Introduction: The Urban Transportation Problem Updated

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Since World War II, urban transportation has received more attention than any other transportation topic. Although strikes; accidents; hijackings; questions concerning routes, schedules, rates, and service; and financial problems in intercity and international transport periodically traumatize specific groups of individuals, urban transportation touches the lives of Americans much more intimately. More than three-fourths of our population lives in built-up areas. When these urban residents travel, they consume urban transportation services directly, whereas they most often consume intercity transport services indirectly in the form of derived demand for goods transport. Moreover, since they usually travel daily, they experience urban transportation difficulties much more frequently than they do problems in intercity and international transportation.

When the urban transportation problem was first articulated in the late 1950s and early 1960s, the principal concern was congestion, particularly during the journey to work, and the main policy issues centered around how to relieve it. Our conception of the problem was gradually broadened to incorporate environmental quality, mobility problems of the transportation disadvantaged, the question of equity, goods movements, and, most recently, fuel shortages and transit deficits. Although each component of the problem has generated policy changes at virtually every level of government, it appears safe to conclude that the greatest concern today centers on rising transit costs and deficits. Thus, the major urban transportation policy issue today is how to achieve efficient, workable urban public transportation. The question of transit operating subsidies is a case in point.

That public transportation (except for the taxicab) is in dire financial straits is common knowledge. It is less obvious that

1. As serious as the transit deficits may be for the transit operator or for local government, the current deficits are not the problem but rather one sympton of the basic structural weaknesses in the urban transportation market;
2. The urban transportation market is a highly sensitive complex set of interdependent relationships that is poorly understood, even though a basic understanding is a prerequisite for intelligent transportation planning and the development of sound transportation policy at the metropolitan, state, or national level; and
3. With the possible exception of The Urban Transportation Problem (1), no attempt has been made (or at least nothing has been published) to tie together the most important strands and to demonstrate how they interact in the market to produce today's urban transportation problem (or problems), specifically (a) demand for and supply of different services, (b) external costs (risk, pollution, noise, congestion, neighborhood disruption) and their effects on travel demand and mode choice, (c) institutions (e.g., labor unions and their effects on costs or economic regulations as barriers to entry, service improvements, and innovation), (d) financial assistance programs and their effects (e.g., differences in the absolute amounts of federal funds available and their matching requirements with respect to the different modes or municipal subsidies to different modes), (e) cross-subsidies for different groups of users (particularly with respect to peak and off-peak travel), (f) disparities in the amounts of resources devoted to the promotion and marketing of private (as opposed to public) transportation, and (g) inflation and its effects on the relative costs of the different modes (e.g., reduced labor productivity in public transportation) and on mode choice.

In addition, certain nonmarket influences exert strong forces on the behavior and performance of the urban transportation market.

1. There are problems in the fiscal relations between various levels of government. Local governments (the level that is hardest pressed financially) typically bear most of the responsibility for mass transit costs that are not covered by transit revenues and bear total responsibility for parking, while 98 percent of the states' direct transportation expenditures are for highway purposes. Some projects require the concurrence of four levels of government before expenditures may be made. And, although the federal government seems anxious to delegate making decisions about urban transportation to local elected officials, many state and local officials are reluctant to grant this authority to them or to regional planning bodies.

2. Until the transportation system management (TSM) element of the Transportation Improvement Program was incorporated into urban transportation planning during 1975, the urban transportation planning process was oriented toward the single-occupant automobile. Because the basic concepts, assumptions, and methodologies were developed in the 1950s when the problem appeared to be congestion and the solution advanced was to create additional highway capacity, some of the original architects of the process now compare it to a dinosaur.
3. Local financial planning for transportation services is at best sketchy and primarily concerned with short-term objectives. Since local planners have little influence over the sources of revenue, there is not much motivation to design financial systems that will encourage efficient urban transportation. Federal and state revenues are generally taken as given, with little or no opportunity for local planners to take part in the financial planning process. Even local revenue sources are usually controlled by generalists who are not particularly aware of the problems of financing urban transportation. In consequence, local transportation agencies have not developed staffs that have the capabilities and expertise required to plan innovative approaches to urban transportation finance.

These are all long-range problems, and progress in improving the market environment in which transit deficits occur (getting larger each year) will be measured in years, possibly in decades. Unfortunately, a crisis atmosphere surrounds public transportation in cities today. In Washington, D.C., there is serious discussion about whether to complete even a truncated version of Metrorail, which would consist of only about half of the originally planned 158-km (98-mile) system, because of escalating costs of construction and difficulties the surrounding municipalities are experiencing in raising funds for Metrorail at the same time they are trying to cover the Metrobus deficits. In the nation's capital as in other cities, there is strong pressure to do something fast. Unfortunately, the something demanded almost never addresses the underlying problems cited above but instead focuses on obtaining additional revenues. Certainly we need better answers to the question of where the money is to come from to meet the transit deficits, and studies have been undertaken by the U.S. Department of Transportation (DOT) as well as by the major cities on the question of how to obtain additional funds.

PURPOSE OF THIS STUDY

The purpose of the present study was to examine the long-term forces in the urban transportation market that generate chronic transit deficits and to evaluate alternative courses of action to improve economic efficiency and financial viability at the local level. The resulting report is designed to synthesize theory and practice to produce a practical working program for both those who plan and implement policy at the local level and those who develop and administer financial programs at the state and federal levels. Its purpose is to (a) focus attention on the financial difficulties that contribute to the deterioration of service for users of both public and private transportation in cities, (b) identify the underlying causes of present urban public transportation deficits, (c) identify alternative programs to assist cities to reduce their dependence on federal financial assistance (especially for operating costs), (d) develop a common framework to assist the different levels of government to evaluate urban transportation costs versus revenues, and (e) provide a volume that will summarize the state of the art and contribute to a better understanding of the options available to local government and to public transportation operators to improve the financial viability of public transportation.

STUDY APPROACH

The original approach of the sponsoring agencies and the Transportation Research Board was to examine the major causes of poor market performance in urban transportation in the form of a conference that would examine pricing, economic regulation, labor practices and productivity, transit management and marketing, and the role of government. Because we wanted to develop each of these areas in some depth and were concerned that a 4 to 5-day conference would be too exhausting and would make it difficult for participants to choose among workshops, we decided to conduct individual 2 to 3-day workshops on these five topics and to schedule the workshops sequentially so that people would have an opportunity to participate in more than one workshop. Brief summaries of the five workshops follow.

1. The workshop on urban transportation pricing alternatives considered such topics as objectives of pricing policies, spatial and temporal aspects, effects on revenue and patronage, public attitudes, and barriers to implementing pricing innovations.
2. The workshop on economic regulation of urban public transportation addressed problems of urban public transportation to determine how current regulations might be amended to facilitate more efficient workable public transportation. In addition to a review of current federal, state, and local practices and problems and the theory of regulation, the workshop considered the impacts of removing or curtailing economic regulation of public transportation on demand; revenues, services, and the interrelationships between deregulation and other public policies; and paratransit.
3. The workshop on issues of labor relations in urban public transportation was designed to identify problems in and alternatives to current labor practices, explore increased labor involvement in efforts to improve productivity and introduce technological innovation, examine trends in bargaining and contract arbitration, and evaluate the impacts of subsidies and the transition to public ownership and operation of transit facilities.
4. The workshop on measuring the effectiveness of transit marketing considered how public transportation can be planned, managed, and operated to provide the desired services while remaining financially healthy. It included considerations about current and potential markets, tailoring services to meet demand, facilitating the delivery of information to users, improving services, setting fare policies, providing transportation for the disadvantaged, and integrating public transportation management.
5. The workshop on government responsibilities for financing efficient urban transportation examined the means available to local government to bring about the changes recommended in the earlier workshops and cited specific examples. A conceptual framework was suggested for identifying all the expenditures made on transportation facilities and related services by federal, state, and local governments as well as public authorities and private organizations, on the one hand, and all the revenue from the transportation system, including user charges, transportation-related taxes, and nontransportation contributions, on the other hand. The pattern of deficits in different types of services (e.g., bus versus rail, peak versus off-peak travel) and expenditures

(capital versus operating) was examined, and the strengths and weaknesses of the local, state, and federal governments were assessed. Local, state, and federal sources of revenue for funding deficits were evaluated with respect to the size of fiscal resources and administrative and political considerations (e.g., flexibility, degree of government interference and control, and local autonomy).

The agencies that sponsored this study selected TRB to conduct these workshops because it could (a) command sufficient prestige to attract the best talent; (b) blend theory and practice and achieve a balance between government, industry, and the academic and research communities; and (c) produce a high-quality, state-of-the-art report that would serve as a resource and would be widely disseminated among those concerned with urban transportation at all levels of government.

REFERENCE

1. J. R. Meyer, J. F. Kain, and M. Wohl. The Urban Transportation Problem. Harvard Univ. Press, Cambridge, 1965.