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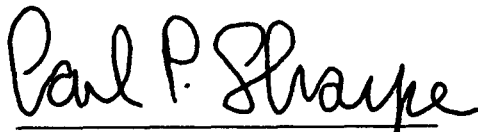
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CHAPTER I

THE CHANGING ENVIRONMENT OF URBAN TRANSPORTATION

Changing economic, demographic, and fiscal conditions have helped to precipitate a major reappraisal of urban transportation. A growing number of cities, faced with reduced federal dollars and mushrooming operating costs, are questioning the relevance of traditional transportation arrangements and challenging the logic of conventional approaches to service delivery. Emerging from this process is a wealth of innovative ideas that promise to bring about profound changes in the way we think about the organization, financing and delivery of local transportation. The end result may be a significant -- and in the view of many, a long overdue -- restructuring and reform of America's urban public transportation.

What has triggered the reappraisal is not just changing fiscal realities -- although these have certainly dramatized the situation and accelerated a search for new solutions -- but also a growing sense that the market for traditional transit service is progressively diminishing. Buses operating on fixed routes and set schedules worked well in the days when most homes and jobs were located in central cities, when a large proportion of the urban population lived within walking distance of bus routes, and when travel destinations were sharply focused on the downtown. Today, we are confronted with a vastly different set of circumstances. Trip origins and destinations are widely dispersed, the largest residential, shopping and employment centers are often found in the suburbs, and travel patterns resemble Brownian motion -- they appear random in nature and are taking place in every direction at once.

Changing Demographic Patterns

Within metropolitan areas, suburban population growth has been far outstripping that of central cities in every region of the country. From 1950 to 1980, the populations in the ten largest urban areas decreased by over 35 percent, while population outside the central cities rose by more than 60 percent. This trend appears to be continuing. This residential migration, coupled with massive shifts of employment to suburban locations, has fundamentally modified the nature of metropolitan travel. The majority of workers today are "lateral" commuters, i.e., they both live and work in the suburbs. The Census Bureau's national study of commuting, The Journey to Work in the United States: 1975, showed that about 38 percent of workers lived and

worked in the suburbs, about 34 percent lived and worked within central cities, and about 19 percent lived in the suburbs and commuted into the city to work. Another 8 percent of workers were "reverse" commuters, living in the central city and commuting out to jobs in the suburbs. Recent census data show that the proportion of commuters who live and work in the suburbs has increased in virtually every metropolitan area since the mid-1970s.

Traditional transit was never designed to cope with the dispersed living and travel patterns that have developed since World War II. Public transit was predicated on the existence of concentrated flows of people along predictable routes -- a market that could be satisfied with a single type of service provided throughout the day in defined travel corridors. What has emerged instead is an increasingly fragmented market. Contemporary travel demand varies not only by trip destination, but by time of day, by age group, by price elasticity of demand, even by level of comfort desired. There is no longer a homogeneous traveling public -- instead there are many different traveling publics, each with its own set of needs and preferences.

Despite these changes, most cities have made little attempt to adapt transit systems to the new markets. By and large, public transit systems have continued to function in much the same way as they did before the suburban migration, operating large buses on radially oriented fixed routes and providing a single type of service throughout the day.

As a result, transit ridership has been eroding as cities seemingly have been unable to respond adequately to the changing conditions of the marketplace.

Just how serious the decline in transit usage has been can be seen from the 1980 census data. Between 1970 and 1980, the number of people commuting to work on public transportation fell by almost half a million, a decline of seven percent, despite a significant increase in the workforce. In terms of modal choice, the shift has been even more pronounced. Only 6.4 percent of all workers rode public transit in 1980, down from 8.9 percent in 1970. A significant decline in the proportion of people using transit occurred in virtually every region except the West, as can be seen in the following table:

WORKERS USING PUBLIC TRANSPORTATION, 1970 AND 1980

	<u>Rate of transit use</u>		<u>Change, 1970-1980</u>	
	1970 (%)	1980 (%)	Number (000s)	Percent
U.S. Total	9.0	6.4	-487	-7.3
Northeast	19.1	14.2	-596	-16.7
North Central	6.7	4.9	-187	-13.3
South	5.0	3.3	-82	-7.3
West	4.6	5.0	378	66.6

Source: Philip N. Fulton, U.S. Bureau of the Census, Population Division, Journey-to-Work and Migration Statistics Branch, Washington, D.C., 1983.

It is tempting to blame this erosion in transit ridership on the Americans' "love affair with the automobile." But recent census data do not support this theory. Almost half of the respondents in the Census Bureau's 1980 Annual Housing Survey said they did not use public transit because it was not available, and another 25 percent of respondents cited difficulties with using transit. Only 13 percent of the respondents said that they simply preferred to use their own private cars, and less than one percent said that they did not use public transportation because it was too expensive. Thus, about 75 percent of all the interviewed workers who commute by car did not use public transit not because they preferred the automobile but because transit could not conveniently serve their needs.

During the 1970s, the financial impact of diminishing ridership went almost unnoticed because of a rapid growth of federal operating subsidies. Between 1972 and 1980, federal operating assistance to mass transit grew five-fold, from 200 million to over one billion dollars a year, and helped to cover the widening gap between fare revenues and operating expenses. In a larger sense, however, these subsidies have done the cities a disservice, for they masked the underlying structural weaknesses and encouraged city officials to expand services into low density areas without regard to their economic soundness. The result was to compound an already precarious state of transit finances.

Now, however, the threat of shrinking federal subsidies, combined with budget restraints at the state and local levels, is making the cities more cost conscious. Local officials evidence a more questioning attitude toward conventional transit, a greater willingness to challenge the conventional

planning wisdom, and greater receptivity to innovative solutions.

A recent U.S. Bureau of the Census report, commenting on the continued decline of transit ridership during the decade of the 1970s, has put it this way:

"It has long been a fundamental assumption of planners that mass transit would provide the ultimate remedy for the urban transportation problem by reshaping urban form and modifying consumer behavior. On the contrary, the principal lesson to be learned from the 1980 census is that for transit to retain its public, it must better adapt itself to the changes in urban form and consumer preferences that are taking place around it."

In the sections that follow, we will examine how transit is being redesigned and restructured to better respond to today's needs and fiscal realities.

Separating Policymaking and Operating Functions

One principle that is increasingly being questioned is the desirability of keeping in a single agency the functions of sponsoring (planning, financing, arranging) and providing (operating, delivering) transit service. In the past, these two roles were deemed inseparable. When a policy decision was made to establish a public transportation program, a public agency was typically set up to finance and administer the program, and designated as the sole provider of that service. Public agencies were both the purchasers of service on behalf of the taxpayers, and suppliers of the service. Public transit officials saw themselves both as policymakers and administrative managers of an operating enterprise.

While this conception of the public sector role is still widely embraced, it is no longer universally accepted. Increasingly, local officials view transportation agencies primarily as policymaking bodies that decide what services are needed and ensure that those services are delivered by others in the most cost-effective manner.

Even when the transit agencies still regard themselves as operating enterprises, local elected officials no longer see a compelling need for these agencies to remain exclusive service providers for the entire region. They are inclined to view the transit agencies instead as merely one among several potential transportation operators, and to think of themselves as prudent purchasers of service in a competitive market. Thus, the City of Minneapolis, required by law to provide shuttle bus service

to a new stadium, considered the Metropolitan Transit Commission, found it too expensive, and contracted for service with a private company at a savings of \$900,000 a year.

In the longer run, we may see a thorough rethinking of the role of regional transit authorities -- a rethinking that has already begun in several jurisdictions, notably in Chicago, Newport News, San Diego, San Francisco, and Minneapolis/Saint Paul. In these cities, arranging for service and providing service have become two distinct roles. One agency is being used to plan, facilitate, and coordinate public transportation; another set of agencies is employed to provide and operate transportation service. In the Chicago area, for example, the Regional Transportation Authority (RTA) has been stripped by the Illinois legislature of its operating role and will be only a resource allocation body. Operating functions have been entrusted to three entities: the Chicago Transit Authority (CTA) within the city; a suburban bus board that will take over bus operations in the suburbs; and a regional commuter rail authority. The individual operating agencies will determine their own transit needs and develop services that best respond to those needs. They will set service levels and fares, establish operating policies, and make decisions on how to deliver service (internally or by contract). The RTA will distribute the funds and monitor operations to ensure that the operating agencies stay within their budgets and recover a defined proportion of operating costs from the farebox.

Another example of a separation of policy and operating roles is the Peninsula Transportation District Commission (Pentran), the public transportation authority serving Newport News and Hampton in southeastern Virginia. The Commission sees its function as one of identifying the region's transportation needs and ensuring that those needs are satisfied in the most efficient and economical manner -- i.e., as a sponsor rather than a supplier of services. To this end, the Commission coordinates a variety of services and service providers, including employer-based vanpool programs, private commuter buses to employment centers, shared-ride taxi service in low density areas, and special services for the handicapped operated by social service agencies. The Commission retains certain system-wide functions, such as marketing and setting fares; all other functions are carried out by the operating elements, both public and private.

A third example is Westchester (New York) County's transportation department, which contracts with 16 private bus companies for service, retaining only fare-setting, marketing, and scheduling responsibilities.

In Dallas, the new Dallas Area Rapid Transit Authority (DART) intends to contract with private firms or public agencies to perform virtually every aspect of its operation, from preparing blueprints for the new rail system to operating the bus and proposed rail systems. By shifting operation and maintenance to the private sector, DART will be able to concentrate on longer-range issues: setting general policy, determining annual budgets, monitoring tax and fare revenue, marketing the system to the public, and responding to the public's needs. Through built-in bonus incentives, fines, and cancellation provisions, the Authority will be able to tailor transit service to its exact specifications.

All four agencies see their principal function as one of managing rather than operating transportation systems, by identifying the region's transportation needs and assuring that those needs are met in the most efficient and economical manner.

Minneapolis/Saint Paul has probably taken the most far-reaching steps in the direction of sorting out the policymaking and operating responsibilities. A special legislative study commission has concluded that it is inherently wrong for a single agency both to provide transit service and to have a policymaking role that gives it the power to freeze out or discourage competition. A recent act of the state legislature has separated the operating and policymaking functions, both of which were held by the Metropolitan Transit Commission (MTC). The MTC will retain responsibility for the day-to-day operation of the public bus system in the central city. A new Regional Transit Board will oversee planning, financing, and policymaking, and will serve as an arranger-of-service for the outlying areas. The Board will purchase service on a competitive bid basis from interested public and private operators, tailoring it to the needs of the individual communities.

Regional vs. Local Service Delivery

Another principle being reevaluated is the proposition that a single organization should be the sole provider of transit service for an entire metropolitan area. Suburban jurisdictions across the country are questioning the economics of regional service delivery and are asserting a right to provide their own transit service. What began as an isolated experiment in April 1975, when Montgomery County, Maryland launched its locally funded Ride-On system, has since become the subject of serious consideration in a growing number of metropolitan areas, including Chicago, Kansas City, Southern California, the San Francisco Bay Area, the District of Columbia, and Minneapolis/Saint Paul.

One strong motivation for decentralizing transit has been a desire to save money. There is some evidence that centrally-run region-wide systems are not necessarily the most efficient. Indeed, they may suffer from diseconomies of scale: economies gained through large-scale operating efficiencies are lost because of heavy overheads, rigid, overstaffed organizations, formalized labor-management relations, huge employee pension commitments, and large fleets of expensive equipment. Small-scale systems, it is argued, may be generally more efficient and less costly to operate because they have leaner organizations and greater flexibility in hiring practices.

One illustration of the cost differential between regionally and locally provided transit service is the Ride-On system in Montgomery County, Maryland, a county-sponsored and operated local transit system that provides feeder service to Washington, D.C.'s regional Metrorail and Metrobus system as well as local daytime circulation service in the County's suburban centers. A recent cost comparison shows that Ride-On provides equivalent service on suburban routes at approximately a 40 percent savings:

	<u>Ride-On</u>	<u>Metrobus</u>
Cost per mile	\$ 2.70	\$ 4.02
Cost per platform hour	\$ 29.00	\$ 48.00
Driver wage rates	\$ 7.45-10.05	\$ 9.04-12.04

Source: Montgomery County, Maryland, Department of Transportation, "Ride-On and WMATA Performance Indicators, FY 1983," internal report.

However, the argument for locally sponsored service does not rest on economic grounds alone. Community-based transit is also seen as a way of improving responsiveness, accountability, and quality of service. Small-scale service districts are more flexible in adapting to changes in local demand and offer local residents more voice in deciding how their money is spent, what kind of services they get, and from whom they obtain them. By running their own systems, local governments believe they can more easily tailor services to fit the needs of their citizens and are less dependent on decisions made by distant officials who, no matter how well intentioned, do not necessarily have the best appreciation of what the local communities need.

With decentralized systems, it also is argued, each community can decide on a different mix of services. Some communities may wish to contract with private operators for flexible on-demand services, others may prefer to run more traditional fixed-route services, still others may wish to operate a mix of both. Finally, local government may be more readily able to use locally-sponsored transit as an instrument of its own social and development objectives. For example, it can merge social service transportation into the local system and thus provide more extensive service to transit-dependent groups; or it can focus service on a particular location in order to encourage business activity or foster new development.

It is arguments of this kind -- and not just simply a concern for costs -- that have led the Minnesota legislature to give suburban governments in the Twin Cities area the right to "opt out" of the regional transit system, i.e., to withhold up to 90 percent of the property taxes their residents would ordinarily have paid to support the metropolitan transit system, and to use the money for locally sponsored transportation services instead. The City of Plymouth, Minnesota has recently taken advantage of the "opt-out" provision and inaugurated a locally-sponsored transit system. The system offers local feeder and circulation service within the city using five 25-passenger vans as well as rush-hour express bus service to and from downtown Minneapolis. The budget for the entire system is approximately \$285,000 a year, thus saving the City of Plymouth over \$700,000 a year in contributions it would otherwise have to pay to the Metropolitan Transit Commission.

The desire to gain more local control over transit service has also been an important motivation behind the efforts of suburban jurisdictions in the Kansas City area. Johnson County, Kansas, an affluent suburb of Kansas City, was displeased with the quality and cost of service provided by the Kansas City Area Transportation Authority (KCATA). In 1982 Johnson County pulled out of the regional system and began operating its own service under contract with a local private carrier. The county is now paying about half of what it previously paid to KCATA for the same service. While the Kansas City Area Transit Authority (ATA) at first resisted the withdrawal, it subsequently decided not to object if contract operation offered lower costs and better service. Today, the ATA actively assists suburban jurisdictions in assuming bus operations, and has shed some 10 percent of its service in favor of independent suburban operations.

A similar trend also exists in the metropolitan Washington, D.C. area, where several local jurisdictions (in addition to Montgomery County and its Ride-On system) -- notably, the City

of Alexandria and Fairfax County -- have announced their intention to break off from the regional bus system and start operating their own local bus systems.

The issue of decentralized service delivery remains controversial, however. Some officials believe that a service area in which operating units are not organized under some central direction must also be uncoordinated: they see decentralized operation leading to a "crazy quilt" of systems whose lines will end at local political boundaries rather than provide regional connections. Others feel that allowing suburban communities to go their separate ways conflicts with the principle that transit is an essential regional service that benefits everyone, even those who do not use it. Still others perceive the efforts of suburban jurisdictions to achieve a measure of independence not as a welcome sign of local self-reliance and political maturity but as a move that may hurt the central city, subvert the cherished principle of regional cooperation, and deprive the regional transit systems of the most influential element of their political constituency.

However, those public officials who support the community-based systems concept do not necessarily challenge the need for regional service coordination; they merely question the need to place every service within the entire region under the control of a single operating authority. While suburban jurisdictions acknowledge responsibility for helping to support a regional bus system, they also want the level of their support to be more consistent with the levels of service they get.

From a metropolitan area perspective, suburban decentralization does presents certain problems. The most serious one is the possibility of sharp increases in the metropolitan transit systems' unit costs, as their scale of operations begins to shrink under the influence of suburban "opt-outs." But this might be only a temporary dislocation, if the regional systems can achieve a new equilibrium and scale down their bus fleets and garage facilities to reflect a smaller scale of operations. In the longer run, locally sponsored transit services may prove highly beneficial to metropolitan areas. By shedding suburban services, regional transit agencies could not only eliminate the source of their largest operating deficits but could devote full attention to their traditional market, the high ridership bus routes of the central city.

The Re-Emergence of the Private Sector

The third new influence in the operating environment of urban transportation is the tendency to view the provision of public transportation as a joint responsibility of the public and

private sectors. Behind this trend lies a realization that government alone can no longer shoulder the full financial burden of all public needs, or meet the huge investment requirements of America's communities. Local tax and spending limitations and high interest rates have impaired the borrowing capacity of local government and constrained its ability to fund new infrastructure. Federal cutbacks in transit operating subsidies have placed additional limitations on financially strapped local governments.

Out of this realization there has developed a conviction that urban transportation must become a cooperative task. The private sector has come to understand that it must, in its own self-interest, assume a more active role in dealing with local transportation problems. Business leaders have come to realize that they cannot ignore the health of the communities in which their companies operate, and that a well functioning transportation system is essential to that vitality. Land developers, anxious to protect and enhance property values, and no longer able to rely fully on public investment, are increasingly prepared to share in the cost of necessary transportation improvements. Private transportation operators sense new opportunities in the deregulated environment, and are moving aggressively to exploit the fast growing market for customized transportation services.

Local government, for its part, has an equally strong motivation to seek expanded private sector involvement. By allowing the business community greater voice in local transportation decisionmaking, public officials increase the likelihood of private sector support and gain an influential ally in their efforts to mobilize public opinion behind new public works programs. By contracting for service with private providers, local government often can improve the efficiency and lower the cost of service delivery.

In short, there is a growing recognition within both the private and public sector of a strong mutual interdependence and mutuality of interests in public/private cooperation. What form this new partnership will take will vary from place to place. However, a stronger private sector role can provide a wider diversity of services, more service providers, greater variety of financing arrangements and funding sources, and a more competitive, market-oriented environment for transit service.

Conclusion

Changing economic, demographic and fiscal conditions have triggered a major reappraisal of the ways in which we manage,

finance and provide mass transportation. Emerging from this reappraisal is a new conception of how public transportation systems should function in the future. Central to this conception are the principles of choice, diversity and competition. The new view recognizes that the urban transportation market is not monolithic -- that it is, in fact, highly segmented, requiring different types of services for different client groups. The new view also acknowledges that centralized public transportation systems, operating as they do in an environment insulated from local control and from competition, are increasingly being challenged as unresponsive, inefficient, and inflexible. A belief is growing that decentralized operation, coupled with central fiscal and policy coordination, may be a more effective form of transit organization. Finally, the advocates for reform proceed from the premise that government is no longer financially capable to respond single-handedly to all transportation needs and wants of the public, making it necessary for the private sector to become a partner in meeting these needs.

CHAPTER II

DEVELOPER AND PROPERTY OWNER INVOLVEMENT IN LOCAL TRANSPORTATION

Traditionally, developers and property owners have considered transportation as a public responsibility, to be financed and provided by local and state government. Transportation facilities, no matter how essential or beneficial to a private development, were deemed to be part of the public infrastructure, to be financed by the taxpayers at large.

Similar attitudes have prevailed with respect to service provision. The responsibility for operating transit systems and for transportation system management (TSM) implementation typically has been delegated to transit agencies and local, county and state transportation departments. The private sector has had little voice in the design and implementation of TSM plans, even though many aspects of modern transportation management, such as variable work hours, workplace-oriented ridesharing programs, off-street parking management, and employer subsidies for parking and transit, depend essentially on private initiative.

Recent developments have undermined this traditional allocation of responsibilities. Voter-imposed tax and spending limitations and high interest rates have impaired the borrowing capacity of local government and constrained its ability to fund new infrastructure. Federal cutbacks in transit subsidies and decreasing revenues from gasoline taxes have placed financial limitations on the amount of transportation service local government can deliver. Rapidly mounting costs of highway construction and maintenance, which have been increasing twice as fast as the general rate of inflation, have further compounded the fiscal dilemma of local and state government.

The combined pressures of these factors have forced the public and private sectors to look for cooperative solutions. Private developers, no longer fully able to rely on public funding, increasingly are forced to assume some transportation investment responsibilities. Local governments, not wanting to discourage new development and its beneficial contribution to the tax base, are offering developers special incentives in return for sharing in the cost of transportation improvements. The result is a new form of partnership in which land owners and developers share in the costs as well as the benefits of transportation/real estate development.

Developer Involvement in Highway and Traffic Improvements

The use of private funds for highway improvements is not new. For years, local governments have required developers to provide streets and sidewalks within subdivisions. Gradually, as commercial and residential development was extended into newly urbanized areas, the practice of developer contributions was broadened to encompass improvements to highways adjacent to the development sites that were likely to be affected by traffic generated by the new development. Such contributions often became a condition of subdivision approval or changes in zoning.

Development Fees

In many cases, especially in California and Florida, developer contributions have assumed the form of "development impact fees." For example:

- * The County of San Diego requires developers to pay a fee as a condition of subdivision approval to provide for a portion of the local cost of road improvements in a community plan area that includes the subdivision.
- * The City of San Diego requires development impact fees "to cover those costs related to the provision of public works facilities, street landscaping and traffic signal installation..."
- * The City of Carlsbad, California recently enacted an ordinance requiring a fee of three percent of the construction valuation, to be paid at the time of building permit issuance; the fee is used by the city to pay for street and traffic engineering improvements.
- * The Cities of Irvine and Thousand Oaks, California impose "system development charges" as a way of making developers "buy into" pre-existing city infrastructure.
- * The City of Roseville, California has imposed a one percent surcharge on all new construction, in order to raise revenue for traffic engineering improvements necessitated by new development.
- * Palm Beach County, Florida requires developers to pay a "fair share" contribution into a special fund for road improvements within the impacted area. The size of the contribution is determined by the cost of mitigation measures required to maintain existing levels of service.

While development impact fees used for improvements within an established area of benefit usually have withstood court challenges successfully (especially if they are roughly proportional to the increased service requirements), their use to finance wider-scale, area-wide transportation improvements remains in question. For example, San Francisco's area-wide "transit impact development fee," approved by the Board of Supervisors in 1982, has been challenged in court as a "special tax" for which a two-thirds vote of the electorate is required. (The fee has been justified on the grounds that new downtown development imposes extra strain on the MUNI system and receives extra benefit from MUNI service, and therefore should contribute proportionately more to the cost of transit operation than development in other parts of the city.)

On the other hand, at least three states (California, Colorado, and New Jersey) have proposed "corridor fee programs" intended to finance regional highway projects. In California, the proposed development fee would serve as a supplemental funding source for the Eastern/Foothill and San Joaquin Transportation Corridors, both high priority highway projects in central Orange County. The fees are being justified on the principle that future development within the corridors will benefit from these transportation facilities and should help pay for them in proportion to projected corridor traffic attributed to future development.

Special Benefit Assessments

Property owners' financial participation in transportation improvements also can be secured through special benefit assessments, wherein property owners are assessed a share of the total cost of a specific improvement, based on the proportionate amount of the benefit each owner receives from the improvement. Assessments may be based on front footage, lot area, appraised value of land, or a combination of factors. To finance the improvement, a locality usually issues bonds with the income from the special assessment pledged as security and used to cover the debt service.

Earlier in this century, special assessments were used widely as the principal means of financing a variety of public improvements in residential areas, such as streets, sidewalks and sewers. Post-war requirements that developers provide basic infrastructure in their subdivisions lessened the traditional dependence on special assessments in residential developments. Instead, emphasis has shifted to the downtowns, where special benefit assessment districts have been extensively utilized in recent years to finance construction of pedestrian malls, for example, in Minneapolis, Louisville, Syracuse,

Rochester, Fresno, and Madison. More recently, benefit assessment districts also have been employed to finance the maintenance and operation of pedestrian malls, for example, in Denver, Pittsburgh, and Brooklyn (Fulton Street Mall). Finally, in two instances -- Miami and Los Angeles -- special assessment districts have been created to raise a private sector contribution toward the cost of a fixed guideway system. (These and other special assessments are discussed in detail in Chapter IV.)

A variation on the special assessment is a "business assessment." Whereas a special assessment imposes a levy on all property owners benefiting from a given public improvement within a defined geographical area, a "business assessment" is levied only on commercial and industrial property within the benefit area. San Francisco's proposed "Core Area Transit Maintenance District," levying a special charge on the owners of all downtown commercial buildings and dedicating the revenue to the municipal transit system, is an example of such an assessment. (The proposed assessment was withdrawn by the Mayor in the wake of strong opposition from downtown property owners and developers, but is now being reinstated.)

A third mechanism for raising contributions from developers toward the cost of transportation improvements is a "Transportation System Management (TSM) Fund." This is a new concept used so far only by a handful of cities, including Orlando and St. Petersburg, Florida. Through it, developers within a designated improvement district are offered the option of contributing to a TSM trust fund in lieu of providing a required number of parking spaces. The local ordinance in Orlando permits developers to reduce off-street parking by 20 percent; in exchange for that reduction, they must contribute 80 percent of the cost of the foregone parking to the TSM fund. The funds collected will be used to support the cost of downtown transportation management improvements and the capital and operating costs of the local transit system. Similar approaches are being considered in other jurisdictions.

Negotiated Transportation Agreements

Development impact fees and assessments are authorized specifically by local statute or in local land use regulations, and their legal authority is derived from state law. Frequently, however, developer contributions are determined through ad hoc negotiations between developers and local officials. Such negotiations often result in agreements stipulating specific off-site transportation improvements to be financed or provided in-kind by the developer. A wide variety of ad hoc transportation agreements have been negotiated in recent years, as shown by the following examples:

- * In Fairfax County, Virginia, a \$2.65 per square foot fee will be imposed on bonus development to finance badly needed highway improvements at the intersection of Route 50 and Interstate 66. The site is the location of a future county governmental center and a 620-acre, \$460 million complex of offices, hotels, townhouses and condominiums. The site is expected to become one of the biggest traffic generators in the Washington, D.C. metropolitan area.

- * In the Denver area, a group of private developers and land owners have joined together to form the Joint Southeast Public Improvement Authority which will undertake a \$20 million privately funded program of highway improvements in order to relieve congestion in the Southeast corridor. The Authority provides a mechanism for: (1) equitably allocating the cost of the program among the developers; (2) an orderly implementation of the planned improvements without the risk of delays or disagreements over each developer's financial responsibility; and (3) eliminating the need for continuing negotiations between developers and the state government.

- * In Orange County, California, the Irvine Company has agreed to provide \$60 million in local transportation improvements as part of developing Irvine Center, a 480-acre complex to be located in the triangle formed by the Santa Ana, San Diego, and Laguna freeways. The improvements will include three freeway off-ramps, two parkways, and 14 projects related to traffic control including a new interchange and the modification of an existing one at a cost of \$12 million.

- * Also in Orange County, a group of developers has agreed to finance the cost of intersection improvements in the cities of Costa Mesa, Irvine and Santa Ana in order to relieve traffic congestion generated by new development. The private contributions, in the amount of \$1 million, have been paid into a joint TSM fund created for that purpose.

- * In northern San Diego County, Shapell Industries -- developer of Rancho Carmel, a 1,500 acre mixed-use development expected to cost about one billion dollars -- has agreed to provide 33 separately identified capital infrastructure projects at a total cost of \$57.5 million. Included are arterial roads, freeway overpasses and interchanges, park-and-ride facilities, bike trails, and traffic control systems.

- * In the Houston area, several large developers, including Friendswood Development Company and Mitchell Energy and Development Corporation, have helped to pay for freeway interchanges and ramps on Interstate 45, and are helping to finance the cost of other road improvements in the northern portion of Harris County.
- * In Los Angeles, MCA Development Company is constructing some \$4 million worth of roadway improvements to relieve traffic congestion in the Universal City area.
- * In New Jersey, several local governments (e.g., Plainsboro, Parsippany-Troy Hills, and Bridgewater townships) have negotiated agreements calling for private developer funding of highway improvements necessitated by proposed developments. Elsewhere in the state, Hartz Mountain Industries, the major developer at the Meadowlands, has contributed \$11 million toward highway improvements and construction of a rail station designed to accommodate increased traffic generated by its development at Harmon Cove.
- * At Tysons Corner in northern Virginia, a major developer, Tycon Inc., Ltd., has offered to build at its own expense a \$3 million overpass spanning an existing highway in order to provide direct access to its new \$100 million office complex.
- * The City of Fairfield, California granted approval for the development of a regional mall after the developer agreed to pay the city an annual fee of 55 cents per square foot for 25 years for off-site improvements, including construction of an interchange, street widening and other traffic improvements.
- * In what must be a record of its kind, a group of developers led by Prudential Insurance Company's realty subsidiary, has pledged to invest \$80 million in local transportation improvements around the new Hacienda Business Park in Pleasanton, California. The private funds will be used to construct two new freeway interchanges, widen two freeways (each by two lanes), install a computer-controlled traffic signal system, and provide sound barriers and landscaping.

Developer Involvement in Transit Improvements

The practice of cost-sharing, or "cooperative financing," also is spreading to the field of transit. What began in the late 1970s as some of the earliest successful efforts at joint development

around transit stations in Denver, Atlanta, Washington, D.C. Philadelphia, Portland and St. Paul is now turning into large-scale initiatives by private developers to participate financially in the construction and modernization of transit facilities. For example, the New York Metropolitan Transportation Authority (MTA) has negotiated an agreement with developers of Lincoln West, a 5,000-unit residential development on Manhattan's West Side, which calls for a \$30 million contribution toward the cost of reconstruction of the 72nd Street subway station that will bear the brunt of the new development. New York City also has enacted a new general zoning code for midtown Manhattan that provides density bonuses in return for major subway improvements, such as subway connections, easements through buildings, and relocation of sidewalk subway entrances. The development bonuses are expected to generate \$15 to \$20 million in private funding for station improvements, according to MTA officials.

Another innovative mechanism to secure developer participation relies on the principle of "benefit sharing." One example of this technique is the on-going negotiations between the Washington Metropolitan Transit Authority and local developers, wherein the latter would pay the Authority "connection fees" for direct underground links to subway stations, analogous to the hook-up fees local governments charge developers for the right to connect to local water and sewage treatment systems. The fees could earn the transit system \$30 to \$40 million in extra income over the next 20 years, according to one estimate.

The principle of benefit sharing also is being applied in Los Angeles where the city plans to raise \$170 million, or 5 percent of the cost of its \$3.4 billion Wilshire rapid transit line, through assessments on properties adjacent to, and presumably benefiting from, the rail stations.

Transportation Management in Private Suburban Developments

During the last decade, a new type of growth center has emerged that defies the conventional designation as suburban developments. Typically, these growth centers have sprung up on the periphery of metropolitan areas or in highly urbanized counties, such as Orange County, California or Fairfax County, Virginia. Because of their size and complexity, these centers have little in common with the typical commercial developments of the sixties or early seventies. Unlike their predecessors, which usually were little more than large shopping malls, the new developments involve a rich mix of activities, including shopping, offices, hotels, entertainment (restaurants, cinemas, health clubs, etc), and a variety of professional and service establishments. Many of these "megadevelopments" are designed ultimately to contain 5 million or more square feet of space, 2 to 3 million square feet of retail space, and a daytime population of 5,000 or more people.

The archtype of such a megacenter is City Post Oak in Houston, which, with its 16 million square feet of office space, 3.3 million square feet of retail space and a daytime population of 60,000, is called "the tenth largest downtown in America." However, others are not far behind:

- * Century City in west Los Angeles has approximately seven million square feet of office space, 35,000 employees, 1100 hotel rooms, 240 shops, restaurants and service establishments, a repertory theatre, and 1200 dwelling units.
- * South Coast Plaza in Orange County, California, ranked as "the busiest mall in the United States," has six major department stores, 197 specialty stores, a 400-room hotel, and half a dozen office towers. Current expansion plans call for three more hotels, a 600-condominium highrise, and nine more office buildings. When completed, South Coast Plaza will have 6.7 million square feet of office space, three million square feet of retail establishments, 2,400 hotel rooms, a performing arts center, and a daytime population of around 20,000.
- * Las Colinas, a 960-acre development near the Dallas/Fort Worth (Texas) Airport, is already home to 200 companies, and will eventually have a daytime working population of more than 100,000 as well as 15,000 permanent residents. The plan envisions not just a concentration of offices but a self-contained diverse community of residential areas, an "Urban Center," and cultural, entertainment and recreational facilities.
- * Tysons Corner in northern Virginia, with its eight million square feet of office and commercial space, 25,000 daytime population, and close to 400 retail and service establishments, may soon become the second largest downtown (after Richmond) in Virginia.

A common characteristic of these megacenters is their near total dependence on the automobile, both for access and internal circulation. Transit service is usually infrequent and sometimes non-existent, and the prospect for better service is dim, because metropolitan transit agencies have a hard enough time meeting existing commitments and do not attach a high priority to serving exurban activity centers. The Ride-On service to major shopping centers in Montgomery County, Maryland and an integrated local transit system envisaged in the expansion of the Serranmonte Shopping Center in Daly City, San Mateo County, South of San Francisco are good examples of how transit can be brought in megacenters.

The future impact of these developments on traffic has become a source of considerable concern to local citizens and officials in the neighboring communities. While capital improvement programs (road widenings and intersection improvements) constitute their first line of defense and can be counted upon to alleviate the traffic situation initially, few local governments consider road construction a sufficient strategy.

This is why in many jurisdictions, private land owners and developers have joined with local officials in attempts to implement supplementary traffic mitigation actions that will help dispel the fear of local residents about the impact of new development on their established communities. These actions, known generically as "transportation management," attempt to influence commuting habits and work patterns in order to reduce the number of single-occupant automobiles and spread the peak hour highway load.

Transportation management techniques include ridesharing (carpools and vanpools), shuttle buses to rail stations, commuter "club buses," parking management, flexible work hours programs, local traffic flow improvements, daytime local circulation services, short-term automobile rental, bicycle facilitation, encouragement of public transit usage, and any other actions likely to reduce or disperse the impact of single-automobile usage.

Unlike public transit, transportation management programs are "hand crafted" to respond to the needs of commuters at a particular site. Since those needs may vary even in small developments, programs usually involve an array of services that suit the requirements of different groups of commuters, according to their travel preferences and geographic origins.

Successful transportation management programs always aim to be flexible and incremental in their approach to implementation. Typically, such programs are implemented in steps, with services introduced progressively as needed. By expanding services only when warranted by actual demand, program costs can be held down and maximum flexibility can be maintained.

How is Developer Involvement Secured?

Behind developer involvement in transportation lie a variety of motivations, ranging from reluctant compliance with regulatory requirements to voluntary initiatives undertaken in the conviction that such involvement is in the developer's own best interest. Development impact fees, assessments, and other taxes and charges are generally specified in local land use regulations, ordinances and municipal codes. For the most

part, however, transportation commitments are assumed as a result of case-by-case negotiations in which local officials use a combination of carrots and sticks to secure developer participation.

Transportation Commitments as Conditions of Permits

Some jurisdictions have made developer involvement in transportation improvements a condition of the approval of discretionary permits. A wide range of discretionary instruments is available, including:

- * Special use permits (giving a property owner approval to use his property in a specific manner);
- * Conditional use permits (imposing specified conditions on permitted use);
- * Highway access permits;
- * Certificates of occupancy;
- * Master plan approvals;
- * Site plan approvals;
- * Subdivision approvals;
- * Zoning approvals;
- * Phase development approvals;
- * Building permits;
- * Certificates of occupancy;
- * Adequate public facilities findings;
- * Environmental reviews.

For example, Placer County, California uses its power of approval of conditional use permits, building permits, and environmental impact reviews to require employers and developers to implement transportation plans (Placer County Code, Section 16.935). Sunnyvale, California and Portland, Oregon make the issuance of building permits conditional on implementation of "transportation mitigation measures" which alleviate the impact of new development. Seattle requires mitigating transportation measures as a condition of approval of certificates of occupancy. In Montgomery County, Maryland,

ridesharing requirements have been imposed on developers as a condition of positive "adequate public facilities" findings, without which developers cannot proceed to construction. The City of San Jose, California requires developers in some instances to implement a "trip reduction program," through diversion to ridesharing and transit, as a condition of issuance of site development permits. The City of Fairfield, California has made financial support of off-site traffic and highway improvements a condition of granting approval for the development of a regional mall. And as noted previously, San Francisco had made the payment of its "transit impact development fee" a condition of issuance of certificates of occupancy.

Use of Incentives to Secure Developer Contributions

In other jurisdictions, developer participation in transportation improvement programs has been secured in exchange for the granting of incentives, especially increased density bonuses and reductions in mandated minimum parking requirements. For example,

- * The City of Bellevue, Washington allows developers to reduce parking requirements by up to 50 percent if they can demonstrate having provided "effective alternatives to automobile access" such as vanpools, flexible work hours, promotion of transit, etc.
- * The City of Dallas, Texas has granted a major development, the Dallas Galleria, a variance to provide less than the code-required amount of parking in exchange for commitments to encourage various transportation management measures, such as ridesharing, appointment of a Transportation Coordinator, and provision of preferential parking for carpools and vanpools.
- * The City of Sacramento, California, allows parking reductions of up to 60 percent in return for designated carpool parking places, provision of monthly bus passes to building tenants, and off-site parking.
- * The City of Orlando, Florida allows a 20 percent parking reduction in exchange for financial contributions from developers to a city TSM trust fund.
- * Norwalk and Palo Alto, California allow parking reductions in exchange for "effective alternative modes of transportation," such as operation of a ridesharing program.

- * New York City grants density (FAR) bonuses to developers who are willing to participate in major subway improvements, such as subway connections.

- * Finally, the City of Los Angeles, California recently enacted an ordinance that allows developers parking reductions of 40% and 25% respectively if they undertake to provide alternate means of access to the development through ridesharing programs or shuttle service to remote off-site parking lots (and space is held in reserve should the projected reductions in parking demand fail to be achieved).

Voluntary Private Initiatives

Some developers are undertaking significant transportation activities without being prodded with conditions or incentives. Their motivation is either a realization that they no longer can count on local government to provide the needed funds, or that good transportation can assist in marketing their developments and lowering the amount of required parking.

Voluntary initiatives take several forms. In some cases, developers have raised capital for highway improvements through specially organized associations, such as the Joint Southeast Public Improvement Association in Denver. In other circumstances, developers and private institutions have launched their own transportation programs in residential and retirement communities (such as Leisure World in Orange County, California), ski resorts (Aspen and Keystone, Colorado), university campuses, and medical centers (e.g., Children's Hospital in San Francisco, Texas Medical Center in Houston). Finally, a number of Transportation Management Associations have been formed by corporate employers, developers and private institutions to provide transportation services in suburban centers, major activity centers and newly urbanized areas where public transit is not available or cannot be conveniently used. TMAs generate revenue through voluntary assessments of membership dues, and with these funds support transportation activities that answer the needs of their members. (For detailed discussion of transportation management associations, see Chapter IV.)

Enforcement and Monitoring of Developer Commitments

One of the most difficult questions surrounding the subject of developer involvement in transportation is the problem of enforcement of transportation commitments. Having negotiated a series of commitments with a developer, how can a local government ensure that those commitments will be carried out?

What recourse does the city have when a developer's agreed-upon transportation management plan falls short of expectations? How can the city ensure that, upon sale of the property, the new owners will honor the commitments? Assuring compliance is particularly critical when the developer has received some benefit, such as reduced parking requirements or a density bonus, in exchange for a commitment to a trip reduction program. The danger is that local government will grant the developer concessions only to find that the promised quid pro quo in the form of a transportation management program has failed to be implemented or the levels of compliance specified in the permit have not been achieved.

The local government must have a well-designed enforcement and monitoring mechanisms as part of its traffic mitigation program. Several enforcement mechanisms can be envisioned:

1. Covenants. A covenant is an obligation that "runs with the land," i.e. is enforceable not only against the original seller but also against subsequent purchasers of the property. Covenants, however, are not popular in the private marketplace, for they are perceived as a cloud on title, making a property less marketable. To require covenants would almost certainly discourage developer participation, although this has not prevented certain local jurisdictions (e.g., Los Angeles and Placer County) from requiring them (as, for example, in Los Angeles, whose parking ordinance stipulates that "before approving such authorization the Zoning Administrator shall require proof that the owner has executed...as a covenant running with the land...an agreement that...", etc.).

2. Contracts. A somewhat less onerous enforcement mechanism might be a performance contract executed between the property owner/developer and the local government, stipulating the actions to be taken and establishing procedures for bringing actual conditions into compliance with the contract. A disadvantage of using contracts in this setting is that they only bind the signatories. Thus, subsequent purchasers of the property would not be legally bound to fulfill the commitments, unless the contract was recorded in the land records. However, damages for breach of contract could be sought against the original parties in the event of failure to perform. Furthermore, the contract could include a liquidated damage clause specifying monetary payments that would be sought if the signatory remained in noncompliance.

3. Withholding or Revocating Special Use or Builder Occupancy Permits. Development approvals could be conditioned upon satisfactory fulfillment of the transportation management commitments. The drawback of this approach is that it might be

difficult to revoke a use permit or to refuse an occupancy permit, unless it could be shown that noncompliance with the terms of the permit would present a danger to the public health and safety. This clearly would not be the case with transportation commitments. Developers might have little incentive to pursue vigorous programs of mitigation measures if they knew that the conditions were not enforceable.

4. Performance Bonds. Developers could be required to post performance bonds, i.e., to place a sum of money in escrow prior to the issuance of a use or occupancy permit, the money to be forfeited in the event of willful noncompliance or significant failure to perform. The drawback of this method is that after the bond period ends, the jurisdiction loses its power of enforcement. Performance bonds commonly are used by local governments to ensure delivery of major projects; however, their use for enforcement of transportation management programs is unproven.

5. Land set-aside. Developers could be required to set aside land for possible conversion to additional parking in the event that the stipulated TSM program failed to achieve its objectives. Alternatively, the developer could be required to build a parking structure that could accommodate future additions in the event the trip reduction program failed. This is the approach followed by the Los Angeles ordinance. The disadvantage is that it may deter developers from entering into transportation management agreements.

6. One-Time Fee. Developers could be required to pay a one-time fee, to be applied toward the cost of a nonprofit transportation management association, that would carry out the conditions of the permit; alternatively, the fee could go to support a public ridesharing/TSM program.

Issues of enforcement of transportation conditions also can arise between land developers and the purchasers of individual properties within the development, or between landlords and tenants. These can be handled through lease provisions and declarations of covenants, conditions and restrictions which can require individual property owners and lessees to carry out the transportation provisions as contractual conditions of their sale or lease agreements, and can enforce them through property owners' or tenants' associations.

Monitoring Process

A monitoring program may need to be established to verify the developer's performance, especially if the commitment has been expressed in the form of a performance standard. The most

common types of performance standard commitments are (in an ascending order of difficulty of monitoring):

- * reaching a specified quota of participants in a ridesharing program;
- * staying within a specified vehicle trip generation rate;
- * achieving a specified modal split;
- * staying within a specified ceiling of on-site parking spaces.

Monitoring responsibility may be assumed by a local public agency, or it may be delegated to the developer who would periodically certify that the program remains in compliance with the terms of the agreement.

Different methods could be used to physically monitor performance, ranging from costly cordon counts to a periodic random sampling of employees to determine methods of travel.

CHAPTER III

BUSINESS INVOLVEMENT IN DOWNTOWN TRANSPORTATION

Transportation is an issue which involves people and organizations in many different capacities: transit agencies as providers; local, state, and federal government agencies as traditional funding sources; and a broad spectrum of people as users. Downtown transportation management is the coordination of agencies and their efforts to provide service to, from, and within central business districts. Because of its focus, downtown transportation management places an emphasis on local rather than regional responsibilities and actions. Downtown transportation needs emphasize pedestrians, parking, mass transit, and ridesharing, and include the users and providers of these services. As with other management processes, though, downtown transportation management views urban transportation as a single intermodal system in which transit, highway, and automobile facilities, operation, and resources are considered together.

Because of its local emphasis, downtown transportation management focuses on specific, low-cost improvements. All such improvements must be in keeping with the broader goals of long-range regional transportation planning. Downtown areas, though, have unique contexts which require special consideration. Because they are high-density employment centers, peak-hour congestion is always a problem. Many cities have problems balancing parking requirements with ridesharing incentives; this is particularly important in downtown areas. Mass transit penetration into central business districts affects development and therefore is of concern to businesses. Steps taken to address each of these issues can work incrementally to address larger transportation concerns.

The transportation system management approach has been taken by The Denver Partnership, Inc. The Partnership aims to define and address systematically transportation management in downtown Denver, including parking, light rail transit, pedestrian traffic, bus routes, highway and street access, ridesharing, and the 16th Street Mall. The Partnership's role is threefold: to provide a forum for private-sector transportation interests; to formulate methods to obtain adoption of policies generated; and to enhance the role of the private sector in transportation decisions.

Public and private agencies involved with downtown transportation management employ an entrepreneurial approach to planning and implementation of transportation improvements.

Business cannot be expected to be philanthropic in complying with public needs, but there is much to be said for enlightened self-interest. Private enterprise can be very public spirited when it realizes that it has a stake in the public domain.

An aggressive entrepreneurial approach on the part of the private sector gives the public sector support for its plans and policies. By approaching a local government with community approval and financial support, the public purpose business organizations usually have received favorable responses.

Downtown Business Organizations

Who, specifically, is involved in a downtown transportation partnership? The actors vary from city to city but likely include local government (COGS, MPOS, Mayors, Council members, development authorities); transit providers; chambers of commerce; business organizations; and individual businesses. The roles taken by these organizations depend very much upon the individual people involved and on the historical context of planning and development in a particular municipality. All are working toward a common objective: to implement a creative range of incentives and services that will decrease congestion and improve mobility downtown.

Over the years, chambers of commerce traditionally have been leaders in coordinating many downtown activities. However, in many cities the need arose for an independent entity to address a broad range of urban issues, and to undertake specific projects crucial to the health of downtown areas. In many cities these organizations have addressed a wide range of center city issues, becoming catalysts for the maintenance of the economic, physical, and social vitality of the central business district. The organizations draw their strength from the active participation of private sector leaders working in cooperation with their counterparts in government. This active role in transportation planning and management has taken many forms, from participation on task forces and funding of studies to actual provision of transportation services and financing of improvements.

Private Sector Involvement in the Management Process

Downtown transportation management is a process which requires a high level of coordination among the groups involved. The public and private sectors have responsibilities of their own, and some responsibilities may be shared between the two. Aspects of downtown transportation management that require private sector involvement as a prerequisite to success include the following tasks:

1. Clarifying and/or identifying problem areas and potential solutions. Transportation providers and municipal agencies generally develop a thorough understanding of the use of and demands on existing transportation facilities. Business persons -- as employers and as providers of consumer goods and services -- have a high degree of public interaction which gives them insight into the needs of people.

Business organizations specifically can assist in the identification of problems by gathering information to help transit providers predict travel demand. Information on numbers of employees, modes of transportation used, trip origins and destinations, and planned business expansions or relocations is helpful in indicating future needs and potential problems.

The wide range of opportunities for business participation in the identification of problems and potential solutions is illustrated in the following examples:

- o The Los Angeles Transportation Task Force, which is composed of representatives of business and public agencies, commissioned an independent study to help evaluate transportation policies for Los Angeles and to stimulate discussion of transportation issues. The study recommended public, private, and joint public-private actions to improve mobility in central Los Angeles.
- o The City of Hartford and the Hartford Chamber of Commerce combined forces to sponsor the development of a set of policy and action recommendations for downtown transportation. The recommendations addressed traffic congestion, parking, streetscaping and pedestrian activities, and downtown transportation system and street environment management.
- o In Syracuse, New York, a grant from UMTA has been matched locally with private funds to support a study of options to improve transit alternatives within the downtown area. The study will concentrate on shuttle systems to operate between fringe parking lots and downtown, and between University Hill and downtown.
- o The El Segundo Employers Association (California) funded a feasibility study to identify streets suitable for reversible lane operation in the direction of peak traffic. The Association now is

considering sponsoring a pilot project on the street that was targeted as a prime candidate for reversible lanes, in order to illustrate the merits of reversible lanes to local jurisdictions.

- o The City Post Oak Association (Houston, Texas) entered into a contract with Houston's Metropolitan Transit Authority to define an appropriate alignment for the proposed regional rail system.
- o Development and management of an open space and pedestrian network in the central business district is being addressed by The Denver Partnership, Inc., in a 12-month project. A goal of the project is to establish a comprehensive open space system to accommodate downtown Denver's growing pedestrian population.

2. Assisting the public sector with decision-making, lobbying, and packaging of projects. Private businesses and community-based business organizations often have considerable powers of persuasion in local matters. They can advise transit agencies regarding the political wisdom of transportation decisions. A strategy which seems technically superior may not receive public support because of the way in which it is presented to or perceived by the public. Efforts by the City Post Oak Association in Houston, mentioned earlier, illustrate the political power that business organizations hold by virtue of the entrepreneurial roles that they take. Other examples include the following:

- o Central Atlanta Progress held regular meetings among merchants, contractors, and Metropolitan Atlanta Regional Transit Authority (MARTA) staff members in order to work out difficulties associated with construction of MARTA's rail line.

Central Atlanta Progress also persuaded MARTA to switch from a cut-and-cover to a deep tunnel approach to subway construction near Peachtree Plaza. This method turned out to be more cost-effective for MARTA and less disruptive to businesses.

- o The Downtown Council of Minneapolis is working actively with Hennepin County and the Metropolitan Council to plan development of a light rail transit system. Penetration into the central city is a key issue for the Downtown Council, as is the decision to locate the system at or below grade.

- o The Santa Clara County Manufacturing Group (San Jose, California), through contact with its 80 member businesses, helped improve ridership on 14 new express bus routes.

3. Playing a direct role in implementation. In many cities, the private sector has been the implementing agency for transit improvements. Ridesharing is the particular transportation mode in which the private sector has been most aggressive; in parking management, the private sector has also taken the lead. Several illustrative examples follow:

- o The El Segundo Employers Association (California), together with the Southern California Association of Governments, produced a bicycle map with tips for safe cycling, and sponsored a series of bicycle safety seminars. Bicycle commuting has increased 44 percent in the past two years.
- o Measures are underway in Los Angeles to reform parking policies through two private sector initiatives: allowing more flexibility for developers to provide alternative incentives in lieu of parking; and increasing ridesharing through employee incentives.
- o In Minneapolis, the public and private sectors are working together to build a fringe parking system which will tie in with the downtown "skyway" pedestrian network and provide enclosed bus transfer facilities.
- o Downtown Tulsa Unlimited operates parking facilities for more than 3,600 cars, under an agreement with the city's parking authority.
- o One thousand employers have joined forces in a ridesharing program in Los Angeles, where fewer than 3 percent of downtown workers use the bus. Vans are leased by employers from a private agency; an estimated 37 million gallons of gasoline have been saved through this program.
- o Management of Denver's 16th Street Transitway Mall is contracted through the City of Denver to Downtown Denver, Inc., (DDI) an operating branch of The Denver Partnership, Inc. Maintenance, security, and public space management services are provided by DDI and funded through a special benefits assessment district.

4. Providing financial support. Feasibility studies, analyses, and transportation improvements themselves may be supported or totally financed by the private sector. Special taxing districts have been established in many cities to fund capital and/or operating costs of transit improvements which bring measurable financial benefits to businesses in a defined area. Commonly, allocated financial support is limited to a one-time contribution for a specific project.

Project support is not always given through direct financial contributions. Land may be donated for highway improvements, as was done in Houston, where Gerald Hines Interests provided land for the extension of a freeway ramp; staff time and expertise may be allocated in support of a public project. For example:

- o A private corporation in Los Angeles has underwritten the expansion of the downtown circulator bus system at a cost of \$70,000 for the first year.
- o Businesses in Atlanta raised \$85,000 to subsidize operation of a downtown loop bus 18 months in advance of its originally planned implementation, in order to help people maneuver through the confusion of construction debris that permeated the downtown area.
- o A privately financed and operated people-mover system is under study in Pittsburgh. The shuttle would transport users between fringe parking areas and downtown. The study was jointly sponsored by the city's redevelopment authority and Westinghouse, Inc., whose corporate headquarters is located in Pittsburgh.
- o The Southern California Rapid Transit District has developed a formal set of policies to promote value capture in the Wilshire Corridor of the proposed Los Angeles Metro Rail Transit System. The policies cover joint development, taxation, advertising, concessions and other viable financing mechanisms. The revenue objective of these value capture policies is 25% of the Wilshire Corridor Metro Rail System capital costs.

5. Monitoring the transportation process. Downtown transportation committees have been formed in many cities. Members from public and private sector organizations share observations and discuss topical issues. The level of communication inherent in such action improves the transportation network.

From this process emerge suggestions to improve the structure, context, operation, or mechanisms of transportation services. For example, the Santa Clara County Manufacturing Group (San Jose, California) partially funded a poll of Bay Area voters' attitudes toward gas tax increases as a basis for funding the development of local transportation revenue plans.

Assessment Districts

A special form of business involvement in downtown transportation improvements, special benefit assessment, will be discussed in detail in Chapter V. This is a tax on all properties within a defined district to pay for all or a part of the cost of transit improvements. The boundaries of the district are defined to include all of the properties benefitting from the improvements, which usually are financed with bonds backed by the assessments. Because downtown transit improvements often increase the flow of patrons, nearby businesses receive economic benefits from the improvements and are eager to support them.

Factors in Business Involvement

The examples cited in the preceding pages illustrate the breadth of involvement and commitment which businesses have given to transportation issues. Why does business get involved? Several factors influence the degree of private sector involvement, and the role that business takes in downtown transportation management and decision-making:

Corporate image. Some cities have one or more "home offices" of major corporations. These corporations have much at stake in the image and operation of their "home towns," and thus are willing to invest manpower and funds to ensure that their cities reflect favorably upon them. Moreover, businesses of long standing feel an allegiance to their cities and often participate in projects as a matter of civic pride.

Impact potential. The perception that there is a mobility problem and, more importantly, that the business community can have a positive impact on that problem often leads to action. Many individual corporations instituted ridesharing programs to cut employees' transportation costs while also helping to relieve street congestion. In Seattle, where ridesharing has been very successful, an estimated 23 percent of commuters use car pools or van pools to get to work. A goal of 36 percent has been established for 1990.

Leadership personalities. Downtown transportation management requires the cooperation of a wide range of interests. In many cities, business leaders have been instrumental in focusing attention on the transportation system and in bringing groups together to focus on specific problems. The entrepreneurial approach that private enterprise encourages is essential in developing public-spirited participation in the transportation management process.

CHAPTER IV

COMMUNITY-BASED AND COOPERATIVE TRANSPORTATION

Introduction

Across the country, community groups and voluntary organizations are playing a growing role in the delivery of services once considered the sole domain of local government. Under mounting financial pressures, many city governments are hiring neighborhood-based civic groups to perform services and manage programs that historically have been carried out by public employees. In other cities, local merchants, developers, and employers are supporting community-based programs that traditionally have been viewed as the responsibility of the public sector. Today, neighborhood-based community organizations provide street maintenance, operate crime-prevention patrols, run day-care centers, drug treatment programs, and recreation programs, and take care of refuse collection, snow plowing, and leaf collection.

Can local transportation also be provided on a cooperative and volunteer basis? There is growing evidence that it can. This chapter reviews available experience with different forms of community-based and volunteer transportation programs.

The motivation for cooperative transportation lies in a growing realization that traditional city-wide transit systems lack the capacity to effectively satisfy local transportation needs of many urban residents and in a desire to fashion services that are more flexible and more responsive to needs at the neighborhood or community level. This is producing a rising sentiment for more grassroots involvement and for greater reliance on local initiative, and sets the stage for increasing attempts to shift service delivery to the local level.

Institutional Mechanisms for Community-Based Service Delivery

Since the concept of cooperative, community-based service delivery is relatively new, no single organizational arrangement has yet emerged as the preferred mechanism for transportation management at the grassroots level. Instead, there are currently a variety of mechanisms being used.

Civic and Neighborhood Organizations

The most familiar volunteer providers are community-based social service agencies, charitable organizations, and religious institutions. These organizations usually serve

targeted groups, especially elderly and handicapped persons and individuals requiring nutritional or health care. While such organizations offer highly cost-effective services, their special-purpose nature and targeted clientele groups limit their effectiveness in responding to a full range of community transportation needs.

One jurisdiction where a social service agency has assumed broader responsibilities is Maricopa County in central Arizona. Most of the outlying area in the county, beyond Phoenix and the immediately adjacent communities, has no public transportation whatever except for the volunteer-operated paratransit system run by the local chapter of the American Red Cross. The system provides transit service from all the communities in the county into Phoenix for medical and social service purposes, and also provides local circulation service within the communities. In addition the vehicles are available to community groups on weekends. Most of the vehicles, however, are used for long haul runs into central Phoenix, which contains the bulk of the medical facilities and social services in the county. It is estimated that the volunteer drivers have reduced operating costs by \$250,000 to \$300,000 per year.

Neighborhood associations have only recently come to be considered as potential providers and arrangers of municipal services. Financially strapped local governments increasingly are entering into service contracts with neighborhood associations as a way of cutting costs. The forms of agreement vary widely. Sometimes, neighborhood organizations simply enlist volunteers or part-time workers. A next step is a formal "co-production" agreement, in which neighborhood residents -- some as volunteers, others paid -- carry out part of a municipal task. Finally, some neighborhoods sign contracts to carry out services in their entirety.

In New York City, neighborhoods have been empowered, by virtue of state legislation, to create so-called "business assessment districts" with the City's Board of Estimates approval, and to contract for supplementary services through specially formed neighborhood-based nonprofit corporations. The special districts assess themselves additional taxes to pay for such services as sanitation and security, and for the maintenance of amenities such as street landscaping. The taxes are collected by the city and returned to the neighborhoods to finance whatever improvements they choose. At present, a dozen such districts are up for approval and many more are on the drawing board. A somewhat similar system is in effect in St. Paul, Minnesota, where neighborhoods receive a stipulated minimum level of municipal services and contract privately through neighborhood associations for additional discretionary levels

of service in such areas as trash collection, snow plowing, and street cleaning.

The City of Huntsville, Alabama has pioneered perhaps the most innovative approach to meeting local transportation needs with the help of neighborhood associations. Called the "Volunteer Community Transit Program," it is a partnership between neighborhoods and the public sector. Huntsville's neighborhoods, acting through specially organized nonprofit Community Improvement Associations, furnish volunteer drivers, gasoline, and program management (i.e., pre-scheduling of shared-ride trips for local residents). The city provides used and reconditioned vans, the county provides preventive maintenance and insurance, and the city Department of Transportation provides overall program management and administration. The cost of vans and insurance is covered by federal funds (UMTA has determined that these are eligible costs under Section 3 and Section 5, respectively). There are currently 14 community volunteer vans in operation in Huntsville and in surrounding Madison County, most of them serving elderly and low income residents who do not own cars. In 1982, these vans carried a total of 33,500 people at a cost of 40 cents per passenger. The city estimates that the program could be placed on a totally unsubsidized, self-supporting basis at a cost of 80 cents per passenger.

Homeowners' Associations

A second potentially productive mechanism for providing transportation service at the neighborhood level is the homeowners' association. For many years, homeowners' associations have been used as vehicles for maintaining and improving common facilities such as streets, neighborhood parks, and swimming pools. More recently, homeowners' associations also have been assuring, generally through contracts with private commercial service companies, selected services, such as street maintenance, upkeep of recreational facilities, refuse collection, snow plowing, and security patrols. A few associations even provide emergency medical and fire protection, day care and in-home elderly care. Currently, there are only a few examples of homeowners' associations providing transportation services, but interest in this approach is growing.

- * In Lincoln, Nebraska, volunteer "ridesharing agents" organize carpool programs in the neighborhoods. The objective is to assist elderly residents to go to church and to a nearby shopping center, and to develop a neighborhood-based carpool program for school children.

- * In Des Moines, Iowa, a local homeowners association cooperatively funds public transit service for residents of a housing development. Households contribute \$20 per adult to a fund that is used to offset operating costs. Although participation is voluntary, 80 percent of the residents contribute to the fund which has not had to be tapped so far, because revenues meet all expenses.
- * In Alexandria, Virginia, condominium and tenant associations run a residentially-based ridesharing program with assistance from the city's Ridesharing Service.
- * In Fairfax County, Virginia, two large apartment complexes, the Rotunda and the Montebello, operate small shuttle buses for the half-mile trip to regional bus lines and shopping malls. At each project, two 19-passenger buses serve more than 1,000 households. The service, which costs \$30,000 in annual operating costs, is run by the condominium associations, and is financed by owners who pay about \$20 extra a year in condominium fees for the service.
- * Montclair, a 1,600-unit single family project in northern Virginia about 35 miles from Washington, D.C., has a daily commuter bus service to Washington. Located in a county that has no public transit, Montclair also has a flourishing van and carpool network among residents. Both the club buses and the carpool/vanpool program are operated by the local homeowners' association, with a \$20,000 annual subsidy from the developer, the Chemical Bank of New York.

Homeowners' associations draw their strength from deed-based covenants. The covenants are contractual stipulations attached to property titles that run with the property regardless of who purchases it. In general, covenants obligate all owners of property in an area to join a self-assessing association. Every property owner is committed to pay a regular monthly or annual fee to support services of benefit to the neighborhood as a whole. Failure to contribute can result in an association-imposed lien on the property. At present, more than 20,000 homeowners' associations can be found in a wide variety of settings. Although most are located in new middle and upper middle income residential subdivisions, some have been created in inner cities, as, for example, in St. Louis' Central West End. Covenant-based stipulations also have been imposed in "private" communities, such as Greenbelt, Maryland; Kensington, Breezy Point, and Seagate, New York; and Rolling Hills (Palos Verdes) near Los Angeles.

Homeowners' associations are versatile instruments for arranging the delivery of local services. The ability of the associations to shop around among alternative service providers of contract services often enables them to develop highly responsive and economical service delivery systems.

Although homeowners' associations are often successful in mobilizing residents to participate in cooperative activities, most have not fully resolved problems of funding.

Representatives of homeowners' associations in working class neighborhoods almost invariably cite the problem of "double payment" as a major barrier to assuming a greater share of responsibility for the delivery of basic services. Property owners are faced with the need to pay twice for their services -- once through fees, and once through local taxes. Although the development of self-financing neighborhood service delivery systems relieves municipalities of demands for costly public expenditures, few cities at present pass along any of the savings to association members.

Kansas City and Houston have pointed to a possible means of overcoming the double payment problem that now constrains property owners' associations. When a homeowners' association arranges for private collection of refuse, the municipalities agree to reimburse the association for a portion of the fee, up to a ceiling that reflects the cost savings to the city resulting from the neighborhood initiative.

"Commuter Clubs" and Other Cooperative Arrangements

A third potential instrument of volunteer community-based service delivery is the transportation cooperatives and "bus clubs" that have sprung up in the suburbs of several metropolitan areas, notably Chicago, Los Angeles, San Francisco, Washington, D.C., and Oklahoma City. The residents of these suburban communities have banded together into nonprofit "clubs" or cooperatives for the purpose of running commuter buses to downtown destinations. The idea was first introduced in Columbia, Maryland, a residential community located about 25 miles north of Washington, D.C., where the homeowners founded the nonprofit Columbia Commuter Bus Corporation. This cooperative has grown from two buses in 1970 to a fleet of 123, carrying residents of Columbia to downtown Washington every weekday. In the case of Oklahoma City, "membership fees" cover the local 50-percent share of the cost of the commuter service and the federal operating subsidy pays the other half; the service is operated under contract by the metropolitan transit agency. In other cases, the participants cover the full expense of leasing a bus and driver from a private operator.

"Mobility Clubs"

A fourth organizational model is the "mobility club," organized primarily to serve the needs of elderly persons. Using part-time non-professional drivers -- such as college students, retired persons, and housewives -- these Clubs provide highly personalized transportation/escort services to their members. Drivers use their own vehicles, are paid modest rates, and are employed only on an as-needed basis. The clubs thus can keep operating costs very low. The Point-to-Point Club in Ardmore, Pennsylvania provides service at only \$8 per hour. Each Club member also pays a \$10 annual membership fee. The combination of fares and membership fees covers over 85 percent of the operating costs of the Club.

Transportation Management Associations

The final model for local service delivery is the transportation management association (TMA). Transportation management associations are voluntary organizations formed by corporate employers, developers, merchants, and private institutions to provide transportation services in suburban centers, major activity centers and newly urbanized areas where public transit is not available or is not conveniently accessible. TMAs generate their own revenues through voluntary assessments or membership dues, and with these funds, support various transportation activities that respond specifically to the needs of their members. Depending on the local requirements, a transportation management association may assume responsibility for running shuttle buses to a nearby commuter rail station, managing a ridesharing program, administering shared parking, coordinating a staggered work hours program, or instituting a program of local traffic flow improvements.

More than twenty TMAs already are in existence. Some are organized around a single activity center: a suburban corporate park or an in-town institutional complex, such as a medical center. Other TMAs are areawide in scope. Some operate their own services and have their own in-house staff, while others contract with professional management and service providers. Some TMAs are single-purpose organizations formed specifically to deal with transportation concerns; others are parts of broader, multi-purpose organizations. However, no matter what their form, all transportation management associations share a common philosophy: they pool private resources in the interest of improving public mobility.

What follows are descriptions of how certain major private developments have sought to address their transportation problems through transportation management programs. Because

few of these developments yet have reached the build-out stage, and because transportation management deliberately seeks to be incremental in approach, most of the programs do not yet contain the full array of services that they eventually plan to include.

The Woodlands (Houston): This is a 25,000-acre residential development, 27 miles north of Houston, with approximately 10,000 residents. The development also contains some office, commercial and light manufacturing activities, employing 5,500 employees. In 1976 the developer, The Woodlands Development Corporation -- a subsidiary of Mitchell Energy & Development Corporation -- initiated a vanpool program as an amenity to The Woodlands' residents. Since then, the developer has used the vanpool program as a marketing tool to attract residents. There is no public transit service into Houston from The Woodlands, so the vanpool program is the only alternative that residents have to driving their own automobiles.

Hacienda Business Park, Contra Costa County, California: Hacienda Business Park, located at the intersection of I-85 and I-95 in Contra Costa County, California, is an 800-acre development that will eventually contain one of the largest office parks in the country. In order to mitigate the traffic impact of the development, Hacienda has designed and launched an ambitious transportation management program.

Hacienda's transportation management program is being conceived as a staged program of TSM actions that will be implemented over a period of years as they are needed. Initially, the program will concentrate on promoting and facilitating carpooling and vanpooling. Somewhat later, the program also may include alternative work hours arrangements (flextime and staggered hours), direct shuttles to BART stations, lunchtime shuttles to the nearby town of Pleasanton, facilitation of bicycle use for local residents, and commuter "club buses" to points in East Bay.

The Hacienda Transportation Management Program is managed by the Hacienda Property Owners Association as part of the Association's responsibility to enforce compliance with and oversee the implementation of the conditions, covenants, and restrictions associated with property ownership at Hacienda.

Hacienda's approach is unique in its ability and resolve to enforce implementation of the TSM program against individual property owners, in its philosophy of staged implementation, and in the variety of the contemplated TSM activities.

El Segundo, Los Angeles: The El Segundo/International Airport complex in Los Angeles' South Bay area is emerging as a major high-density urban center. By 1986, it is estimated that the area will have 8 million square feet of office space, over 9,000 hotel rooms, and a daytime population of 85,000. More than \$860 million worth of new development, representing 6 million square feet of industrial and office space, is expected to be completed in the next three years within a two-mile radius of the Los Angeles International Airport, adding approximately 70,000 additional daily vehicle trips to the already overburdened roads.

Concerned about the worsening traffic conditions, a number of major corporations located in the immediate area formed the El Segundo Employers Association (ESEA) to find common solutions to the area's growing transportation problems. Today, the association's membership is composed of 18 member companies representing more than 65,000 employees, as well as 12 associate members from the public sector. The program includes the use of reversible lanes to speed up traffic in rush hours, an areawide carpool and vanpool program, employment center-oriented bus service featuring flexible routes and schedules, a cooperative system for work hours scheduling, and a bike path system for employees living nearby. The Association works closely with local public agencies on transportation issues of common concern. Funds for the Association's operations come from a voluntary assessment of the participating corporations. The Association has a full time executive director and a staff of four professionals.

Meadowlands, New Jersey: Over 80,000 employees commute to the Hackensack Meadowlands Development District each day, and the expectation is that by 1990 this figure will have increased by 50 percent. Traffic congestion is a major and growing problem and will not be alleviated by capital road improvements any time soon.

Responding to this situation, the public authorities in the area, together with private land owners and developers, have formed a non-profit corporation, organized specifically to devise and manage a transportation management program to ease the commuting situation. The program will offer Meadowlands employers promotional and operating assistance in the formation of ridesharing programs, provide training for in-house transportation coordinators, contract for "third party" vanpool

services and subscription bus services, establish a centralized commuting information service, and explore establishment of other services as required by market demand.

A staff of five will operate the Transportation Management program, with an initial two-year budget of \$519,000.

Columbia, Maryland: Columbia Commuter Bus Corporation, a nonprofit association started in 1970 by a group of residents, operates today a fleet of 123, 50-passenger buses from Columbia, Maryland to downtown Washington, D.C. The association has spent about \$2 million in providing bus service over the last 15 years. The annual budget of the bus club is \$350,000, of which 33 percent are farebox receipts, 16 percent is a contribution of the parent Columbia Homeowners Association, and the remaining 50 percent comes in the form of state and federal subsidies. In order to qualify for the federal subsidy, the bus system offers discounts for senior citizens. Regular service is provided 12 hours a day on weekdays, and 8 hours a day on Saturdays. Lately, the system has operated at a deficit, prompting a proposal for a special residential assessment to support the bus service.

University Circle, Cleveland, Ohio: University Circle is a 500-acre area in Cleveland, Ohio in which 35 nonprofit institutions maintain their homes. They include Case Institute of Technology, Western Reserve University, the Cleveland Orchestra, the Cleveland Museum of Arts, several hospitals, and a host of other educational, cultural and religious institutions. Today, University Circle is Cleveland's second largest activity center (after its central business district), employing some 19,000 people and receiving 15 million annual visitors.

In an effort to bring order to the area and to allow all institutions to expand in optimum ways, several of the leading institutions got together in 1957 and sponsored a comprehensive master plan for the area. To cement the cooperative relationship, a nonprofit corporation, University Circle, Inc. (UCI), was formed to manage the entire development on behalf of its resident institutions.

UCI has jurisdiction over 7,200 parking places and manages the parking lots as a shared resource for the common use and enjoyment of its members. It maintains a motor pool of 40 vehicles that are available to member institutions. It also operates a 13-bus transit system that functions eighteen hours a day, from 6 a.m. to midnight. After 6 p.m., the regular system converts to a "Dial-a-Bus" operation that provides portal-to-portal service to and from all participating

institutions in the system. 60 percent of the cost of operating the UCI bus system is divided, based on ridership, among nineteen participating institutions. The other 40 percent is charged against the parking operation to cover the cost of transporting permit holders from parking lots to their destinations.

Longwood Medical Area, Boston, Massachusetts: Located in southwest Boston, the Longwood Medical Area is a consortium of 16 hospitals, colleges and other nonprofit institutions that have 35,000 employees and students, all within a one-quarter square mile area. The hospitals have an annual out-patient population of approximately 600,000 people that visit the area.

To cope with the difficult traffic and transportation problems created by this high concentration of activities, the resident institutions set up a nonprofit organization, the Medical Area Service Corporation (MASCO), to provide a wide variety of parking and transportation services and to plan for an orderly accommodation of new growth within the Longwood area.

MASCO acquires, leases and operates surface parking lots containing 2,200 parking spaces. Because of the intense use of land within the boundaries of the Longwood Medical Area, most of the lots are located as much as two miles away (to take advantage of lower lease costs and to lessen congestion around the site), and dedicated shuttle bus service is provided free of charge to selected points within the Longwood area. The shuttle system carries 2,000 people per day. To reduce operating costs, there is no mid-day service from 10 a.m. to 3 p.m. If an employee must leave work early, MASCO provides free taxi service from its office. In addition, MASCO runs an internal circulator and a transit shuttle to downtown Boston and commuter rail stations with a combined daily ridership of 2,500.

MASCO also runs a computerized carpool program for employees and students and is considering purchasing its own vehicles to initiate a common vanpool program open to all, without regard to their institutional affiliation. In its role as a private transportation management association, MASCO maintains close contact with city, region and state planning agencies, lobbies for changes and improvements in traffic systems, and participates in city-wide contingency plans for transit shutdowns and natural disaster emergency access systems.

CHAPTER V

PRIVATE PARTICIPATION IN TRANSPORTATION FINANCING

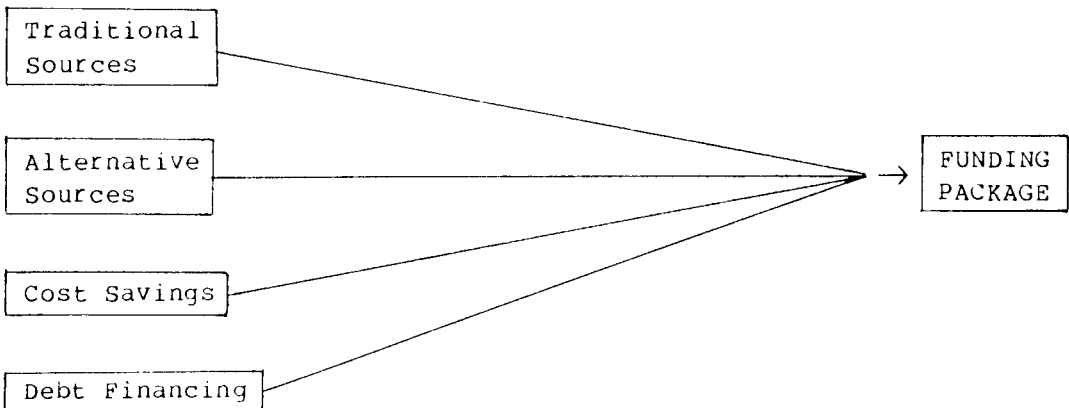
Traditional revenue sources are not generating sufficient funds to maintain the desired level of transportation services in urban areas. Across the country, jurisdictions are seeking supplemental funding from new sources, many of which have a direct private sector connection.

One solution to the funding gap lies in greater use of a multiple source approach to project funding. More and more examples can be found of local and state transportation agencies working with the private sector to package traditional revenues with one or more innovative financing techniques from the following categories:

- o Alternative Funding Sources: New, creative or previously rarely used financing techniques whose revenues supplement funds from traditional sources.
- o Cost Saving Measures: Measures which produce the same service or product at lower costs, such as design improvements that reduce capital costs, preventive measures, or contracting out for lower cost services.
- o Debt Financing Techniques: Techniques for borrowing funds at lower interest rates and for spreading payments for capital expenditures over time to match revenue streams more closely.

As shown below, the sum of revenues from all four categories constitutes an agency's total potential funding package.

Project Funding Sources



This chapter focuses on recent applications of five alternative revenue sources and three debt financing techniques. Techniques for reducing costs, such as contracting out for transit services, are discussed in Chapter VI.

Alternative Revenue Sources

Broader application of the user fee principle is a useful concept for identifying new revenue sources. While the concept that those who benefit should pay is not new for many public services, it has not been fully utilized in the transportation field. Both transit and highway services benefit a variety of groups (in addition to transit riders and highway drivers) that historically have not been asked to pay for the value of such services to them.

The user fee principle is not easily implemented in the transportation sector of public service because of the different type of "beneficiaries." These beneficiaries can be divided into three groups:

- o Direct Users: Bus or rail transit riders and users of roads and highways for personal (employment, recreational, or other), commercial, or industrial purposes.
- o Indirect Beneficiaries: Those who benefit from transit or highway service to a particular site, including property owners adjacent to the roadway or station, real estate developers, employers, etc.
- o Community-at-Large: The general public and business community that benefits from the availability of a convenient, safe transportation system (transit and highways).

For indirect beneficiaries and the community-at-large, the benefits are not always tangible and, therefore, not as easily divided and sold. For example, it is difficult to package and sell the benefits of less congestion on freeways to automobile drivers or the benefits of customer accessibility to merchants adjacent to transit stations or highway intersections.

In spite of these potential difficulties, techniques exist for capturing the value of benefits to these groups. An increasing number of local jurisdictions are adopting them as supplemental revenue sources to severely constrained budgets. The techniques described in this chapter are not always easy to administer, and they do not always generate as much revenue as traditional sources. However, the sum of the proceeds from the alternative

techniques and the traditional sources can be substantial. Moreover, these additional revenues can be used in some cases to leverage large sums of federal dollars. Finally, many elected officials and voters view the user fee principle as a sound basis for financing public services.

Private Donations and Subsidies

In a growing number of instances, the private sector has voluntarily offered monetary or in-kind contributions in exchange for the provision of a road or transportation services. Such transactions may become increasingly common as the private sector recognizes that public funding will not provide the transportation services needed to support its operations in a timely fashion and as the public sector, pressed for funding, actively solicits such offers.

In all instances, agreements are reached by the two parties when both sides have recognized the benefits to be gained. Typically, the public sector benefits from financial gains or savings, while private sector advantages vary from expediting completion of an improvement to the possibility of increased retail sales or property values.

The private sector is more likely to approach the public sector if the jurisdiction is known to be receptive to public/private sponsorship of public projects. In Houston, Texas, for example, there is a history of joint funding of major roads and highway improvements. In 1981, the Friendswood Development Company contributed 10% of the cost of constructing a 1.4 mile portion of the highway fronting its mixed use development. Friendswood wanted to ensure completion of the project, for which state funds had not been appropriated. The total contribution of \$950,000 covered some or all of the costs of the additional right-of-way, three sets of designs, and construction.

Another example of a voluntary private contribution is the campaign to rehabilitate San Francisco's historic cable cars. In 1980, the local Chamber of Commerce, with the Mayor and the Bay Area Council (an organization representing the area's largest businesses and industrial firms) established a blue ribbon committee to solicit contributions. The committee successfully raised \$12 million in pledges, with three firms (United Airlines, Atari, and Western Hotels) chipping in \$1 million each.

In most jurisdictions, however, transit and highway agencies have had to approach the private sector with proposals for donations or subsidies. The following examples illustrate how

entrepreneurial creativity can be financially rewarding. It is easy to identify the mutual benefits associated with each transaction. While not always generating significant sums of money, the additional funds have provided relief to tight budgets:

- o Newport Beach, California: An \$800,000 transit center for the Orange County Transportation District will be built on the grounds of a shopping center, whose developer donated 2.5 acres of land (worth \$1.6 million) and contributed \$300,000 toward the operation of a shuttle service in the shopping center area.
- o Cedar Rapids, Iowa: Retailers give discount bus passes to customers making a purchase in their stores. When the bus drivers turn in the collected passes, marked with the store name, the merchant is billed. The merchant subsidy amounts to 3.1% of total annual revenue, or \$670,000.
- o Champaign, Illinois: A vintage 1960 bus is painted to resemble a generic grocery product and runs a different route each day. 50% of the operating and maintenance costs for the bus are covered by a local grocery chain in Champaign. The chain pays a flat fee of \$850 a month.
- o Springfield, Massachusetts: Merchants sponsor free bus service on the four Sundays before Christmas, since Sunday service is not regularly offered. In 1982, merchants in four shopping areas contributed \$1,500, based on the 1981 revenue from the program.

Several other innovative merchant involvement programs have been tried out successfully. A 1984 Pennsylvania Department of Transportation report on transit marketing contains a good compendium of merchant promotion programs.

Leasing Development Rights and Facilities

A growing number of transportation agencies are tapping the private sector to generate revenues from a frequently overlooked asset: space above, below, or at grade with transit stations and highways. In competitive real estate markets, businesses and developers have leased such space in return for the advantages associated with a particular site. The major benefit to the public sector is a steady stream of revenues over the life of the lease, usually involving little additional cost.

Actual income from the lease obviously varies with the type of agreement and with a number of other factors including the status of the space (developed or undeveloped), market demand for lease space, station or road location, and levels of transit ridership or use of roads.

For example, in Washington, D.C., where the Washington Metropolitan Area Transit Authority (WMATA) has leased space above and below its Metro rail stations, WMATA receives an estimated \$12 million in annual leasing revenue. The California Department of Transportation, which has one of the most aggressive highway airspace leasing programs in the nation, earns \$3.5 million per year.

The WMATA Farragut North Station Agreement is a good example of the value of the advantages associated with locations near a transit station. The Farragut North Station is adjacent to a prestigious hotel in Washington, D.C.'s prime downtown office district. The site is within a two minute ride of D.C.'s retail central business district and a short ride from the district's upper and middle income residential areas. Moreover, the station is one of the busiest on the entire Metro system, handling a total daily patronage of as many as 60,000. In exchange for the right to build a 12-story building containing office and retail commercial space at this location, the developer signed a 50-year lease with an automatic renewal for 49 years (unless notice is given one year prior to the end of the initial term). An annual rent of \$248,000 is paid. After the first two years, additional rent will be calculated on the basis of 50% of the net project income.

A somewhat different air rights leasing arrangement has been negotiated by the Denver Regional Transportation District (RTD) in connection with its downtown transfer facility, across from the State Capitol. The private developer, planning to construct a 600,000 square foot office tower, will pay the transit agency \$100,000 per year while the building is under construction, and upon completion, will pay a progressively higher payment. Beginning with the third year, and every year thereafter, the developer will pay the RTD \$400,000 annually. RTD will also get all revenue from the underground parking garage, and will receive 38 percent of the project's profits after the developer's equity investment has been recovered.

On a smaller scale, the Santa Cruz Metropolitan Transit District (SCMTD) is in the process of leasing office and retail space in its downtown Intermodal Transfer Facility to offset annual operations and maintenance costs of \$177,000. SCMTD expects to receive \$68,380 yearly from its lease.

Another example can be found in Los Angeles where the Southern California Rapid Transit District (SCRTD) recently has embarked on a leasing/joint development program for its rail system. In October 1983, the SCRTD Board of Directors gave its formal approval to a proposal to relocate its planned Mid-Wilshire Metro Rail Station from the Wilshire/Curson location to the

northeast corner of Wilshire Boulevard and Fairfax Avenue. The agreement between SCRTD and Parklabrea Associates will afford an existing department store direct station access and the opportunity to develop 800,000 square feet of mixed use development at the station site. In exchange for such opportunities, Parklabrea will pay SCRTD annual lease payments totalling \$200,000. In addition, it will dedicate in fee simple the property required for station construction and subterranean easements for transit tunnels, and it will provide parking for Metrorail patrons as well as bus storage and related facilities.

Development Fees

In many areas, local jurisdictions are adopting measures that require real estate developers to pay directly for the costs of transportation services needed to mitigate the impacts of traffic generated by individual developments. These measures vary widely, but all are linked to a zoning or land use control ordinance.

Special Benefit Assessment Districts

A special benefit assessment district, initially discussed in Chapter II, is another technique which is familiar to local governments but relatively new in the area of transportation, particularly transit. Jurisdictions have placed assessments on all properties within a geographic area specially benefitting from their proximity to a transit mall or station. The property may be residential or commercial, but -- in all cases -- the owners are perceived to be reaping larger benefits than those the general community receives from the availability of an efficient and effective transit service. Such specific benefits vary by land use and proximity to the service, and they range from increased property values to access to more customers or a larger labor pool.

The assessments typically are used to finance bonds for capital improvements. In Miami, for example, a special assessment district has been formed in the downtown area to secure \$27 million of bonds used to construct a downtown people mover (DPM). Businesses in the area will be assessed charges for 15 years in return for the benefits they expect to receive from an estimated 40,000 passengers per day who will ride the DPM. In addition to capital costs, special assessments also can be used to support maintenance and operating expenses, as in Los Angeles where SCRTD recently received authority from the California state legislature to establish districts around its 18 planned rapid transit stations. In another example, property owners immediately adjacent to a 14-block transit mall in downtown

Denver are funding maintenance of the mall through special benefit assessments. Enabling legislation for creation of the special assessment district was passed by Denver voters; however, assessment and maintenance of the mall is being supervised by Downtown Denver, Inc. (DDI), which represents a group of downtown businesses. The first year assessment is anticipated to generate approximately \$1.5 million for the 1982-83 period.

One of the major challenges associated with special assessments is quantifying the value of the benefits of proximity to a mall or station, and then translating the value into an administratively feasible and politically acceptable formula. Denver, Miami, and Los Angeles have approached the problem differently:

Denver

- o In Denver, the formula for assessments is based on the assumption that the benefits of the mall will increase the total land value of the district by 7%, and that the benefits of the mall decrease proportionately with distance from the mall in four 100-foot segments or zones of depth. The 7% figure is defined as the "total benefit" that must be allocated over the four zones by the following formula: Property owners within the first zone (the first 100-foot segment from the mall) pay an assessment on 50% of the total benefit; property owners within the second zone pay an assessment on 25% of the total benefit; those within the third zone, 15% of the total benefit; and those within the fourth zone, 10%.

Miami

- o In Miami, the fifteen year assessment rates are planned to be 20 cents to 25 cents per square foot of net leasable office space. The rates will decrease to 10 cents per square foot as office space increases in the area. Churches and federal buildings will be exempt from the charge. Political opposition to the assessment district was minimized by the Dade County Manager's initial decision to commission a group of representatives from the private sector and public agencies to study the DPM's financing. This group's recommendation to establish a special assessment district was adopted by the County in 1983.

Los Angeles

- o State enabling legislation sets forth a procedure by which the district boundaries and assessment formulas

are to be established. Local action has not been taken to date; however, it is expected that SCRTD will adopt a resolution explaining in detail the creation and operation of each proposed district. The county board and supervisors and city councils in each district then will have the choice of approving, amending or disapproving the resolution. Once agreement is reached among all parties, the district will become operational. Property owners in the area still will have the option of petitioning for an election on the matter. The assessment will be reviewed annually by the same process, and the assessment invoice subsequently included with the county tax invoice to each property owner.

Thus, legal and political problems that might discourage local jurisdictions from considering special assessment districts can be overcome. Given the revenue potential associated with this technique, perseverance and cooperation with the private sector offers great promise.

Tax Increment Financing

The dedication of property tax increments, generally referred to as tax increment financing, is another useful tool. The procedure involves freezing, as of a certain date, the real estate tax base in a given benefit area. Tax revenues at the pre-investment level continue to flow to the general fund, but the increased revenues, resulting from property values rising above the base, are earmarked for financing public improvements within the benefit area. The revenues may be used to secure bonds for the improvements or to pay for the improvements directly.

Tax increment financing has the potential of generating substantial revenues. The magnitude of revenues depends upon the local ad valorem tax rate, the size of the tax district, the amount of development or redevelopment which occurs within the district, and the cost of the public improvements to be made under the development plan.

Tax increment financing is authorized in a large number of states. It has been used most frequently in California and Minnesota. In California, for example, over 200 redevelopment projects have used this technique, and Los Angeles alone has had 15 tax increment-financed projects, ranging from central business district facilities to neighborhood revitalization. So far, however, the Embarcadero Station in downtown San Francisco has been the only transit project in California that has made use of this technique.

Dedicated Taxes

Of all of the techniques discussed in this chapter, a dedicated tax is, in most cases, the technique with the greatest revenue potential, the least administrative difficulty, and generally the least direct private sector involvement. Political opposition to new or increased taxes, however, is a major obstacle to the use of this technique.

Dedicated taxes are considered to be a mechanism for taxing the public at large for the benefits of a regional transit system or road/highway network when the base of the tax is community wide. For example, sales and property taxes are considered to be broad-based taxes. UMTA estimates that nearly 30% of all state and local tax receipts dedicated at their source for transit operations are derived from a sales tax, whereas nearly a quarter of all local tax receipts at their source for transit operations are collected from a property tax. These taxes obviously are not closely linked to the use of the transit system, and therefore are not classified as user fees.

Dedicated taxes also can be levied upon a specific group that benefits directly or indirectly from the availability of a regional transit or road service. For example, some jurisdictions consider the availability of transit to be a benefit to employers for which they should be taxed. The Tri-County Metropolitan Transportation District, serving Portland, Oregon and its surrounding counties, levies a 0.6% employer paid payroll tax on businesses within the district. Revenues are first used to cover operating expenses, but may also be used for capital expenditures once operating costs are paid. In 1980 and 1981, the Portland tax generated \$35 million and \$37 million respectively, or 55% of the system's operating budgets in those years.

The following are some other recent initiatives by local governments to dedicate a tax to transportation services:

- o Birmingham, Alabama: Birmingham Transit recently began collecting beer tax revenues for transit operating expenses. The earmarked tax is three-ninths of 1% of the beer tax levied in the service area for Birmingham transit. According to the state law, the state guarantees Birmingham Transit an annual minimum of \$2 million. If the beer tax generates more than \$4 million a year, additional funds may be allocated to Birmingham Transit according to a formula in the law.
- o Dade County, Florida: Twenty nine counties in Florida have approved a local option gasoline tax. As

authorized by the state legislature in 1983, counties can levy a local tax of up to 4 cents per gallon (in whole pennies). Implementation of a 1-cent and 2-cent per gallon tax requires a majority vote of a county's governing body, while a tax of 3 cents or 4 cents per gallon requires approval by a majority plus one of the county body. Funds are dedicated for highway and transit related uses. Dade County, with a 4-cent per gallon tax rate, receives an estimated annual revenue of \$28 million.

- o Los Angeles: In 1982, Los Angeles County passed a 1/2% sales tax. 35% of the revenue from that tax is earmarked for the rail transit system.
- o Washington, D.C.: The WMATA board currently is considering proposals to levy a dedicated tax for financing completion of the 101-mile Metrorail system, of which 46.6 miles have been completed to date. This action was stimulated by a recent survey of Washington metropolitan area residents conducted by the Federal City Council, a non-profit organization of the top 100 business and civic leaders in the Washington area. The survey revealed that the region strongly favors completion of the Metrorail system over a shortened system, and a majority were willing to vote for a sales tax to pay for Metrorail construction. A sales tax was greatly preferred over property, gasoline, or payroll taxes.

Debt Financing

Major capital improvements cause a transportation agency to incur high front end expenses. Ideally, an agency's objective is to spread such payments over time to match its flow of revenues. Implicit in this objective is the desire to minimize the associated interest cost. The following briefly illustrates a variety of mechanisms by which the private financial community is addressing these concerns. It is important to note that these mechanisms must meet the needs of an agency and offer attractive returns to investors. Private investors are interested in factors concerning risk, cash flow, tax-exempt status of debt instruments and title (and, therefore, depreciation rights).

- o Vendor financing is an arrangement by which manufacturers of transit vehicles provide financing to local governments for the purpose of purchasing their equipment. Transit agencies, as part of the competitive bidding process, may request vendors to

offer attractive terms for loans, loan guarantees and other devices to give the agency access to credit in amounts sufficient to finance the purchase. Vendors may respond with a financing proposal involving a loan from their own resources or a bank, or involving a lease-purchase agreement with a financial institution. Foreign vendors sometimes have won competitive bids by obtaining low interest loans from the export-import banks in their respective countries. The loan usually is secured by the vehicles, and is paid off with tax or operating revenues.

The New York Metropolitan Transportation Authority (MTA) successfully used vendor financing for the procurement of 825 subway cars from Bombardier, Ltd. Bombardier arranged for \$659 million in loans from Canada's Export-Import Bank. Under the terms of the contract, MTA agreed to repay the loan at a 9.7% interest rate over a 15 year period. (This 9.7% interest rate at the time was considered to be a very attractive rate given much higher rates on the open market.) Vendors sometimes offer financing at below market interest rates because they are anxious to demonstrate their vehicles in use. However, attractive vendor financing may be a substitute for a lower purchase price. Transit agencies should compare the financing costs of a vendor's offer with the terms of financing available from other sources.

- o Revenue and Grant Anticipation Notes are short term instruments which states, counties, and cities can use to match the flow of income and expenditures related to reimbursement of federal or state funded projects. The credit of the issuer usually is only one factor involved in the security analyses of the note. The stability of the revenue source, in this case appropriated grant funds, is often even more important.

For example, the Orange County (California) Transportation District (OCTD) issued revenue anticipation notes to cover the shortfall caused by the time lag of up to a year in receiving UMTA Section 5 operating assistance funds. Three series of notes have been issued: \$13.3 million and \$14.6 million in 1982 and \$16 million in 1983. OCTD, being non-profit and tax-exempt, can borrow at tax-exempt rates. These funds are combined with city and special district funds so that any excess working capital may be invested at taxable rates. The spread of 3% to 4% can yield a profit of several hundred thousand dollars.

The notes all have been given the highest short-term loan rating possible, MIG 1.

Another example is the Southeastern Pennsylvania Transportation Authority (SEPTA), which recently authorized the sale of \$30 million in tax-exempt notes. SEPTA may borrow note proceeds only after it has received executed operating subsidy grants from either the state or the federal government. Because grant anticipation notes are tax-exempt and can be sold at lower than normal interest rates, SEPTA expects that the income from the investment of the funds will offset the cost of borrowing.

- o "Safe Harbor" Leasing. The Economic Recovery Tax Act of 1981 and the 1982 Tax Act permit public transit agencies to "lease" their rolling stock from private corporations, thereby selling the accelerated depreciation deductions associated with that equipment to private corporations seeking shelter for their taxable income. A number of transit agencies have found this technique useful. Los Angeles offers a good example. In the fall of 1981, the Southern California Rapid Transit District (SCRTD) entered into a safe harbor lease agreement with Border Pipeline Company for buses which had been purchased earlier that year. Eighty percent of the purchase had been made by the federal government, so SCRTD was only able to sell the tax benefits on the 20% (\$23,820,000) funded locally. Border Pipeline paid \$3.9 million in cash up front, which enabled SCRTD to recover 16% of the local portion of the purchase. The lease extends for 13 1/2 years, and at its termination SCRTD will purchase full ownership of the vehicles for \$1.

Another transit agency that has made extensive use of safe harbor leasing is the New York City Metropolitan Transit Agency (MTA). In October 1981, the MTA agreed to lend to Metromedia, Inc. the proceeds from the sale of \$87 million in tax-exempt industrial development bonds. In exchange, Metromedia agreed to contribute \$15.5 million toward the purchase of \$102 million worth of rail cars and buses, and then to lease them to the MTA for an amount equal to the bond payments. The MTA will have the use of the needed cars and buses at a \$15.5 million savings, and Metromedia will be entitled to depreciation deductions on the new vehicles.

CHAPTER VI

PRIVATE OPERATION OF TRANSPORTATION SERVICES

The use of contracting to deliver public services is not a new idea, as many would believe. The International City Management Association (ICMA) recently conducted a nationwide survey on contracting, covering 3130 cities and 1570 counties. The survey disclosed that 60 percent of the respondents were already using private firms to contract for a wide variety of services, such as residential trash collection (34% of responding jurisdictions); tree trimming (30%); street repair (26%); traffic signal installation and maintenance (25%); vehicle towing and storage (78%); ambulance service (23%); day care facility operation (34%); and fleet management/vehicle maintenance (30%). The Advisory Commission on Intergovernmental Relations (ACIR) has conducted a survey to assess local officials' reliance on and attitudes toward the use of private firms to provide public services. Of 2,650 cities surveyed, over 36 percent indicated a preference for private contracting.

In few areas, however, are the public benefits of contracting as substantial as they are in urban transportation. In case after case, local agencies have saved public funds by contracting rather than exclusively providing all public transportation services. Savings of fifty percent or more are not unusual, and these savings can be returned to the public in higher service levels, lower subsidy levels, or a combination thereof:

- * The Tidewater (Virginia) Transportation District contracts with a local taxi company for on-call service in low density residential neighborhoods. The service costs the transit authority \$16 per hour, as compared to \$33 per hour to operate its own buses.
- * The City of Phoenix, Arizona contracts with a private taxi company to provide service on Sundays. Approximately 220 riders use the service each Sunday. The city pays the cab company a unit price of \$16.25 per vehicle hour in use plus all fares collected. Phoenix estimates that it is saving over \$700,000 per year in net operating costs by contracting with the taxi company instead of providing fixed-route service with its own buses. (Contract services cost the City of Phoenix \$1.22 per mile, compared to Phoenix Transit costs of \$2.86 per mile.)
- * The Ann Arbor (Michigan) Transportation Authority spends approximately \$33,000 per year for substitute

late night taxi service, compared to \$100,000 it would have had to spend each year for just one "Night Ride" bus route.

- * Los Angeles County, California contracts with a private operator to provide commuter service to downtown Los Angeles from the Santa Clarita Valley at a saving of 45 percent, as compared to publicly provided service.
- * A score of communities in California have entered into purchase-of-service contracts with private operators to provide fixed-route and flexible services; in San Diego, the cost per vehicle mile has dropped from \$3.65 to \$2.39 -- a cost reduction of 35 percent for essentially the same level of service.
- * The Southern California Association of Government (SCAG), after evaluating 22 public bus lines in Southern California, concluded that over \$5 million per year in public subsidy could be saved if the 22 bus lines were turned over to private carriers.

Beyond operating cost savings, recent evidence indicates that the competitive process itself works as an incentive to limit operating cost increases. In Los Angeles, for example, the cost of the privately-operated Santa Clarita Valley commuter service consistently has increased less than the inflation rate. No comparable incentive to control costs exists in public transit agencies, as the rapid rise in transit operating expenses testifies.

Finally, the private operator's interest in retaining the contract and obtaining future contracts creates a powerful incentive to assure quality service. A public agency, holding an exclusive monopoly on providing service and protected from competition, lacks that strong motivation. Incentive contracting, whereby a portion of the private contractor's compensation is contingent upon real and measurable performance, can be used as an added stimulus. Such contracts not only encourage the private operator to be efficient, they also protect the contracting agency from a poorly performing operator. Incentive contracts, properly conceived, can be an important management tool for achieving maximum efficiency.

Finally, a major advantage of contracting with private providers is the flexibility and reduced risk it affords the contracting public agency. Changes in service levels can be implemented quickly. Poorly performing contractors can be removed, and organizational changes that might require reductions in personnel levels can be implemented more easily.

There is more freedom to experiment or adjust service levels to meet new circumstances. In sum, private contracting works well because the contractor's desire for growth and profits cause him to remain flexible, competitive, and receptive to service modifications that contribute to efficiency. By capitalizing on the profit motive of the private contractors and challenging them through incentive contracts, the transit agency can gain a valuable instrument for carrying out its mission.

A number of urban transportation services are appropriate for contracting to private operators. They include commuter services which are particularly expensive for a public agency to run since they involve only peak hour service; demand responsive services for elderly and handicapped persons; local feeder and circulation services in low density areas; and substitute service during periods of low demand, such as weekends and evening hours.

Commuter Services

A good example of contracting for peak hour commuter services is the "club bus" program of the Golden Gate Transit District in San Francisco. Since the early 1970s, this agency has been contracting with private bus companies to provide express commuter service to and from Marin and Sonoma counties to downtown San Francisco. There are currently four companies providing over 30 bus runs each way. Each club determines the schedule and pickup points, collects dues, and makes monthly payments to the transit agency. The agency contracts for buses and drivers from charter bus companies on a competitive bidding basis.

Among other jurisdictions that contract for express commuter bus service are Dallas, Texas and San Mateo County, California, which contracts with Greyhound for all commuter bus services to San Francisco. Newport News' Pentran and Norfolk's Tidewater Transportation District follow a somewhat different model, purchasing buses with public funds and leasing them out to private firms to operate.

Elsewhere, private carriers bring thousands of daily commuters to their jobs without any public subsidies. In Chicago, for example, private "club" buses carry over 5,000 daily commuters from the southern suburbs to the Loop. In New York, 700 private buses bring 100,000 daily commuters into Manhattan every day from destinations in New Jersey, Long Island, and Westchester County. In Los Angeles, 14 private companies operate 140 buses carrying 6,000 daily riders.

Paratransit Services

Replacing fixed route buses with privately-operated flexible services using small vehicles is another strategy gaining acceptance, especially for low-density routes in suburban area which do not generate sufficient ridership to justify regular route service. Today, a score of cities are routinely contracting with taxi companies for services in low density areas and during times of low demand as a way of reducing operating costs and providing more convenient service. As already noted, Norfolk's Tidewater Transportation District has been contracting for several years with taxicab companies to provide service on lightly patronized bus routes, both in low-density suburbs and during evening hours. Phoenix, Arizona contracts with a local taxi company to provide service on Sundays, when ridership is but a small fraction of what it is during the rest of the week. Ann Arbor contracts with a local cab company for substitute service at night, when demand falls off drastically. And in several communities, (for example, Lexington, Massachusetts; Santa Fe, New Mexico; Hammond, Indiana; and Freeport, Illinois) the operation of the entire local transit system has been contracted to private firms.

San Diego offers a particularly striking illustration of the potential of contracting for local feeder-type services. In response to a serious financial crisis in its transit system (San Diego labor costs were among the highest in the transit industry), San Diego county and local municipalities undertook to contract out most of the local services to private carriers. There were two transit operators five years ago; today there are seven. In order to compete against the local private operators, the regional transit agency negotiated a special "community wage rate" which is 50 percent below the standard wage rate.

Westchester County, New York represents yet another model of private contracting. This suburban county contracts with a number of different private carriers to operate its entire county-wide bus system, currently carrying over 100,000 passengers per day. The county's transportation department provides the vehicles (acquired with public funds), sets policy on fares, schedules and routes, runs budgeting, marketing and public information programs, and monitors performance. The private bus companies, for their part, maintain and operate the buses under long-term contracts. The system has one of the highest operating ratios (percentage of costs covered by passenger fares) in the nation: 63%. Westchester County's assistance to its mass transit system in 1982 was \$3.7 million. By contrast, in the nearby Nassau County, where the bus system is operated by a public authority, the figure was \$8 million,

even though the Nassau county system carries several million fewer annual riders than the Westchester system.

What these examples underscore is a growing conviction that government need not operate all of the services that the public requires, especially when such services can be delivered more effectively and at a lower cost by the private sector. More and more regional transit authorities are willing to forego service delivery themselves, if they can be convinced that service can be provided more efficiently and at a lower cost through contracting with private carriers.

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