funds, it would have more latitude in determining service characteristics, making capital purchases, and contracting, and may be able to achieve cost savings as a result.

One reason that a jurisdiction may decide to provide its own bus service is to improve the quality of the service for its residents. Several issues need to be considered when comparing the service quality of the regional operator with that of the local. These include responsiveness of service planning (quickness and flexibility), routing considerations (providing service for transit dependents or service designed to reduce auto use), frequency of service (local supplements to regional service), service innovation (use of smaller buses, jitneys, taxi-based service, van pools, etc.), driver quality (effects on reliability, safety, and ridership), and integration with other services (e.g., school buses).

There are also a number of political issues that affect whether a local jurisdiction will want to supplement or take over bus service from a regional operator. These are difficult to measure, but generally fall into the categories of equitable distribution of service, efficiency in service planning, incurrence of indirect costs, responsiveness of local politicians, desire for control by the local jurisdiction staff, improvement of community image, and integration with land-use planning.

From the perspective of the local jurisdiction, the characteristics of the region and its transit service will determine whether taking over transit service will be to its benefit. From the perspective of the region, it is important to take into account the

impact of such a move on the regional operator and on the other jurisdictions in the region. It is difficult to draw conclusions about the desirability of local jurisdiction control of transit service. The major factors that need to be taken into account include the regional funding mechanism, the costs and types of service provided by the regional operator compared with those of the local jurisdiction, the history of cooperation among local jurisdictions, and the impact on the regional operator.

CHAPTER ONE

INTRODUCTION

In recent years, there has been a trend for local governments to replace or augment bus service where a regional transit authority has traditionally provided service. The purpose of this report is to document what has brought this change about, the ways in which it has occurred, and what we can learn from the situations in which it has occurred. The major types of issues considered in this report are cost-related, service-related, and political.

This phenomenon has existed in very few places more than six years. One of the earliest examples is the 1975 initiation of locally provided service (RIDE-ON) to augment and replace some Washington Metropolitan Area Transit Authority (WMATA) transit service in Montgomery County, Maryland. Most examples of a shift from regional to local provision of service have occurred in the last six years. As a result, there is not a great deal of experience from which to draw conclusions about the long-term implications of the phenomenon. The environments in which the shifts have occurred are significantly different. Opinions differ widely about the effects of the shifts, depending, to a great extent, on whether the opinion holder has a regional or local orientation.

Although forms of local provision and the results are as varied as the jurisdictions, the underlying motivation is similar everywhere. In most places where local control has been implemented or considered, the desire to reduce cost has been one of the most important motivating objectives. The cost issues that have been considered include:

- labor costs,
- work rules,
- administrative costs,
- social-welfare goals,
- vehicle operating costs,
- cost-effectiveness of service planning, and
- federally imposed restrictions.

Service-related improvements have been another important motivator for local jurisdictions that consider taking on the responsibility of supplying transit service. The service-related issues include:

- responsive service planning,
- routing considerations,
- frequency of service,
- service innovation,
- driver quality, and
- integration with other local services.

As with the cost-related issues in the decision to move to locally

controlled transit, the results in service improvements have been mixed.

Political issues have been an ingredient in the decision to move to local control of transit. The issues include:

- equitable distribution of service,
- efficiency in service planning,
- incurrence of indirect costs,
- responsiveness of local politicians,
- community image,
- local jurisdiction staff control, and
- integration with land-use planning.

HISTORY AND CONTEXT

Before beginning a discussion of the issues in local control of transit services, it is important to see the phenomenon in the context of the historical changes in transit agencies and in the broader organizational, economic, and demographic context.

Organizational

Before 1960, there were more transit providers in the United States than there are today (Figure 1). Some metropolitan areas were served by dozens of transit companies. Until 1960, all except about 20 transit agencies in the United States were privately owned. Given the large number of individual agencies, one would expect there to have been little regional coordination of services. Some mechanisms emerged, however, to promote integration of service. The government regulated fares and service. Large companies that owned many of the small transit agencies in a region were formed. Where monopolies did not emerge, interlocking directorates served to facilitate regional coordination.

Transit ridership dropped off dramatically after World War II (Figure 2). Some say the demise of transit began as early as the 1920s (1). It is beyond the scope of this synthesis to analyze the causes of this phenomenon, and there clearly are multiple reasons for the reduction. Transit agencies went from making profits to losing substantial amounts. Their response was to cut service. The loss of bus service was seen by some as detrimental to fulfilling the transportation needs in urban areas. The Urban Mass Transportation Administration (UMTA) was formed as the federal response to this development.

One of UMTA's policies was to encourage urban areas to take over private transit agencies and form regional agencies under the administration of local governments. Starting in the

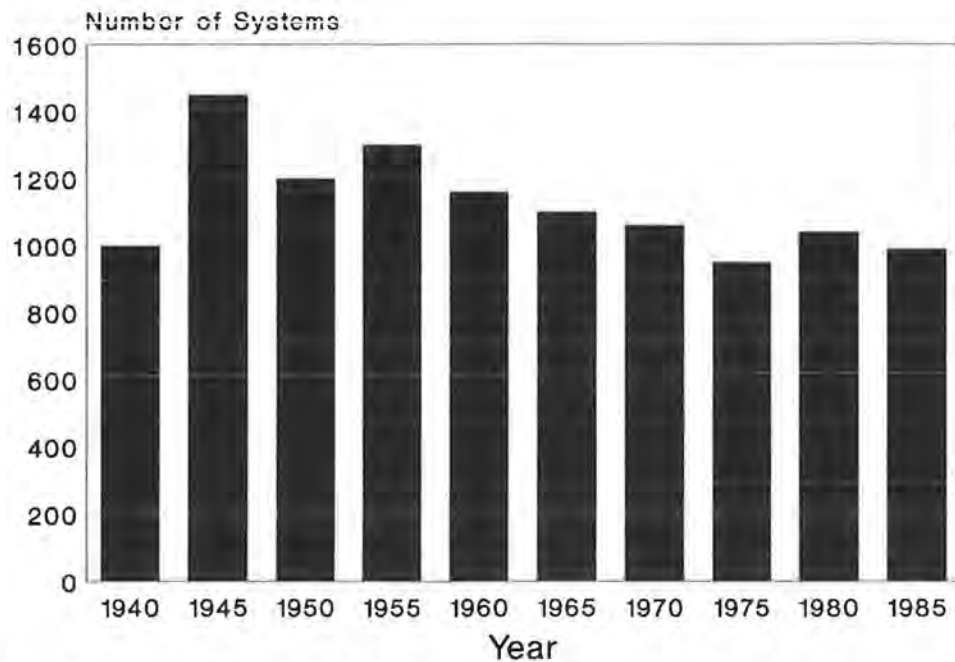


FIGURE 1 Number of transit systems in the United States.

1960s, this occurred. Because of the need to expand service and catch up on capital equipment purchase, transit operations were subsidized heavily. The public subsidy (local, state, and federal) of transit rose from practically nothing in 1950 to an overall average of 60 percent currently (2).

The takeover of transit companies by local governments occurred at the same time that widespread movement, fostered by federal policies, toward regional coordination developed. Bus companies were combined into agencies serving not just indi-

vidual cities and towns, but often whole regions. The 1960s and 1970s were the heydays of regional planning and coordination. The development of regional transit agencies reflected this trend.

The 1980s witnessed the rise of skepticism in the ability of big government to manage things efficiently or effectively. Private enterprise and competition were more highly valued than in the past. The federal government reduced its expenditures for mass transit and led states and local jurisdictions to be required to pick up increases in costs that had been covered

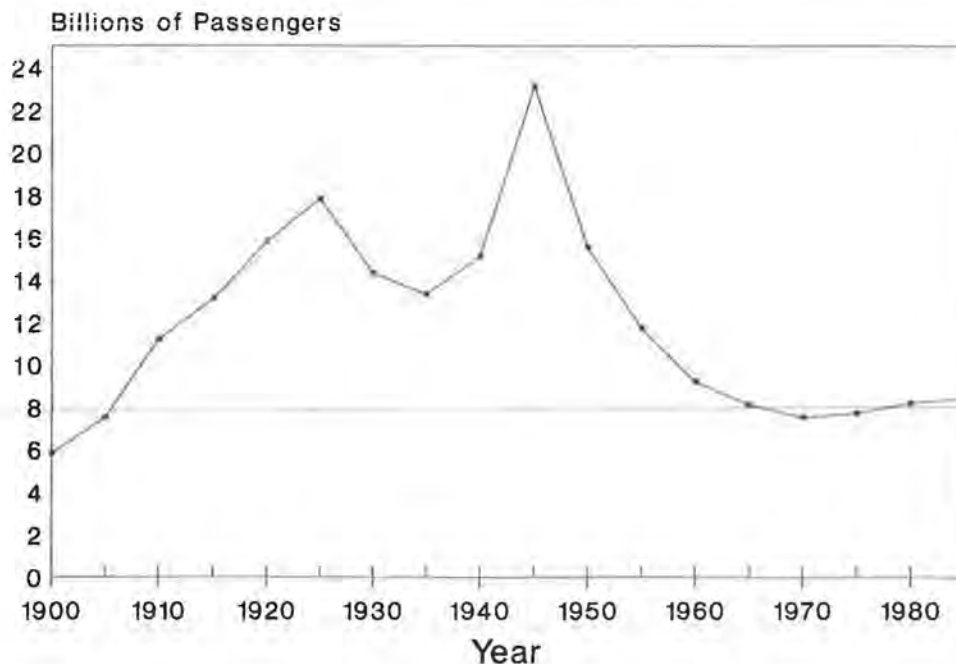


FIGURE 2 National transit ridership.

through federal subsidies. Figure 3 shows the trend in federal versus state and local operating subsidy for transit. In addition to the expectation that local government should cover a greater percentage of transit operations, the UMTA initiative to promote private involvement in transit was another example of the new federal policy to reduce federal operating subsidies. The result was less federal support (both financial and otherwise) for regional transit agencies and a more entrepreneurial approach by local governments. The interest in a shift from regional to local provision of transit is not surprising in this context.

Economic

The economic situation also has changed in the last decade. For the first time in most people's memories, the historical increases in real personal disposable income have been reduced. In some regions of the country, it has actually declined (3). There have been revolts against new taxes. The transit industry, which has become used to fairly high subsidy levels, can no longer count on continued tax support. Even though there has not been a reduction in overall subsidy levels, there is a perception that it may occur. The ability to rely on federal funding to cover increasing costs for transit has been severely curtailed. One of the responses to this fear has been an upsurge of interest in cost control.

One of the responses to the political and economic shifts has been a renewed interest in private provision of transit services. It is no longer novel for local jurisdictions, even the medium-to large-sized ones, to contract for services. Figure 4 shows the current rates of contract expenditures by agency size. The market for contracting transit services has grown considerably, as has the private industry to provide this kind of service.

Until recently, the unemployment rate has been high. The presence of a willing work force has contributed to the avail-

ability of transit workers at a lower cost. The desire to keep costs down, in the context of the larger labor pool, has supported the tendency for local jurisdictions to contract service to private companies or to hire their own in-house labor rather than participate in regional transit agencies, which tend to pay relatively high wages.

Demographic

It is a commonplace observation these days that growth is faster in the suburbs than in central cities, not only in population, but in employment as well. There have been two major consequences of this development. The effects on the transportation system have been obvious and well-documented. Suburban congestion is difficult to alleviate with traditional fixed-route transit. Clearly, innovations are required to deal with the new transportation environment.

With the rise of employment opportunities in the suburbs, all kinds of new businesses have developed. The larger tax base, because of increased population and business opportunities, means that suburban governments have been transformed from rather small political bodies to the sophisticated and entrepreneurial entities that we observe today. In addition, there has been a tendency for members of the business community to be involved in local politics and to influence the directions that it takes. The result has been a greater interest in local control, both on the part of local politicians and local-jurisdiction staff members.

SUMMARY

Most of the recent developments, whether organizational, economic, or demographic, support at least the consideration of a move toward local control of local bus service. The degree to which this end has been pursued depends on many factors,



FIGURE 3 State/local versus federal subsidy.

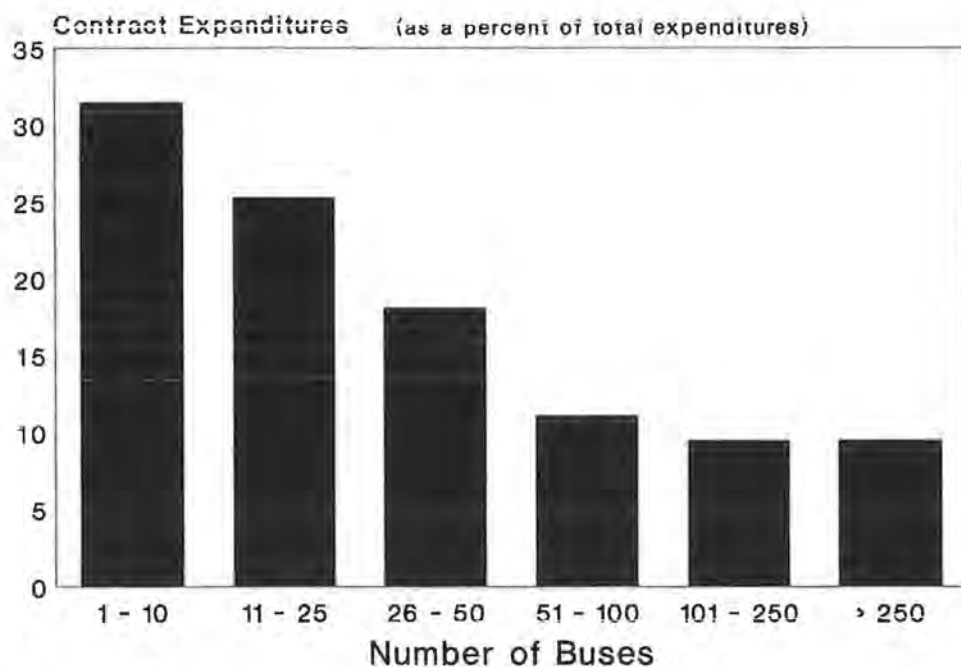


FIGURE 4 Contract expenditures by agency size.

including the responsiveness of the regional transit operator to the new transportation environment, the character of the region's local jurisdictions, and the nature of the transportation problem. The success of these efforts depends on the same attributes of the regions. Another factor, which cannot be ignored but is difficult to predict or analyze, is the combination of personalities and styles of the major participants in regional transportation decisions.

Chapter 2 discusses the range of options for local service provision and the variety of funding and institutional environments in which it occurs. Chapters 3, 4, and 5 discuss the individual issues organized in the three general classes defined in this chapter. They cover the issues that should be taken into account when local control is under consideration. The last chapter provides a summary of the results of this exploration of issues in the shift from regional to local provision of service.

CHAPTER TWO

THE DECISION ENVIRONMENT

It is impossible to say whether the shift from regional to local provision of services has been successful in general. One reason already mentioned is that the phenomenon is rather new and there has not been enough time to assess the results in the long run. Equally important is the fact that every situation is different. There are a multiplicity of ways that local service can be provided. Each one has advantages and disadvantages. The funding environment is extremely important. Under some conditions, local provision of service would not even be considered. The institutional environment affects the degree to which coordinated service can be achieved when local jurisdictions provide some of the transit service in a region. This chapter discusses each of these issues.

FORMS OF LOCAL SERVICE PROVISION

The phrase "local provision of service" is used throughout this synthesis to take into account the fact that a local jurisdiction may choose to provide service in one of several ways. It has the option to contract with a private company to provide all or some transit services. It could also elect to hire its own staff and become a part of the local government structure. It could completely replace the transit service provided in the local jurisdiction by the regional operator or it could simply supplement it. Combinations of these options are also possible.

Many local jurisdictions choose to contract virtually all transit service. For instance, the city of Plymouth (near Minneapolis, Minnesota) contracts with a private provider, which operates all of its services as well as owning and maintaining the vehicles. The city, however, does the marketing and maintains the park-and-ride lots. National City Transit (near San Diego, California) contracts with a private firm to operate all of its service. However, the city owns all of the assets, including the transit vehicles. San Diego County contracts with several firms for a variety of services, from fixed-route express service to taxi-based dial-a-ride service. Although the county is the legal operator, it operates none of the service itself, but does own some of the vehicles. The Southwest Area Transit Commission serves the cities of Chanhassen, Chaska, and Eden Prairie, located near Minneapolis, Minnesota. It currently contracts all of its service with the regional transit operator (the Metropolitan Transit Commission). The regional operator is allowed to subcontract dial-a-ride service provided to the Southwest Area Transit Commission.

In contrast with local jurisdictions that have chosen to contract most or all transit service, Montgomery County (near Washington, D.C.) chose to manage its own transit system. The staff, from the general manager on down, are employees of the

county. The county council is the policy-making body for the agency. The county owns most of the assets and operates most of the service. The county does contract some of its service. In addition, WMATA operates about half of the transit service in the county.

As can be seen from the above examples, there are a wide variety of forms of local service provision. Local jurisdictions may choose to contract for all, some, or none of the operations. They can choose to own all, some, or none of the assets. They can provide all transit service or supplement service provided by the regional operator. All combinations are possible.

TYPES OF FUNDING ENVIRONMENTS

There are two basic ways that regional transit agencies are funded: either through a dedicated tax or through some method related to the amount of service provided and the revenue collected. Local jurisdictions have less influence on the amount and quality of service provided in the first case than in the second.

Dedicated Taxes

If the dedicated tax is statutorily required to go to the regional operator, there is little incentive for a local jurisdiction to provide transit service. An example of this case is in the Seattle, Washington, area. The regional transit agency subsidy comes primarily from a 0.6 percent addition to the sales tax and from 2 percent of the motor vehicle excise tax collected in King County (the service area for the Municipality of Metropolitan Seattle, or Metro for short). If a local jurisdiction desires additional service, the usual approach is to try to get Metro to provide it by using the political process. With minor exceptions, no local jurisdiction in King County has provided public transportation services on its own. It is possible, however, that under some circumstances a local jurisdiction would be motivated to do so.

If legislation allows a local jurisdiction to retain a dedicated tax collected from its residents, there may be great incentives for the move to local provision of transit service. For example, in Minnesota, public transit is supported primarily by a fixed percentage of the property tax. (The amount is partially a function of the amount of service provided. Through a mechanism called "tax feathering," three different levels of taxation are defined, depending on the amount of service provided.) However, 1981 legislation called the "Metropolitan Transit Service Demonstration Program" (referred to as the "opt out" legislation) allowed local jurisdictions in Minnesota to retain 90

percent of the property tax intended for transit. Cities and towns were eligible only if they were located in a "metropolitan transit taxing district" and received minimal service from the regional operator. If a local jurisdiction is contributing to a regional transit operator and feels that it is not receiving service commensurate with its contribution, it would certainly consider taking over the provision of transit service if it were allowed to retain its contribution.

Level-of-Service-Related Funding

If the local jurisdiction's share of the regional system's expenses is determined by formulas based on service characteristics and fare collection or by negotiation, the question of local participation in a regional transit system is open. Unless the local jurisdiction is statutorily required to make a large contribution to the regional transit agency regardless of level of service, it may see a cost or service advantage in providing its own transit service in lieu of, or in addition to, that provided by the regional operator. The answer to the question concerning these advantages is very complicated, and is the subject of this report.

TYPES OF INSTITUTIONAL ENVIRONMENTS

If transit service is provided by more than one agency in a region, there are different ways to organize the agencies. Each one implies a different level of coordination. In this section, four prototypical examples of regional coordination of independent service are discussed (4). They are:

- complete independence,
- informal coordination,
- formal coordination, and
- integration.

No existing region conforms exactly to any of these prototypes. Regions in which some transit service is provided by local jurisdictions as well as a regional operator contain some mix of the elements of these prototypes. Most such regions are a mix of the second and third types.

Complete Independence

In this prototype, there is no coordination of service, no transfers honored between agencies, and independent fare structures. Rider information is provided separately by each agency. Obviously, such a system would not be very user friendly for those who have to make interjurisdictional trips. However, if a region's land use and economy were organized in such a way that there were few interjurisdictional trips, local trips could, in fact, be very well served. Tailoring routes, fares, and information uniquely for each local jurisdiction could lead to very good service for local trips.

In reality, however, regions without at least some significant interjurisdictional connections do not exist. Complete independence of transit agencies would serve a substantial portion of the population poorly. It is possible that transit service provided by local jurisdictions could develop with very little, if any, coordination. If local jurisdictions took over transit service to

such an extent that the regional operator disappeared or became no larger than the local jurisdictions, and if there were no other alternative coordinating mechanism or motivation to create one, the region could be left with several independent transit agencies. The resulting situation would resemble the pre-1960 configuration of several regions served by independent transit companies, except that the transit agencies would be run by different governmental agencies.

Informal Coordination

In most cases where local jurisdictions separate from a regional operator, some forms of coordination will spontaneously arise, if there is any regional cooperation at all. At least at the staff level, local jurisdictions will find it advantageous to coordinate service at transfer points between jurisdictions. Decisions to coordinate transfers and fare structures would require decisions by the political bodies representing the jurisdictions. To the extent that such agreements could enhance ridership and that local politicians perceived equitable compensation for service provided, there would be motivation to arrange coordinated transfers and perhaps fares. Informal coordination of bus information would entail each local jurisdiction providing up-to-date information to the others.

The advantage of a system of informal coordination of bus service is that the need for a new organization would be circumvented. The extra costs for the coordinating agency or body would be avoided, and the savings could be passed on to the bus patrons or the local jurisdictions. The disadvantage of an informal system of coordination is that its continuity would depend on the perpetuation of the good will that existed among the local jurisdictions and the regional operator.

Formal Coordination

Sometimes a regional body is created expressly to coordinate transit service where it is provided by a number of local jurisdictions. The *Verkehrsverbunden* (Transportation Consortia) in Germany are good examples of formal coordinating bodies that do not have any responsibility for operating service. The primary function of these regional bodies is to help ensure that coordinated service, fare structure, and information systems are provided. Their power comes from their mandate to distribute funding.

It is also possible that a regional operator would continue to perform coordinating functions when local jurisdictions provide transit service. However, the same reasons that prompted the local jurisdictions to pull out may make them unwilling to accept the control required for regional cooperation to come from the regional operator. There may be a stronger tendency for local jurisdictions to trust some new, separate coordinating agency.

The advantage of having an agency whose purpose is to coordinate transit service is that the possibility of continuity of coordination is enhanced. However, the existence of such a body can lead to conflicts over which agency has responsibility for some of the activities that are not clearly placed in the local jurisdiction or in the coordinating body. Examples of these "boundary" activities include midrange planning and some types

of capital development. In addition, a new bureaucracy has the possibility of growing beyond its usefulness.

Integration

In an integrated region, the regional operator provides all the coordinating functions and operates regional service (express and long-haul trips). The local agencies' responsibilities are to operate the local and feeder service in their jurisdictions. One process that could produce such a regional organization is when a new rail or other high-capacity service is introduced. The agency created to construct and operate the new service is also vested with the responsibility for coordinating the service that feeds and supplements the high-capacity system. The Metropolitan Transit Development Board (MTDB) in San Diego is an example of this kind of arrangement.

The advantage of this kind of a system is that there is continuity in the coordination of service. In addition, there is less duplication of effort, because the coordinating agency is also responsible for providing some of the service. There will probably be conflicts over responsibilities assigned to the regional

operator and the local jurisdictions. Given some of the motivations discussed above for local jurisdictions to pull out of a regional agency, it is unlikely that such a system would develop with an existing regional operator. The regional operator would retain a great deal of power and control over what happens in the local jurisdictions. The more likely scenario for development of such a system is when a new mode (rail or express bus) is introduced to a region.

Supports for Coordination

Recent technological developments will support the ability of local jurisdictions to coordinate regional transit service in the future. Electronic communication and control developments of the last decade offer new possibilities for quick and efficient coordination of activities. Examples include mobile telephones, facsimile machines, and automated-telephone-information systems. Communication networks and personal computers have developed to the point at which independent elements of a regional system can be managed more efficiently than was possible in previous years.

COST-RELATED ISSUES

In most places, the primary motivation stated by local jurisdictions that consider providing bus service has been to improve cost-effectiveness. This motivation can come in different forms. The main reason can be to provide the same service at a reduced cost. On the other hand, the desire can be to provide more service at the same cost. Alternatively, the objective can be to provide more service than the regional agency provided, even if the cost is higher. In all these cases, there is an underlying premise that the local jurisdiction can provide bus service more cost-effectively than can the regional operator. Before making such a decision, the local jurisdiction needs to consider several issues in making a valid cost comparison. They include the following:

- labor costs,
- administrative costs,
- social-welfare goals,
- vehicle costs,
- cost-effectiveness of service planning, and
- federally imposed restrictions.

LABOR COSTS

Labor costs constitute the largest part of all transit agency operating budgets. Reducing labor costs can therefore have a significant effect on lowering the cost of providing bus service. In locations where local jurisdictions have achieved a reduction in cost, the major contribution to the reduction has come from paying lower labor costs.

The reduction in labor costs can come in different forms. A local jurisdiction may be able to achieve lower wage rates than the regional operator. In addition, savings may also be realized through the provision of less expensive benefit packages. Although drivers constitute the largest proportion of transit agency personnel, maintenance personnel also offer the potential for labor cost reductions.

There are at least four ways that lower labor costs may result when a local jurisdiction assumes responsibility for bus service. Each of them has different consequences for the local jurisdiction and may or may not hold up over time.

Hiring Lower-Paid Drivers and Mechanics

Every major regional operator in the United States is unionized. Most pay relatively high wage rates and have good benefits packages. If it were legally possible to do so, the local jurisdiction could either hire nonunion drivers and mechanics or contract

with a private company that hires them at lower wages. It may also employ unionized workers or contract with a private company that employs workers represented by a union but at a lower wage rate than that paid by the regional operator.

The difference between wages paid by the regional operator and the wages necessary to hire sufficiently competent drivers and mechanics can be large. A recent survey showed that beginning driver wage rates in the private sector average \$5.97 per hour, whereas those for large public transit agencies average \$13.01 per hour. Medium-sized public agencies average \$10.77 per hour (5). To take a specific example, Chula Vista Transit (CVT), located in the San Diego, California, area, contracts with a company that pays drivers a base wage of \$5 per hour, compared with San Diego Transit's (SDT) base rate of \$12 per hour. National City Transit (also in the San Diego area) contracts with a company that pays its drivers \$7.67 per hour, the highest rate among all the local operators in the region (other than SDT). In both cases, the drivers and mechanics are represented by unions. It should be pointed out that companies that pay a low wage initially may have a steep progression in pay rates.

Two forces tend to inhibit a local jurisdiction's ability to pay much lower wages than the regional operator. Both forces have to do with the fact that potential transit employees for the regional operator and the local jurisdiction come from the same labor market. If the employees of the local jurisdiction are not unionized, other unionized employees of the local jurisdiction may support the transit union representing the drivers in the regional transit agency and participate in political activity to prevent the local jurisdiction from doing so. Recently, an attempt to institute local transit service in Prince George's County, Maryland, was resisted, partly because of political pressure brought to bear by the union representing WMATA (the regional transit operator) workers. The plan to substitute services provided by the Southern California Rapid Transit District with the implementation of the San Gabriel Valley Transportation Zone (Foothill Transit) was blocked, at least temporarily, by an injunction that was issued in response to a petition by two transit unions. The injunction was lifted recently.

The second force operating is possible pressure over time to increase the low wages paid initially. In the competition between the local jurisdiction and the regional operator for good drivers, the operator paying the highest wages and offering the best benefits is likely to hire the best employees. For instance, CVT changed contractors in 1988 partly in response to high turnover rates generated by a contractor that paid drivers the minimum wage and offered no benefits. The current contractor pays a higher wage and offers some benefits, resulting in somewhat higher costs. The issue of quality of employees is discussed further in a later section.

It should also be pointed out that the fact of a local jurisdiction paying a lower wage rate may help to hold the regional operator's wage rates and benefits down. In an effort to become competitive in bidding for service in local jurisdictions, SDT has negotiated a contract with the union representing the drivers to allow two different wage scales, depending on the type of service provided. The contract defines a "community-based" driver as one working in a suburban jurisdiction. The hourly base wage rate is \$6.50, rather than the \$12 paid to city drivers. So far, SDT has been unsuccessful in winning contracts let by local jurisdictions.

There are counterexamples to the expected tendency for local jurisdiction and regional operator wages to meet each other. In an environment where there is strong competition among private transit companies for contracts with local jurisdictions, those companies may bid each other down. In the Los Angeles area, the wage rates for operating the downtown circulator contract actually went down because of the competitive environment.

The potential for cost control through paying lower wage rates and benefits is complicated. Local jurisdictions need to consider the long-term potential for cost savings as well as the initial advantage of paying lower wages and benefits. (See the sections on social-welfare goals and service quality for further discussions of indirect impacts of paying lower wages and benefits.)

Work Rules

Another important influence on the cost impact of local jurisdiction substitution for service provided by the regional operator is a comparison of the work rules. As Teal et al. (6) point out, private operator driver work rules are generally much less restrictive than those of public transit. Work rules and craft job restrictions required of the regional operator may lead to greater pay for certain kinds of work or a greater number of drivers and mechanics than would be required under less restrictive work rules. A study conducted by Seattle Metro identified the elimination of work rules that require minimum pay levels or schedules as one of the three primary ways that costs could be reduced through private contracting (7). A survey of the private bus industry in 1986 confirmed that "the private bus industry is comparatively unrestrained by the non-safety related work rules which retard productivity in public transit" (5).

Cervero (8) lists several work rule concessions that competitive contracting could prod unions into accepting, implying that relaxation of these rules could have a beneficial effect on the cost of providing transit service. These include the following:

- repeals of contract restrictions on hiring part-time workers;
- bilateral agreements to increase the share of part-time employees;
- reduced spreadtime, split-shift, or overtime pay premiums;
- reductions in guaranteed or combination-time pay provisions; and
- relaxation of straight-time requirements for a fixed percentage of peak-period drivers. (According to Cervero, changes in part-time employment practices would be especially effective because of the high marginal cost of providing peak-hour service.)

The important point here is that in any consideration of a local jurisdiction taking over provision of transit service, the possibility of changing work rules should be considered. One possible outcome that should be considered, however, is that the reaction of unions to proposed relaxation of work rules may be the same as their reaction to reduced wages and benefits.

Hiring Special-Category Drivers

If the local jurisdiction uses vehicles that are different from buses used by the regional operator, it is possible that, even under union contracts, drivers of those vehicles could be paid at a lower rate. Contracts with unions representing drivers could provide for paying lower rates to drivers of smaller vehicles. For example, until recently, Seattle Metro's contract with the union provided for higher pay for driving articulated buses than regular buses. If a local jurisdiction operates smaller vehicles than the regional operator uses, some savings in labor cost could result.

The regional operator, if it were willing to, could accomplish the same savings by operating small vehicles in the local jurisdiction. However, the regional operator may have constraints that the local jurisdiction does not have on the kinds of vehicle, such as inability to purchase or maintain a small fleet of special-purpose vehicles efficiently.

Hiring Novice Drivers

When a local jurisdiction operates bus service on its own and hires drivers, or if it contracts with a private provider, there is the opportunity (and probably the necessity) to hire primarily novice drivers. It is unlikely that there will be a large pool of experienced drivers who are attracted to working for a new local jurisdiction-controlled bus service that pays lower wages and offers fewer benefits. The same case can be made, but less strongly, for maintenance personnel.

In addition to the issue of driver quality, which is covered in a later section, the impact of hiring novice drivers on cost needs to be assessed. Because new drivers are paid at a lower rate than experienced ones, the result is that, at least initially, total wages will be lower than if the same routes had been operated by the regional operator with experienced drivers. This would occur even if the pay scale were the same as that for the regional operator. In addition, if retirement benefits are included in the pay package, the local jurisdiction does not initially have to pay them.

An additional cost for using novice drivers is in training. The ratio of training time to driving time is directly related to the percentage of novice drivers. If the existence of a large number of novice drivers in a new operation is compounded by high turnover rates, training costs will be even higher. One consideration, in addition to improved service quality, when CVT contracted with a private operator that paid higher wages was that the higher wages would be offset to some extent by less necessity to pay training costs caused by high turnover.

All of the conditions brought on by the use of novice drivers will tend to approach those of the regional operator as the drivers get more seniority. The pay differential will decrease, costs for the benefits (if they are part of the pay package) will increase,

turnover will decrease, and training costs will decrease. This does not mean, however, that labor cost will necessarily become the same as those of the regional operator, for all the reasons discussed in earlier sections. However, when a local jurisdiction estimates labor costs over time, these factors should be taken into account.

ADMINISTRATIVE COSTS

On the average, administrative costs ("General Administration" as defined in Section 15 of the Urban Mass Transportation Act) constitute about 15 percent of the total operating costs for transit agencies nationwide (2). The percentage varies little by agency size. A local jurisdiction may be able to achieve some savings in administrative costs through a combination of reducing the number of administrative personnel and paying lower labor costs for general administration.

Some reduction in administrative costs can be achieved. For instance, in a consultant study concerning the design of the Huntington Feeder Bus System for Fairfax County in Virginia, general administration constituted 17 percent of the total forecasted annual operating budget (9). Because the forecasted budget was only 64 percent of the cost for the existing WMATA service, the administrative cost is equivalent to 11 percent of the existing cost. The Washington Metropolitan Area Transit Authority's general administration cost is 15 percent of total operating costs. This means that, of the 36 percent forecasted reduction in operating costs, 4 percent is caused by a reduction in administrative costs.

If a local jurisdiction considers contracting for service with a private company, the possibility of savings in general administrative costs may be very attractive. However, the costs for contract monitoring and assisting in the service delivery costs need to be taken into account. The amount varies depending on the size of the contract and the functions that the local jurisdiction retains. Teal et al. (6) recommend using a figure of between 5 and 10 percent of the total private service operating costs when estimating the contract-monitoring costs.

Another set of factors that should be taken into account when evaluating the relative administrative costs involve the administrative functions that are desired. For instance, the local jurisdiction has to evaluate whether a significant investment in marketing is worthwhile. It also has to decide how to carry out operations and capital planning. The local jurisdiction may decide to do without some of the administrative functions performed by the regional operator.

Some administrative functions that a local jurisdiction would have to take over may not be obvious. For instance, large regional operators generally have their own legal services. The costs for those services are included in the administrative portion of the operating budget. A local jurisdiction may have a legal department or may contract out for legal services. In either case, the cost for the services applying to the transit function should be taken into account in the comparison between local and regional operation. Other examples of such administrative functions include service planning, customer relations, governmental relations, and press relations. If the local jurisdiction operates the service itself, it needs to include consideration of payroll functions, benefits administration, and other management functions that do not require employees dedicated to the transit

function. It may be that the marginal cost for providing these administrative functions is not important, but they should be investigated in a cost comparison.

SOCIAL-WELFARE GOALS

Regional operators incur higher costs because they serve social functions that reduce the cost-efficiency of operating transit service. When a local jurisdiction considers supplying transit service, it has the option (in most cases) to consider *not* serving these social functions. However, if it uses federal funds, it may not have a choice in this matter (see the section on federally imposed restrictions). In any case, the local jurisdiction should consider the indirect costs associated with not serving the social functions provided by the regional operator.

Included among social-service functions served by transit operators is providing mobility to so-called "transit dependents." The operator has a choice whether to provide transit service on nonproductive routes in order to supply transportation to people who do not have access to automobiles or are unable to drive them. Having access to transportation may allow someone to find employment when they would have difficulty otherwise. This can reduce the local jurisdiction's costs in other ways. Another related social-service function is providing mobility to physically impaired people. It costs more to make transit service accessible, but it may save costs in a variety of other ways.

Potential cost savings accruing to a local jurisdiction by paying lower wages and lower benefits should be weighed against the social costs for doing so. If people are unable to make a living wage, are not protected from large health-related costs, or have no retirement benefits, the local jurisdiction may end up paying for this circumstance in some way. The local jurisdiction may pay directly for it in higher social-service costs. It is difficult to quantify the relationships among these factors, but they should be a qualitative consideration in decisions concerning wage rates and benefits.

VEHICLE COSTS

One of the potential cost savers for local jurisdictions is to switch some service provision from full-sized or articulated buses used by the regional operator to smaller or less expensive vehicles. In addition to cost factors, quality of service should be taken into account and will be covered in a later section. The potential costs savings from different vehicles are direct capital costs and direct operating costs.

A regional operator could decide to deploy different vehicles in the same places that the local jurisdiction would desire them. Regional operators often contract such service with a private provider. For instance, paratransit service provided by Seattle Metro, which includes minibuses on low-ridership routes and specialized services for social-service agencies, is provided under contract with several private operators. There are, however, instances in which regional operators resisted such change. For instance, the regional operator's ability to use paratransit may be limited by labor contracts. The pros and cons of smaller vehicles apply to regional operators, but perhaps not to the same extent as they apply to local-jurisdiction decisions.

One of the main reasons that regional operators sometimes

decide not to have a fleet containing different sizes and types of vehicles is that a diverse fleet can lead to inefficiencies. For example, a larger stockpile of spare parts is required, maintenance personnel must be trained on several kinds of vehicles, and dealing with different bus manufacturers can increase expense. Perhaps even more important is the difficulty for a large agency to schedule assignments of vehicles properly and efficiently. All of these problems also apply to a local jurisdiction that decides to operate a variety of vehicle types and sizes.

Direct Capital Costs

The range of costs for different kinds of vehicles varies considerably. For example, minibuses cost substantially less than standard buses. The typical cost for a 20-passenger minibus is about \$45,000, whereas a standard 40-ft bus runs about \$130,000. In areas where standard buses are underutilized (that is, they rarely have more passengers than could be handled with a minibus), a real savings can be realized. However, one should also take into account the life of the bus and compute the depreciated cost of the bus over its lifetime. The typical service life for standard buses is 12 to 15 years, whereas for minibuses the life is 6 to 8 years. Using the averages, this means that the annual depreciated value of a standard bus is about 1.5 times that of a minibus. Because the relative service life for different vehicles varies widely according to maintenance practices and agency policy, it is difficult to say precisely what capital cost differences are for each kind of bus. (See the section on service quality for a further discussion of this issue.) It is important that the local jurisdiction considers service life, maintenance costs, service quality, and method of financing as well as initial vehicle cost in comparing service for different kinds of vehicles.

In the evaluation of the cost-efficiency of using small buses, it is also important to take into account how the buses will be used in service. If two minibuses are required to take the place of what one standard bus could do, the capital savings potential can be reversed. Improvement in service should, of course, also be considered in this situation.

Another important consideration is financing the purchase of a new fleet, assuming that the local jurisdiction desires to own the buses. The Fairfax Connector and National City Transit are two examples of local jurisdictions that own the buses, even though the operation of service is contracted. If a regional operator uses standard buses in the local jurisdiction's area, those buses are likely to be part of a long-term purchase plan designed for efficient replacement. If the local jurisdiction decides to replace them all at once with a fleet of minibuses, the financing cost for such a large purchase could be substantial. Urban Mass Transit Administration funding is more readily available to regional operators than it would be to local jurisdictions. (The implications of using federal funding are discussed below.)

A local jurisdiction could lease buses or include provision of buses in the contract with a private operator. In both cases, the local jurisdiction has flexibility in the types and sizes of vehicles it uses.

Direct Operating Costs

The operating cost for minibuses (20 passengers), exclusive of drivers, is considerably less than for standard buses. Minibuses

consume less fuel and oil and cost less to maintain (with the caveats mentioned below). Typical per-mile costs (excluding driver and administrative costs) are 10 to 20 percent less for minibuses than for standard buses (2). These estimates are based on data from 14 transit operators that operate only minibuses compared with a randomly selected sample of operators using only full-sized buses matched by state and number of vehicles. Assuming that minibuses replace standard buses one for one, the potential savings to the local jurisdiction are obvious. Bus operating costs (excluding driver and administrative costs) typically consume about 30 percent of a transit system's operating budget. A 20 percent savings leads to approximately a 6 percent savings in overall service costs.

In addition to quality-of-service considerations, other factors need to be considered in estimating the relative costs of using smaller vehicles. One is that even though it is obvious that minibuses use less fuel and oil than standard buses, the local jurisdiction may not be able to purchase fuel and oil at the same price as the regional operator. Large transit agencies may be able to negotiate attractive deals with oil companies or save money on fuel and oil by stockpiling during times of low prices. A smaller agency may have more difficulty achieving these objectives.

Second, the maintenance cost for a local jurisdiction depends to a great extent on the cost of supplying maintenance facilities. If a new facility is required, the amortization of the capital investment may outweigh any other advantage in maintenance cost. Even though minibuses are simpler and less expensive to maintain, a local jurisdiction may not be able to realize the savings if it is required to develop its own maintenance capabilities. This problem can be mitigated by contracting maintenance with a private company or combining vehicle maintenance with other functions of the local jurisdiction.

COST-EFFECTIVENESS OF SERVICE PLANNING

Cost savings may result if bus service is more efficiently deployed. That is, if service is provided to locations that will generate the most passengers, passenger revenue will cover more of the system operating costs. Requirements for transit service are constantly in flux. New residential areas develop, new highways and streets are built, demographics change, new employment opportunities emerge, and recreational and social facilities change.

For reasons that are discussed under the section on political issues, regional operators tend to respond more sluggishly than local jurisdictions. The long process means that currently implemented service may not be the most efficient possible. One of the ways that a local jurisdiction can achieve cost savings is to cut short some of the process to implement service changes and achieve greater efficiency in the deployment of service.

FEDERALLY IMPOSED RESTRICTIONS

Even though the reasons may not be apparent, one of the possible motivations for a local jurisdiction to provide its own service is to avoid federal funding. In the past, transit agencies have relied heavily on federal funding. Federal funds currently account for about 68 percent of the total capital cost and 19

percent of the total operating cost of the U.S. transit industry (2). So they are still clearly an important part of bus service funding.

Federal funding, however, does not come without its costs. Along with the funding come many restrictions and requirements on how a transit agency operates. Perhaps the clearest example are the requirements of Section 13(c) of the Urban Mass Transportation Act of 1964 (UMT Act). The UMT Act has been revised many times since 1964, but Section 13(c) has not changed. It requires that recipients of federal assistance:

- Preserve and continue collective bargaining rights and benefits of their transit system employees, if any.
- Avoid adversely affecting any transit worker as a result of the federal aid and fairly compensate those who are adversely affected (10).

The UMT Act requires that agencies receiving federal funding sign agreements with labor that satisfy the Section 13(c) provisions. If a local jurisdiction has received federal funding, it should already have signed a 13(c) agreement that limits what it can do.

A recipient of UMTA funds is also required to abide by Section 504 of the UMT Act, which requires that all transit facilities be accessible to the mobility-impaired. This requirement means that transit vehicles and facilities would be more expensive than if such access were not supplied.

Federal requirements concerning procurement of buses and other capital elements of the system also limit a system's flexibility in making purchases, if federal funds are used. Federal specifications must be followed. The "Buy America" provision limits the cases in which foreign equipment can be considered. Sole-source limitations and other federally imposed require-

ments for the procurement process mean a more expensive and less flexible system for making capital-purchase decisions.

Using federal funds for construction means that the requirements of the National Environmental Protection Act (NEPA) must be followed in any environmental impact assessment. State environmental requirements may be more stringent than federal ones (as they are in the state of Washington), but in many localities, avoidance of NEPA requirements may streamline the environmental impact assessment process.

Federally imposed requirements to give special consideration to Disadvantaged Business Enterprises can limit the ability of a local jurisdiction in choosing contractors. The requirements of the Equal Employment Opportunity Act can likewise limit the local jurisdiction's flexibility in hiring, disciplining, and firing employees.

It should be pointed out that the federal requirements and restrictions that apply when federal funding is used have not been developed arbitrarily. Every one of them was enacted because it serves to achieve social goals for the larger society. Similar requirements are applied by some state and local governments for the same reason. A local jurisdiction may decide to follow some of the requirements, even though it is not required to do so as a consequence of receiving federal funds.

If an agency does not receive federal funds, it may not be bound by some of these federally imposed restrictions and requirements. Therefore, it would have more latitude in determining service characteristics, making capital purchases, and contracting. It may be able to achieve cost savings as a result. When a local jurisdiction considers taking over bus service, one of the considerations should be how federal assistance will be involved and what current federal restrictions may apply. It may be that the cost savings possible by avoiding federal restrictions more than offset the funding that would result. This becomes increasingly likely as the amount of federal funding continues to decline.

CHAPTER FOUR

SERVICE-RELATED ISSUES

One of the reasons that a local jurisdiction may decide to take responsibility for the provision of bus service is to improve the quality of service for its residents. The regional operator may be seen as unresponsive to local needs. In fact, a regional transit agency with responsibility for a wide range of types of service areas will naturally have difficulty tailoring service for each local jurisdiction's needs, no matter how well-intentioned or motivated it is to do so. Another possibility is that the local jurisdiction is quite willing to spend more on local service than it currently contributes to the transit service provided by the regional operator.

There are at least six issues that should be considered in comparing the service quality that can be provided by the local jurisdiction with that of the regional operator:

- responsive service planning,
- routing considerations,
- frequency of service,
- service innovation,
- driver quality, and
- integration with other local services.

This section covers the pros and cons in the ability of local jurisdictions to accomplish these objectives.

RESPONSIVE SERVICE PLANNING

One potential advantage a local jurisdiction has over a regional operator in implementing effective service changes is knowledge of the local issues and people involved. By this very fact, service changes carried out by a local jurisdiction should be more sensitive to community needs. Many regional operators have recognized the importance of knowledge of local affairs and have organized their planning staff so that specific staff members have responsibility for specific areas. For instance, WMATA has planners specifically assigned to work with each member jurisdiction in determining service in its area. There is always the danger, however, that the regional agency planners can still have a "we know better" attitude that can be counterproductive to the objectives of the geographic assignment. On the other hand, they can also have better data and a higher skill level.

Another way that service planning carried out by the local jurisdiction can be more responsive is to be quicker and more flexible. For all the reasons discussed below in the section concerning political issues, the process employed by the regional operator is likely to be more sluggish than that employed by the local jurisdiction. Therefore, the local jurisdiction may have

the advantage of providing timely service changes that are responsive to the needs of the community.

ROUTING CONSIDERATIONS

Service to suburban jurisdictions provided by regional operators tends to be express service during the peak hours. It is oriented primarily toward commuters and often serves only park-and-ride lots. There are many reasons for this. Often, the demand for off-peak or local service is too small to serve cost-effectively. If there is demand for off-peak service to the central business district (CBD), it can only be met cost-effectively at park-and-ride lots. Because suburban households tend to be relatively affluent, with a high ratio of cars to licensed drivers, peak-oriented and park-and-ride service are often most appropriate.

There are at least two reasons why typical service patterns provided by regional operators are often not seen as sufficient or appropriate by local jurisdictions. One is that, even in relatively affluent suburbs, there are transit dependents. Some people rely on transit service because they cannot afford a car, whereas others cannot drive a car because they are too young, too old, or disabled. A local jurisdiction may choose to provide transit service, *even at a higher cost*, in order to serve the needs of such people.

Another motivation for a local jurisdiction to provide service is, as a policy matter, to reduce the use of automobiles. Even if residents own cars and are able to drive them, a local jurisdiction may adopt policies that help to reduce dependency on automobiles in lieu of building or upgrading roads or other transportation facilities. It may be worth it, from a cost perspective, for a local jurisdiction to provide additional transit service, even at a higher cost, than to make other transportation investments. Montgomery County, Maryland, is one jurisdiction that has clearly made this choice.

FREQUENCY OF SERVICE

In some cases, local jurisdictions are dissatisfied with the frequency of service provided in their service areas. The local jurisdiction may elect to supplement bus service provided by the regional operator or, in some cases, this issue could be the deciding factor in the local jurisdiction's decision to take over bus service altogether.

From the point of view of the regional operator, more frequent service in a particular local jurisdiction may not be justified when compared with requirements in other service areas. Al-

though there may be some provision to supply a minimal level of bus service to a local jurisdiction as a policy matter, the regional operator tends to allocate service where the greatest need exists. Thus, the local jurisdiction may perceive that it is not receiving its "fair share" of the service. (See the section on equitable distribution of service in Chapter 5 for a further discussion of this topic.)

SERVICE INNOVATION

A local jurisdiction may be willing and able to provide transportation using different means than the regional operator is willing to provide. For instance, as discussed above, a local jurisdiction may be able to offer a fleet of small buses when the regional operator is unwilling or unable to do so. Smaller buses could provide better neighborhood penetration because (a) they cause less damage to local streets, (b) they do not create as many other environmental problems (such as noise and air pollution) and hence are more acceptable to residents, and (c) they can often be operated at a lower cost than conventional full-sized buses.

Other possibilities for enhanced service through alternative means that a local jurisdiction may support are jitney services, taxi-based programs, van pools, and home-end ride-matching services. All of these methods have the potential to provide more convenient service to lower-density suburban residential areas. However, in many cases, more service means greater cost. On the other hand, additional innovative service provided locally may cost less than the original service provided by a regional operator. For instance, when the city of Shakopee, Minnesota, decided to "opt out" of participation with the regional operator, it replaced express bus service provided by the Metropolitan Transit Commission (MTC) with vanpool service. There was an immediate increase in ridership with the switch from bus to vanpool service because of the ability to offer more flexibility in departure times. With the money not transferred to the regional operator, the city was able to initiate a local dial-a-ride service and still have some revenue left over.

The point here is that local jurisdictions can often be more flexible than regional operators in service provision. They may choose to spend the extra funds for more service when it is difficult to obtain the service through a regional operator. They may provide service through means that the regional operator is unwilling or unable to provide. There is always the alternative, of course, for the regional operator to pursue nontraditional means to provide public transportation. It has been observed, however, that large operators have a tendency to concentrate on central-city service and resist the change necessary to serve the suburban market (11).

DRIVER QUALITY

The quality of drivers has many determinants, including pay rates, hiring practices, training, and disciplinary policies. The quality of drivers can have an effect on objectively measurable factors such as reliability and safety, and it can also affect subjective factors such as courtesy and helpfulness.

The relationship between pay rates and driver quality is complicated by many factors. It is not always clear that higher-paid

drivers will be higher quality, unless all other things are held equal. Mitigating factors include hiring practices, training, and disciplinary policies. If the hiring process weeds out potential problem employees and training is adequate to prepare employees for the job, the quality of the work force can be maximized. If work rules allow for swift and effective discipline, unsatisfactory drivers who make it through the hiring and training process can be dealt with appropriately. When a local jurisdiction contemplates either contracting with a private company that pays low wage rates or hiring its own drivers at a lower rate, these factors need to be taken into account.

If it appears that reliability and safety may be lower than those qualities resulting from service provided by the regional operator, the consequent costs and effects on ridership should be taken into account. Low reliability can have a detrimental effect on ridership as well as reducing farebox revenues. Safety problems may result in bus maintenance problems and law suits. The impact of lawsuits on the local-jurisdiction transit budget may not be felt for a long time.

Bus patrons tend to place a high degree of importance on the demeanor of bus drivers in their evaluations of the quality of bus service. It has often been observed that unfriendly or unhelpful treatment from the bus driver can override other good aspects of bus service. A potential motivation for a local jurisdiction to take over service is that its drivers would tend to be more tied to the community and more likely to feel a responsibility for providing good service to the community they identify with. Therefore, the bus drivers should be perceived as more courteous and helpful than if they do not have those ties.

If a local jurisdiction operates the service, two factors should be taken into account when it assesses the change in quality of bus drivers. It is important to know the regional operator's procedure for driver assignments on the currently operated local-jurisdiction routes. If the routes are primarily peak service, they are often off the extra board or biddable trippers. Thus, there may not be much opportunity for continuity in who operates the service. On the other hand, suburban routes tend to be among the most attractive in the system. If the driver assignment method allows the most senior drivers to pick the same routes over and over, continuity is likely to occur and the drivers will be relatively experienced.

A second factor to consider is that, when a local jurisdiction takes over local service and either hires its own drivers or contracts with a private-service provider, there will be a tendency for drivers to have relatively little experience, at least at first. It takes time before a cadre of regular experienced drivers can be developed. The effect of experience on reliability, safety, and courtesy should be taken into account.

INTEGRATION WITH OTHER LOCAL SERVICES

When a local jurisdiction takes over bus service, there is the potential for coordination and integration with other locally provided services. For instance, local provision of service may allow better coordination with school bus service and this may also reduce the total cost to the jurisdiction. A regional operator could just as well integrate regular routes and schedules with local school bus service. However, the incentive to do so is not as strong. The regional operator would have little financial incentive to supplement locally funded school bus service.

Even though there are opportunities for a local jurisdiction to provide better integrated service *within* its service area, the coordination *between* jurisdictions may be more problematic. A regional operator is in a good position to make sure that interjurisdictional trips are well served. Local jurisdictions may not have the same motivation to make sure that trips to all other local jurisdictions are well served. In fact, without some agency with regional coordination responsibilities, many of these trips may go completely unserved.

In the presence of several independent transit operators, information concerning interjurisdictional trips may be hard for the customer to obtain. Route and schedule information provided by local jurisdictions should contain up-to-date information about connecting routes. Having this information provided by the regional operator does not guarantee that it will be provided well; however, the likelihood is greater than if it is left up to the local jurisdictions.

When local jurisdictions provide bus service, the collection of fares when interjurisdictional trips are made could be more difficult. Unless free transfers are implemented, a traveler going

a short distance between two local jurisdictions would pay two fares, thus discouraging these trips. For this reason, many regional jurisdictions have worked out interagency transfers. For instance, the MTDB in San Diego has worked out a zone fare payment system that transcends the boundaries of service provision by local jurisdictions.

In short, when more than one service provider exists in an area, it might be more difficult for the consumer to perceive the system as a system. However, the organizational arrangement when local jurisdictions provide bus service (discussed in an earlier section) can mitigate this difficulty. For instance, in Springfield, Massachusetts, the transit service provided by multiple operators looks like integrated service to the public. Given the current trends for dispersion of employment as well as residence, the problem of coordination will become even more critical for local jurisdictions to solve. In fact, even when all service is provided by a regional operator, the public's ability to understand the connections among activity centers, information concerning them, and the fare structure can be problematic.

POLITICAL ISSUES

In addition to fairly tangible issues of cost and service, some of the motivation for local jurisdictions to supplement or take over bus service from a regional operator is political. The existence of political considerations and the success or failure of achieving political objectives is difficult to measure. It is clear, however, that they operate to some extent. For the purposes of this report, seven areas will be discussed. They are:

- equitable distribution of service,
- efficiency in service planning,
- incurrence of indirect costs,
- local politicians' responsiveness,
- local-jurisdiction staff desire for control,
- improvement of community image, and
- integration with land-use planning.

One general development that has led local jurisdictions to take on transit responsibilities was suggested in Chapter 1. As suburban jurisdictions have been transformed in recent years from bedroom communities to activity centers including residential, business, shopping, and other amenities, the sophistication and breadth of purview of those jurisdictions has grown. Along with that phenomenon, stronger suburban jurisdictions have emerged, with politicians coming from the business community and large, professional staffs. The political motivations for local jurisdictions to take over transit service from regional operators has been a part of this transformation.

EQUITABLE DISTRIBUTION OF SERVICE

One of the common complaints of local suburban jurisdictions is that they do not receive their fair share of transit service. Residents of local jurisdictions may contribute to regional operator subsidization through sales tax, property tax, motor vehicle excise tax, transportation benefit districts, parking taxes, or other means. The equitable distribution of benefits from these contributions is likely to be a source of concern. If there is a dedicated tax, the local jurisdiction is usually concerned with getting its "fair share" of the service. If the local jurisdiction's contribution is determined through a formula, its concern is that the formula correctly allocate the costs and revenues for the service it receives. If the service level and the contribution are determined through negotiation, both elements are involved. In any case, the issue is the balance of service and contribution.

It is difficult to determine what part of these taxes should be attributed to the geographical area in which the local-jurisdiction resident lives. For instance, suppose the major subsidy for a regional operator comes from a portion of the sales tax dedicated

to transit. Further suppose that a suburban resident rides a bus from home to the CBD and buys some electronic equipment at a store there. The sales tax is paid by the suburban resident and attributed to the CBD jurisdiction. It is not applied toward the part of the bus service that occurred in the suburbs. Similar distributional problems exist with any tax instrument.

When there is a dedicated tax, some regional operators have requirements on the amount of service to be provided to local jurisdictions, based on some estimate of the subsidy incurred in the local jurisdiction. For instance, Seattle Metro is required by its enabling legislation to incur losses outside the city of Seattle in proportion to the amount of sales tax and motor vehicle excise tax collected there. In locations where the local jurisdiction's contribution is determined by formula, a similar balance is the objective. For example, the formula that determines WMATA's member jurisdictions' contributions is based on an allocation of the cost of service to the local jurisdiction minus the revenues collected in that jurisdiction.

However, there is a serious complication to this seemingly simple bookkeeping task. It is nearly impossible to allocate the benefits from transit service fairly across jurisdictions based on where the service goes and who uses it. For instance, to what degree does an express route from the suburbs to the CBD benefit the CBD by reducing congestion there in addition to providing a service to the resident of the suburb? How do the residents of the suburban jurisdiction who do not use the transit system benefit? These types of questions can never be answered satisfactorily.

The result of all this is that someone always believes that he or she is not getting a fair share of the service. This has served to motivate some local jurisdictions to pull out of a regional transit district and provide their own service using their locally collected revenue.

This restructuring has associated costs. Reallocating dedicated taxes collected for transit from the regional operator to the local jurisdiction generally requires change in legislation. For example, the "opt out" option was not possible in Minnesota until the 1981 legislation expressly allowed it. The political battles and deals cut to accomplish this type of legislation are not without some consequences that should be considered. The consequences include loss of good will between the local jurisdictions and the regional operator that could eventually have an impact on the degree of coordination that could be achieved among multiple transit agencies operating in one region. Other consequences include trade-offs that local jurisdictions have to make in order for the legislation to receive sufficient support.

If it is true that a local jurisdiction contributes more than its fair share to the regional transit service (and this is not possible to determine precisely), and the local jurisdiction is able to retain

the extra share, it means that some other local jurisdiction will have to contribute more to regional service. A cost savings for one local jurisdiction may be a cost to another.

For example, in the consultant's analysis of substituting WMATA service in Fairfax County, the savings to the county of \$1,240,912 annually is accompanied by an increase in the local operating assistance requirement for other jurisdictions of \$1,061,986 (9). The degree to which this problem exists is determined by the formula for distributing costs and revenues. According to a WMATA study (12), inherent characteristics of the formula contributed to this problem:

As one jurisdiction reduces its service and therefore its allocated cost, other jurisdictions experience an increase in allocated costs even though total system costs are reduced. This occurs because some variable costs do not change directly with the level of service.

EFFICIENCY IN SERVICE PLANNING

Most regional operators have staffs devoted to identifying changes in service needs and to accommodating them by re-deploying service as needed. However, large organizations tend to develop procedures that are sluggish, at best, meaning that service adjustment can be a lengthy process. Several factors add to the time it takes a regional operator to respond to a changing environment:

- Obtaining community input and responding to it are important goals.
- Assessing environmental impacts is also critical.
- Weighing investments required to change service in one area versus another is mandatory for a regional operator.

It is not surprising that local jurisdictions find this process unresponsive and frustrating to deal with. Avoidance of this process is attractive both to local-jurisdiction staff and politicians.

The question is whether the service-change process will be just as sluggish when a local jurisdiction is responsible for supplying bus service. One part of the process required of a regional operator can certainly be avoided. That is the part that weighs the importance of investing in one local jurisdiction over another. The other parts (community input and environmental impact assessment) are still important, even when the decision is made by the local jurisdiction. These requirements often are major issues in the resolution of regional allocation of service.

It is not clear that the service-change process can be shortened very much without an adverse effect on the consideration of community input and environmental impacts. Moreover, local jurisdictions often do not have a staff whose sole function is to deal with these issues. The lack of such a staff may actually contribute to streamlining the process but cause some important issues not to be fully considered when the service-change process is solely in the hands of the local jurisdiction.

INCURRENCE OF INDIRECT COSTS

Local jurisdictions may desire to have more control over transit service in order to reduce expenditures that are not

directly related. One example of this is reducing street-maintenance costs through the use of smaller vehicles. Because minibuses are not as hard on pavements as standard buses are, lower construction costs required for heavy-duty pavements and lower pavement-maintenance costs may be possible. To the degree that the affected streets are the responsibility of the local jurisdiction, this could lead to a substantial savings that does not normally show up in a cost comparison.

Another example is in the integration of school bus service and regular transit service. By making investments in transit service, cost reductions in school bus service may be possible, and vice versa. If there is local control, the jurisdiction is able to decide for itself whether investments in transit are worth savings in other parts of the jurisdiction's budget.

LOCAL POLITICIANS' RESPONSIVENESS

When a local jurisdiction participates in a regional transit agency, some of its desires are bound to be unsatisfied when regional priorities are taken into account. Local politicians, rightly or wrongly, could be blamed for shortcomings in local transit service. If bus service is under the control of the local jurisdiction, it has the possibility to be more responsive to local needs. Thus, local politicians can be perceived as more responsive to the needs of their constituents. For instance, suppose some neighborhood desired a local shuttle to connect with an express bus to the regional CBD. If the decision to implement the local shuttle were in the hands of the regional operator, the decision would have to be in the context of needs in every other neighborhood in the region. However, if the bus service were controlled by the local jurisdiction, the decision would have to be weighed against more service only in other parts of the local jurisdiction. A local politician could more effectively affect the local decision than the regional one.

Another example of the way local politicians can be responsive to their constituents is in responding to complaints from the public about large buses operating in local neighborhoods. This was one of the original reasons that Montgomery County, Maryland, considered providing its own local service. The public complained about environmental impacts and the waste of money caused by the operation of large buses that were not filled. The public does not usually understand that it can be more cost-effective to use existing large buses than to implement a new fleet of small buses. They also do not fully understand that the occasional environmental impact caused by a bus (large or small) is less than that of the autos it replaces. Substituting minibuses for large buses in neighborhoods may win good will, even if it is not fully justified on a technical basis.

The other side to this potential advantage of local control is that local politicians would have to accept the blame when things went wrong, as well as the credit when they were satisfactory. When a local jurisdiction participates in a regional transit agency, the politicians in the local jurisdiction always have the possibility of deflecting the blame when transit service is not satisfactory.

LOCAL-JURISDICTION STAFF DESIRE FOR CONTROL

The comments about local politicians' desire for control may also apply to local-jurisdiction staff. The motivations may take

on a slightly different form, because staff members do not have to be reelected; however, the results are the same. Having the local jurisdiction take control of bus service makes local staff positions more important and enhances the possibility of advancement for the occupants of those positions. As with politicians, the other side of the coin is that local staff have the possibility of failing to provide satisfactory bus service.

IMPROVEMENT OF COMMUNITY IMAGE

This issue is closely connected with the previous two issues; however, it can apply more broadly to all the residents of a local jurisdiction. People tend to derive part of their identity from the place in which they live. To the extent that the place in which they live has a positive image, they can enhance their self-image. Even though people sometimes identify with a whole region, it seems that neighborhood or local-jurisdiction identification is often the strongest form of identification. In large cities, virtually all residents can name the neighborhood in which they live. In suburban areas, the whole jurisdiction may serve the same identity function as neighborhoods in a larger city.

Buses identified with the local jurisdiction serve as one way of building a positive image of the community. Transit signs specific to the community serve the same unifying purpose. In the San Diego area, where several individual local jurisdictions provide transit service and there is a very effective integration of service, one source of conflict was whether transit signs would be common throughout the region or be specific to the local jurisdiction. The salience of this issue indicates the significance of the identity of the local transit system. A successful local transit system can serve a positive, unifying function for the community as well as making people who live there feel good about themselves.

The other side to this issue for local jurisdictions is that there is always the risk that locally provided service will not be as good as the service provided by the regional operator. If that were the case, it would be damaging not only to local politicians and staff but to the community's image.

Competition with Other Jurisdictions

One aspect of community image is the perception of the

community in relation to that of other local jurisdictions. In addition to image, there can be very practical advantages for a local jurisdiction to have good transit service when it comes to competing with other jurisdictions for business and residents. Having a good transit system is good for business. Having more businesses locate in a local jurisdiction means a greater tax base and a stronger economy. A good transit system also can improve the quality of life and attract more residents. To the extent that locally provided transit service is better than that provided by the regional operator, a local jurisdiction can improve its standing in competition with other local jurisdictions in the region.

There are costs to competition that need to be taken into consideration in a local jurisdiction's decision to provide local bus service. Building a stronger community image may come at the cost of advantages to the community in regional cooperation. For instance, residents of the local jurisdiction may be less able to make convenient interjurisdictional trips with locally controlled bus service in comparison with that provided by a regional operator. The stronger community image may come at a cost to the residents' mobility.

INTEGRATION WITH LAND-USE PLANNING

The influence of a locally controlled transit system on the structure of growth in the local jurisdiction depends on how land use is controlled. Usually, bus service aids in the achievement of the community's land-use and growth objectives (13). The shape and character of the transit network can be used to encourage business and residential growth where it is desired and to discourage it where it is not wanted. A regional operator could certainly provide the same transit service as the local jurisdiction. However, it is more likely that locally provided service will be responsive to local land-use desires than would that service provided by a regional operator. To the extent that other land-use controls, such as zoning, land purchase, and other parts of the transportation system, are under the control of the local jurisdiction, controlling the transit service would enhance its ability to manage land use. On the other hand, if there is a regional land-use authority, local control of transit service could reduce its ability to manage growth.

CONCLUSIONS

When a local jurisdiction considers taking over the provision of transit service from a regional operator, two perspectives need to be taken into account. From the local jurisdiction's perspective, the characteristics of the region and its transit service will determine whether making such a move will be to its benefit. From the regional perspective, it is important to take into account the impact of such a move on the regional operator and the other jurisdictions in the region.

THE IMPACT OF REGIONAL CHARACTERISTICS

It is difficult to draw general conclusions about the desirability of local-jurisdiction control of transit service that would apply to all regions. Several factors describing the characteristics of the regions need to be taken into account in determining how the issues discussed in this synthesis would affect the decision.

Regional Transit-Funding Mechanism

One major factor is how regional transit service is funded. In localities where funding is through a dedicated tax, major changes in legislation may be required even to allow a local jurisdiction to retain its financial contribution to transit service. The political battles and trade-offs required to allow local-jurisdiction retention of transit funds may have consequences that overshadow any benefits that can be gained by the reorganization of transit service. If the local jurisdiction's contribution to regional transit service is determined through a formula or by negotiation, it is easier for the local jurisdiction to decide to supply its own service.

Regional Operator Cost for Service

The second major factor is the cost of service provided by the regional operator. If labor costs are much higher than those that could be achieved by the local jurisdiction through contracting or running its own service, the situation lends itself to a shift to local control. If the regional operator's administrative costs are much greater than 15 percent of its operating budget, savings may be achieved through a reduction in these costs. If the route structure and service frequency provided by the regional operator do not serve the market's needs and the regional operator is unwilling or unable to make adjustments, the local jurisdiction may be able to do so. If a suburban market can be better served through innovations such as small buses, dial-a-ride service, or vanpools, and the regional operator is unwilling

or unable to provide these innovations, the local jurisdiction may be able to make improvements and save money at the same time.

The cost impacts of local provision of service are quite complex and can only be determined through a management study specific to the jurisdiction. It is important that the local jurisdiction think through all the consequences of saving money, including the social consequences and the impact on service quality.

History of Cooperation

The third factor that can make a difference in how individual regions handle a movement to local provision of bus service is the history of cooperation among local jurisdictions. Often, this comes down to the personalities of the politicians in the area who are influential in transportation matters. In a region with a history of cooperative relationships, the coordination problems created by multiple transit operators will probably be worked out more satisfactorily than otherwise.

IMPACT ON THE REGIONAL OPERATOR AND OTHER LOCAL JURISDICTIONS

From the regional point of view it is important to consider the impact of local provision of service on the regional operator and on other local jurisdictions. The withdrawal of more affluent local jurisdictions from the regional agency could impose a hardship on the less affluent ones and on the regional operator. Even when there is an overall savings to the region when a local jurisdiction decides to provide its own service, the other local jurisdictions may have to pay more for their own service.

The simple possibility of local jurisdictions deciding to provide their own service can have an impact on the regional operator. Regional transit agencies were often accused of paying little attention to cost-efficiency during the period when federal funding for transit was abundant and there was little competition (8). It is generally accepted that the absence of competition does not promote the most efficient utilization of public funds. When local jurisdictions consider contracting with transit-management firms for bus service or operating their own service, it is likely to lead the regional operator to examine its operations, seek ways to promote efficiency, and to respond to local concerns. Not to do so would be hazardous to the existence of the regional agency. Therefore, even if local jurisdictions do not decide to provide their own service, regional operator service and cost-efficiency may be affected by just the possibility.

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