

Analysis of Financing Options for Transportation

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ABSTRACT

This paper reviews and analyzes various innovative financing techniques for highway and transit. With federal support diminishing and transportation needs growing, agencies are seeking new ways to meet this crisis. The techniques discussed fall into the four broad categories of: (1) charges on benefiting properties; (2) joint venture approaches; (3) user charges; and (4) marketing and merchandising approaches. Charges on benefiting properties recognize that there are specific beneficiaries who gain from transportation improvements and include: connector fees, negotiated investments, special benefit assessment, tax increment financing and impact requirements. Joint ventures with the private sector recognize that it is mutually advantageous for public and private sectors to cooperate on transportation projects and include the techniques of land/air rights leasing, donations for capital improvements and cost sharing. User charges are intended as direct payments for services rendered and are classified as motor vehicle taxes and fees, tolls, commercial parking taxes and taxes on motor fuels. Marketing and merchandising approaches include advertising and merchandising. None of the techniques are a panacea for transportation finance but where appropriate conditions exist, they can be effectively used to finance the growing transportation needs of our nation.

INTRODUCTION

The years ahead are likely to be challenging ones for the transportation profession. In some parts of the country, particularly in the south

and west, there are accelerating demands for the extension of transportation services to meet the needs of rapidly growing populations. Meanwhile, in many of the nation's older cities, transportation infrastructure and rolling stock are rapidly aging and will likely need replacement or substantial rehabilitation in the not too distant future. There will also be continuing calls for the expansion of services to meet the needs of special populations, such as for the elderly, the handicapped, lower income households, etc. In this time of increasing demands for transportation facilities and services, resistance to local tax increases remains strong, and federal assistance upon which state and local governments have relied so heavily in the past is rapidly diminishing. During these times of fiscal change, transportation agencies are seeking new ways to meet increasing needs. This paper examines financing options that are available to communities and analyzes their applicability.

States, towns, and cities throughout the nation have developed a host of innovative techniques in an attempt to grapple with new fiscal realities. These techniques fall into four broad but interrelated categories. They are: (1) charges on benefiting properties; (2) joint venture approaches; (3) user charges; and (4) marketing and merchandising approaches. This paper reviews some of the key techniques within these broad categories and analyzes how they can be employed by transportation professionals to meet future needs.

CHARGES ON BENEFITING PROPERTIES

Charges on benefiting properties recognize that there are specific beneficiaries who gain from transportation improvements. Techniques within this category attempt to identify these beneficiaries, capture some of the value generated by the improvements, and channel captured revenue into support of the transportation system. Five techniques within this category appear particularly promising. They are: Connector Fees, Negotiated Investments, Special Benefit Assessment, Tax Increment Financing, and Impact Requirements. A review of these techniques, their advantages and disadvantages and how they work, is furnished below.

Connector Fees

A technique which has recently received considerable attention particularly for rail transit financing is that of connector fees. Connector fees are charges to owners or developers of buildings adjacent to a transportation facility for being physically connected to it. They are typically of three types.

- Lump sum payments to compensate for capital cost of knockout panels, plaza areas, etc.;
- An annual contribution to the operating costs of the facility, such as station maintenance; or

- ‘In lieu’ dedication of property for station areas or easements.(10)

There are a number of excellent examples of communities that have used, or are developing plans for the use of, connector fees. In Washington, D.C., a department store (Woodward and Lothrop) paid \$500,000 for a knockout panel to connect the store’s basement level to the region’s Metro system. The store experienced an initial 53 percent increase in retail sales volume and to date, has realized subsequent increases each time the Washington, D.C. Metro system has expanded.(10)

A second example is that of Dade County, Florida. Dade County expects that approximately \$5 million in revenues can be collected from the downtown component of their Metrorail system, currently under construction.

Communities interested in instituting connector fee programs should be aware that many agencies do not currently possess the legal power to negotiate connector fees. Enabling legislation is often necessary as a prerequisite to instituting such a program. A second obstacle is the fact that developers often hesitate to pay for access to a transportation facility or transit line. To be successful with this approach, it is necessary to document the types and level of benefits likely to result from the connection.

Negotiated Investments

A negotiated investment is an agreement between a developer and a public body, through which the former agrees to either make a needed public improvement or to contribute a fixed sum towards an improvement which will benefit his development. This contribution is usually made in exchange for some concession needed by the developer. Local governments can often utilize their zoning and building permit authorities to bargain with developers to pay for transit related improvements required to provide access to the new development area.(7)

The fact that negotiated investments are tied to land use regulations can sometimes present problems for transportation agencies. This is due to two factors. First, legal issues frequently arise questioning the extent to which a governmental body can attach conditions to zoning and other police powers; and second, transportation agencies have no control over zoning and land use regulations. As a result of the latter, transportation agencies must frequently work with other governmental agencies, as well as with developers, to obtain the desired results. Needless to say, this can be a cumbersome and time consuming process.

One of the best examples of a negotiated investment is in New York City. A group of developers are providing \$31.5 million to that City’s MTA to renovate an overcrowded subway station. The \$31.5 million is part of \$100 million “amenity package” of public improvements for the developers’ proposed housing and commercial project along the Hudson

River. The contribution is the result of negotiations between the developer and the New York City Planning Commission to change the zoning of the project site from manufacturing to residential use.(7)

A second example of a community that has used negotiated investments successfully is Fairfax County, Virginia. In that county, a developer recently contributed almost \$20 million in road improvements, only a portion of which were required for his development, in exchange for being allowed to construct approximately 4 million square feet of office and hotel space in an area which had previously been zoned for residential purposes.(11)

Special Benefit Assessment

Special benefit assessment is based on the premise that some or all of the costs associated with a public improvement should be borne by properties within a well defined area benefiting from the project (e.g., the benefit assessment district). The assessment can be either a one-time fee or a re-occurring charge over a period of years.

Generally, an attempt is made through this technique to apportion the assessment on a particular piece of property in relation to the amount of benefit received. This is done by utilizing in the assessment formula, such factors as site size, floor area, and distance from the improvement.

There are several excellent examples where communities have utilized special benefit assessment as a means of meeting local transportation needs. Maintenance of the 16th Street transit mall in downtown Denver is being funded through a special assessment charged to property owners immediately adjacent to the mall corridor. A 1978 revision to the city charter permitted creation of the special district. The first year assessment was expected to be approximately 1.5 million dollars.(8)

Commercial property located in a special benefit assessment district in Los Angeles is being assessed to support a fixed rail transit system. With an assessment of 27.5 cents per square foot, property owners will contribute \$250 million toward the project.(1)

Experience has shown both major advantages and disadvantages associated with this technique. On the plus side, this technique is politically more acceptable than many other innovative financing techniques. This is because only properties directly benefiting from an improvement are assessed to pay for it. On the minus side, however, there are often legal problems associated with this technique, both with property owners who frequently challenge the establishment of the assessment district, and issues related to the formula used to determine the assessment.

Tax Increment Financing

Tax increment financing is based upon the premise that public improvements spur development in areas surrounding them and, thereby,

increase property tax revenues. Projected increases in property tax revenues are used to back bonds with which the public improvement is financed. Alternatively, annual increments of tax revenue are deposited into a fund dedicated to improvements with the TIF district itself.

Tax increment financing typically works in three basic steps. First, a tax increment financing district is established covering the area likely to benefit from the project or improvement. Second, a base year of assessed property values is established. Finally, as property values in the district rise, resulting increases in property taxes are dedicated to the improvement, while the taxes on base line property values are distributed to pre-existing taxing jurisdictions.

There are a number of issues which communities should be aware of prior to utilizing this approach. First, enabling legislation is necessary before this technique can be employed. To date, such legislation has only been passed by about half of our state legislatures. Second, it is hard to justify utilizing increases in property tax revenues within the tax increment financing district solely for transit or transportation purposes. This is due to the fact that it is difficult to separate transit induced values from the myriad of other economic forces at work in a TIF district. Finally, there is often a great deal of political resistance to the creation of TIF districts. Such resistance comes from related taxing jurisdictions, such as hospital districts, school districts, etc. which rely heavily on property tax revenues and which will be deprived of additional income in the tax increment financing district.

There has not been much experience in this country with tax increment financing for transportation purposes. In fact, although this technique has been used extensively in redevelopment projects (some of which have had transportation components), until recently the only transportation use has been for financing of the Embarcadero Station in San Francisco.(6) Prince George's County, Maryland, began using TIF as a means of financing transportation improvements within its newly developing areas. Since the necessary enabling legislation was adopted by the Maryland legislature some six years ago, Prince George's has established ten TIF districts. Thus far, these districts have generated some \$8.5 million in revenue.(9)

Impact Requirements

A final technique by which some of the benefits generated by transportation improvements can be recouped is through impact requirements. Impact requirements are charges or other conditions imposed upon developers to mitigate or compensate for the impact of their projects. Such requirements are established by local ordinances and are administered through local police powers, usually the building permit process. The requirements may take several forms, from a fee based on the

square footage of new development, to the sponsorship of a ridesharing program.(8)

Impact requirements generally meet two types of political resistance. Developers often argue that such requirements impede growth and economic development. Citizen groups, on the other hand, frequently argue that such requirements are not stringent enough.

Some of the best examples of the utilization of impact requirements are from the state of California. Through the enactment of a Transit Development Fee Ordinance in San Francisco, for example, developers can be required to pay up to \$5 per square foot of new office space to compensate for the likely impact of their developments on transit services.(5) In Placer County, California, developers are required to design ridesharing programs in order to reduce potential traffic congestion.(7)

JOINT VENTURES WITH THE PRIVATE SECTOR

A second category of techniques is that of Joint Venture Approaches. These techniques recognize that it is frequently mutually advantageous for the public and private sectors to cooperate on transportation projects. There are three major techniques within this category: (1) land/air rights leasing, (2) donations for capital improvements and/or operating expenses, and (3) cost sharing.

Land/Air Rights Leasing

Where a transportation agency owns land that it does not need in the foreseeable future for transportation purposes, or where a parcel is not being utilized to its potential, the full value of such properties can sometimes be realized by leasing the air, surface, or subsurface rights. Such leases provide a steady and dependable stream of income during the life of the lease, usually 99 years. This income can be utilized to offset operating expenses or the costs of capital improvements.

Evidence from several communities that have engaged in such leases suggests two major issues. The first is a legal issue, and relates to the fact that eminent domain powers are frequently used to assemble land for transportation projects. Several court cases have questioned the eminent domain powers of public entities to obtain air and subsurface rights in excess of those needed to achieve the objectives for which the land was condemned. The second issue is one of equity. Citizen groups almost invariably question the equitability of lease arrangements, arguing that the public does not benefit sufficiently under such contracts.

There are many excellent examples of communities that have used such lease arrangements. Air rights over Denver's Civic Center Transit District were leased to J. W. Galbreath and Company in 1981. This lease is expected to provide some \$55 million in income to the RTD during the first 15 years.(7)

In Miami, the air rights over land adjacent to the Dadeland South Station currently under construction, was leased in exchange for the acquisition of the one-acre site for the station. The air rights will enable the developer to build 600,000 square feet of office space, 50,000 square feet of retail space and a 300 room hotel. The lease requires the developer to pay 4 percent of unadjusted gross income for each year of the lease.(2) Beginning in 1986 the Office of Transportation Administration for Metropolitan Dade County expects to receive payments of 2-3 million dollars per year from the lease.

Donations

Several communities have been successful in obtaining donations from the private sector to improve services or expand their transit systems. Donations are generally of two types: (1) monetary donations for capital improvements or the extension of services; or (2) donations of real property as sites for transit facilities.

Nine million dollars was raised, in two years, by San Francisco's Committee to Save the Cable Cars.(7) In Grand Rapids, Michigan, the Area Transit Authority received a \$100,000 donation as the local match for lengthening one of the system's routes to service the local zoo. In New port Beach, California, the developer of a mall donated land for a transit center and contributed \$300,000 toward the operation of a shuttle service.(8)

The examples cited above are typical of the types of donations received. They are generally made in connection with some highly visible project through which companies or individuals will be recognized for their contributions, or they are made for reasons of pure self interest (i.e., to increase access to a development).

It is also important to consider two other issues when contemplating the use of this technique. First, it is important to realize that the transportation agency must be legally empowered to accept donations. Many transportation agencies currently do not have this power. Second, one must consider both donors and investment opportunities when establishing a system for donations. If a non-profit tax exempt committee is established to accept the donations, such contributions can be invested without tax liability, and corporations making contributions are eligible to receive tax write-offs.(7)

Cost Sharing

The final, and most effective joint venture technique is cost sharing. This technique has been used successfully by communities throughout the nation. It is based upon the fact that, in order to gain a long-term competitive advantage for their projects, developers are often willing to share operating expenses or contribute to the capital construction costs

of transportation facilities that are interconnected to, or integrated with, their developments.(10)

Los Angeles was the first city in the U.S. to negotiate an individual station maintenance and capital cost sharing agreement for a then proposed downtown people mover. In Washington, D.C., owners of International Square Development provide heating and air conditioning for the Farragut West Metro Station.(10) Similarly, in Des Moines, Iowa, a real estate firm is sharing in the start-up cost of a bus service to an outlying area.(6)

There are several important matters to consider when implementing a cost sharing program. Paramount among these is the fact that developers or groups who cost share should be included in the design stage of a transportation facility. This generally assures an improved overall design of the subject station area, and affords the participating development interest an improved short and long-term competitive market advantage.(10)

As with other joint venture techniques, transportation agencies must possess the legal authority to enter into cost sharing agreements.

USER CHARGES

A third group of techniques is known as user charges. In their original form, user charges were direct payments made for services rendered, highway tolls and bus fares being good examples. More recently, the concept has been broadened to include a wide range of other revenue collection techniques that do not have such a direct link between payer and purpose. To the extent that the payer is identified as a user of a particular transportation facility or service and the fee, tax, or excise is uniquely applied to the general public, the mechanism can be classified as 'User-Pay'.(4)

"User Charges" or "User-Pay" approaches, other than fares, can be classified into four broad groups. They are: Motor Vehicle Taxes and Fees, Tolls, Commercial Parking Taxes, and Taxes on Motor Fuels.

Motor Vehicle Taxes and Fees

There are a number of fees on motor vehicles which have or could be used for transportation purposes. They include: driver's license fees, motor vehicle excise taxes, registration fees, heavy vehicle taxes, tire taxes, personal property taxes on motor vehicles, safety sticker fees, etc. Revenues collected from taxes and fees are used for both transportation and non-transportation purposes. Where they are being used for transportation purposes, it is generally for highway related expenses. Nonetheless, the case has been made for utilizing such fees to finance transit, on the grounds that transit systems reduce congestion on highways and thereby provide benefit to all travelers.

Disadvantages of utilizing motor vehicle taxes and fees for financing transportation are of four types:

1. Many techniques within this category, particularly license, titling, and registration fees, vehicle excise taxes, personal property taxes on vehicles, and safety sticker fees, are insensitive to the amount of vehicle use.(4) Other techniques within this category, including heavy vehicle, weight-distance taxes, tire, parts, and repair excise taxes, do not suffer this limitation.
2. The administrative costs to collect most motor vehicle taxes are relatively high, although administrative mechanisms are in place for many of them.
3. Some of the taxes and fees within this category, are difficult to collect. For example, since many personal property and registration taxes are levied only in a localized area, anyone claiming to reside outside of the area is exempt.(5)
4. Finally, the utilization of taxes and fees within this category to subsidize other than highway travel often lacks political feasibility. This is due to the fact that many vehicle owners object to subsidizing transit through such approaches.

A major advantage of approaches within this category relates to the fact that, once established, these techniques can produce a steady and dependable income stream for transportation purposes.

There are examples throughout the country where such taxes are being used for both transportation and non-transportation purposes. Virginia, for example, allows municipalities to impose personal property taxes on vehicles.(6) A surcharge on vehicle license has a partial precedent in Washington State's two percent tax on the value of motor vehicles. The proceeds of that state tax are shared with local transit districts.(10) Motor vehicle excise taxes in Minnesota are being used to support transportation. Under provision of legislation passed in 1981, 76 percent of motor vehicle excise tax revenue will be transferred by 1992 to the state highway program and 25 percent of revenues will be used to support state transit assistance programs. Also, the federal government and many states impose additional "heavy vehicle" taxes.(3)

Tolls

Fees for access to highways, bridges and tunnels can be a significant source of revenue. Such fees are often collected by regional or turnpike authorities that operate outside state or local control. Traditionally fees from tolls have been used solely for highway finance, although the case has been made for using tolls in congested areas to finance transit on the grounds that such areas would be more congested were transit not provided.

Several factors must be taken into account before implementing tolls.

First, enabling legislation is required before this, (or most other financing techniques) can be employed. Further, if a state imposes tolls on an interstate facility, it must pay back the federal government its original contribution.(6)

States that own and operate toll facilities include: California, Connecticut, Delaware, Florida, Georgia, Illinois, Michigan, Missouri, Nebraska, New Hampshire, New Jersey, New York, Ohio, Oklahoma, Pennsylvania, Texas, Virginia, and West Virginia. New York, Philadelphia, and San Francisco have used tolls to help finance transit. For example, the Triborough Bridge and Tunnel Authority annually contributes over \$100 million to meet New York City's transit deficit.(6)

Commercial Parking Taxes

Several communities have recently begun taxing commercial parking lots. Such taxes are borne either by the parker or by the lot operator. Taxing commercial parking shows great promise in that it has the potential of both serving as a permanent local funding source for transit and transportation improvements and for increasing farebox revenue.

New York City and San Francisco have both used this technique very successfully. A six-percent tax on commercial parking in New York City yields approximately \$12 million per year. A 25 percent tax on commercial parking in San Francisco generates approximately \$5.5 million annually.

Several important issues have been raised regarding taxing commercial parking lots. Studies have shown that parking price strategies may alter travel behavior. If this is indeed the case, then commercial parking taxes may be a means of increasing transit ridership. The converse argument is that commercial parking taxes can discourage downtown shopping and job seeking and, thus, in an overall sense be counterproductive.(6) Further questions of equitability have been raised, suggesting that all long-term downtown parkers should be included in any taxing scheme, not just parkers within commercial lots.

Taxes on Motor Fuels

Taxes on motor fuels, including gasoline, diesel and gasohol, have traditionally been used only for road and highway construction and maintenance, although in recent years such funds have been used to finance transit. Such taxes can provide an ongoing revenue source for transportation, and since they vary with fuel usage, they are to some extent sensitive to levels of benefit received.(10)

Motor fuel taxes are employed by every state in the country, with rates ranging from 5 to 14 cents per gallon. Virginia recently adopted a 2-cents-per-gallon increase and an additional 4 percent tax in Northern Virginia, to help finance the Washington, D.C. metropolitan area tran-

sit system. Illinois, Florida, Tennessee, and Virginia allow local jurisdictions to tax motor fuels and earmark revenue for transit.(6)

Two major advantages of motor fuel taxes are that they are easily administered, and since they are often tied to fuel prices, they tend to rise and fall with inflation, which can be a disadvantage in times of declining petroleum prices.

MARKETING AND MERCHANDISING APPROACHES

Two additional techniques are already being used by many transportation agencies throughout the country to supplement traditional revenue sources. They are: (1) Advertising/Marketing Approaches and (2) Merchandising Approaches.

Advertising/Marketing Approaches

Transit stations, buses, trains and highways make excellent locations to market goods and services due to the large volume of people coming into contact with them daily. While transit agencies frequently take advantage of this fact by renting or leasing advertising space in high traffic areas, highway agencies do little in the way of raising revenue through advertising. Mechanisms employed include: kiosks in terminals and on boarding paths; rental display cases; audio-visual displays; and panel boards on and in trains and buses.

Cities throughout the United States are using advertising as a means of raising revenue for transit. MTA in New York City raises almost \$17,000,000 annually, while Metro in Washington, D.C., raises \$1.6 million, and the CTA in Chicago almost \$2.2 million.(10)

Cities which have employed this approach report two major problems: (1) kiosk advertising can hinder security by shielding areas from the views of security cameras and guards; and (2) kiosks are often vandalized.

Pennsylvania has extended the concept of transportation related advertising, by selling special organization license plates to members of such groups as the Elks, the Masons, the Veterans of Foreign Wars, the American Legion, etc. These plates publicize the organizations and at the same time provide significant sums of revenue for the state's transportation system. In 1984 the state sold over 82,000 plates at \$20 each and realized over \$1.6 million in additional revenue as a result. Other states also raise revenue through the sale of so-called "vanity" plates.

Concessions

Concessions can be grouped into two major categories:

- (1) Manned retail outlets (including such establishments as newspaper stands, retail stalls, food and drink stands, etc.), and
- (2) Mechanical devices (including telephones, automatic teller machines, vending machines, etc.)

They generate revenue for transit agencies through “revenue percentage” or “sales override” leases, or through annual concession fees under a master lease agreement.

While concessions can generate significant sums of revenue for the transit agency, a number of factors need to be taken into consideration before utilizing them. First, since concessions tend to slow pedestrian traffic, it is important to allow for this factor when designing access paths with the transit terminal. Second, one should be aware of the fact that although the maintenance of concessions is generally the responsibility of the concessionaire, food and beverage retail outlets and vending machines increase refuse maintenance costs associated with the transit station and associated rolling stock. Finally, increased security is frequently necessary in areas serviced by concessions.

Concessions are being used in virtually every area of the nation to generate revenue for the support of transportation facilities. In Toledo, for example, several banks are paying the maintenance costs of new downtown bus shelters, in which they are installing automatic teller machines.(6) On a much larger scale, a report by the Southern California Rapid Transit District estimates that non-food and beverage built in vending machines could generate approximately \$1 million in annual revenue for the Metro Rail System measured in 1982 dollars. It estimates further, that a full complement of kiosk and retail stall facilities located in Metro Stations would generate between \$750,000 and \$1.5 million in annual revenue to the SCRID.(10)

SUMMARY AND CONCLUSION

The years ahead will be difficult ones for many transportation agencies. Demands for services continue to increase, while infrastructure and rolling stock age, and traditional sources of transportation funding disappear. If adequate levels of transportation services are to be maintained, state and local transportation agencies will have to be increasingly creative in their funding approaches.

This paper has examined a variety of financing techniques that can be grouped within four broad categories: user charges, charges on benefiting properties, joint venture approaches, and market and merchandising approaches. Individual techniques within each of these categories are examined and described. Some of the key issues associated with the implementation of these techniques were discussed and examples of where they have been employed were cited.

While each of the techniques examined has been employed successfully by state or local governmental agencies, none, by themselves, is a panacea for generating needed revenues for transportation. Nonetheless, these and other similar techniques are deserving of further study and application. Where appropriate conditions exist, these techniques can be

effectively utilized to finance the growing transportation needs of our nation.

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