ASSESSING THE ARGUMENTS FOR URBAN TRANSIT OPERATING SUBSIDIES

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Operating subsidies to urban transit have been growing rapidly in recent years. In the near future they will probably pay one-third or more of the industry's operating expenses. Proponents argue that operating subsidies are desirable because (a) they alleviate problems with existing automobile and land use patterns (such as congestion, air pollution, energy consumption, and urban sprawl); (b) they create a more egalitarian distribution of income and mobility; and (c) they permit public transit to be priced at its marginal cost. Unfortunately, many of the arguments of subsidy proponents are implausible. The most plausible argument is not that operating subsidies should be used indiscriminately, but that they should be used to support only particular types of public transportation service. Local transportation authorities currently do not restrict their fare reductions to the appropriate types of service, and they are not likely to do so in the future.

•IN RECENT YEARS the amount of operating subsidies received by the urban transportation industry has grown rapidly. The public, as well as most government officials, appears to accept without criticism the necessity or desirability of operating subsidies. Now that operating subsidies are so substantial, it is important to reassess their rationale. This analysis has two purposes: to estimate the size of current government operating subsidies and to review evidence that suggests that operating subsidies will not generate most of the benefits proponents of subsidies claim.

GROWTH OF OPERATING SUBSIDIES

A few states and local governments have long provided assistance to local urban transportation firms. Since World War II, public transit ridership has steadily declined, and the level of state and local government subsidies for both capital and operating expenses has slowly increased. Partially because of the burden of these growing subsidies, local governments began to lobby for federal operating and capital assistance for urban transportation in the late 1950s.

Programs of federal aid for urban transit have existed since the early 1960s, but not until 1974 could federal aid be used to pay both capital and operating expenses. Since 1964, the principal program of federal aid has been the UMTA capital grant program. Only public agencies are eligible for capital grants, but they are allowed to lease the capital facilities or equipment purchased at nominal rates to privately owned transportation firms. The local agency must contribute a share of the costs of any federally assisted capital project. The local share, a minimum of one-third through 1973 and one-fifth since that time, cannot be financed out of passenger revenues. Federal expenditures under the capital grant program have increased from $52 million in fiscal year 1965 to $826 million in fiscal year 1974. The National Mass Transportation Act of 1974 authorizes the expenditure of $7.8 billion for capital grants over the next 6 years, an average of $1.3 billion per year.

Federal assistance was restricted to capital expenses until 1973 largely because it was believed that local transportation authorities and unions would find it more difficult to dissipate capital assistance, especially in wasteful operating practices and ex-

cessive wage rates. Local authorities in smaller urban areas thought that the restriction was unfair, however, because the capital needs of their bus transit systems were relatively small. In addition, some local authorities in the larger urban areas (which were extending, building, or planning rail transit systems) lobbied for operating assistance. They believed passenger revenues on these new rail systems would not even cover operating expenses.

As part of the National Mass Transportation Assistance Act of 1974, which increased the funding for federal capital grants, Congress authorized a new program of federal operating grants. Unlike capital grants, which are distributed among metropolitan areas at the discretion of the Secretary of Transportation, operating grants are distributed among metropolitan areas according to a formula specified in the act. Local governments are required to contribute an amount at least equal to federal operating aid, and the level of local operating aid must not fall below the level provided in the years just prior to 1974. The act authorized $3.9 billion in operating aid during the 6 years from 1975 to 1980; the annual rate of disbursement increases from $300 million in 1975 to $900 million in 1980.

Direct estimates of the magnitude of all the government operating subsidies for urban transportation are difficult to obtain mainly because hundreds of state and local governments provide operating aid. No transportation operation can sustain a service that operates at a deficit without some form of subsidy, however. Thus a useful rough estimate of government operating subsidies can be obtained by looking at the industry operating deficit. This deficit is the difference between operating expenses and operating revenues (which are made up largely of passenger revenues). Figures obtained this way may, however, underestimate actual government subsidies for two reasons. First, the operating deficit does not reflect those government operating subsidies provided in the form of tax abatements or services in kind. Second, some firms still make an operating profit, and, as a result, the operating deficit does not accurately represent the sum of the operating deficits incurred by the firms in the industry.

If we use the reported industry operating deficit as a rough minimum estimate of government operating assistance, the recent growth in the level of operating subsidies is impressive. The urban transportation industry includes bus and rail transit firms and commuter railroads. Extensive data on deficits of transit firms are available from the American Public Transit Association. APTA estimates that transit firms did not show a collective operating deficit until 1963. The transit operating deficit grew rapidly after 1963, in the last few years at an annual rate of 25 to 30 percent. By 1973 the annual transit operating deficit was $681 million (1). In that same year the collective operating deficit of commuter railroads was between $42 and $108 million, depending on what share of railroad operating costs is allocated to commuter as opposed to freight operations (2, pp. 380-382). Thus by 1973 the total annual urban transportation operating deficit was between $723 and $789 million.

Because of this recent rapid growth, government operating subsidies were an important source of revenue for the industry even before federal operating grants began. By 1973 operating subsidies were more than one-third as large as all revenues received from passengers. Although the operating deficit was between $723 and $789 million, operating revenues (largely passenger revenues) were $2.085 billion. This level of operating subsidy is even more impressive when one considers that during 1973 the industry also received at least $1 billion in state, local, and federal capital assistance. If we count capital as well as operating assistance, in 1973 the industry received about as much in government subsidies as it collected in passenger revenues.

In the future, if only because of the federal operating grant program, the level of operating subsidies will continue to grow. The law establishing that program requires that local governments provide matching funds; it also requires that the operating aid given to local governments not be reduced below the level provided before the program began. At the level of currently authorized funding for federal operating grants, operating assistance from all levels of government will increase from $1.223 billion in fiscal year 1976 to at least $1.623 billion in 1980. During that same period, if the current funding levels for the federal capital grant program are not changed, capital as-

sistance from all levels of government will be at least $1.625 billion per year. Thus, in the next few years, minimum total government assistance (operating plus capital subsidies) will grow from $2.848 to $3.248 billion per year. This estimate is considerably higher than the $2.085 billion collected by the industry from passengers in 1973.

Few other industries are as dependent on government subsidies as the urban transportation industry now is. Most other industries price their goods and services so that the revenues collected from customers are sufficient to pay for the production costs. Selling a good or service at its cost implicitly encourages consumers to conserve the scarce resources used to produce it. Why is urban transportation so unique? Why should the industry fail to charge its users for the resources required to provide transportation?

ARE OPERATING SUBSIDIES DESIRABLE?

The Proponents' Arguments

Proponents of urban transportation subsidies argue that government subsidies make it possible to set fares below average costs, and that fares below costs are desirable because they generate benefits for society. Fares can be set below average costs either by reducing the fare while maintaining the level and quality of service provided (thus maintaining costs) or by holding the fare constant while increasing the level and quality of service provided (thus increasing costs).

The proponents of subsidies claim that low fares offer benefits. First, they correct the problems with current automobile and land use patterns. The most frequently cited problem with automobile use is excessive automobile travel encouraged by government aid for highway construction and by the failure of governments to charge automobile users for the full costs of the congestion, pollution, and accidents they cause or the parking spaces and energy they consume. Proponents of subsidies argue that lower transit fares reduce automobile travel by encouraging travelers to shift to transit. The most frequently mentioned problems with current land use are urban sprawl and the decline of economic activity in the central business districts of large metropolitan areas. It is widely believed that jobs and residences will return to the centers of large metropolitan areas if public transit is subsidized.

A second benefit of low fares is that they create a more egalitarian distribution of income and mobility. Some proponents of subsidies argue that the benefits of low fares accrue largely to transit riders and that the riders generally have low incomes. Other proponents argue that low transit fares are especially beneficial to persons who, because of poverty, age, or physical handicap, have limited access to private automobiles.

Improving the allocation of society's resources among competing uses, which comes from pricing goods and services at their marginal costs, is a third benefit attributed to low fares. The marginal cost of a good or service is the additional cost incurred by producing one more unit of that good or service. Generally, only economists are concerned about pricing goods at marginal cost, and most economists argue that the allocation of society's resources is improved if we produce only as much of a good as can be sold at the marginal cost. If the average cost of a good declines as the output of the good is increased, then the revenues collected under marginal cost pricing will be less than the total costs. Some economists argue that transit exhibits such declining average costs and, as a result, must be subsidized if it is to be priced at marginal cost (3).

The Opponents' View

Opponents of subsidies generally have two counterarguments. One is that the subsidies will cause inefficiency in the transit industry. Managers in unsubsidized and privately

owned firms have strong incentives to use efficient methods to produce their services because reductions in production costs increase their profit. Under subsidy arrangements, however, cost reductions usually do not bring increases in profits. In addition, because subsidized firms are often publicly owned, profits are often a less important goal for their managers. As a result, the manager's incentives to control costs may be weak.

The other and perhaps more important counterargument is that the proponents' arguments that low fares are desirable because they generate important benefits are implausible because low fares do not generate the benefits proponents claim or because low fares are a relatively inefficient method of generating those benefits.

Available evidence generally supports the latter counterargument. We will review the evidence below and draw from it three important conclusions. First, most, but not all, of the proponents' arguments are implausible. The unconvincing arguments are that low fares are desirable because they improve land use, improve some problems with automobile use, and create a more egalitarian distribution of income. Second, the proponents' more plausible arguments do not imply that subsidies and low fares should be applied indiscriminately but rather that subsidies should be restricted to specific types of transit service. The plausible arguments are that low fares are desirable because they reduce automobile congestion and improve the allocation of resources through marginal cost pricing. Third, local transit authorities do not restrict their subsidies to the appropriate types of transit service, and they are not likely to do so in the future. The first two of these conclusions have been noted by several other analysts (4, pp. 341-353; 5; 6). But given the recent rapid growth in government operating subsidies, it is worthwhile for us to review the conclusions again.

THE PROPONENTS' IMPLAUSIBLE ARGUMENTS

Improvement of Land Use Patterns

Analysts concerned with current land use do not concur in the exact reasons why urban sprawl and CBD decline are undesirable. If they are undesirable, fare reductions will have only a small and uncertain effect on sprawl and decline. Land use patterns are the product of a number of decisions made by individual workers and employers on residential and workplace locations.

Economists have developed simple analytic models of these locational choices. The cost of transportation is an important factor in locational choices; for example, models hypothesize that workers consider the out-of-pocket and time costs of commuting to their jobs from different locations when choosing their residence. Workers employed in the center of a metropolitan area are assumed to make a trade-off between decreasing costs of land and housing and increasing commuting costs when deciding how far away from the center they will live (7).

These same analytic models can be used to make gross predictions about the effects of changes in transportation prices, including transit fares, on the location decisions of workers and employers. Based on use of these models, in the short run even a substantial change in fares will have little effect on land use. In the short run the most important effect will be on the residential location decisions workers make. A fare reduction will have little effect because transit fares are only a small part of the costs that individuals consider when choosing a residential location. In addition, certain characteristics of the land markets, such as the durability and immobility of houses, make the response of locational decisions to changes in relevant costs quite slow.

In the long run, lower fares are more likely to affect land use. The effect, however, will not be an unambiguous reduction in urban sprawl or CBD decline. For example, a reduction in fares will make it less expensive for workers employed in the center of a metropolitan area to live in lower density areas farther from the center and, as a result, will tend to shift the location of residences and certain population-serving industries, such as retail sales, away from the centers of metropolitan areas. However, a reduction in transit fares will also make it less expensive for employers in the center

of the metropolitan area to attract employees and, as a result, may cause an increase in economic activity at the center and in the number of workers who must live close enough to the center to commute. Because a change in transit fares establishes incentives both to decentralize and to centralize residences and jobs, it is not clear whether, in the long run, changes in fares will reduce or accelerate CBD decline and urban sprawl.

Improvement of Automobile Use Patterns

With the possible exception of the argument that low transit fares will reduce automobile congestion, most of the arguments that low fares are desirable because they alleviate problems of automobile use are unconvincing for three reasons. The first reason is that some of the alleged problems with the current pattern of automobile use are not especially serious. For example, it is not obvious that the failure of automobile users to pay the full costs of the parking they use causes excessive automobile use. Automobile parking is subsidized because fees in some municipal lots do not cover costs or because some employers and retailers provide free parking for those employees and customers who use automobiles. Evidence suggests that where the cost of land for parking spaces is high, as in the centers of the more dense metropolitan areas, these practices are uncommon (2, pp. 156-159). As a result, the effective parking subsidy and any resulting imbalance between automobile and transit use are probably relatively small.

The second reason why some of the proponents' arguments are unconvincing is that, even if problems with automobile use are serious, low fares simply will not alleviate them. For example, several empirical studies and casual observation have shown that, at least in the short run, a change in transit fares has only a small effect on the level of automobile use (6, 8, 9, pp. 61-71). One study, which used data on the choices of commuters in Chicago in the late 1950s, estimated that, if the transit fare had been dropped to zero, there would have been only a 13 percent reduction in automobile work trips. To induce a 50 percent reduction in automobile work trips in the 1950s, when incomes were much lower than they are now, each transit rider would have to have been paid about 50 cents for each trip (8).

The implication is that reductions in transit fares cannot in the short run correct problems that require a large reduction in the number of automobile trips, such as automobile air pollution. Given the reductions in vehicle emission rates required under the federal Clean Air Act, automobile air pollution is a problem in only a few large cities, notably Los Angeles and Chicago. However, these cities have such unfavorable airsheds, large numbers of automobiles, and small numbers of nonautomobile pollution sources that large reductions in peak-period automobile use are necessary to ensure that federal ambient air standards are met (10). Because automobile use is relatively insensitive to changes in transit fares, in the short run automobile air pollution cannot be corrected by transit subsidies.

In the long run the number of automobile trips will be more sensitive to changes in transit fares. However, even in the long run it may not be desirable to use transit subsidies to correct problems that require a large change in the number of automobile trips. These problems, such as air pollution, energy consumption, and congestion, are in a sense the product of too much transportation. In the long run less transportation is probably a more appropriate solution to these problems than simply changing the mode of transportation used. A policy of fare reductions to encourage the use of transit, instead of a policy to discourage the use of transportation in general (and automobile transportation in particular), will increase the use of transportation and, if successful, will probably just shift the locus of these transportation-induced problems away from the automobile to public transit.

The criticism that low transit fares will not correct the problem is also applicable to the argument that lower fares are desirable because they correct the problem of excessive construction of urban highways. In fact, existing urban highway capacity

may not be excessive since the benefits of some selective construction apparently would exceed the costs (2, pp. 155-156). In addition, highway users pay the costs of urban highway construction and maintenance in special highway user charges such as motor vehicle fuel and excise taxes and tolls. However, if we accept that urban highway construction is excessive, lower transit fares cannot affect construction and maintenance costs because lower fares affect only the level of use of existing highways. Because highways are durable, changes in the level of use hardly affect construction and maintenance costs. The only way to correct the resource misallocation entailed in any excessive construction of highways is to reduce the future rate of highway construction. The recent recognition of some of the social costs of highway construction, such as the destruction of urban neighborhoods, appears to have reduced the rate. The amendments to the Federal-Aid Highway Act of 1973 may also reduce highway construction in the future. The amendments provide that, if state and local governments do not wish to construct an urban segment of the Interstate Highway System and if the U. S. Secretary of Transportation agrees that the segment is not essential, the money earmarked for the segment can be used for transit instead. The amendments also provide that, as of fiscal year 1975, state and local governments have the option of diverting federal aid designated for non-Interstate urban road systems to transit projects.

The third reason why low transit fares are not desirable to solve problems of automobile use is that low fares are often an unnecessarily cumbersome and indirect method of alleviating the problems. This criticism is most applicable to the argument that low fares are desirable because they encourage energy conservation. Although subsidies and low fares will shift some travelers from automobiles to transit, energy may not necessarily be conserved. Lower fares, rather, encourage more trip making. And, if new transit services are required to induce a substantial shift away from automobiles, the average passenger load per transit vehicle and thus the relative energy efficiency of transit may decline.

Even if we assume that low fares will save energy, conservation will occur in only one use of energy: the work trip. Low fares do not encourage conservation in other transportation uses (such as intercity and nonwork passenger trips or freight transport) and in nontransportation uses (such as home heating and manufacturing). Low fares, moreover, encourage only one method of conservation in the work trip: shifting from automobiles to transit. They do not encourage other methods, such as increasing the gasoline mileage of automobiles, car pooling, or living closer to work.

The difficulty of inducing automobile users to switch to transit suggests that, compared to reducing energy consumption in other uses and by other means, reducing energy consumption with low fares will be difficult and relatively expensive. Automobile users are attached to their automobiles largely because instant availability and door-to-door service conserve travel time. To induce any substantial voluntary shift, one must compensate former automobile users for their loss of convenience with substantial transit subsidies. The loss of convenience, or the compensation necessary to make automobile users give up the convenience voluntarily, represents a real cost of this method of energy conservation. Two methods of conserving energy in urban passenger transportation that are probably much less costly are shifting to a lighter, more energy-efficient automobile and reducing the number of nonwork trips. Lower cost methods of conserving energy are probably also possible in the nontransportation uses of energy.

Redistribution of Income

Like the argument that low fares are desirable because they alleviate problems of land and automobile use, the argument that low fares are desirable because they create a more egalitarian distribution of income is also implausible. Most persons who make this argument assume that the benefits of low fares accrue to transit riders and that most transit riders are poor. However, some of the benefits of low fares are shifted by market forces from the riders to other groups that have higher incomes, notably

CBD landowners. Specifically, a change in transit fares changes the relative advantage of different locations for residences and employers, and, in some situations, the landowners can exploit the advantages by charging higher rents (5, 11).

Even if transit riders do receive all the benefits of low fares, the typical rider is, by national standards, not poor. Transit ridership is concentrated in the large metropolitan areas where monetary (if not real) income is relatively high. Inasmuch as transit is mainly used for the journey to work, certain groups with relatively low incomes, such as the unemployed and retired, are underrepresented in the ridership. As a result, the distribution of all U. S. transit riders according to household income is about the same as the distribution of all U. S. households according to household income (2, p. 210; 12; 13).

The redistributive effects of low transit fares might be improved if the fare reductions were restricted to those types of services heavily patronized by poor riders (e. g., service in smaller metropolitan areas and the shorter radial and off-peak service in larger metropolitan areas) or to those riders on all types of service who are poor (e. g., through a special reduced-fare identification card). But even with this strategy low fares will not bring benefits to the large number of poor people who do not use transit often, especially the rural poor. Poor people, moreover, might prefer to be given the money directly, to spend for what they need, rather than to receive it in the form of subsidized transit. More effective and efficient methods of aiding the poor would be to give them money grants or subsidies directly for more widely consumed goods, such as food or housing.

THE CONVINCING ARGUMENTS AND THEIR IMPLICATIONS

Two arguments for operating subsidies are more plausible than the ones we have discussed so far. They are that low fares are desirable because they reduce automobile congestion and that operating subsidies permit the pricing of transit at marginal cost. It is important to note, however, that these arguments (as well as the other, less plausible ones) do not imply that indiscriminate fare reductions are desirable. Rather, they imply that low fares should be restricted to specific types of public transit service.

Automobile Congestion

When a vehicle enters a stream of traffic on a highway, its presence reduces the average speed of all the vehicles on the highway. By reducing the average speed it increases the cost of traveling, in terms of time, for the occupants of all the vehicles. In deciding whether to enter the highway, the occupants of the marginal vehicle do not take into account the time costs that their entrance will impose on travelers already on the road. As a result, automobile use may be underpriced and highway congestion may be more severe than is desirable. The effect of the marginal automobile on average speed and thus the time costs it imposes on other travelers can be relatively large but only when the volume of traffic is close to the maximum capacity of the highway. This usually occurs only on highways in the central areas of the larger, older metropolitan areas during the height of the morning and afternoon rush hours.

Two direct methods of reducing excessive congestion are to impose a toll on peak-period highway users equal to the time costs they impose on other users or to physically restrict access to the highway during the peak (for example, by closing or metering some expressway access ramps). Unfortunately, these direct approaches sometimes are expensive to implement or are politically infeasible (14). For example, it may be expensive to collect a toll from all vehicles entering a congested downtown area in the peak period unless access to the downtown area is restricted to a few roads or bridges (as it is in Manhattan).

Where more direct methods are impractical, it may be desirable to reduce highway congestion by lowering transit fares. Although reductions in transit fares have only a

small effect on automobile travel, on heavily congested highways extremely small reductions in automobile use can be beneficial. It is possible that the reduction in highway congestion is worth the cost of certain undesirable side effects of reducing fares, notably the cost of encouraging the use of transportation in the peak period. Obviously, this rationale for low fares implies that fare reductions should be restricted to transit services that compete with heavily congested highways. That service is likely to be confined to the extremely large and older metropolitan areas and, within the metropolitan areas, to the core area during the peak traffic periods.

Marginal Cost Pricing

The other plausible argument that implies that low fares should be implemented only on particular types of service is that subsidies are desirable because they permit marginal cost pricing of transit. If one accepts the reasoning of many economists that pricing goods at marginal cost is usually advisable because it ensures the appropriate allocation of society's resources among competing uses, then the plausibility of this argument depends on whether the average cost of providing a transit trip declines as the number of trips increases. If average cost declines, fares set at marginal cost will generate revenues below total costs and a subsidy may be required.

The evidence on whether the average cost of transit declines as the number of trips increases is too complicated to be summarized here (2, 3). It indicates that on all but one type of service operating subsidies are not required because prices set at marginal cost will generate sufficient revenues to cover operating costs (although not always sufficient to cover capital costs as well). The only type of service for which operating subsidies may be required is bus or rail rapid transit routes with such a low density of passenger demand that headways are more than 30 or 40 min. Of course, transit service should not be provided at all on those routes if the passenger density is so low that other public transportation modes, especially taxi or jitney, could serve the passengers at a lower total cost than the transit modes. Transit service with such long headways is most likely to be found in the small metropolitan areas with relatively extensive or new highway systems. Within those metropolitan areas, long headway service is most likely to be found in the suburban areas and during off-peak periods.

ALLOCATING SUBSIDIES TO THE APPROPRIATE TYPES OF SERVICE

Currently, operating subsidies are often not used to support those types of service that the more plausible arguments indicate should be subsidized. The problem is not that subsidies are unavailable. As was shown earlier, operating subsidies to the industry are substantial and growing. Moreover, at least before the advent of the new program of federal operating grants, operating subsidies to the industry were concentrated in firms serving those metropolitan areas that have a substantial amount of the two types of service that probably should be subsidized: service with long headways and service competing with very congested highways. This can be demonstrated by comparing the operating ratios of transit firms serving different metropolitan areas. The operating ratio is the ratio of operating expenses to operating revenues (largely passenger revenues) and, thus, reflects the extent to which the firm relies on operating subsidies. The higher the operating ratio is, the larger the relative operating subsidy is. According to 1972 data on 105 transit firms, firms in the large and high-density metropolitan areas (likely to have substantial service competing with congested highways) and firms in small and low-density areas or cities (likely to have substantial service with long headways) generally have higher operating ratios than others (2, pp. 340-357).

The more important problem with the current use of operating subsidies is that within those metropolitan areas the subsidies are usually not targeted to the types of service for which they are most desirable. It is hard to get information on the dis-

tribution of operating subsidies among different types of service within a metropolitan area. Sometimes the information can be inferred from the fare structure, the operating ratios of individual routes, or the differences in operating ratios between bus and rail transit operations serving the same metropolitan area. In a few large metropolitan areas where inferences can be drawn, the distribution of operating subsidies among different types of service appears to be perverse; the service most likely to compete with extremely congested highways (central city and short radial service) generally has a relatively low operating ratio. However, the tendency for any particular type of service to receive higher operating subsidies is not strong; for example, a wide variation often exists in the operating ratios of routes that appear to offer similar types of service (2, pp. 357-377).

State and local governments are at least nominally responsible for decisions about the appropriate level or use of operating subsidies in a metropolitan area. It is unlikely that they will, on their own initiative, change the distribution of subsidies among different types of service to make it more consistent with the distribution of subsidies implied in the more plausible arguments for subsidies. The benefits of transit subsidies are concentrated on relatively small groups within a metropolitan area, such as transit riders and, in some cases, downtown landowners and transit unions. Although the determinants of local decisions about subsidies are undoubtedly complex, a basic determinant is probably the status and relative political power of these beneficiaries. For example, in a metropolitan area where only a small portion of trips to the downtown area are made by transit, downtown interests may not perceive subsidies to be very beneficial. In a metropolitan area where the downtown has a relatively small proportion of the total economic activity, downtown interests may not be powerful enough to get substantial subsidies. And, in a metropolitan area where a majority of transit riders are poor or from an ethnic minority, subsidies are less likely.

If these fundamental characteristics of local communities are important determinants in decisions about subsidies, then it will be difficult to change local decisions about how subsidies are distributed. Actions that change the distribution of subsidies among different types of service, such as a change in the fare on one route relative to the fares on others, redistribute the benefits of subsidies among different groups of riders (and landowners) within the metropolitan area. These different groups often come from different cities or neighborhoods within the metropolitan area, and therefore benefits are redistributed among the different cities and neighborhoods, too. As a result, such decisions are politically sensitive for the metropolitan area government. It is difficult to arrive at a consensus among riders, cities, or neighborhoods about what is a fair distribution of subsidies within the metropolitan area. And, because local governments find changing the distribution of subsidies politically sensitive, it is unlikely that they will, on their own, retarget subsidies to particular types of service.

It is also unlikely that the federal government, perhaps as part of the program of operating grants, can improve the targeting of operating subsidies to the appropriate types of service. Because transit decisions are the responsibility of state and local governments, about the only means the federal government has for changing these decisions is to make federal grants conditional on them. One reason why it is unlikely that the federal government could improve the targeting of subsidies is that the threat of withholding grants may have little effect on state and local decisions, especially since the decisions affected are so sensitive.

More important, little support is evident within the legislative or executive branches for a federal effort to assess and change detailed local decisions about subsidies. Lack of congressional support for such an effort can be seen in the fact that, unlike the older federal capital grants (which are distributed among metropolitan areas largely at the discretion of the U. S. Secretary of Transportation), the new federal operating grants are distributed among metropolitan areas by a formula specified by the authorizing legislation. Within the executive branch the only support for an effort to assess and improve local decisions about transit comes from the Office of Management and Budget (OMB). OMB has been concerned that most of the expensive rail lines constructed under the capital grant program generate too few benefits to justify their costs. To date, the Urban Mass Transportation Administration, which administers the federal capital and

operating grant programs, has successfully resisted OMB pressure to make detailed assessments of local proposals for capital projects. Instead, UMTA usually approves any capital grant application that meets the simple statutory requirements (9, pp. 77-83).

The reluctance of Congress and UMTA to assess and improve local decisions about subsidies is understandable. Because the rationale for targeting subsidies to particular types of service is complex and not widely appreciated, the federal government could appear petty and unreasonable if it threatened to withhold assistance because fares on particular services were too high or too low. Any attempt to change local decisions would cause additional friction between the relevant federal agency and the congressional delegations from the affected areas.

Key congressional supporters of federal assistance are motivated less by the possibility of using federal assistance to alleviate problems with current patterns of automobile and land use, with the distribution of income and mobility, and with marginal cost pricing of transit than by the possibility that federal transit assistance will provide some financial relief to hard-pressed urban governments. Of course, the objective of providing financial relief to urban governments does not imply categorical grant programs for transit, but rather a program of revenue sharing with urban governments. This is especially true because transit ridership and presumably the benefits of transit subsidies are heavily concentrated in a few large cities in the Northeast. (The New York, Chicago, Boston, and Philadelphia metropolitan areas have only 14.6 percent of the nation's population but more than 52 percent of transit ridership.) Regardless of whether transit assistance is the appropriate mechanism for bringing financial relief, it is obvious that members of Congress preoccupied with the objective of financial relief will perceive little payoff in making assistance conditional on detailed local decisions about how subsidies are used.

SUMMARY

Most of the popular arguments supporting government subsidies for low transit fares are implausible. The more plausible of these arguments do not imply indiscriminate subsidies but rather subsidies to particular types of services. The governments responsible for local transit decisions do not target subsidies to the appropriate types of service and are unlikely to do so in the future.

The lack of popular appreciation of the limitations of the arguments for subsidies and the inability of governments to target subsidies to the appropriate types of service probably have two important consequences. The first and most obvious consequence is that current government subsidies, despite their size, probably do not effect even the more achievable of their claimed benefits. The second consequence is that the level of government subsidies to the industry is likely to grow far beyond the levels implied by the more plausible arguments. Without an appreciation of the limitations and implications of the arguments, government officials and managers in the transit industry have no defensible criteria for deciding whether the fare on a service is appropriate or whether a particular service should be expanded. In the confusion, low fares, like the 35-cent fare in New York, are often treated as if they were ends in themselves, rather than means to other ends. Further, transit managers tend to make few changes in the services they provide, regardless of declining patronage and changes in residential and employment patterns. If these simplistic policies are followed in the face of constant cost inflation, the recent rapid growth in government subsidies will continue. For example, a simple extrapolation of current cost and passenger trends indicates that the annual transit operating deficit in the New York metropolitan area alone will reach $1 billion in a few years. Although this rapid growth in transit subsidies is unlikely to effect many of its claimed benefits, it will reduce the amount of resources urban governments have available to help with other pressing public problems, such as poverty, education, housing, health care, emergency services, and crime.

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