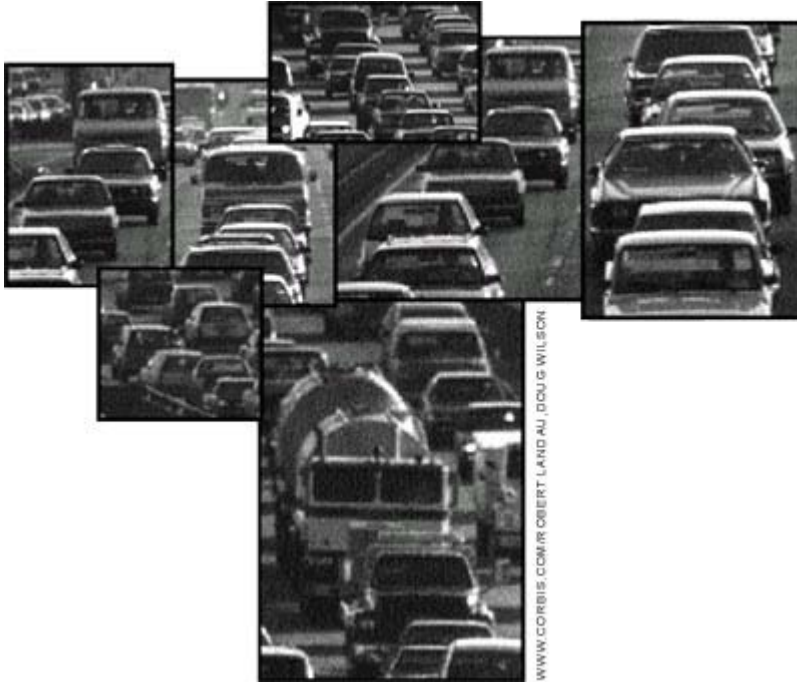


The grand experiment has failed. Public transportation is headed for the ashcan of history.

Have Car Won't Travel

The Sober – and Sobering – Case for Privatizing Urban Transportation

By **Clifford Winston**



Urban transportation has become a planner's quagmire in a war that seemingly cannot be won. America's highways are jammed at rush hour, causing infuriating delays. Bus service, never fast, has deteriorated over the years, while fares have risen. Pressures to expand rail service to outlying areas remain strong, even though current rail operations cannot

attract enough riders to cover more than a modest fraction of their expenses.

Popular opinion seems to be that we can – and should – spend our way out of this mess by building more roads, running more buses and installing more track. Washington agrees and, as laid out in the Transportation Equity Act for the 21st century (T21 for short), has greatly increased support for transit and highways for the 1998-2003 years. While spending more public funds for urban transportation may result in some improvements for travelers, history and serious analysis suggest that its primary effects will be to swell transportation deficits and waste tax revenues.

As long as government delivers the service and pays the bills, urban transportation is destined to remain inefficient – and inequitable. The politics that has led to excessive labor costs, bloated bureaucracies and construction-cost overruns in the past promise more of the same for the future. I am convinced that the only way to improve the system is to shield it from those influences by privatizing it.

Private operators, facing fewer operating restrictions, greater economic

incentives and stronger competitive pressures, could reduce waste and make service more responsive to travelers' preferences. Moreover, they could accomplish both without funneling income from poor to rich – the little-understood reality of the current system of financing urban transportation.

To date, Federal, state and local government officials have kept urban transportation in the public sector because the political benefits they reap outweigh the political costs of fallout from the system's inefficiencies. As these costs continue to grow, however, a transition to a more efficient privatized system seems virtually inevitable. The real question is whether policy makers will stand by passively as a bad public system becomes worse, or take steps now to expedite privatization.

HOW WE GOT HERE

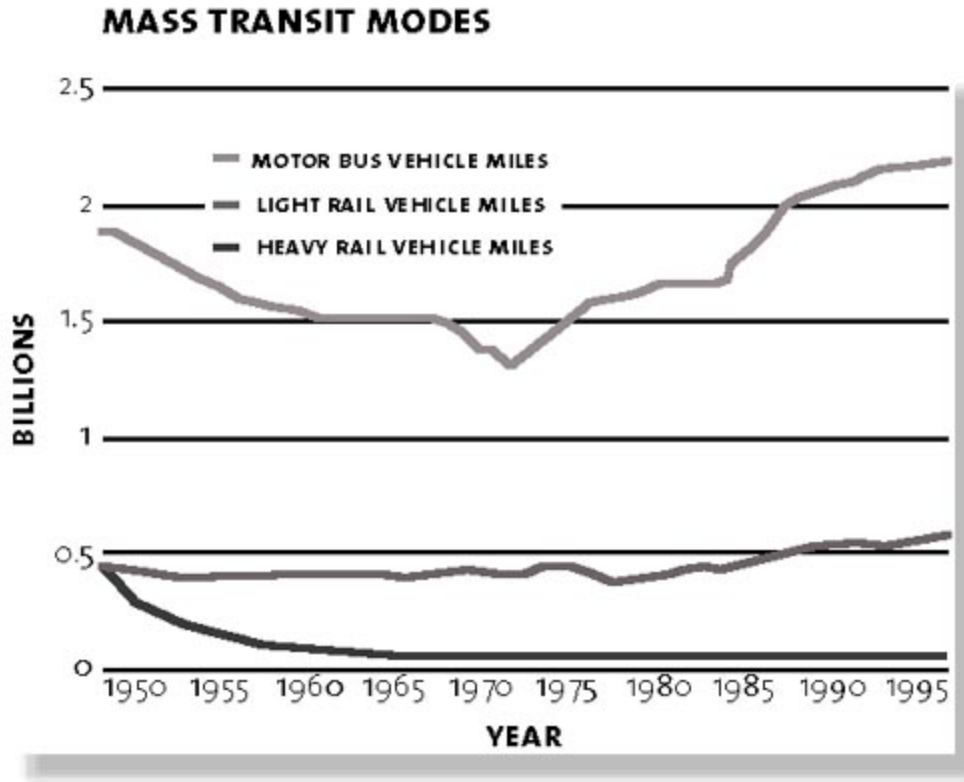
The Federal government began subsidizing urban transportation in the 1950's, funding urban extensions of the interstate highway system. Then, in response both to the deteriorating financial condition of private transit and to arguments by big city mayors that subsidizing transit would be more cost-effective than building highways, Congress passed legislation in the early 1960's that financed cities' acquisitions of their transit companies.



In 1974 the Federal government began providing operating subsidies as well. Growing Federal support of mass transit slowed the long-run decline in the use of buses and light rail systems – trolleys and streetcars. By the late 1970's, Federal subsidies had expanded bus and heavy rail capacity. Capacity has continued to increase in the last two decades, yet other trends revealed ominous weaknesses in service.

Many cities have cut bus service frequency on their core routes in order to extend service to the suburbs. Meanwhile, cities including New York, Chicago and San Francisco have cut rail-service frequency and raised real (inflation-adjusted) fares. Indeed, since 1980 real transit fares have increased 44 percent. Although Federal support of public transit was intended to lure urban travelers from their cars, the share of commuters who use bus and rail has diminished since the 1960's. Rising incomes and suburban sprawl have reinforced commuters' preferences for their automobiles, causing autos' share of work trips to climb to nearly 84 percent by 1990. Between 1960 and 1990, mass transit's share of all trips in large urban areas fell from more than 20 percent to less than 10 percent.

Transit's long-run growth in capacity and decline in patronage have combined to create deficits that are a serious drain on the public purse. By 1995, public transit operating expenses in the United States were about \$18 billion a year, almost twice the yearly \$9.6 billion in operating revenues. Continuing capital investments are swelling this deficit. And sadly, most of the subsidies do not benefit travelers. According to Don Pickrell (1985) and Douglass B. Lee (1987), as much as 75 percent of Federal spending on mass transit ends up in the pockets of transit workers (as above-market wages) or to suppliers of transit capital (as higher profits and interest). Just 25 percent is used to improve service and lower fares.



With many cities planning to build new light rail systems or extend existing ones, transit deficits are certain to keep growing. Indeed, if experience is any guide, rail ridership will be grossly overestimated at the planning stage for new service, while capital and operating costs will be underestimated.

The tendency for urban rail to expand also makes it difficult to forecast how much a system will cost when the network is completed. For example, projected costs of the proposed light rail and subway lines in Los Angeles have continued to escalate, as plans have become more ambitious. Los Angeles county voters were so put off by the most recent cost projection – \$75 billion over the next 20 years – that they voted to prohibit the use of local sales-taxes to continue construction.

Signs of a backlash do not seem to have much effect on the chattering classes, though. A recent New York Times editorial chided state and city officials for their lukewarm response to the Regional Association's plan for a \$13 billion expansion of New York City's subway. Meanwhile, proposals for constructing and extending other urban rail systems throughout the country continue to move forward.

With its share of trips now at 90 percent, the automobile is more than ever the dominant form of urban transit in America. But having invested hundreds of billions of dollars building and maintaining roads to accommodate autos, the public has begun to lose patience with road construction that never catches up with demand. For example, after an eight-year marathon of construction to widen parts of Interstate 270 in suburban Washington, D.C. to 12 lanes, traffic

already exceeds levels projected for 2010.

Workplace and residential relocations during the 1990's – largely the result of the trend toward working and living in distant suburbs – have helped to stabilize congestion. But estimates of the ongoing costs of congestion, mainly in the form of wasted time but also in wasted fuel and vehicle wear and tear, run as high as \$40 billion a year.

All this suggests that we are not likely to improve urban transportation much by throwing gigabucks at the problem. We could, however, make much more efficient use of the resources devoted to urban transportation. First, prices of all modes could be more closely aligned to costs, reducing the incentives to use too much or too little of each. Second, transit and highway services could be adjusted to maximize the difference between benefits and costs after properly accounting for "externalities" such as pollution and congestion. Finally, travelers could signal more effectively the services for which they are willing to pay, and suppliers could be given greater incentives and freedom to provide them efficiently.

Although transit policy makers are not likely to reshape the public system in these ways, a reformed public sector is not the only possible solution. If a substantial portion of the urban transportation system were privatized, I am convinced that market forces could manage what public officials are unable or unwilling to do.

A TAXONOMY OF WASTE

Public mass transit deficits exist because policy makers set prices and service levels that generate less revenue than is warranted for the service provided. Likewise, severe highway congestion is caused by pricing that makes auto travel less costly to the individual driver than its impact on other drivers would warrant.

What are the social costs of these inefficient policies? Chad Shirley and I have estimated the impact on travelers and taxpayers of a policy that fully charged travelers for the costs of their trips, and provided additional service only to the point where the added benefits equaled the added costs. In the case of autos, cost-based pricing could be implemented by setting highway tolls that vary with the level of congestion. Current technology can assess such tolls without disrupting motorists' journeys or invading their privacy.

The net benefits (added benefits less added costs) from implementing only the pricing component of this policy total nearly \$8 billion a year. Because optimal pricing means much higher fares and tolls, travelers lose \$16 billion. But these private losses are more than offset by the reduced public transit deficits and accumulated toll revenues that bring the urban transportation budget into balance.

EFFICIENT COMMUTER PRICING AND SERVICE: WHO WINS, WHO LOSES

BILLIONS OF 1998 DOLLARS

ASSUMPTION AND MODE	CONSUMER BENEFITS	GOVERNMENT BALANCES	NET BENEFITS
EFFICIENT PRICING ONLY			
AUTO, BUS AND RAIL TOTAL	-16.0	23.9	7.9
Autotoll	-8.2	12.0	3.8
Bus	-4.3	7.0	2.6
Rail	-2.4	2.8	0.4
NET - BENEFIT MAXIMIZATION			
EFFICIENT PRICING AND SERVICE FREQUENCY			
AUTO, BUS AND RAIL TOTAL	-16.2	29.3	13.0
Bus	-4.3	11.7	7.3
Rail	-2.8	4.3	1.6

SOURCE: Shirley and Winston (1998)

It's not clear, of course, that the average citizen is likely to see benefits in policies that increase his own costs, even as they lower public deficits. But studies have found that voters are more inclined to support elected officials who reduce government spending. It's thus likely that travelers wearing their hats as taxpayers would vote for their enlightened self-interest at the ballot box.

Cost-based urban transit punctures some sturdy truisms. Transit subsidies have long been justified on grounds of efficiency because auto travel is implicitly subsidized – that is, a traveler's costs of using his or her automobile do not include the costs of added congestion, pollution and the like. Our findings show, however, that overall urban transportation efficiency would improve if any mode's prices were more closely aligned with its costs. Current fares are so out of line with costs that pricing transit according to cost would reduce economic waste, even if the price of using cars remained unchanged. By the same token, raising the cost of driving without raising mass transit fares would also increase overall transit efficiency.

Government officials have kept urban transportation in the public sector because the political benefits outweigh the fallout from the system's inefficiencies.

frequency as well as prices were adjusted to maximize net benefits. Current transit frequency is excessive because of low ridership. Thus cutting frequency generates benefits because public deficits are reduced by more than the value of the service lost to urban travelers.

Another popular theory is that transit should be subsidized because auto travelers do not pay the costs to society of accidents and pollution. Shirley and I do find that the net benefits would be even greater if we fully accounted for the policy's effect on accidents and pollution – but not because auto travel would be reduced. Efficient pricing and service would increase auto travel and accident costs, but the lower accident costs from less bus and rail travel would offset these costs. Similarly, pollution costs increase because of more auto travel, but decrease because of reduced travel by buses.

Additional inefficiencies in the public sector arise because rail and bus companies do not minimize the cost of producing a given level of service – as the high proportion of empty transit seats attests. During the mid-1990's rail filled roughly 18 percent of its seats with paying customers, while bus filled roughly 14 percent. In contrast, about one-third of auto's carrying capacity is typically filled. These differences in capacity utilization have clear implications for mass transit's cost competitiveness with autos. While transit's average operating costs per seat mile are lower than auto's, this potential cost advantage is never realized in practice because empty seats drive its operating costs per passenger mile much higher than auto's.

Nor is automobile travel on urban thoroughfares produced at minimum cost. According to Gabriel Roth (1996), highways make inefficient use of their capacity and actually cost government more than is collected in fuel taxes when depreciation of highway capital is taken into account. Kenneth Small, Carol Evans and I (1989) also found that highway pavement is generally too thin, which raises maintenance costs. The bottom line: Improved capacity use and road durability could greatly lower the costs of urban auto travel.

Until analysts get a better handle on the potential of both mass transit and auto travel, it is premature to say whether the most efficient urban transportation system would shift travelers from mass transit to auto, or vice-versa. It is already clear, however, that the delivery of urban transportation by government is creating substantial inefficiencies from travel by all modes.

THE POLITICS OF URBAN TRANSPORTATION

It's no secret why government can't cope with transit inefficiencies: Policy makers (appropriately) respond more to political forces rather than market forces. Although government subsidies largely accrue to transit managers and suppliers of transit labor and capital in the form of higher wages, profits and interest payments, a portion does go to the popular causes of keeping fares below cost and expanding service beyond the level that could be supported without subsidies. Probably more important, these public benefits are enjoyed by groups with influence disproportionate to their numbers – high-income commuters, business developers and so on.

Shirley and I estimate that more than 80 percent of the waste from sub-optimal urban transit fares and frequencies can be attributed to these political

influences. Transit inefficiencies might be more easily overlooked if they redistributed income from the well-to-do to the poor, but this is not the case. Everyone gets something from the grab bag: transit managers and workers get higher wages, while lower- and middle-income bus riders get more frequent service. Upper middle-income rail riders cash-in through more frequent service and greater route coverage.

With the average annual household income of bus commuters approaching \$40,000 and the average annual household income of rail commuters exceeding \$50,000, the poor are hardly transit's greatest beneficiaries. Indeed, since the tax burden created by transit subsidies takes a larger portion of income from the poor than from the rich, it is clear that public transit is increasing – not decreasing – inequality.

BIG CITY COMMUTERS

HOW THEY COMMUTE	1960	1970	1980	1990
MILLIONS OF WORKERS				
Privately Owned Vehicle	17.5	27.6	36.5	49.8
Bus	3.8	3.3	3.0	2.9
Subway/Rail	2.3	2.2	2.0	2.3
Walk	3.0	2.7	2.1	2.2
Other	2.2	1.2	1.7	2.4
PERCENT OF WORKERS				
Privately Owned Vehicle	61.0	74.4	80.4	83.5
Bus	13.1	9.0	6.7	4.9
Subway/Rail	8.0	5.9	4.5	3.8
Walk	10.4	7.4	4.7	3.8
Other	7.5	3.3	3.7	4.0

SOURCE: Federal Highway Administration

The recent failure to impose variable tolls reflecting congestion costs on the San Francisco Bay Bridge, as described by Stephen Shmanske (1996), illustrates how politics drives highway transportation. Congestion-linked tolls were to be part of a Congressionally approved demonstration project, but the Metropolitan Transportation Commission and the California Department of Transportation decided to commit a share of the toll revenue to various public agencies overseeing alternative transit modes. The California legislature subsequently rejected the tolls on the grounds that they amounted to a tax increase designed to funnel money to bureaucratic, loss-making transit systems. Thus the country's only approved congestion-pricing demonstration was never implemented.

Urban transportation inefficiencies are not a "mistake" that can be easily

corrected: entrenched political forces make it difficult for the public system to be improved. Unfortunately, increased Federal support for transit and highways will only delay the search for an alternative.

THE CASE FOR PRIVATIZATION

You don't need to be a libertarian to conclude privatization represents the only realistic hope for paring the huge inefficiencies that have developed in all modes of transportation under public management.

Travelers wearing their hats as taxpayers would vote for their enlightened self-interest at the ballot box.

Just how would privatization make a difference? Private bus and rail companies, competing vigorously with each other and with private autos, would set prices and service to maximize profits. Shirley and I found that the economic effects of such competition are remarkably similar to the effects of efficient pricing and service. Society's gains from eliminating transit deficits – private carriers would earn profits – would substantially exceed travelers' losses from higher fares and reduced service.

These findings, however, focus only on pricing and service inefficiencies. They far overstate the potential losses to travelers because they do not reflect the improvements in operating efficiency that could be achieved by private carriers. Transit costs are likely to fall at least a third because private bus and rail companies would reduce labor and capital costs by using the latest technologies to improve routing, scheduling and vehicle design. Improved customer service would fill more bus and rail seats, lowering costs per passenger still further. Costs would also fall because a competitive (and unsubsidized) transit market would force companies to reduce transit wages. The typical Washington Metrobus driver, for example, gets paid as much as 50 percent more than drivers for the handful of private bus companies operating in the D.C. area.

Competition among conventional bus, rail, taxis and autos, along with new entrants such as jitneys and minibuses, would insure that cost reductions become fare reductions. New entrants are likely to be an especially important source of competition. Many travelers in New York City, for example, prefer the service offered by illegal gypsy vans to that of public transit. Urban travelers would play an important role in spurring efficiency by adjusting their travel plans and (in the case of corporate buyers) developing bargaining power with carriers – much as inter-city travelers and shippers have done in deregulated air, rail and trucking markets.

Most likely, though, the private market's primary benefit to travelers would be more innovative and responsive services. By using new technologies – personal rapid transit and real-time, demand-responsive services, for example – that are currently suppressed in the public system, carriers could provide more convenient and reliable service. Private carriers would also have an incentive to adjust their routes in accordance with economic and demographic changes. The current public system has been largely unresponsive to such changes, failing, for example, to expand service from the inner cities to suburban areas with growing

demand for workers.

OBJECTIONS TO PRIVATIZING TRANSIT

Some opponents of privatization argue that it simply will not work, noting that the Federal government got involved in urban transit during the 1960's precisely because private transit failed. Peter Pashigian (1976) and George Hilton (1985) point out, however, that the lesson of private transit failure is more complicated.

The collapse of private bus companies was largely due to regulation – that is, regulation that seriously hampered performance.



What's wrong with this picture?

Other critics point to the more recent British experience with privatizing buses. Peter White's (1995) characterization of Britain's experiment thus far parallels the predictions for the short-term consequences of transit privatization in the United States. Public subsidies have fallen along with costs. Fares have risen, minibuses have emerged as a major form of service innovation and bus ridership has generally declined in response to higher fares. Longer-run developments are as yet uncertain.

My view is that the 1950's United States experience and recent British experience with private transit are of little relevance to contemporary America. A more useful perspective comes from the consequences of railroad deregulation in America in the 1980's. Although policy makers were aware that regulation inflated the costs of rail operations, they were concerned that railroads' monopoly power in some regions would allow them to raise shippers' rates.

In fact, the deregulated railroads have reduced their costs, while fierce competition among railroads and trucks has cut average rates by more than 50 percent. Service quality has substantially improved, and the industry is more profitable than it would have been under regulation. Critics of deregulation and privatization, I would argue, both underestimate the intensity of competition and overestimate the extent to which specific groups of consumers are likely to be hurt.

Another objection to privatization is that its benefits would be achieved only by redistributing income from low- or fixed-income travelers to wealthier citizens. The implication is that the poor and elderly are currently the primary beneficiaries of public transit. In fact, the opposite seems to be true.

Where transit systems are creating new routes, they mainly focus on well-heeled commuting professionals heading toward the central business district. And this expanded service is typically financed by taxes that fall disproportionately on the poor. As I noted above, public transit has failed to connect lower-income inner-city residents with new jobs in the suburbs. By the same token, Richard Crepeau and Charles Lave (1996) have found that the mobility of the elderly depends little on public transit.

Since the tax burden created by transit subsidies takes a larger portion of income from the poor than from the rich, public transit is increasing – not decreasing — inequality.

A compelling example of the potential benefits of privatization for low-income workers is new dollar-a-ride service in the New York City borough of Queens. Queens Van Plan, a private company serving mostly low- to middle-income minority workers whose neighborhoods are neglected by public mass transit, provides an indispensable service and operates at a profit. However, current regulations prevent the company from serving other low-income areas of New York. Under a privatized system, Queens Van Plan and similar entrants would be free to expand where the market demanded.

Transit union leaders resist efforts to privatize transit because they wish to protect the high wages and job security of their members. Train operators and station agents for the Bay Area Rapid Transit (BART) system in San Francisco, for example, are paid more than \$40,000 a year. The economic effects of privatization on the transit labor force, however, are not entirely clear. Although it is likely that wages would fall, an efficient private transit industry could actually increase patronage and total transit employment.

In view of the sound case for privatization and the weakness of the objections to it, Washington should begin what is sure to be a long transition by encouraging cities to run privatization experiments. Federal grants could be used to encourage such experiments. Cities should also be given the flexibility to find their own way to introduce private competition in transit and to reduce transit's dependence on taxpayers.

Of course, it would take time for businesses and travelers to adjust to the new competitive order. While privatization is unlikely to cost low-income travelers more in the long run, short-term assurances – perhaps in the form of a transportation voucher program – would build support for the experiments. Once experiments begin, however, policy makers must allow competitive markets to evolve and not micromanage the transition.

PRIVATE ROADS

The costs of road transportation in the United States are inflated because pavements are too thin and road capacity is inefficiently used – jammed during peak travel hours and lightly traveled at other times. The source of these problems, economists widely agree, is inefficient pricing, investment and maintenance. As in the case of transit, these inefficiencies are likely to be reduced only if roads are subjected to competitive forces. But is such

competition feasible?

New Zealand is considering giving government roads to commercial road companies, which would be expected to charge for their use and earn a return on capital while being regulated as public utilities. I hesitate to recommend this step for America, however, because regulators would very likely micromanage tolls and thus discourage efficient pricing schemes.

The argument for commercialization, and eventually privatization, may become more compelling as road technology evolves. Many transportation engineers and planners envision highways where sophisticated navigational aids guide choices of routes, set travel speeds and even drive the vehicles. These technological advances call for much greater management of highway travel, which in turn could generate inefficiencies that prompt calls for a private road traffic control system – much as it has with air traffic control. If the Federal government wants to move to a new era of highway transportation, it should give serious thought to allowing private companies to manage the road system.

WHAT WILL SPUR CHANGE?

Since policy makers reap benefits from business as usual in urban transportation, why would they consider such a fundamental change as privatization? Privatization will only become attractive to them when the burden of financing public deficits and coping with complaints about inefficient and unresponsive service finally overwhelm the joys of political patronage. Current transit losses are large and growing, but the recent successes in eliminating deficits in both Federal and state budgets have temporarily relieved the pressure to cut wasteful spending on transportation. There is no better evidence of this than the "compromise" that produced the T21 legislation, with increased Federal funding for all modes of urban travel.

Eventually, I believe the political cost of sustaining urban transportation systems plagued by deficits and deteriorating performance will spur change. My hope is that policy makers will find it in their interest to act sooner rather than later, encouraging experiments in private urban transportation. Properly conducted, these experiments should generate popular support for privatization and pave the way toward a more efficient urban transportation system.

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