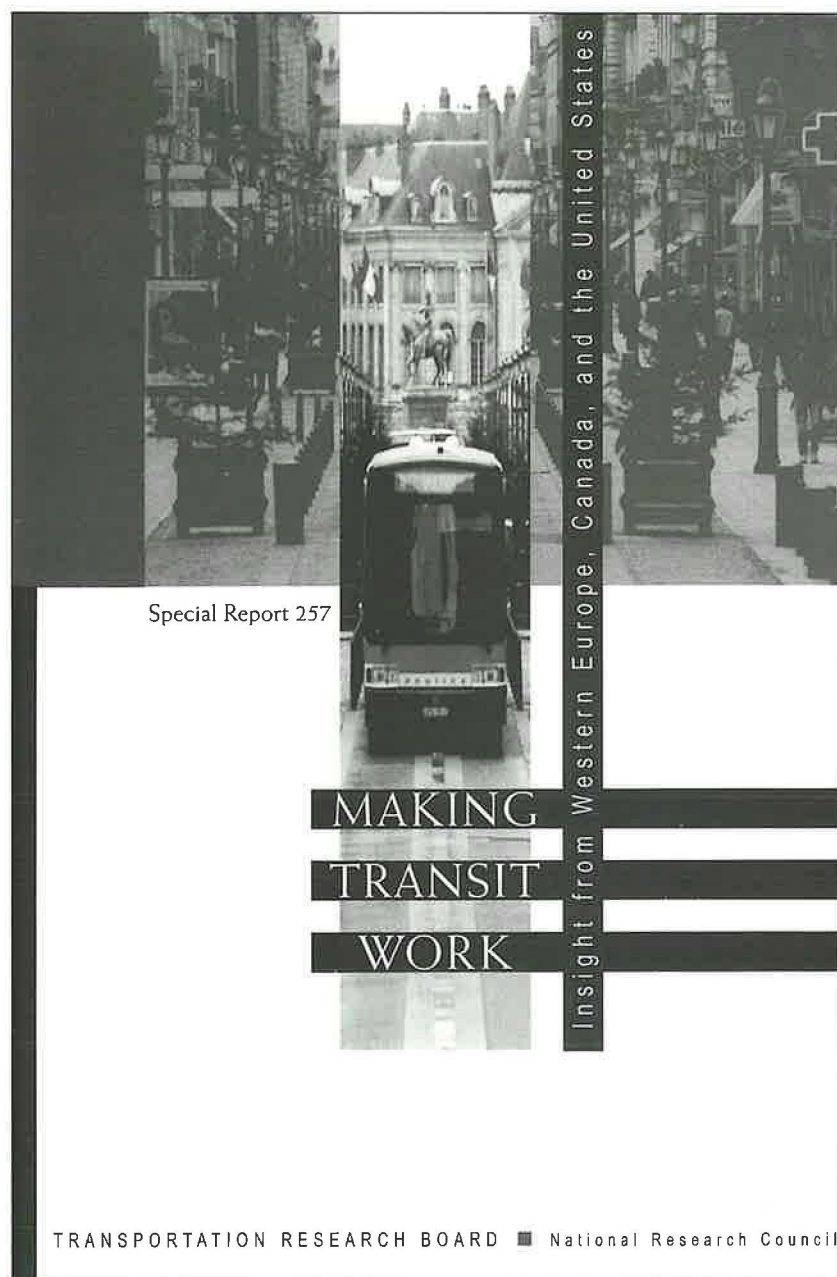


Making Transit Work

Insight from Western Europe, Canada, and the United States

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MAKING TRANSIT WORK

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Americans touring cities in Western Europe and Canada often marvel at the ubiquity, convenience, and popularity of urban rail and bus transit systems and wonder why so few U.S. cities are as well served. The most commonly cited reasons are that Western European and Canadian transit systems are more innovative and receive more public financial and political support than their American counterparts.

But the differences are more complex. During the mid-1990s, teams of transit managers from the United States toured public transportation systems in dozens of Western European and Canadian cities. In their reports—documented in a series of Transit Cooperative Research Program (TCRP) *Research Results Digests*¹—the teams described many innovative practices, services, and technologies with potential for application in the United States.

However, they also noted distinct differences in the urban environments and transportation policies abroad; for example,

- ◆ A different attitude prevails among policy makers and the general public about the role and value of public transportation;
- ◆ Transit systems are integral components of regional transportation systems;
- ◆ Transit managers have a high level of technical competence and professional prominence as well as the latitude to realign routes, change equipment, and adjust fare schedules; and
- ◆ Innovation is commonplace among transit operators and encouraged by elected officials.

¹See Research Results Digest 20: *International Transit Studies Program, Report on the First Three Missions*, May 1997; Research Results Digest 22: *International Transit Studies Program, Report on 1996 Missions*, October 1997; Research Results Digest 27: *International Transit Studies Program, Report on the Spring 1997 Mission: Public-Private Partnerships and Innovative Transit Technologies in Scandinavia*, October 1998; Research Results Digest 31: *International Transit Studies Program, Report on the Fall 1997 Mission: Applications of Intelligent Transportation Systems to Public Transit in Western Europe*, October 1998.

Seeking a more complete explanation of these differences, TCRP sponsored a special study to compare U.S., Western European, and Canadian public policies and attitudes about urban form, transit, and highways. The Transportation Research Board (TRB) convened a committee of experts in public transportation, economics, public policy, highway transportation, and urban planning (see sidebar). Led by Les Serman, Executive Director, East-West Gateway Coordinating Council, St. Louis, Missouri, the committee identified many factors contributing to the differences. In particular, the committee observed that

◆ Most Western European residents live in densely developed communities near public transportation corridors established before widespread use of the automobile, providing naturally large markets for transit.

◆ Fuel prices in Western European cities are three to five times higher than in the United States, and many other government taxes, parking regulations, and traffic policies deter use of automobiles and encourage transit.

◆ The fragile and physically constrained medieval towns and historic cities of Western Europe compel government actions to discourage automobile use and promote public transit.

◆ Strong national and regional governments in Western Europe and Canada coordinate policies on urban land use and the planning of highways and transit and can emphasize transit.

History and Past Policies

The United States once led the world in public transit use. By 1920, Americans living in cities averaged more than 250 transit trips per year, mainly on the nation's 65,000 kilometers of electric railway. Privately operated streetcar lines served hundreds of American cities. However, by 1930, one of every four households owned a car, and by 1960 there was one car registered for every two Americans.

The faster and more flexible automobile opened more tracts of land to residential and commercial development. Urban development could take place farther from the traditional central cities and suburbs along transit lines. Large urban areas—many shaped almost entirely by the automobile—emerged after the streetcar era.

Most Western European cities had been shaped by centuries of carriage by foot, water, and animal. Seeking to preserve historic centers, many Western European cities were cautious about adopting new transit technologies—especially private streetcars. Many opted instead to build and operate their own

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electric streetcar systems, treating transit as a public service rather than a private enterprise.

Western European transit systems faced little competition from the automobile until late in the 20th century. Recovering from two devastating world wars, few Western Europeans could afford automobiles before the 1960s, and fewer still could afford new homes outside the cities. Government reconstruction and housing programs helped keep populations in the central cities and the nearby suburbs served by transit. Because few Western Europeans could afford to drive, dispersed and decentralized development would have been impractical and unpopular.

Therefore, after World War II, while U.S. policy makers were responding to the proliferation of automobiles by building urban freeways, Western European governments were strengthening public transportation. Although many new highways were added outside cities, Western Europeans invested in bus and rail transit, providing both capital and operating assistance. Meanwhile, automobiles, viewed as luxuries, were taxed heavily, making frequent driving affordable only for a few. These policies not only boosted demand for transit, but also obliged Western European governments to provide high-quality transit as an alternative to the automobile.

Policies and Practices Today

Continuing a century-long tradition, Western Europe supports public transit through policies and programs. Although most receive government funding, Western European transit operators rely heavily on fare collection, which compels customer-oriented service. Speed, comfort, and reliability receive much attention.

Operating practices—such as the routing of buses, the spacing of bus stops, and fare collection—are designed not only for passenger convenience, but also for increasing service speed and reducing delays. Transit is marketed to attract new riders, often through tailored discount passes. The coordination of ticketing and scheduling among transit modes and providers makes travel less complicated (see sidebar, page 23).

In addition, a transit-first approach prevails in traffic management. Buses and streetcars have priority in city traffic. Transit vehicles can preempt traffic signals at busy intersections, operate on dedicated travel lanes, and move ahead of vehicles in queues.

The automobile remains less convenient and more costly to operate in Western Europe than in the United States, especially in cities. High levies on motor fuel—several times higher than in the United States—and high parking charges and taxes make car ownership and use expensive. Many Western European cities have taken steps to discourage driving—for example, by curtailing parking spaces and restricting automobile use in shopping and business districts.

These policies frequently are part of a strategy to curb downtown traffic and preserve the traditional role of cities as economic, social, and cultural centers. The higher cost and greater inconvenience of driving in Western European cities does much to explain the higher levels of transit use.

Public Attitudes and Institutions

Western Europeans view their cities—as well as any undeveloped surrounding land—as scarce and fragile national resources to be protected and conserved. Urban land use typically is planned and regulated at the national and regional levels to encourage compact and clustered residential and commercial urban development accessible by transit. The integration of land use and transportation planning is made possible because national, regional, and local governments often share these responsibilities, or a single unit of government—often at the national level—has jurisdiction.

In the United States, however, land use planning is a local responsibility, seldom coordinated with regional transportation planning. Diffuse controls make it difficult to foster urban development patterns that promote public transit use by raising densities and intermixing commercial and residential land use. Residents of established communities often resist development, while localities on the urban periphery seek it to increase employment and raise tax revenues. As a result, more development takes place in dispersed patterns away from the central city and established transit corridors.

Transit in Canada

Canada's experience with transit is especially relevant to the United States. Nearly all of the external conditions and factors that differentiate the United States from Western Europe also apply to Canada—for example, a history of low gasoline taxes, high rates of car ownership, and economic and demographic pressures for urban growth.

After World War II, Canada also experienced rapid suburban development and precipitous declines in transit use. However, the Canadian provinces and

Extensive pedestrian malls like this one in Orleans, France, discourage travel by automobile and encourage walking, biking, and transit use. (© UITP. Reprinted with permission from *Public Transport International*, No. 5, 1998, W. J. Tyson, Non-User Benefits of Public Transport, p. 40.)



cities made concerted efforts to improve transit services, including a transit-first approach to urban traffic management and eventually higher fuel taxes and other policies favoring transit.

Canadians share many Western European attitudes about planning urban land use at the regional, rather than local, level and about coordinating land use with transportation investments. Transit-accessible designs are required for suburban subdivisions and office parks, and new residential and commercial development is channeled to current or planned transit corridors. Through these integrated efforts, transit has retained an important role in urban Canada in the past three decades.

Learning from Canada and Europe

Much of metropolitan America is now suburban and not conducive to traditional public transit operations and use. The availability of inexpensive land for development outside cities, burgeoning metropolitan populations and economies, and inner city economic and social strife have combined with the automobile to create decentralized urban areas difficult to serve by public transit.

Transit thrives in areas with high concentrations of workers, businesses, and households. Even dramatic changes in transportation investments, land use controls, and public attitudes—including the acceptance of denser settlement patterns and Western European-style disincentives to driving—would take many decades to reshape the American urban landscape to favor transit use.

Nevertheless, transit can play a more prominent role in the U.S. urban transportation system. It may be unreasonable to expect American transit use to rise to Western European levels, but there are many cities well suited to increase services. Boston, Chicago, New York, San Francisco, Washington, D.C., and several other American cities retain high levels of central city employment, population densities, and public transit mode shares.

Many of the policies and practices in Western European and Canadian cities are relevant—such as channeling new development into areas well served by public transportation and deploying creative transit marketing and fare programs. Successful implementation of European- and Canadian-style policies and practices is likeliest in cities with significant transit use. If American central cities can attract more residents and workers and can encourage new development on transit routes, transit ridership may increase.

The European and Canadian examples also offer insights into improving transit in other cities. Transit systems in Western Europe and Canada distinguish themselves by providing dependable, good-quality ser-

Examples of Key Practices and Public Policies Favorable to Transit Use in Western Europe and Canada

Reliability and Frequency of Transit Service

- ◆ Wide spacing between bus stops to increase operating speeds.
- ◆ Passenger loading platforms to ease bus reentry into traffic streams.
- ◆ Prepaid tickets and boarding passes to expedite passenger boarding.
- ◆ Low-floor buses with wide doorways to speed boarding and alighting.
- ◆ Transit priority in mixed traffic (e.g., bus lanes and special signalization).
- ◆ Vehicle locator systems.

Comfort, Safety, and Convenience of Service

- ◆ Amenities at transit stops and stations.
- ◆ Clean vehicles and knowledgeable drivers.
- ◆ Convenient ticket purchasing places.
- ◆ Sidewalks leading to stations and secure, lighted waiting areas.
- ◆ Uniform and simplified fare structures across transit modes.
- ◆ Discounted transit passes tailored to individual needs.
- ◆ Widely published schedules and color-coded matching of buses and lines.
- ◆ Taxi services to extend and complete transit networks.

Making Transit Competitive with Automobiles

- ◆ High automobile taxes.
- ◆ High motor fuel taxes.
- ◆ Parking limits in city centers.
- ◆ Restrictions on driving in downtown retail districts and other areas.
- ◆ Discounted automobile rentals and car cooperatives sponsored by transit agencies.

Compatible Urban Land Use Policies

- ◆ Decision making shared among local, regional, and national governments.
- ◆ Regional integration of transportation and land use plans.
- ◆ Rules and guidance on street and site development favorable to transit.

vice that meets passenger expectations. They reveal that a commitment to good service is critical, regardless of the scale and scope of the ridership.

In sum, the comparison makes clear that no single factor can explain why transit tends to be more popular abroad. Many policies, practices, and conditions working together have elevated public transit's role in the cities and suburbs of Western Europe and Canada. These experiences offer no panacea for transforming the role of public transit in the automobile-oriented urban areas of the United States. However, the comparisons offer insights into ways of making transit a more effective and attractive alternative for urban travel.

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