

sources of funds. This will consist of a general catalogue or list of local government fund sources other than transit operations, including advertising and terminal concessions. The first category will cover cash flows from direct benefits received by the providers of the cash flow, including value capture and special benefit districts. Most of these ideas are innovative as they apply to transit or have had very limited application. The second category will cover cash flows from indirect benefits or from transportation-related operations—taxes or charges of all kinds on highway users and possibly on activities that directly benefit from transit services, such as major entertainment centers. This category includes fuel taxes, automotive excise taxes, license and registration taxes, tolls, and increased parking charges.

The rest of this section will contain extended discussions of each of the several groups of general taxes and charges. It will consider general fund financing as well as the full array of local government taxes for the purpose of linkage (the transit need is discussed as a reason for action, but there is no specific legal requirement that the money be spent for transit and nothing else) or dedication (the tax flows straight through to transit and cannot be used for anything else). These taxes will be evaluated in a matrix of their advantages and disadvantages for fund flows to public transportation. The tax groups include real property taxes (other than the special district assessment), retail sales taxes, payroll or wage taxes, public utility taxes or charges, and excise taxes.

By using the sources at hand, about 150 local actions in transit finance between 1970 and 1975 were surveyed. More than half simply transferred money out of general funds, which has the advantage that it entails the fewest commitments for specific financing and allows the greatest flexibility for local legislative bodies. The real property tax is by far the most popular of the earmarked or dedicated taxes; it accounts for 50 to 55 percent of the cases. The sales tax accounted for 8 to 10 percent, and all the other taxes were relatively minor; more use was made of the gasoline tax than any other.

The next section will briefly review state transit subsidy programs. These are in a constant state of in-

crease and evolution. Most of the large urbanized states now have programs for both capital and operating assistance to transit. These have a very wide variety of ground rules that, when added to the federal ground rules, cause serious administrative problems at the local level. There will also be a summary of federal transit assistance programs and some comments on the administration of section 5, which will be useful at the local government level.

The next section will discuss financing for special-service clientele, focusing on the elderly and handicapped. This financing involves a complex of funds from other federal programs (primarily in the U.S. Departments of Health, Education, and Welfare and Housing and Urban Development, as well as some from the Department of Labor). It also involves funds from state and local agencies, both public and private. A major policy issue has involved whether these services to the elderly and handicapped, which often have numerous providers, each with its own financing, should be integrated with similar services in the existing transit operation. There are a couple of demonstration projects under way in this area, and it is hoped that the handbook will include some feedback from them.

The final section will examine prototype institutions and review the possibilities for setting up plans and packages with major emphasis on operating assistance at the local level. From the standpoint of local officials, the base from which they start—besides the revenues from the transit operation itself—is (a) their section 5 federal money and (b) whatever funds they receive on a regular basis from state assistance programs. In some cases, there is relatively little left to be done by local authorities; in others, because the states are doing nothing, the local authority has a big job.

The handbook may have an additional section that will review all of the arguments for and against operating subsidies for transit and will comment on the administration of subsidies. The book will probably not address the question of how best to divide up the cost of the regional system among the cities and counties that receive the service, which is an area of fierce controversy, but it will concentrate on how to raise the money to fund the deficit.

## Study on Transit Revenue Sources: Part 2

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During the past decade, officials at all levels of government have been increasingly faced with difficult decisions about financing transit. At the same time, there has been relatively little analysis to assist policy makers in this regard. This report sets forth some initial results of a study sponsored by the Urban Mass Transportation Administration (UMTA) that was designed to help fill this gap by assisting local decision makers in identifying the full range of transit financing techniques, more systematically assessing the pros and cons of each local case, and choosing among alternative courses of action. This brief review cannot, of course, cover all of the details and supporting analysis.

### PURPOSE AND SCOPE

The specific objectives of this report are to review innovative financing techniques, many of which entail joint development and the related notion of value capture, and to evaluate their financing potential, institutional feasibility, and apparent promise for widespread application in the transit field. Typically, the innovative techniques covered here have been little used to pay for transit in this country, although they have been applied to finance other capital improvements. ("innovative financing techniques" as used in this report involves an introduction of financing techniques from one field to another,

e.g., from capital improvements programing to new uses in urban transportation, or from one area to another, e.g., from Canada to the United States. Moreover, and to anticipate a point made subsequently, the financing potentials of these "new" techniques tend to be modest, if measured against existing revenue sources for transit, e.g., the fare box, or typical financial requirements, e.g., the costs associated with major regional systems.)

Since these innovative techniques tend to involve investment on land around transit facilities, a further focus of this report is on fixed-guideway systems. As a general rule, such fixed-guideway facilities as commuter lines, standard rail, light rail, and people movers tend to foster more focused private development than other forms of transit (buses or paratransit) and hence are the primary interest of this study. To facilitate analysis, these innovative financing techniques can be grouped into three broad categories.

1. Land use regulation, usually over areas affected by transit improvements—Techniques include incentive zoning, special district zoning, dedications and exactions, and use of the official map. Some of these can involve indirect financing, whereby the costs for transit-related facilities are shifted from the public sector to the private sector.

2. Taxes, assessments, and charges, typically imposed over limited areas in ways that attempt to relate the levy to benefits received—This category includes dedicated property taxes levied over a small local district (as distinguished from those in San Francisco or Denver varieties, which are regionwide in application), tax increment financing, special benefit assessment, and service charges (either on a one-time or recurring basis) for connecting the transit station to adjoining properties.

3. Public land acquisition, which commonly involves some assembly of property by government, although there is some variation—This includes lease or sale of air rights (already acquired in the course of transit construction), lease or sale of supplemental property (normally acquired in excess of transportation rights-of-way), and participation in or development of air rights or supplemental property (with the government assuming an equity position or acting as actual developer).

A common denominator among these techniques is their reliance on private investment in land around transit facilities or station areas. Most innovative techniques, in fact, require the development of new revenue-producing land uses for their financing potential to be realized. Such techniques work well (and sometimes only) where very small real estate markets are strong and other development factors (e.g., availability of land, suitable zoning) are favorable. In some cases, other supporting actions by government (beyond transit improvements per se) may be required to trigger business investment and exploit financing potentials fully.

## TRANSIT FINANCING POTENTIALS

It appears that a combination of innovative financing techniques could defray perhaps 5 to 15 percent of the capital costs associated with certain fixed-guideway facilities, e.g., a light-rail line constructed in a central city or a small-area system such as a downtown people mover. These results, judged reasonable under an ambitious but achievable application of innovative financing tools, are unlikely to revolutionize transit finance in any community. They do suggest an important contributory role that can be played by innovative tech-

niques within the larger constellation of transit funding sources.

This finding on financing potentials, although it is somewhat less than the 20 to 40 percent (or higher) suggested in some previous studies, is not surprising in view of the substantial costs associated with most fixed-guideway systems. Frequently, these systems are the largest single public works project ever undertaken in urban centers; capital costs mount into the hundreds of millions of dollars, and annual operating deficits (depending on fare structure and related factors) may amount to tens of millions of dollars. This finding certainly does not suggest that innovative techniques should be ignored in formulating transit finance plans. Rather, the appropriate role of innovative techniques needs to be considered in the context of other available revenue sources and in light of local economic and political conditions.

Most of the innovative financing techniques covered in the report have been successfully employed in U.S. cities to pay for a variety of capital improvements either directly or indirectly (e.g., through provision by the developer of public amenities as a condition of zoning approval). Many are legally feasible and practicable for transit applications. The most promising methods include tax techniques (dedicated property tax, tax increment financing, special benefit assessment), lease or sale of air rights already acquired in the course of transit construction, and incentive zoning in areas served by transit.

Not all innovative financing techniques, however, need involve joint development or the related notion of value capture. A dedicated property tax or special benefit assessment, for example, could be applied to established properties without waiting for new construction or joint development. Likewise, tax increment financing does not capture added property values, since no new taxes are levied.

Furthermore, it is important to recognize that the specific financing potential and institutional feasibility of innovative techniques requires a case-by-case analysis to take into account local conditions. Adequate local administrative resources and existing or available enabling legislation from the state are among the necessary institutional prerequisites. Consequently, it cannot be said that even the most promising techniques can be implemented in every community. And even where the financing techniques are institutionally feasible, local economic conditions will typically confine the scope for applying innovative financing techniques to a small number of locations (e.g., high-density transit station areas that are characterized by strong real estate markets and other favorable factors, such as suitable zoning and availability of assembled land).

Where these conditions are not sufficiently favorable, it may still be possible to encourage private investment through incentives that may be used by the public sector. Generally, however, to the extent that such incentives entail additional public investment in transit station areas, there would be a corresponding reduction in transit financing potentials, at least for the immediate future.

Analysis indicates that innovative financing techniques represent an untapped source of transit revenues that most localities have been slow to investigate. A major stumbling block in exploiting these potentials is that many transit agencies do not have the expertise to identify and pursue these new financing possibilities. Moreover, some local jurisdictions are small and most are hard pressed financially, two characteristics that adversely affect their ability both to hire professionals in this area and to engage in the extensive planning and entrepreneurial activities called for by most innovative techniques. In addition, expertise in real estate development is less

available now, since urban renewal activities have been discontinued in many communities and redevelopment authorities have been dismantled.

To exploit these potentials, therefore, most transit agencies must (a) develop their own teams of real estate development professionals, (b) work with local urban renewal authorities or economic development agencies, (c) contract the work out to experienced development organizations (public or private), or (d) create a new entity (e.g., a transit-corridor development corporation). This may require new federal funding, e.g., federal financial assistance earmarked specifically for the acquisition of land or buildings within the entire zone affected by construction and operation of transit rather than limited to right-of-way.

#### POSSIBLE PAYOFFS FROM INNOVATIVE TECHNIQUES

As noted above, the specific financing potential and institutional feasibility of these techniques can be determined only through case-by-case analysis of local conditions. In overall terms, however, the possible advantages of relying on these revenue sources include (a) broadening the base of financial support for transit, (b) establishing a more equitable basis for transit finance, and (c) enhancing the cost-effectiveness of public investment in transit.

##### Broadening the Financial Base for Transit

One consideration is that putting together the financing for any large-scale capital improvement is typically a complicated task that requires recourse to multiple funding sources from federal, state, and local governments and, frequently, private interests. Rarely can a single source of funds provide a satisfactory solution; usually some mix of public, private, and civic funding will prove most effective. Consequently, the financing potentials of innovative techniques (about 5 to 15 percent of the capital costs associated with certain transit facilities) should prove important to many U.S. communities, since there is growing agreement that transit needs to develop new sources of funds for operating and capital purposes. A related consideration is that, as a practical matter, innovative financing techniques represent one of the few untapped sources of funds remaining for transit in this country.

##### Establishing An Equitable Allocation of Costs

Innovative financing techniques may also be worth exploring from the standpoint of equity, since the benefits of transit normally extend beyond direct users (regular riders of the system) to encompass both neighboring property owners and business interests in areas immediately served by transit and the public at large. Therefore, it may be equitable for the costs of transportation

service to be borne not only by the direct users but by these other beneficiaries of the system.

This thinking suggests an allocation of transit costs in a manner commensurate with benefits received, so as to spread the cost among the direct users (e.g., through fares), neighboring property owners (e.g., through levies on adjacent properties), and the public at large (e.g., through general-purpose revenue sources such as the sales tax).

##### Enhancing the Cost-Effectiveness of Transit Investment

Finally, judicious application of innovative financing techniques would be one way to exploit the broader promise of transit as a cost-effective public investment, with benefits beyond urban transportation alone. Thus conceived, transit could be a means to multiple public objectives (e.g., revitalization of the central city, urban economic development, energy conservation). This larger potential of transit can be enhanced by most of the innovative financing tools considered in this report, which call for coordinated development of transit facilities and land around stations.

Such development, in turn, is frequently contingent on favorable market factors, the availability of assembled land at affordable prices, and supportable zoning. It is true that these development factors are largely beyond the immediate control of the transit agency once route alignments and stations are located and that they may be seen as a needless bother by some necessarily narrow-minded public officials who are primarily concerned with the construction and operation of fixed-guideway systems. But taking land into account during transit development would give the public an added payoff from its transit investment.

Exploiting innovative financing techniques, for instance, would entail substantially greater attention to development potentials in decisions about route alignment and station location than is currently the case in most transit planning efforts. Transit station areas planned in this manner—by virtue of their strong development potentials and superior accessibility—could become magnets for new activity centers with a mix of mutually supporting commercial, residential, and institutional development.

For transit, too, there would be a payoff from such coordinated development. More intensive use of land, higher densities around transit stations, and new activity centers—all the natural consequences of coordinated development—could create and attract new transit riders, and greater ridership is what a transit system needs in order to sustain its high operating costs and justify itself as a cost-effective investment. Seen in this broader context, innovative financing techniques could even create a self-executing economic incentive for public officials to implement the kinds of land use and development patterns that support taxpayer investment in transit systems.