Session 1

General Statement of the Issues

The first session was designed to set the stage for the discussions on transportation financing that would follow in the next five sessions. The findings and conclusions of the four previous workshops in the series were summarized. The moderator described the purpose of the entire conference as an attempt to find ways of accommodating the many different, and often competing, views of what a community transportation system is: a profit-making business, a public utility, a social service, a growth shaper and land user, an environmental impact, an energy user, an energy saver, a status symbol, and a drain on taxpayers. The conference was designed to furnish solutions to the problem of putting all these various perceptions together.

The glaring fiscal fact about public transportation is that it cannot—or at least currently does not—carry its own costs, and its ability to do so is diminishing at an extremely rapid rate. Apart from the question of whether it should be financially self-sufficient, there is little likelihood that it ever will be. However, it is not impossible to control the nature, and perhaps the extent, of the dependence that community transportation has on the public pocketbook. Expenditures could be controlled, revenue sources adjusted, or service levels diminished.

Whatever the approach or combination of approaches that is taken, the process of implementing the solution must include certain essentials:

1. The proposed solutions must be communicated to the public—both consumers and politicians.
2. Both consumers and politicians must be involved in the decision-making process.
3. The present political and administrative appartus will require legislative adjustment to permit implementation of the solutions proposed.
4. The intent of this legislation must be carried out.

The role of the present workshop in this process is that of communication—to define the problem, to see what research has been done to find solutions, and to consider what type of research is needed to come up with solutions.

The Decision-Making Environment of Urban Transportation

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There are several groups that make the decisions that ultimately shape the transit product in this country: governments, transit and paratransit operators, those who supply the operators, and the public at large.

Included in the category of transportation-system suppliers are the firms that make transit cars and buses, automobiles, taxis, and other means of transporting the public, as well as the suppliers of private capital. Many factors in the suppliers' environment have tended to discourage new firms to enter and old firms to continue in the business of supplying the needs of urban transportation operators. One such factor is the nature and the extent of the influence government has on urban transportation.

The federal commitment to urban transportation is relatively recent in origin, and suppliers are uncertain as to its probable level and its constancy over the long run. Because government in general provides such a large proportion of the transit industry's funding, it is a pervasive force in the market for transportation equipment. Government influences both the size and the shape of this market. It is an external force in the market, however, and is thus less predictable than the forces that originate in the market itself. This unpredictability, which raises the level of risk that suppliers must face, takes several forms.

1. Will government's interest in public transportation continue at its present level and in its present emphasis? Policy shifts can have a profound effect on the amount and type of transportation equipment that is required; this is true both of general policies, such as those regarding the use of fuel energy or homeownership and suburbanization, and of transportation-specific policies on such matters as building fixed-way systems.
2. If government should sponsor one particular design for equipment or infrastructure, will operators tend to buy only equipment of that design? Investors may hesitate to enter the market with competing equipment if they feel that the Urban Mass Transportation Administration is more likely to fund the type of equipment it has endorsed.
3. Will regulations or standards be specified in such a way as to bias the market in favor of a particular supplier's product? Although standards are presumably made for the benefit of the public at large, these standards may also rule some suppliers out of a market and operate to the private benefit of a few supplying firms.
4. Will foreign competitors be unduly favored for reasons of foreign policy, rather than because of market-induced motives? Supplier entry could be easily discouraged if foreign suppliers are not required to meet the same specifications on the same terms as U.S. suppliers.

5. Will federal actions influence market segmentation by discouraging or promoting standardization of equipment among different systems? Allowing systems, particularly fixed-way systems, to so specialize in their infrastructure that the market for any particular type of equipment is very small will discourage suppliers from entering the market at all.

The behavior of transit operators is another factor in the supplier environment that acts to inhibit entry into or continuation in the field of manufacturing transit equipment and infrastructure. Much of the discouragement stems from ineptitude in the operators' purchasing function:

> This purchasing problem is made manifest by the publication of some of the craziest specifications the world has ever seen for the procurement of hardware. I couldn't understand the specifications, and no engineer has ever been able to explain them to me. How do you know when you have won? How do you know when you have met the specifications?

If successful bidding could mean financial disaster because of poor specifications. it is small wonder that new firms are hesitant to enter the industry and that existing firms are reluctant to compete for such orders.

Operators may also complicate the supply environment by requiring such specialized equipment that the market for any one type of equipment can never be large enough to permit innovation or economies of scale. There is a trade-off here, however. Even though standardization may permit the development of larger markets that are attractive to new suppliers, it may also act to discourage competition and innovation among existing suppliers.

The atmosphere in which operators make their decisions is also thoroughly permeated by government policies. A market-determined environment usually has a single goal; environments determined by public policy may have multiple goals (which may be mutually exclusive), and these shift unpredictably in emphasis. This causes considerable uncertainty about the type and level of funding that will be forthcoming from government. For example, the goal of providing for general public mobility has given way to an emphasis on transportation for the elderly and handicapped; this shift makes a large difference in the way a transit system spends its capital funds and the way it designs its operations.

The uncertainty that characterizes government funding of transit is also present in the supply of private capital, which is not available in continuing supply or in a growing supply to meet a growing need. It is highly variable; interest rates fluctuate wildly and not directly in relationship to the prime rate.

The federal government could mitigate this uncertainty in the supply of private capital by designing laws and regulations in such a way as to attract the maximum amount of matching funds from such private sources as banks, insurance companies, and pension trusts. Making investment in transit attractive to the private market requires some knowledge and experience in how that market works, however, and the federal government is sadly lacking in administrators who have a transit-specific background.

The constraint that labor imposes on transit operations is another large element of the transit operator's environment. Operators cannot slough off unneeded labor as easily as is possible in some other industries. Although transit unions are strong, union contracts are not the sole source of transit labor's strength: Labor exerts a strong political influence on public-service funding. Labor-saving innovations in equipment and infrastructure could be developed, but most transit systems cannot take advantage of them. This constraint falls more heavily on older transit systems than on new ones that can build new, labor-minimizing technology into their systems at the outset.

The lack of knowledge of transit markets is a pervasive handicap that is found across the spectrum of urban transportation. It manifests itself in two forms: a nonexistent or inappropriate data base and a lack of experience and insight. Very little is known about what might attract investors into transit, and very little is known about the demand function of transit consumers. Observing what people do in the marketplace is not sufficient; most often, consumer actions are a response to the supply pattern they are presented with, which may not conform closely to their demand.

The environment in which government operates with respect to transit is plagued by politics as well as by the lack of specific knowledge about transit markets. The search for greater efficiency is not as important in guiding government decisions to invest as is social policy, and social policy changes with the times. Government must allocate public funds among a great number of competing functions, and social goals usually do not offer clear, objective guidelines for doing this. This haziness is reflected throughout the transit industry: "Politics makes the urban transportation field one of monuments and make-work."

Whatever the level of funds allocated to transportation as a whole, parceling these funds out among communities is based on guidelines that are related more to politics than to efficiency. Allocating federal funds for urban transportation on a nondiscretionary formula basis does not necessarily correct this situation. A formula based on the number of passengers handled, for instance, may be politically popular but may not make the most efficient use of the funds available; smaller cities may have fewer voters, but their transit funding needs may be more pressing than those of larger systems.

The present organizational and institutional constraints surrounding urban transportation act to discourage efficiency in operations and competition in supply. There are several ways that this environment could be reshaped to encourage better performance on all levels.

1. In certain contexts, free transit may be a desirable means of providing universal mobility while meeting specific social goals.
2. Competition in the supply of transit equipment and infrastructure would be stimulated more by subsidizing capital availability through low-interest, long-term loans than by offering outright grants in which the government has a proprietary interest.
3. Some transit systems—even large ones—might be better maintained and operated more efficiently if they were converted from public entities into employee-owned cooperatives. This would not only provide operators with market incentives but would also be more likely to attract private capital into urban transit.
4. More should be learned about the demand side of transit. Several methods could be used to accomplish this. Revealed preference research is one possibility. Transit stamps, analogous to food stamps, might also furnish information about demand elasticities for transit services.
5. Consumer education is critically important. Consumers persist in choosing to drive their automobiles at any cost. Is this because of a strong preference for automobile travel or because of ignorance of comparative costs? A true market choice can only be expressed by informed consumers.
6. In many areas, there is a need to examine funda-

mental concepts. An example of this is the failure to understand what capacity means in the urban transportation field; each new study defines it differently. It will be impossible to evaluate alternative solutions to these problems without a common understanding of the underlying, fundamental concepts.

Workshop Discussion: The Transit Environment

Much of the general discussion centered on whether it is consumer ignorance or political ignorance that underlies the reluctance of the public to use transit services. It was suggested that the consumer preference for automobiles may be quite rational if the cost of the extra time consumed in bus travel is taken into account. Politicians may be unaware of the social advantages of public transportation, but this is at least partly the fault of the transit industry; a greater effort should be made by the industry to educate politicians about the potential of public transportation and about the problems of financing it. It was pointed out, however, that even if politicians were fully informed, they are limited in their ability to act by the public's reluctance to accept efforts to fend off impending disaster; perhaps the catastrophe must occur before anything can be done about it.

Session 2

Definition of the Problem

There are many ways of defining the urban transportation problem in terms of its financial aspects. The most immediate and critical problem that must be faced is the large and growing deficit that transit operations generate and the imposing burden this deficit places on government at all levels. From a broader perspective, however, it may not be transit operations in themselves that are responsible; ultimately, it is the government's insistance that transit fulfill social objectives that feeds the transit deficit.

Transit Financing Trends and Outlook

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Transit deficits are not a straightforward matter of cost and revenue curves; rather, they are ultimately the result of public-policy choices on fares, levels of service, and taxing. Whether we like it or not, when the headlines say that Washington's Metro deficit will be $300 million in 1990, the responsibility for that deficit rests with federal, state, and local officials. However, transit costs and deficits also seem to have a momentum of their own that decision makers must grapple with. That momentum is the focus of this paper.

RECENT TRENDS

Although transit deficits nationwide increased only 9 percent during 1976, they had increased more than 800 percent during the preceding 6-year period. What were the forces behind these deficits? At its simplest, the current deficit in transit operations is a result of the growing gap between costs and revenues. Transit costs have increased at a rate more than twice the general inflation rate; at the same time, operating revenues have increased at only about half the inflation rate. As a result of this combination of trends, operating revenues currently cover only 56 percent of operating costs—down from 91 percent 6 years ago.

It is possible to identify about six categories of operating cost that have increased since 1970. The relative magnitude of these increases, which in absolute terms add up to a doubling of overall transit costs, is shown below.