Local Transportation Goals and Financing Realities: The Urban Transit Example

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The financing of urban public transit has always been a challenging and problematic subject, but particularly so since the late 1960s when the deficit payments for existing systems grew substantially and the demand for new systems in other areas increased. The expansion of transit services or changes in fare levels are typically instituted to try to meet a wide variety of local, state, and federal goals, and funds from each level of government are usually involved. However, the most serious transit financing problems in recent years have generally occurred on the local level, where relatively small differences in local matching costs under various federal subsidy schemes frequently can overwhelm the selection process among transportation options. The paper discusses the nature of local transportation goals and how this matches up with the fiscal methods available locally and offers basic criteria by which the suitability of a local taxation scheme may be judged. The issues involved in the choice between the use of earmarked transportation taxes versus general revenues are also discussed. It is concluded that (a) local transportation projects must be planned more carefully and selected to match the true nature of the travel markets involved and (b) financing schemes should be designed to match benefits and patterns of tax burden and to minimize description in other local economic markets.

The last 10 years have been particularly turbulent ones for the nation's transportation sector. Major social, economic, and environmental factors that came to the fore in the late 1960s caused a serious rethinking of the way in which transportation needs are met. The nation's increased energy. consciousness has strengthened these forces and further complicated the transportation planning process. A major highway building era has gradually wound down, and the modest federal support for mass transit in the mid-1960s has expanded in both amount and scope under various legislative actions. Although state and local governments have always been the principal source of revenues for transportation operations, the considerable fiscal leverage of federal funds (particularly for large projects) has given federal decision makers power to make or break many local transportation projects.

A classic example of how local transportation goals can be shaped (or at least strongly influenced) by financing mechanisms is the West Side Highway Project in New York City. The existing elevated highway along Manhattan's west side is poorly designed for current traffic needs and in such dilapidated condition that most of it was closed to traffic several years ago. After numerous years of analysis and millions of dollars spent on planning funds, the state put forward Westway as its favored option -- a submerged Interstate highway that will cost roughly \$1.7 billion. transportation and nontransportation reasons have been given in favor of Westway as well as arguments in favor of trading in the funds for transit revenues under Section 103e of the Federal-Aid Highway Act of 1970. However, the arguments that appeared to have the most political appeal, especially for a fiscally pressed city like New York, are those that compare how much federal money would come into the region under these two options. Of particular import were the facts that (a) transit options required local matching funds versus the state's matching of federal highway dollars and (b) the federal share of transit projects is 80 percent versus 90 percent for highway costs (since then the Surface Transportation Act of 1978 raised the federal share for transit and non-Interstate highway projects via trade-in to 85 percent).

involved in a brief review of the economic aspects of Westway and its possible alternative projects $(\underline{1})$, I realized that the supposedly primary reason for building a major transportation facility--to effectively meet (and influence) transportation needs--seemed to take a back seat to such issues as the funding share of local governments, the number of construction jobs to be created, and other aspects that are rather secondary from the perspective of long-range planning. The transportation goals of providing cost-effective mobility were somewhat overwhelmed by the financial realities of fiscally strapped municipalities and the often all-powerful influence of federal support.

THE RECENT CRISIS IN HIGHWAY FINANCE

The past 25 years have been a period of high growth for the highway transportation sector in the United States. The roughly \$70 billion in federal aid to the Interstate highway system during this period increased the amount of new highway construction considerably. However, although the federal share of highway expenditures was much higher than before, state and local governments were still the principal sources of overall highway funds, as the table below demonstrates (note that the total amounts do not include debt retirement) ($\underline{2}$).

	Highway Expenditures, 1955-1975				
Government	Amount	Percentage			
Level	(\$000 000s)	of Total			
Federal	83 416	25			
State	183 991	55			
Local	65 111	20			
Total	332 518				

The division of funding among the three levels of government has been fairly constant over the past 10-15 years. One factor, however, that has changed dramatically during this period is the cost of highway construction and maintenance; over the 1967-1977 period the nation's consumer price index rose roughly 85 percent, but the highway cost index increased by more than 133 percent (3). Many of the highways and bridges built during the post-World War II era are now in substantial need of repair -- at a time when the costs of such maintenance are rapidly increasing and the available revenues are shrinking in constant dollar terms. The recent expansion in the amount of federal funding for bridge repairs was a partial response to the overall fiscal squeeze of state and local highway agencies. The highway user revenues (mainly from gasoline taxes) that were expected to increase with the steady expansion of highway travel could no longer be assumed to meet the necessary fiscal needs. Transit supporters who long viewed the highway sector as both sumptuously financed and as a possible source of funds for transit also have had to realize that the highway system shares, to a great extent, the same fiscal plights that transit has experienced since the mid-1960s. The idea that state and local transportation financing were highway and transit modes in a fight over the same sources of revenues was clearly erroneous. The main point is that both

Table 1. Distribution of transit operating assistance by level of government.

Govern- ment	Amount (\$000 000s) ^a			Percentage of Total		
	1975	1976	1977	1975	1976	1977
Local	699.4	857.4	841.1	49.7	52.0	44.2
State	406.6	367.1	478.4	28.9	22.3	25.1
Federal	301.8	422.9	584.5	21.4	25.7	30.7
Total	1407.8	1647.3	1904.1			

^aDoes not include automated-guideway transit (AGT), commuter rail, or urban ferryboat operations.

sectors require additional funds if the specified needs of system maintenance and expansion are to be met.

THE LOCAL FINANCING SCENE

The changes in the transportation needs and goals caused by various social, environmental, and energy factors have created a number of serious challenges for local planners and decision makers. Public pressures to expand transit services, in response to higher gasoline prices, leaves transit authorities in a revenue bind because (a) service expansion is costly and (b) the claims that higher fuel costs will swell transit patronage will very likely fall short of covering such service expenditures. Several major articles in New York City newspapers, for example, recently decried the poor condition of many of the region's commuter rail operations (4) and implied that such low-grade services were ruining a golden opportunity to attract automobile travelers who had seen their monthly journey-to-work commutation costs increase by \$15-\$17 in less than two months [assuming a \$0.40/gal cost increase (common in the New York City area), daily commutation of 25-30 miles, and 15 miles/gal efficiency].

The real question here is, Why are these transit operations in such poor condition? After possible mismanagement, union work rules, and the like are accounted for, the simple lack of ample funding and overall public concern for these and other transit operations becomes the most realistic reason. In such a setting, the transportation goal of an efficient and (most importantly) well-patronized commuter rail network is clearly at odds with the financial reality of the public's willingness to pay for such services. In a similar vein, the same local transit agencies have strongly protested the requirements [under the U.S. Department of Housing and Urban Development (HUD) and Urban Mass Transportation Administration (UMTA) regulations] to convert transit systems to fully accessible operations. The goal of providing this type of mainstream services (versus separate paratransit service) to the elderly and the handicapped, although legally mandated, does not include public assurances that the necessary funding will be available (5).

Local transit operations have traditionally been supported primarily from local or regional funding sources, which make the frequent pressures for service improvement or fare protection much more of a local concern than highway improvements. The data in Table 1 (6) demonstrate that the local share of operating assistance remained relatively constant over the 1975-1977 period, and preliminary estimates from the American Public Transit Association (APTA) show that no significant changes occurred in 1978. Federal operating assistance (under Section 5 of the Urban Mass Transportation Act of 1974) is scheduled to increase slightly each year until 1984; however,

expected increases in operating expenses and deficits will require an equal or greater expansion in state and local assistance. Whether or not a recent study's claims that many municipal governments are in better fiscal shape than originally thought is true (7), cities will still be left with difficult decisions about which local goals (including transportation) should be supported.

NATURE OF LOCAL TRANSPORTATION GOALS

many instances the definition of transportation goals of a particular area will depend on which planner, agency, or public official is asked. The transportation sector is one of the most visible public services and so essential to the everyday operations of society that its continued existence and growth is almost taken for granted. The tremendous changes in America's life-style after World War II occurred hand-in-hand with similar adjustment in the ways persons and goods were moved. In larger urbanized areas, where the local (versus state) voice in transportation planning is greatest, transit service and patronage fell rapidly as automobile ownership and use increased at an even greater rate. The increased consciousness of the need for effective planning led to a much more structured view of the planning of transportation systems and culminated in the current (often overlapping) network of metropolitan planning organizations (MPOs), transit agencies, local planning commissions, highway departments, and related agencies. In such a setting, the exact nature of an area's transportation goals (i.e., what social, economic, environmental, or other impacts the system is expected to provide) is difficult to determine, whether one is a directly involved decision maker or an outside observer.

In a recent study that, like many over the past two to three years, focused on a "current emphasis...on a more comprehensive and open process..." in transportation and urban planning (\underline{a}) , the transportation planning process was broken down into three basic levels:

- Policy planning--essentially a political arena that deals with broad social issues that set the overall context for more-specific planning;
- 2. Systems planning--analysis of entire transportation networks and the design, operation, and control of all their modes; and
- 3. Project planning--efforts associated with a particular portion of the overall system (e.g., the Westway situation in New York), including aspects of design, construction, and financing.

A crucial factor in the understanding of the linkages among these three planning areas is that only system and project planning deal specifically with transportation problems and solutions. They enter the sphere of overall policy planning as only one of many options to achieve various goals. The attainment of some social wants (e.g., cleaner air) by definition will have a major transportation element, as that sector's activities strongly affect local and regional air quality. A similar analogy could be made with petroleum conservation, as motor vehicles consume roughly 40 percent of the nation's petroleum. In other areas, however, the transportation mandate is often less clear or only has a meaningful, effective role if coordinated with other nontransportation investments or policies. suburban area, for example, that wants (or at least is willing) to grow may support a major transportation link to the central city. However, without the related investments in other overhead social services (e.g., sewer and water systems and schools), the growth that improved access might induce could be effectively stifled or redirected in an undesirable fashion.

An additional problem occurs when transportation planners, faced with overlapping or conflicting goals at the policy planning level, are hard pressed to create programs that do not violate one or more social goals. In a 1978 ruling by the Office of Civil Rights of the U.S. Department of Transportation (DOT), for example, the Connecticut Department of Transportation's arrangement of bus routes in the Hartford area was found to be in violation of the rights of that city's minority residents because the city-to-suburb service was poor, but much more extensive, higher-quality service was provided to commuters (mainly white) who travel from the suburbs to downtown Hartford (9). Although the requirements of a federal law (Title VI of the Civil Rights Act of 1964) were specifically in question here, it could just as easily have been argued on the grounds of conflicting local priorities.

Appropriate Local Transportation Goals

The real question to be asked in such a frequently confusing, highly political setting is twofold:

- 1. What social goals require specific transportation actions for their attainment, and which ones can be met by transportation or nontransportation policies?
- 2. Which of these actions is suitable for local transportation planning that depends, to a significant extent, on local financing?

Assuming, therefore, that one could ascertain the true nature and priority of a particular social goal, it still remains to be seen whether some action within the transportation sector can best meet that goal, assuming the fiscal means are available to follow that policy. In New York City, for example, the approval of the mobile source portion of the state implementation plan (SIP) to achieve federal air quality standards was based on New York State's promises of transit service improvements and fare stabilization policies. Such pledges (generally viewed to be beyond the financial capability of New York City) were based on a substantial increase in federal transit aid. When officials disclosed that these incremental revenues might not be forthcoming, the overall air quality plan was considered to be in jeopardy. In addition, the governor had used this pledge to win support for the Westway (10). Both the specific nature and actual realization of several local transportation goals were therefore strongly affected by a relatively minor change in the level of available local funds.

A state requirement (under a federal mandate) to reduce vehicular emissions, therefore, required local transportation decisions that were greatly affected and constrained by available local revenues. When plans for nonlocal revenues were threatened, the transportation policies developed to help achieve this goal became untenable. Referring to the three planning levels, this problem eventually provides those at the policy-planning level with a dilemma: Raise funds from alternative sources and carry out the planned transit scheme or develop some new transportation scenario that has a different local revenue burden yet still achieves the required air quality goals (e.g., toll charges on river crossings that are now free and the use of revenues generated to support transit).

The goal of cleaner air may have avid local support but its appropriateness as a local concern is mostly due to the existing federal mandates under the Clean Air Act of 1960. The appropriateness of reducing vehicular trips to meet these goals is also not necessarily in question, although the balance between reducing vehicle miles of travel versus the emission rate of vehicles themselves is a major policy dispute (11). However, whether it is appropriate for a city to reduce emissions by, say, raising local tax revenues in order to maintain or reduce transit fares rather than by following some alternative air quality schemes is clearly in question. The laudable local goal of a better, more heavily patronized transit system, which may help an area attain much more than cleaner air, faces very serious problems of both adequate funding and the cost-effectiveness of reducing emissions in that manner (i.e., how many persons will truly change modes due to such policies).

The clean air examples deal with the selection of policy options to meet an externally imposed goal. However, other transportation policies are more local in nature, although the financial leverage of federal and state policies cannot be ignored. Cities such as Atlanta, for example, that have begun to develop new fixed-guideway transit systems are making very expensive investments in networks that they hope will both shape and help meet future transportation needs. Atlanta, a city in which roughly 13 percent of the journey-to-work trips were made by transit in 1970 (12), made a clear local policy decision when it (a) took over the private Atlanta Transit System in 1972 and lowered fares from \$0.40 with \$0.05 transfers to \$0.15 and free transfers and (b) proceeded on an overall \$2.1 billion transit-development plan, the heart of which is that city's 14-mile subway system and a 1 percent sales tax earmarked for transit.

A recent study by the Urban Land Institute (13) supported the concept that a permanent transit structure will provide a city with the capability of sustaining and continuing growth in the future. It would not be constrained by the forces of expensive and often erratic petroleum supplies or steadily increasing congestion that might curtail and even reverse growth in more automobile-dependent cities.

Although other studies $(\underline{14})$ might question the validity of assuming that a fixed-guideway system like the Metropolitan Atlanta Rapid Transit Authority (MARTA) could effectively operate in or substantially alter such automobile-based areas, the important point is that the city thought that (a) the low-fare policies and new heavy rail system were capable of achieving important local goals (15) and (b) it was willing to finance both the escalating construction costs and (more importantly) the operating deficits. Recent UMTA policy statements concerning new rail investments (16) have stressed that such systems cannot be expected to convert lower-density, automobiledependent cities into Boston, Chicago, or New York City. In addition, it emphasized that local or regional governments must face (and plan for) the realities of substantial subsidy support and not assume that federal operating assistance will expand to fill these gaps. The experiences with San Francisco's Bay Area Rapid Transit (BART) system and the Washington, D.C., Metro have shown that optimistic expectations of break-even or modest deficit operations have been contrary to the realities of lower-than-projected patronage and rapidly escalating costs.

Local Goal Versus Local Financing

The essence of such financial limitations on possible transportation goals is the extent to which local funds are required to carry out the necessary steps to achieve such ends. The financing of transportation facilities has been widely viewed as local or regional in nature because the pattern of benefits are primarily limited to such areas. The basic reasoning behind the recently popularized value-capture concept (essentially following the long-supported idea of land-based taxes for transportation operations) follows this viewpoint as well $(\underline{17})$. One might wonder why the federal government is even in the business of local transportation subsidization, especially transit subsidies are concerned (18). However, those who advocate continued (or expanded) federal operating assistance would support their stance by pointing out the following facts:

- Such aid is needed to counterbalance the modal effects of the long history of heavy federal aid for highway development;
- 2. Many social policy goals that greater federal transit support can supposedly help to attain, such as energy conservation and environmental improvement, are multistate or national in perspective and, therefore, deserve support from the national level; and
- 3. Other programs (e.g., welfare) that are probably most effectively handled on the federal level are still heavily financed at the state and local level; federal support of more locally focused transit operations could counterbalance inequities or inefficiencies in other areas (i.e., essentially an earmarked form of revenue sharing).

The social and political impact of the 1973-1974 energy crisis probably made it possible for Section 5 of the Urban Mass Transportation Act of 1974 to be passed and thus reversed a long-standing federal policy against operating versus capital assistance. Similar changes occurred on the state level, where even a major transit state like New York did not provide local transit operating assistance until 1974. A recent survey by state transportation and highway departments (19) confirmed that, although roughly half the states provided some form of transit operating assistance, there was a strong opinion that such expenditures were local in nature and should be financed as such.

Availability of Appropriate Local Tax Mechanisms

A crucial question in such considerations is whether the local governments involved have a suitable tax mechanism that is capable of effectively funding a particular local program. Whether an individual tax package is good for a specific situation will essentially depend on the following factors $(\underline{18})$:

- 1. Will it avoid creating unwanted market effects (e.g., will a special payroll tax created to support transit development induce firms to locate outside the city)?
- 2. Will its overall incidence (the distribution of tax payments among various groups) be in keeping with local equity policies (e.g., is a propertytax-based method of transit support regressive in nature)?
- 3. Does it link tax payments to particular expenditures in a way that is conducive to collective decision making; do local citizens realize what benefits the tax revenues are to provide so they can make a rough net benefit decision on the overall

policy's merits; is there a reasonable correlation between payments made and benefits received?

- 4. Does it raise sufficient revenues while being sensitive to overall economic forces (e.g., how well will revenues keep pace with inflation)?
 - 5. Is the tax easy and inexpensive to administer?

The answers to these questions are the financial realities against which the attainability of various transportation goals must be judged. One of the strongest political appeals of the Atlanta move to take over transit operations and cut fares by roughly two-thirds was that the overall policy effectively met so many of these criteria. percent increase in the sales tax was not particularly disruptive due to the low level of sales taxes in Atlanta at that time. The highly visible connection of the sales tax to the transit system also greatly enhanced the public's understanding of the program's overall worth. The tax generated a fairly substantial amount of revenues with moderate administrative ease, and its percentage-based nature allowed its revenues to rise with inflation (assuming retail sales were stable or grew in constant dollars). One could criticize the generally regressive nature of such excise taxes (20), although at least one analysis claims that the Atlanta program's overall incidence picture (taxes paid and benefits received) is more proportional-to-progressive in nature (\underline{B}) . However, the scale of local expenditures will increase substantially as the MARTA system is completed and made fully operational. In addition, the Atlanta voters recently rejected another 1 percent increase in sales taxes (not earmarked to transit services), and a recent comparative study of the fiscal health of numerous cities showed Atlanta to be worse off than originally expected (7). Apparently the fiscal realities of the situation have changed.

EARMARKED TAXATION AS A FISCAL SOLUTION

The transportation sector has a strong precedent of earmarked revenues. Most states dedicate the majority of their gasoline tax revenues to highway construction and maintenance, althoughly two-thirds of the states return an average of one-third of these funds to counties and municipalities (19). On the federal level, the most significant example is the Highway Trust Fund, fed mainly by a \$0.04/gal qasoline tax; a similar fuel tax is used to support the Airport Trust Fund. Although a fair number of cities have some form of earmarked transit taxation (e.g., Atlanta's sales tax and Boston's property tax), the revenues generated are usually well below the needed levels, and the major source of revenues typically is general revenues. Transit advocates often feel that the main cause of their fiscal plight is the lack of this type of guaranteed revenue producer -- one that is relatively insulated from annual legislative battles for funds and provides a stable base for long-range planning.

In terms of economic efficiency, the more earmarking the better. In fact, the best earmarking device of all is user charges (e.g., fares and tolls). The more they can be depended on as a revenue source (within other economic and social constraints), the greater the efficiency of the system. The gradual decline over the past 15 years in the operating ratios (passenger revenues per operating expenses) of the nation's transit systems shows that the reverse has held true, although the decline has generally leveled off since 1975. However, any financing scheme that promotes the use of various taxes over fares must be compared with other options (including higher fares) by using the

five financial criteria outlined above. A citizens advisory committee to the Metropolitan Transit Authority (MTA) in New York City, for example, recently suggested a plan to cut all subway and bus fares by 50 percent and commuter rail fares by 20 percent by using \$130 million from a payroll tax surcharge and \$420 million in new automobile taxes and bridge tolls (21). The overall scheme would certainly have some difficulties in the area of unwanted market effects because it would further increase labor-based taxation in the most heavily taxed city in the country. Most of the levies would be easy to collect, although the retrofitting of bridges with toll systems would seem costly (not considering the continuously intense political opposition to this scheme). The connection between benefits received and taxes paid is certainly tenuous, mainly due to its heavy dependence on a transfer of funds from automobile travelers to transit passengers. Equity issues are somewhat muddled here, although I think that the net impact would be fairly regressive (22).

The main point, however, is that the sharp reduction in fares greatly reduces the affected agency's control over the system's capacity, further separates the individual passenger's decision making from the realities of service costs (especially in the peak periods), and avoids the overall transportation problem of how all modes' services are sold to the public. From my perspective, such plans can eventually worsen the overall fiscal situation in urban areas because they lower fares (although numerous studies show fares are secondary to service quality in most transit markets) and very likely disrupt other markets that are being inefficiently taxed for often unnecessary revenues. However, this does not mean that transportation agencies and decision makers should not necessarily push for earmarked taxation schemes or that such plans could not resolve fiscal constraints to local transportation developments. What it means to emphasize are the following earmarking concepts:

- Markets that are taxed should benefit from the associated transportation improvements;
- New tax should not be placed in an already heavily taxed area;
- 3. Taxing of the automobile to support transit may be an effective and economically efficient means of earmarked support in some settings; however, there is no universal rationale for such revenue transfers (also, it implies a them-versus-us modal competition that is destructive to rational transportation operation); and
- 4. All modes need to be priced efficiently before truly appropriate subsidy schemes are developed (the underpricing of automobile trips is the most widely mentioned claim here, but there should certainly be no financial carte blanche to lowering transit fares in current or constant dollars).

FUTURE PROSPECTS FOR LOCAL TRANSPORTATION FINANCE

At the recently held American Society of Civil Engineers (ASCE) conference on urban transportation finance, the financial doldrums of operators, transportation agencies, and planners were painfully clear. The basic problems of moving goods and people continue, but they have now been complicated by the pressures of the recent energy crisis and challenges of those to come. Transit forces had some signs that their time had finally come, but the entrance of new gasoline supplies brought the exit of most new patrons and the usual financial squeeze remained. The highway sector was feeling the financial weight of maintaining deteriorating

facilities and has gradually become aware that the steady growth of gasoline tax revenues was a thing of the past. It was clear that there are no simple solutions to local transportation financing problems. The promises of expanded federal transit assistance for capital project development for the 1980-1989 period by drawing revenues from the Energy Security Fund (i.e., the so-called excess profits tax on petroleum firms) provided some hope for financial relief in some areas. These funds, however, are still only tentative at best and would (a) only add an additional \$1.2 billion nationwide in annual revenues and (b) require an increase in state and local matching funds. The changeover has also begun from an age of highway construction to one that concentrates on maintenance and improved management of existing systems. The exact impact of such policy adjustments on the amount of funds available at the regional and local level is difficult to determine.

The main points when transportation goals are contrasted with available local financing, assuming an area's overall social goals as given (e.g., revive the downtown areas, reduce air pollution, and control suburban growth), are as follows:

- 1. Are the transportation solutions offered to help achieve these goals cost effective and politically implementable?
- 2. Can a financing method be found that is also in line with these and related goals and meets the types of good tax criteria outlined earlier in this paper?

Federal and state revenues will continue to be available and will frequently be the deciding factor in local transportation decisions (especially on major projects). Local revenues, however, will still be a major force, particularly in the consideration of current or future transit deficits. Regional transportation improvement programs, developed by MPOs in cooperation with state and local governments, include lists of needed highway and transit projects, with revenue needs (and shortfalls) listed next to them. Does the lack of funds to fully support such wish lists constitute a perplexing financing problem?

Clearly, the question, in the familiar terms of economics, has both supply and demand elements. Although it is hard to define, there is a limit to available local revenues. In addition, other local social services are crying poverty with equal vigor, including the politically sensitive areas of education and police expenditures. The financial realities of local government, especially in larger, older cities that have recently lost numerous residents and jobs to other areas, presents financial and transportation planners with a double challenge:

- 1. Carefully select programs and projects that are closely matched with the realities of transportation demand in the travel markets in question, and
- 2. Give equal attention to the identification of financing schemes that are correlated with the patterns of benefits provided by the services local government funds and minimize disruptions to other economic markets. Effective, rational pricing of the services involved is crucial to such considerations, from both operational and financial perspectives.

Some local areas will be more hard-pressed than others to find and politically implement the solutions to these two problems and, I hope, federal

and state assistance will, to some extent, reflect these differences. Relatively minor differences in the local cost of particular programs should not dominate decision making, and seemingly artificial differences in incentives from federal and state sources should be removed (e.g., the gradual closing of the gap between transit and highway matching shares). In summary, the only solution to local revenue shortfalls must include (a) program prioritization, (b) greater stress on cost-effective program selection, and (c) the careful development of financial schemes that follow some of the general guidelines that this paper has briefly reviewed.

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Publication of this paper sponsored by Task Force on Local Transportation Finance.

Transit Financing Trends in Large U.S. Metropolitan Areas: 1973-1978

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From 1970 to 1978, total government subsidization of transit in the United States increased almost tenfold, from only \$540 million to \$5264 million. This burgeoning aid program has prompted significant changes in the nature of government assistance. There has been a marked shift among government levels in the responsibility for transit financing, and new tax mechanisms have been adopted, particularly at the local and regional levels, to raise additional transit funds. This paper documents these transit financing trends in detail and explores briefly the potentially significant impact of these trends on the overall equity, efficiency, and political feasibility of transit financing. On the basis of operating subsidy data collected from transit agencies in each of the 26 largest U.S. metropolitan areas and capital subsidy data for all urban

areas provided by the U.S. Department of Transportation, two main conclusions were reached. First, the responsibility for transit financing has shifted to higher levels of government so that, in 1978, the federal government contributed 52 percent of the total subsidy. Second, there has been a very strong trend toward the use of uniform-rate regional taxes specifically earmarked for transit subsidization.

Government financial assistance to mass transit in the United States has increased dramatically since 1970, when capital and operating subsidies combined