of the recent spate of significant fare increases in the larger cities. In addition, the issue of transit efficiency and economy is receiving increasing attention at all levels of government; new state programs and local initiatives, such as the recent productivity-linked labor agreement in New York City, are being undertaken to combat rising unit costs.

These considerations support the view that costs and revenues will increase at somewhat lower annual rates than those projected on the basis of performance from 1974 to 1976 alone. In these lower estimates, unit costs would increase 6.5 percent, service levels 2 percent, ridership 0.5 percent, and average fares 3 percent. The net result would be a slightly lower deficit in 1981 than the earlier projection had indicated. This smaller deficit would require increases in operating assistance of 14 percent annually, rather than 17 percent.

Some governments will find 14 percent increases in transit financing tolerable; others will not. Some will even welcome much greater increases as they undertake significant service expansion or fare reduction. Many small urbanized areas, for instance, have recently inaugurated large service increases, probably largely as a result of recent new sources of federal and state operating assistance. On the other hand, some medium-sized and small cities fear that using these new funds now will leave them holding a very large bill if state and federal funding is withdrawn or reduced 3 to 5 years hence. Even present deficit levels are intolerable in many of our largest and most transit-intensive cities, despite federal and state assistance. These cities have already found the cost of transit service too high, and they are attempting to retrench through service cutbacks and fare increases.

Obviously, the way different cities handle this issue depends on the priority they place on transit services and on their taxing resources. The catch is that the cities that appear to have the greatest need for and dependency on transit are the older, denser cities, whose budgets are most strained by other public-service needs. Because these cities have grown to be dependent on transit, they have the most to lose by curtailing transit services and the most to gain by developing lower cost transportation alternatives. On the other hand, innovations in the types of service provided and in the efficiency of traditional services may be more difficult to implement in these cities, simply because the inertia surrounding existing methods may be much greater than that in less transit-intensive cities. Future transit service and financing initiatives can and will come, as they have to date, from a variety of cities—New York City (the recent labor agreement); Knoxville (paratransit and the brokerage concept); and Madison, Wisconsin (transportation systems management and the use of part-time labor).

CONCLUSION

In summary, three points stand out.

1. Deficits are not completely self-generated; both past and future deficits are a result of public-policy choices concerning fares, levels of service, labor negotiations, and taxation.
2. The momentum of current trends in rising costs, constant ridership, slowly rising fares, and gradually increasing levels of service will probably push deficits upward at a rate of about 15 percent/year, but this will vary greatly among types of cities.
3. The probability that governments will take the initiative to reduce deficits through innovative types of service and new efficiency controls—rather than through service cutbacks—will be largely a function of the financial pressure on those cities and of their commitment to provide improved public transportation service in the face of that pressure.

Objectives of Public Transportation Assistance

Porter Wheeler, Congressional Budget Office

Basically, it is clear that transit has rather strong support in Congress. Members of Congress are very reluctant to oppose transit programs and transit funding, because the urban voting block is strong and the mass transit block may be stronger still. The question really is what is being supported. The objectives of the urban transit programs of the Urban Mass Transportation Administration (UMTA) are not particularly well defined. In the operating area, this is because the programs are rather new; they just began in a small way in fiscal year 1975. At present, both the capital and operating programs require more thought, rather than more money.

Specifically, there are two aspects of the transit programs that will be addressed here. One involves some budgetary questions and the other some questions that have been raised by Congress about the UMTA programs. Such questions must be answered if Congress is to continue to approve dramatic increases in mass transit funding.

First, how does the new budget process affect mass transit funding? This big push for financial aid to urban transit came in the 1970s. Although some funding was provided under the 1964 act, the largest amount came under the 1973 and 1974 amendments, which provided approximately $12 billion in the form of contract authority. This funding was provided in legislation recommended by the authorizing committees, in this case, the Senate Banking Committee and the House Public Works Committee.

The Congressional Budget Act of 1974 changed the rules of the game. It created budget committees, a congressional budget process, and the Congressional Budget Office (CBO). Congress will have a budget and will attempt to help determine national priorities for federal spending in the future. The essential difference is that the Congressional Budget Act made it rather difficult to get contract authority; in fact, it basically prohibited the granting of contract authority without prior appropriation.
In the past, contract authority was spending authority that simply required a liquidating appropriation after UMTA's bills had been submitted; in future years, contract authority for capital grants to mass transit will require prior appropriation.

This means that both the budget committees and the appropriations committees are going to play a somewhat new and expanded role in transit legislation. They will tend to have a review and oversight mission with respect to the authorized programs and will tend to play some part in setting priorities for various federal programs. This congressional priority setting will become a much more serious game now that President Carter says that we are going to have a balanced budget—if not immediately, then at least in the near future. That should have an important effect on what happens to transit funding during the next few years.

When it became clear that transit legislation would be considered this year, CBO began to ask a number of questions about the mass transit program and various funding options (1). When any federal program comes under close scrutiny, not everything is always particularly true of the UMTA programs.

Essentially, the representatives of the transit industry were asking for a very large increase in federal financial assistance; in particular, they were asking for a very large increase in the area of capital grants, although they were also concerned about the problem of operating deficits. The capital grants program currently involves about $1.2 billion/year, and the industry association was asking for more than $3 billion/year by 1982. The formula grants program, which is primarily devoted to operating assistance, will rise to $300 million/year in 1980. Here, industry representatives were asking for more modest increments in federal assistance—an increase to about $1.4 billion/year by 1982. A rule of thumb was proposed whereby the federal contribution would be about one-third of the operating deficit nationwide; this would not necessarily mean one-third in any particular city: It would depend on the way the formula worked out with respect to operating results.

The CBO report found that there were a number of questions about what the benefits of a number of the UMTA programs really are. Of the $12 billion that had been provided, nearly two-thirds—a little more than $7 billion—was budgeted for discretionary capital grants (that is, discretionary to UMTA in approving requests for money). The distribution of these funds was basically about 30 percent for assistance in purchasing buses (which could be used to fund up to 80 percent of any given system's purchases) and about 70 percent for rail systems (divided approximately evenly between new rail systems and improvements or extensions of existing systems).

This level of emphasis on rail systems will be one of the important areas of research that will determine how the UMTA program is evaluated by CBO. Rail systems clearly are extremely expensive. This in itself causes problems; a federal program providing major money that only goes to a few localities will have serious political problems in securing approval.

Rail systems are supposed to solve a number of urban transportation problems, but the evidence suggests that they are not successfully solving a number of these problems. For instance, they appear to have little impact on automobile traffic and congestion levels, although this is put forward as one of the justifications for major capital investments. In the San Francisco area, some of the Bay Area Rapid Transit System impact studies suggest that, although some drivers were diverted to transit, traffic flows returned to their previous levels within a year.

Rail systems are also put forward as energy conservers. It appears that this too is questionable because the construction of rail systems is very energy intensive, because rail systems tend to divert a large number of passengers away from the relatively energy-efficient bus, and because they encourage additional trip making; that is, if they are successful, additional trips will be made and more energy will be used. In addition, because rail systems use fixed guideways, there is an access problem. People must get to them in some way, and they must use energy to do so. As a result, the total energy used to travel by a rail system is often more than that needed to travel by other forms of transportation. A study nearly completed by CBO for the Senate Public Works Committee suggests that only in limited instances can rail transportation offer any significant energy savings (2).

The major unanswered question is whether rail systems can make a contribution to revitalizing central-city areas. This is always appealed to as a justification for major capital investment in urban transit and for major new money in the UMTA programs, but further research on appropriate justifications will be necessary to get broad-scale support and approval of major funding increases.

In addition to their large capital requirements, new rail systems tend to have rather large operating deficits. Thus, the more rapidly new systems are built or old systems are expanded, the more quickly the operating deficit mounts and the heavier is the burden that has to be faced later. This can only reinforce existing reservations about a greatly expanded capital grant problem for rail systems.

A lot of cities are clearly not receiving very much from the present formula grant program in the way of operating assistance in relation to their deficits or to their ridership. For instance, the formula by which the operating assistance is distributed is basically a population formula, which offers no reward for having an extensive public transit network. As a result, a very small proportion of the deficit in major cities, such as New York, is covered by federal operating assistance. One possible solution might be to broaden the scope of UMTA funding so that areas can choose whether to use the funds for continued operating assistance or for new capital investment possibilities. At the moment, a large part of UMTA funds are available only for capital assistance and not for operating assistance since the section 5 program that helps cover deficits is smaller than the capital grant program.

There are some of the areas in which research could help clarify some of the supposed benefits of transit programs. Information on which policies are working, why they work, and how they work, as well as on ways to improve operating efficiency and innovative ideas, is not coming forward at the federal level. Should the federal government dictate all these little improvements? Should it simply provide assistance and let the state and local authorities determine how it could best be used? The general thrust in recent years has been to provide funds and let the local authorities make most of the decisions.

Although finding the answers to these questions is important, research alone is not sufficient to change existing programs or bring new programs into being. It is clear that the political process is not going to offer a one-to-one translation of research results into legislative proposals.

There are a number of reasons that a particular proposal may not come through the legislative process intact. One is that any particular proposal must have a legislative vehicle. Congress does not accept every good idea. There has to be a need or reason for Congress to
act on a matter, as well as a legislative package that can bring together enough support and enough reason for acting. There must also be some preconditions for change. In the current situation, there are such preconditions, because UMTA funding is beginning to run low. There will be a need for refunding the UMTA program over the next couple of years, although there is some debate as to when exactly that will be needed. The Senate has already passed a mass transit bill that would increase the funding for UMTA programs, and it seems likely that the House of Representatives will at least consider the matter during 1978. The Secretary of Transportation has also promised that the U.S. Department of Transportation will have recommendations at some point, presumably in late 1977 or early 1978.

Although these preconditions are very important in getting any major legislative policy enacted, there is always some element of compromise involved in any legislation that is passed. Even if the research results and conclusions are incorporated in legislative proposals, they will be changed, diluted, and compromised in one fashion or another. That is not particularly a bad thing; it only suggests that there is more than one interest at work in the process and that all interests need to be represented in major legislative change.

REFERENCES

The Problem of Funding Transit

David Olson, Committee on Appropriations, U.S. House of Representatives

In our discussion of transit financing I think we should be a little more precise in analyzing the sources of funds and the justification for the various sources. There is a substantial difference between fares and taxes with regard to the financial problem in urban transit. It has been suggested that two-thirds of transit costs should be financed by the user and one-third by the public through taxes. This implies that urban transit produces a product that has benefits, two-thirds of which accrue to private parties (the users) and one-third to the general public. It would seem to me that the appropriate ratio will vary according to the transit jurisdiction; in some areas, the users will pay more and in some areas they will pay less.

The current ratio implies a high social benefit. Is the benefit really that high? Do we really get the social benefits that are claimed—environmental enhancement, reductions in peak-hour traffic on the highway system, provision for the transportation needs of the elderly and handicapped? If the social benefit is not really that high, this mix of fares and taxes ought to be reconsidered.

The low-fare or no-fare financing arrangement for a transit authority implies that a great deal of social benefit accrues from that system, and it is questionable whether that much benefit is actually realized. The Bay Area Rapid Transit System impact study and other empirical findings seem to support that conclusion.

We have been discussing the redistributive impacts of transit. On the basis of both my private observations as a user of a commuter railroad and my professional observations, I believe that a great deal of income is being redistributed through public financing of rail transit—from the poor to the rich! When I studied this question in college, income redistribution was supposed to go the other way. It would appear that only bus transit is achieving positive redistributive effects.

Which levels of government are going to support public transportation? If it is true that most or all of the social or public benefits of public transportation accrue to the particular city or region in which a system is located (that is, if the external benefits are local in nature) and if it is true that the social benefits of transit vary widely depending on the particular region, then at least the current mix of tax financing, in which just more than 50 percent comes from local sources, must continue.

In regard to capital programs, we have seen a heavy federal involvement, financial and otherwise. I believe that the core problem in the financial area is simply how to ensure that the supply of transit service is made to adjust, in quantity and quality, to the expression of private and public demand. The program must be capable of responding overall and of allowing the local operator to respond to true expressions of public and private demand—for increases as well as decreases. A "true expression of demand" is demand backed by funding. The two essential questions are whether the program allows supply to respond to private demand and whether the program allows supply to respond to public demand. I am concerned that the present program does not. If we intervene in this process with federal money at the margin and a federal policy that takes a lot of the sacrifice away from the local governments, then the operator, the transit governing bodies, and the local governments will not be making the kinds of decisions that are required to achieve an economic and political equilibrium.

I do not believe that the national transit program has achieved an equilibrium; therefore I do not think the program is at present a success. We need to answer some of the critical empirical questions that have emerged from the transit experience so far. Earlier we heard that there has been a real decrease in the private price of transit during the last 6 years. Normally this implies an increase in the quantity used, but that increase in quantity has not occurred. There was some increase in transit use during the energy crisis, but this is not enough. We may run out of oil in 1990 but, unless we rethink some of these issues, transit is not going to make it until 1990 in some of our cities. Our program should