about Transportation and Growth

n many of the most desirable areas of the United States, economic growth has become a two-edged sword: the same new jobs that offer employment opportunities and tax revenues also bring traffic. The inability of many communities to provide adequate facilities has made traffic congestion a leading concern. The problem has been aggravated by a general pullback in federal and state funding, which traditionally has accounted for about three out of every four highway dollars, mostly from fuel taxes and other user charges. Clearly, a reduction in such a major revenue source places an almost impossible burden on local governments to fill the gap.

The question is asked by concerned communities: What is the value of economic development if (continued)

Myth 2.

Growth is unpredictable and therefore adequate planning is not possible.

There is a widespread feeling that growth is occurring in areas where it could not have been anticipated, and therefore could not have been planned for. In fact, the spread of development into more remote suburban and rural areas has rarely come as a surprise. New York City was decentralizing by the 1850s. During the 1950s, virtually all of the population increase in the largest 27 metropolitan areas occurred in the suburbs. Between 1960 and 1980, two-thirds of the job growth was in the suburbs. In most cases, this growth has been a logical extension of existing market trends. There were early harbingers that such a phase was beginning—a small shopping center, a research laboratory, or the assembly of land. Land speculation has been an early indicator that something was about to happen. But all too often officials were unable, or unwilling, to accept the realities of growth and communicate them to the community. The result—growth occurs without the transportation facilities needed to support it.

FACT 2.

Growth generally is predictable; plans made in advance are essential to cope with it.

Myth 3.

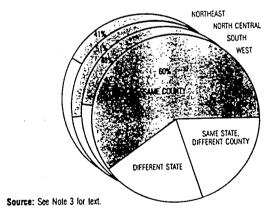
Growth in a community primarily serves newcomers.

Many attitudes toward growth are shaped by the notion that the houses and office buildings built to serve it are occupied primarily by new residents. Charging newcomers for the facilities needed for growth appeals to elected officials as a means to gain revenue without alienating voters. It can also placate community attitudes by assuring existing residents that newcomers are paying their fair share. But how can a "new" resident or worker in an area be identified? Contrary to the usual assumption that anyone who moves to a new home or works in a new office building is a newcomer, a large share of new housing and office space is purchased or leased by existing members of the community. A 1988 national survey of new homebuyers found that half of them—ranging from 41 percent in the Northeast to 60 percent in the West—already lived in the county where they purchased their new homes. U.S. Census Bureau statistics show similar trends for all household moves. In many communities, most of the growth is due to natural increases in the existing population.

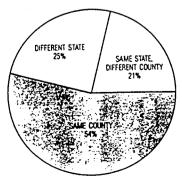
FACT 3.

Much of the development in growing areas is needed to serve existing residents, not people moving in.

Prior Residence of New Homebuyers



Prior Residence of All Movers: 1975-1980



Source: 1980 U.S. Census, City and County Data Book (Washington, D.C.: U.S. Department of Commerce, 1983).

Myth 5.

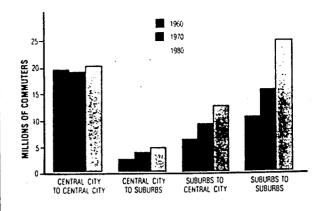
Urban transportation's major challenge is improving commuting to downtown jobs.

According to the 1980 U.S. Census, there were twice as many suburbanites commuting to suburban jobs in metropolitan areas as there were to jobs in the central cities. Between 1960 and 1980, intrasuburban commuting accounted for 57 percent of the increase in metropolitan commuting.5 Although the downtowns of our major cities are generally the most important single destination, they no longer are the dominant location for jobs; less than 8 percent of regional workers—ranging from 3 percent in Los Angeles to 10.9 percent in San Francisco-are employed in the 10 largest urbanized areas. 6 The new transportation challenge is how to meet the diverse needs of suburban destinations. In addition, nonwork trips are becoming a larger share of travel. In 1983, the number of miles traveled to earn a living, including work-related business, was only 27 percent of daily travel in metropolitan areas.7 Moreover, during rush hours in large regions, much of the growth in auto traffic has been for nonwork trips. By 1983, it was estimated that in urban areas of at least 3 million people, travel on the roads during the evening rush hour was almost evenly divided between commuting and nonwork trips. For a typical area, the central business district commuter probably represents less than 10 percent of all highway travelers during the heaviest rush hour.

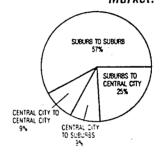
FACT 5.

In most growing areas, a diversity of transportation needs—dispersed suburban employment, reverse commutation, and nonwork travel—are as important, if not more important, than the problem of downtown commutation.

Relative Sizes of Main Flow Markets for Commuting: 1960-1980



Shares of the Total Increase in Commuters by Market: 1960–1980



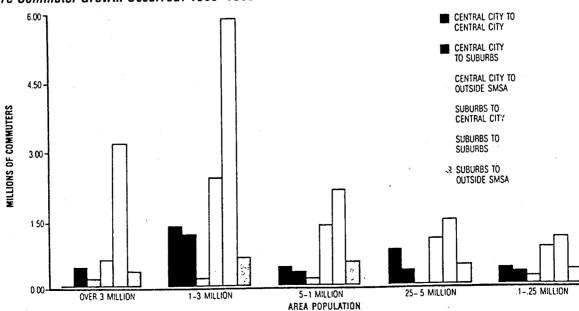
Source: Alan E. Pisarski, Commuting in America (Westport, Connecticut: Eno Foundation for Transportation, Inc., 1987).

Weekday Auto Travel in Regions with More Than 3 Million Population: 1983–1984



Source: Compiled from 1983 Nationwide Personal Transportation Study data, U.S. Department of Transportation; Peter Gordon, Ajay Kumar, and Harry Richardson, "Peak Spreading: How Much," unpublished paper, University of Southern California, 1988; ULI estimates, assuming 10 percent of employment in central business district.

Where Commuter Growth Occurred: 1960-1980



Source: Alan E. Pisarski. Commuting in America (Westport, Connecticut: Evo Foundation for Transportation, Inc., 1987).



New roads should not be built, because they will only fill up with traffic.

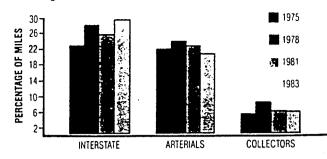
A prevailing belief is that a new road that attracts a large volume of traffic has not been a good investment because it generates increased travel without relieving existing facilities. The weakness of this argument becomes clear if it is applied, say, to new schools (they just fill up with students) or libraries (they only fill up with books). The fact that a new highway is well used demonstrates its success in offering a shorter or cheaper route for users; or access to new markets for industry; or better job, housing, or shopping opportunities for travelers. Not surprisingly, a new road in a congested area will attract traffic, especially when there has been little new construction. Attracting traffic and relieving other facilities are exactly what it was supposed to do. The Federal Highway Administration has calculated that each \$1 invested in improving the interstate highway system saves \$5 in costs to users—a substantial economic benefit. 10 Clearly, great economic value is attached to highway improvements.

Many also believe that new roads encourage growth, opening up areas to unintended development. Certainly, that is a possibility and must be dealt with according to the specific situation. An extensive number of highway impact studies was compiled in 1976 and summarized to show not only some of the traffic benefits, but also the economic and social advantages of highway improvements.11 Perhaps the most comprehensive lesson can be gained from a look at the U.S. interstate highway system-funded through the Highway Trust Fund established in 1956—which now carries one-fitth of all highway travel in the United States. It was not until 1982 that one-half of the urban interstate travel had begun to occur on roads rated as congested during peak hours. As the standard period for design is 20 years, the planners of the interstate highway system were generally "in the ball park." Moreover, the latest federal highway statistics show that out of 11,200 miles of interstate roads in urban areas, only 5,200 experienced traffic volumes greater than 70 percent of capacity during peak hours. 12 With many areas struggling with the problem of congested traffic arteries, the argument that building new roads is not part of the solution makes no sense.

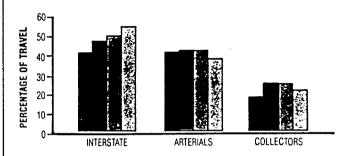
FACT 8.

Highway improvements are essential to a balanced regional transportation system. Their use is an indication of the need for them, not a sign of their failure.

Congestion* Based on Percentage of Total Miles



Congestion* Based on Percentage of Total Travel

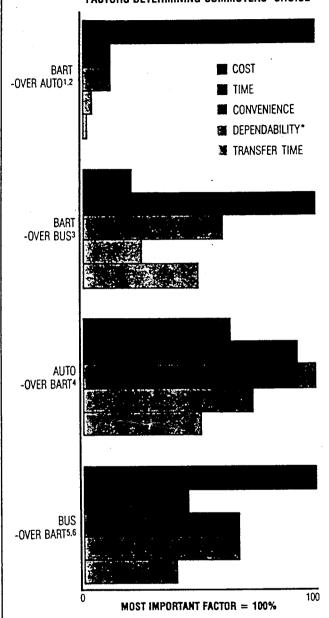


*Congestion = Vehicle-to-capacity ratio greater than 0.80 during peak periods.

Source: U.S. Department of Transportation, *The Status of the Nation's Highways: Conditions and Performance*, report to Congress (Washington, D.C.: author, 1987).

Relative Importance of Different Factors in Choice of San Francisco Bay Area Commuting— Auto, Bus, or BART: 1977

FACTORS DETERMINING COMMUTERS' CHOICE



PRIMARY REASONS FOR CHOICES

ILOWER COST OF A BART TRIP

2CAN AVOID DRIVING IN TRAFFIC AND ELIMINATE PARKING PROBLEMS

3TRAVEL TIME SAVINGS

4CONVENIENCE AND TIME SAVINGS

5CHEAPER

GREATER DEPENDABILITY OF BUS

 Note that during this survey period, BART was not operating at its full service level. Since then, the frequency of trains, the operating speeds, and the reliability and capacity have been improved substantially.

Source: Metropolitan Transportation Commission, BART in the San Francisco Bay Area: The Final Report of the BART Impact Program, for the U.S. Department of Transportation, Washington, D.C., 1979.

Myth 11.

We should not make capital investments because they will be outmoded by new technology.

The hope is that a technological "fix" will some day offer a more convenient, less environmentally damaging alternative to urban travel than today's mix of cars, buses, and trains. But for now, no such fix appears to be on the horizon. A recent National Research Council study concluded that the primary means of transportation, at least until the year 2020, will continue to be private vehicles and buses. 15 Research is underway to develop advanced technology to make the vehicle, highway, and operator more efficient. Like most new technologies, however, this one will likely be introduced incrementally—for example, by converting an existing facility or by gradually expanding the system. Although telecommunications and home offices will allow more people to work at home and avoid commuting, this option is not likely to affect more than a small percentage of travelers. In fact, between 1960 and 1980, changing patterns of work have resulted in a decline of 2.4 million people who regularly work at home. These changes have been caused by a migration of jobs to the suburbs, where walking is much less likely; and a decline in farming, an ideal walk-to-work occupation.5

FACT 11.

Transportation options for the near future will be much like those available today. We should continue to work with these options while seeking better technologies for the more distant future.