Urban Transit: A Public Asset of National Significance

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Urban Transit: A Public Asset of National Significance

Abstract
The national significance of urban transit has been the subject of much debate in recent years. To place the various arguments in perspective, this article offers a brief overview of major developments in urban transit, particularly focusing on the effects of federal assistance, during the last twenty years.

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Local Interest Inserts

Atlanta, Boston, Chicago, Cincinnati, Dayton, Los Angeles, Louisville, New Orleans, New York, and St. Louis
Urban Transit: A Public Asset of National Significance

The national significance of urban transit has been the subject of much debate in recent years. To place the various arguments in perspective, this article offers a brief overview of major developments in urban transit, particularly focusing on the effects of federal assistance, during the last twenty years.

The rapid growth and progress of urban transit in our country early in this century was followed by its decline during the 1930s and again from 1946 through the mid-1960s. From a dynamic industry, urban transit in the U.S. deteriorated until by the mid-1960s it consisted of but several inefficient commuter rail services, five rapid transit systems, a dozen streetcar lines, and five trolleybus systems; the rest—with very few exceptions—were bus services operating without any preferential treatments, attracting only passengers who had no private automobile as an alternative. The growth of automobile ownership clearly had a major impact on urban transit, particularly in smaller cities, but the decline of our transit systems was also hastened by government policies which concentrated on widening streets and constructing urban freeways and parking facilities. In addition, many cities regarded public transit as a private enterprise, rather than an essential public service. The result was a "vicious circle" in urban transportation involving auto owners, who enjoyed increasing mobility, and transit users, who were faced with less and less mobility.

The serious urban crises of the 1960s, coupled with failed efforts to adjust cities to the automobile and the serious negative impacts which excessive freeway construction had on urban environments, eventually led to a major change in attitudes toward urban-transportation. Realizing the significance of transit in a highly urbanized society, Congress passed the Urban Mass Transportation Act of 1964, initiating federal assistance for transit capital investments. In 1968, the Urban Mass Transportation Administration (UMTA) began not only to administer federal assistance but also to organize transit research and development efforts, which had been badly neglected in the preceding decades. The National Mass Transportation Assistance Act of 1974 provided transit systems with operating assistance amounting to between 10 and 25 percent of their revenues, the lower percentages being for large cities. During the 1960s and 1970s state and local financial assistance was also introduced in most states and cities.

Progress Since the Mid-1960s
UMTA has had a mixed record in steering transit modernization but its overall achievements have been indisputably positive. Initially, UMTA placed an unrealistic emphasis on "new modes," such as dial-a-ride and various automated guided transit systems. Many innovations resulted, but these did not live up to their expectations. The program for the elderly and handicapped, with the central problem of accommodating passengers in wheelchairs, also took a disproportionate share of funds and activities before it was redirected in most cities to special paratransit services. Less glamorous but more stable and with far more significant results have been UMTA's programs involving buses, garages, various rail transit systems, innovative marketing methods, and public-private cooperation in construction and operation of transit systems. During the relatively short period of some twenty years, various transit projects and innovative operating practices contributed greatly to the revival of our cities. Some major categories, grouped by modes, are briefly described here.

New rail rapid transit (metro) systems were built in five cities: San Francisco (mostly local funds), Washington, D.C., Atlanta, Baltimore, and Miami; and extensions of networks and/or new rolling stock were provided for all existing rapid transit systems in New York, Chicago, Boston, Philadelphia, and Cleveland. The best examples of the positive impacts which rail transit has had are found in San Francisco, where BART stimulated major modernization and extensive developments in its central business district (CBD); in Washington, where similar developments occurred and travel within the central city intensified; and in Atlanta, where the opening of the two Metro lines permitted reduction of bus trips in the CBD from 900 to 350 per day, decreasing congestion and improving service quality. Similar changes occurred in other U.S. and Canadian cities; transit developments in Toronto, Montreal, Calgary, and Vancouver are particularly impressive.

Regional (commuter) rail systems were modernized and, in several cases, integrated with local transit services. The most significant physical improvement was the construction of the center city tunnel in Philadelphia, which connects two previously independent rail networks into an extensive unified regional network with seven diametrical lines. Light rail transit (LRT), a mode previously ignored...
in North America, was introduced with considerable assistance from UMTA in the mid-1970s. Led by Edmonton, Canada, in 1978, a number of North American cities adopted this mode, which offers far better service than buses at a much lower investment than rapid transit requires. New LRT systems now operate in Calgary, San Diego, Buffalo, and Portland; San Francisco, Boston, and Pittsburgh upgraded their streetcars into LRT systems; and new LRT networks are under construction in Sacramento, San Jose, and Los Angeles, while Dallas, St. Louis, Minneapolis, and several other cities are actively planning them.

Trolleybuses were renovated in all five cities that they serve, and a number of technical innovations were tested and introduced. San Francisco and Seattle, because of their hilly terrains, have been leaders in this area.

Buses were modernized and upgraded in most cities. Diversification of vehicles and introduction of articulated buses were part of that effort. Even more important was the realization that separation of transit from street traffic is essential if it is to compete with private automobiles; bus lanes on streets and freeways were introduced in many cities. Unfortunately, the effect of these lanes has been diluted in recent years through their conversion into “high occupancy vehicle” facilities that allow entry to many other vehicles, mostly competitors of transit.

Infrastructure of old transit systems—such as metro stations, rail transit tracks, viaducts, yards, and depots—was extensively rebuilt and modernized with substantial assistance from UMTA.

Operational Innovations, Research, and Development
Numerous operational innovations accompanied the physical modernization of transit systems. New fare collection methods include different fare levels and structures as well as monthly ticket purchases; passenger information systems were improved and new ones developed; a timed transfer system, a new type of transit network design and operation initially developed in Canada, was analyzed and its implementation assisted under UMTA’s sponsorship; cooperation with private developers in construction of rail transit systems and bus terminals was initiated. As a consequence of these innovations, transit systems in U.S. cities have been extensively rebuilt and modernized since 1965. Most of this progress would not have been achieved without federal assistance and various UMTA initiatives.

About 1970 many cities decided to keep fares stable in order to increase ridership. To do so, some cities and states introduced taxes to supplement fares and/or to provide investment capital for construction of transit facilities. In 1972 Atlanta-area voters approved by over 60 percent a referendum which permitted lowering transit fares between 45 to 50 cents; the result was a ridership increase of over 30 percent. Unfortunately, increasing costs of improved services, combined with inflation, kept widening the gap between costs and revenues from fares. By the late 1970s, something had to be done to change that trend and limit the growth of public financial assistance to transit. Among the proposed solutions, several were implemented successfully. Most states and cities introduced taxes dedicated to transit; particularly successful was the 0.25-0.50 percent sales tax, which is then allocated to investment and operating funds by a prescribed formula. Some cities or regions, such as the San Francisco Bay Area, stipulated that fares must cover at least a certain percentage of revenue (usually between 35 and 50 percent). Prescribing the minimum allowable operating ratio forces transit agencies to increase efficiency and introduce moderate fare increases, rather than allowing extremely low fares which, although politically popular, are economically damaging.

Developments Since 1980
Transit modernization in the United States has always had strong opponents, notably the highway-oriented professionals who maintain that the private automobile is essential to the “American way of life” and that our lives, cities, and environment should be adjusted to its needs. This group is supported by the powerful pro-highway lobby and by some academicians and theoreticians who argue against public assistance to transit, against public investments in general, and particularly against rail transit in any form. While highly critical of most planned transit improvements, critics have seldom suggested any real alternatives for achieving efficient transportation in human-oriented cities. Their proposals that buses could provide the same or better transit services than rail rapid transit, or that our cities should rely on jitney services, such as found in Damascus and Manila, cannot be taken seriously. Further, their criticism of public investment,
overdesign, inadequate payments by users, etc., is applied only to transit; they tend to ignore the same problems as they apply to highways.

In 1981 the Reagan Administration introduced a major change in federal policies toward transit. Reflecting the arguments of the traditional critics of transit, the policies of the present administration can be summarized as follows:

1. Federal assistance to transit has led to increasing expenditures, but few useful improvements; capital assistance has often led to overdesign, while operating assistance has simply resulted in higher wages through blackmail by labor unions and excessively low transit fares.
2. Transit is a local, not a federal problem; the federal government should discontinue its involvement. UMTA should be closed and all transit activities transferred to states, cities, and transit agencies.
3. Federal operating assistance to transit should be discontinued immediately; capital assistance should be reduced to that available from the earmarked one cent/gallon gasoline tax. Users should pay a much greater share of transit costs, i.e., fares should be increased substantially.
4. Transit operations should be transferred as much as possible to private operators. These policies are far from acceptable to most transit experts and public officials. Most importantly, Congress has had a much more positive attitude toward transit and cities in general and has repeatedly refused to accept the administration’s proposals for drastic cuts in federal funding. The responses to the administration’s arguments can be summarized as follows:

   1. Federal assistance to transit has not been a failure; it was instrumental in reversing a long trend of deterioration and resulted in impressive progress in transit since the 1960s. The problems of overdesign, excessively high wages, and low fares do exist but can be corrected by better methods than stopping construction, destroying labor unions, and increasing fares to such levels that major ridership losses result.
   2. Leading transportation experts and politicians of both parties argue that urban transit is a national issue. For example, Thomas Larson, former Secretary of Transportation in Pennsylvania, recently testified in Congress that In large northeastern cities transit is . . . essential for the survival of these populations. . . . there is also a national responsibility in cases where the economic survival of a city or state would have spill-over effects on interstate commerce and the national economy itself.
   3. Many critics claim that the policies of the present administration are influenced more by the interests of the powerful highway lobby than by sound economic principles and national interests. While it requests cuts in transit financing “to reduce the national budget deficit,” the administration proposes increases in highway expenditures; while it forces major increases in transit fares, it rejects introduction of tolls on highways and resists even negligible increases in taxes on auto use (gasoline, excise, etc.).

Privatization has become the dominant focus of UMTA’s efforts in recent years. To evaluate its potential and limitations, we must first define this rather broadly used term and consider the merits of its individual aspects. The many kinds of private involvement in transit provision can be grouped into four broad categories:

   1. Funds for transit line or station construction can be collected from private properties located in their vicinity which will share access to stations or will benefit from increased land value. Actually, the practice of planning joint developments around stations and collecting contributions from properties sharing the benefits was used in some cities decades ago but then neglected. Such funding, arranged with individual property owners or through formation of a special tax district, can be both logical and effective; however, these contributions usually amount to only a fraction of the required funds, and the need for public investment remains.
   2. Construction of facilities by the private sector and lease-back is increasingly common and is likely to be more popular if present tax arrangements remain in force.
   3. Contracting various support functions of transit agency business to private contractors is another option. A number of transit agencies have contracted such functions as ticket sales, maintenance of tracks or vehicles, or cleaning of stations to private companies for many years.
   4. Provision of transit services by private operators is presently being discussed extensively and tested in different forms.

The interest in privatization of some transit services has been stimulated by escalating costs and
cases of inefficient operations of transit agencies. Labor union pressures have often caused unjustifiably high personnel expenses, so that private operators, particularly those with non-unionized labor, can provide certain services at lower cost. However, the extensive experience of "free market" bus operations in developing countries shows that uncoordinated private operation of transit usually has major shortcomings: cut-throat competition on major routes, and poor services in low-density areas; lower quality personnel; poor vehicle maintenance and lower safety; inadequate integration of services, if any, with respect to information, transfers, joint fares, etc.; and difficult data collection, analysis, planning, and upgrading of services. Thus, transit becomes a second-class mode of transportation, instead of a high-quality service competitive with the automobile.

Whether it is possible to get the advantages of private operations without introducing their shortcomings depends greatly on local conditions and on the type of contract, but experiences so far have thrown some light on this question. Arrangements with private operators are commonly classified as follows: sole source contracting: transit agency (or city) contracts the services to a single private operator for a certain period of time; competitive contracting: transit agency calls for competitive bidding for specified services and awards the contract under precisely specified conditions (level of service, fares, coordination) for a given period of time; deregulation of services: bus operators are licensed and controlled with respect to safety, but an unlimited number of operators can compete on the same routes, charge different fares, and operate without any service coordination or integration with others.

Source contracting can be convenient in such areas as paratransit services for the handicapped, but if the private firm also has unionized labor, provides adequate selection and training of personnel, and carries liability insurance similar to that of the public agency, it will not be able to provide the same service at a significantly lower cost.

Most leading promoters of deregulation are theoretical free-market economists who explain the recurrence of the old, well-known problems by arguments which leave experienced transit operators unconvinced. In Great Britain, where deregulation is presently being introduced in all cities except London, this problem was discussed in the official Ministry of Transport policy document "Buses." Based on a dogmatic claim that private business is always more efficient than public, and small companies more efficient than large (no economy of scale!), this document ignores the conflict between the dominant profit motive of private operators and public service aspects which transit service requires. The report admits that private operators cannot offer a fully integrated transit service, as public agencies have done, but claims that such integration is not worth the additional costs—a statement which would certainly be unacceptable to the populations of cities like Munich, Portland, or Toronto which have had high-quality transit services.

Unlike Great Britain, this country has experienced little pressure for deregulation. Instead, most privatization activities here have been focused on the "middle" solution, competitive contracting of certain services precisely defined by the transit agency. In a number of cities, contracted operations have resulted in cost reductions while integrated services have been retained. In such cases, the public transit agency remains central, and the portion of services contracted out is usually limited, because coordination and administering of many contractors would be impractical and costly. But evidence suggests that in some cases a limited contracting out has resulted in reduced labor costs even in the services which continued to be operated by the agency due to subsequent signing of more favorable labor contracts (San Diego). Thus, instead of upsetting the existing transit organizations and their stable services, or destroying coordination between buses and rail services, as in Great Britain, private contracting in some of our cities has reduced costs while retaining fully integrated services.

As usual with "fashionable" topics in urban transportation, privatization in transit is neither a panacea nor a useless fad. It is a search for lower operating costs of transit services which will, hopefully, bring new organizational forms and greater efficiencies while retaining high quality transit services.

Conclusions

In the case of urban transit, several classic conditions for federal involvement exist. First, since urban areas are centers of the nation's economic, Continued on page 63.
Vuchic (cont.)
industrial, governmental, and cultural activities, their problems are clearly national ones. Second, extensive externalities of transit—from increased mobility to its long-range positive impacts on urban environment—make it a social service as well as a business enterprise and place it in the domain of governmental concern. Third, the substantial investments needed in its infrastructure and modernization call for national pooling of financial and professional resources—a traditional role of the federal government. Finally, major federal assistance to modes competing with transit (e.g. 90 percent financing of many urban freeways) makes federal assistance to transit fair and logical.

A number of constructive evaluations, criticisms, and proposals for increased effectiveness of federal programs and UMTA's actions have appeared through the years. George Smerk pointed out as early as 1974 that the primary federal role is in providing funds and information (including R&D and technical leadership), but that local initiative in planning and implementation of transit projects is also essential. Indeed, support for transit improvement has been growing in recent years not only on national but also on local levels. And recent experiences have shown that provisions for separate rights-of-way for transit are a sine qua non of high quality transit, not only in older but also in new, auto-oriented cities, such as San Diego, Los Angeles, Dallas, and Houston.

Since 1980, attacks on transit programs, particularly by the federal government, have slowed progress considerably. But they have also brought some needed critical reevaluations (e.g., the focus on damaging adversary management vs. labor relations); stimulated a stronger involvement of additional "parties," such as state and local governments and the business community; and accelerated the search for different organizational solutions for transit.

What are the prospects for the future? The crucial role of transit in improving the quality of the urban environment has been recognized. Continuing concern for a human environment, intensified office building construction, residential renovations in many central cities, and uncertainties about the energy situations are likely to revive and increase support for transit. The present controversy between the extreme pro-privatization forces and those in opposition to them can be expected to lead to greater organizational efficiencies as well as retention of integrated transit system services for the public. Increased public-private partnerships, more constructive management-labor relations, and stronger support by local authorities should be expected. A constructive federal role in R&D efforts and in financing, particularly capital investments, will remain vital to this progress. With respect to technology, our cities will increase their utilization of the many transit modes, from paratransit and a variety of bus priorities to modern light rail and rapid transit. Significant recent technological innovations will be utilized in infrastructure and vehicle construction, as well as in increased automation.

Notes
5 For more on the pros and cons of deregulation, see John Hicks, "The market alternative to integration"; *City Transport*, (May/June 1986), 23-4 and Vukan R. Vuchic, "Deregulation: A Return to the Primitive", *City Transport* (May/June 1986), 18-20.