

# DEREGULATING URBAN TRANSPORTATION

*Robert Cervero*

The nation's air, rail, trucking, and intercity bus industries have all been deregulated in recent years with generally bipartisan support. The lifting of controls over fares, routing, and market entry has taken place in the name of economic efficiency—getting government out of the friendly skies and busy highways of this nation so that private market forces can prevail. Strangely, however, deregulation has been largely limited to intercity and transcontinental modes of transportation. There is no reason, however, why the same principles cannot be successfully applied to urban transportation as well.

## Current Problems in Urban Transportation

Present-day urban transportation problems are all too familiar to most Americans. Many of our nation's cities are plagued with overcongested and undermaintained highways and financially crippled transit systems. Maintenance and restoration of major arteries and freeways have routinely been deferred over the past several decades, even though private automobile and truck travel has steadily increased since the 1950s. Few municipal bus systems in the United States today recoup more than 40 percent of their costs from fares, relying instead largely on government bailouts to make up the difference. Yet transit wage rates have outpaced the rate of inflation over the past 15 years (one of the few employment sectors to accomplish this feat), even though service quality and overall productivity have

---

*Cato Journal*, Vol. 5, No. 1 (Spring/Summer 1985). Copyright © Cato Institute. All rights reserved.

The author is Assistant Professor of City and Regional Planning at the University of California at Berkeley. A condensed version of this paper appeared in the May/June 1984 issue of *Regulation*.

generally fallen during this period.<sup>1</sup> In many cities buses often operate at crush loads during rush hours. During off-peak hours, however, restrictive work rules prevent the hiring of part-time help and may cause the same buses to run nearly empty.

The cost of operating the nation's transit systems and reconstructing and maintaining urban roadways today stands at over \$20 billion per year, comprising almost 5 percent of total local, state, and federal budgets.<sup>2</sup> (This ignores capital expenditures, which, by comparison, have generally stabilized in recent years). The financial burden of urban transportation is quickly overwhelming government treasuries at a time when public pressure is mounting to curb spending.

Federal largesse has been particularly generous to transit interests over the past decade. Federal subsidies to urban transit grew from \$132 million in 1970 (consisting largely of small capital grants) to over \$3.2 billion in 1982, an increase of 2,400 percent.<sup>3</sup> For the same period, federal expenditures on highways grew only 93 percent, from \$4.38 billion to \$8.45 billion, and much of the increase was eaten up by inflation.<sup>4</sup> This shift in national policy reflects a common belief among many people—be they environmentalists, political conservatives, or even pro-highway supporters—that a strong national urban transit system is needed. Public transit enjoyed broad ideological appeal throughout the 1970s, and was openly embraced by Republican and Democratic administrations alike as part of their national urban policy packages.

Despite the massive infusion of government aid to transit, there has been only a relatively small payoff. National ridership has remained fairly stagnant since 1970, amounting to about 6 billion passengers annually.<sup>5</sup> Several studies document that a large share of government subsidies has been consumed by higher labor costs, lower productivity, and the unbusinesslike expansion of services into low-density,

<sup>1</sup>See American Public Transit Association (APTA), *Transit Fact Book* (Washington, D.C.: American Public Transit Association, 1984), preliminary estimates; Don H. Pickrell, "Sources of Rising Operating Deficits in Urban Bus Transit," *Transportation Research Record* 915 (1983): 18–24; and John R. Meyer and Jose A. Gomez-Ibanez, *Improving Urban Mass Transit Productivity* (Washington, D.C.: Urban Mass Transportation Administration, U.S. Department of Transportation, 1977), pp. 12–15.

<sup>2</sup>See APTA; *Highway Statistics, 1982* (Washington, D.C.: Federal Highway Administration, 1982).

<sup>3</sup>APTA.

<sup>4</sup>See *Highway Statistics, 1982; 1980 Summary of UMTA's Transit Assistance Program* (Washington, D.C.: U.S. Department of Transportation, 1980); and *Highway Trust Fund 24th Annual Report* (Washington, D.C.: U.S. Department of Transportation, 1980).

<sup>5</sup>APTA.

suburban markets.<sup>6</sup> The availability of subsidy dollars, many argue, has lulled transit operators into a false sense of security, which in turn has resulted in lax management practices and overly generous wage settlements.<sup>7</sup> Most important, the underwriting of public transit services has discouraged the emergence and expansion of many alternative and generally higher quality urban transit services, such as taxis and private commuter buses. Indeed, transit's monopoly along many dense corridors of U.S. cities has helped institutionalize inefficient operating practices while squelching competition and innovation.

Perhaps the major public policy lesson in urban transportation during the 1970s and early 1980s has been that money itself will not lure Americans out of their cars and into public transit or other forms of ridesharing. Despite low transit fares, expansive transit routing, carpool matching programs and publicly sponsored vanpools, Americans have resisted attempts to change their commuting habits. As Alan Altshuler notes, Americans have continued to pursue low-density, auto-reliant lifestyles despite public efforts to convince them they should do otherwise.<sup>8</sup>

It is argued in this paper that more could be done to improve the quality of urban transportation and perhaps abate the current fiscal shortfall through the process of deregulation than through almost any other policy strategy. Current problems have created an unprecedented opportunity for introducing various regulatory reforms. Decontrol would allow jitneys, shared-ride taxis, vanpools, and private commuter buses to compete for parts of the transit market now largely monopolized by bus and subway operators. A competitive marketplace would force operators to restructure their services and price them more rationally. The riding public would benefit not only from a wider array of available travel modes but also from a more integrated system of urban transportation. The deregulation of minimum parking requirements found in most local zoning ordinances could also help relieve inner-city congestion and promote the use of

<sup>6</sup>The two most complete studies on the "leakage" of transit subsidies are Douglass B. Lee, Jr., "Evaluation of Federal Operating Subsidies to Transit," working paper (Cambridge, Mass.: Transportation Systems Center, 1983); and Don H. Pickrell, *The Causes of Rising Transit Operating Deficits* (Washington, D.C.: Urban Mass Transportation Administration, U.S. Department of Transportation, 1983).

<sup>7</sup>See John Pucher, "Effects of Subsidies on Transit Costs," *Transportation Quarterly* 37 (October 1982): 549-62; and Robert Cervero, "Examining the Performance Impacts of Transit Operating Subsidies," *Journal of Transportation Engineering* 110 (September 1984): 467-80.

<sup>8</sup>Alan Altshuler, *The Urban Transportation System: Politics and Policy Innovation* (Cambridge, Mass.: MIT Press, 1979), p. 377.

alternative travel modes. Likewise, revising subdivision regulations to allow parking limits on new developments and density levels supportive of public-transit investments could have substantial longer-term payoffs.

Perhaps it is deregulation's potential for spawning a rich mix of different types of urban transportation services that is most promising. Many Americans have only one or two alternatives when traveling other than by car—generally bus or taxi. Yet the past decade has taught us that the provision of fixed-route, uniform-quality services will not lure significant numbers of people out of their cars. There is tremendous diversity in travel preferences—some want fast, comfortable services and are willing to pay a premium fare for them, while others are satisfied to travel under slower, more congested conditions if they are given a break at the farebox. A wide array of service options clearly offers the greatest hope of enticing commuters to switch their mode of travel.

The importance of service features is well known within the transportation field. Studies consistently show that commuters are far more sensitive to the quality of transportation services than price levels—that is, they are most likely to change their travel behavior, and perhaps switch modes, given dramatic changes in travel times or comfort levels. In fact, several studies have found transit riders to be at least twice as responsive to service changes (such as more frequent scheduling of buses) than to lower fares.<sup>9</sup> Factors such as reliability of schedules, assurances of a seat, and availability of temperature control have proven to be key determinants of what modes travelers choose. Time spent walking to a bus stop, waiting, and transferring is particularly abhorred by commuters. It should come as no surprise, then, that private commuter buses and taxis provide these desired premium features to their customers and are making a profit while doing so.

What we need, then, is a wider assortment of urban transportation services targeted to meet the diverse needs and travel preferences of urban Americans. Regulatory reform could inject a much-needed dose of competition into the urban transportation sector, just as it has done with the nation's airlines, railroads, and highways, and thereby give rise to a wealth of travel alternatives to the automobile.

## Legacy of Urban Transportation Regulations

The regulation of urban transportation in the United States has long embraced fundamental principles of public welfare

<sup>9</sup>Patrick Mayworm et al., *Patronage Impacts of Changes in Transit Fares and Services* (Washington, D.C.: U.S. Department of Transportation, 1980).

economics.<sup>10</sup> Taxis, jitneys, and private buses have fallen under government control in the belief that their ascendancy would undermine common-carrier public transit services and threaten public safety.<sup>11</sup> Similarly, parking is often regulated for the purpose of averting potential traffic congestion. Even though these regulations are said to protect the broader "public interest," interference in the private marketplace all too often has created inefficiencies and market distortions where none previously existed.

The underlying economic rationale for regulating urban transportation modes has historically been that they are natural monopolies—that is, they enjoy economics of scale (where average costs decline as use increases), as do water and electric utilities. Under such conditions, a sole operator can most efficiently and inexpensively provide services. If numerous competitors were allowed into the urban transportation market, the argument goes, they would "skim the cream" by taking the most lucrative routes and leaving the unprofitable ones. However, a single transportation company would operate in the public interest by operating both money-making and money-losing services, a practice commonly called cross-subsidization. To ensure high levels of transportation services throughout an urban region, then, regulators argue that the public has an obligation to protect carriers from excessive competition and ensure that they receive an adequate rate of return.

A variety of controls on urban transportation have emerged under this regulatory banner. Entry restrictions have been placed on taxis in most U.S. cities, while jitneys, shared-ride taxis, and other private ridesharing ventures have generally been regulated out of existence. Both fare levels and rate structures also have come under government scrutiny. In addition, regulations have sought to ensure safety through controls on vehicle inspection, driver qualifications, and general operating practices.

The first regulation of urban transportation in the United States involved the granting of franchises to electric utility companies to operate streetcar and trolley lines around the turn of the century. Franchises often stipulated a nickel fare, which traction companies were more than willing to accept, given the opportunity to bring transit under the monopoly of the electric utility industry.<sup>12</sup> Even at

<sup>10</sup>Alfred E. Kahn, *The Economics of Regulation: Principles and Institutions*, vol. 2 (New York: John Wiley and Sons, 1971).

<sup>11</sup>Ronald Kirby et al., *Para-transit: Neglected Options for Urban Mobility* (Washington, D.C.: The Urban Institute, 1974).

<sup>12</sup>See Sam Bass Warner, *Streetcar Suburbs: The Process of Growth in Boston* (Cambridge, Mass.: Harvard University Press, 1962); and Spencer Crump, *Ride the Big Red Cars: How Trolleys Built Southern California* (Los Angeles: Trans-Anglo Books, 1962).

this time, most streetcar lines were being subsidized, as transit was often part of an overall real estate development package. The principle of cross-subsidization was being fully exploited—electric utilities would willfully sustain losses operating streetcar services as long as they alone could extend routes into the suburbs to reap the rewards of land speculation. These real estate dealings represented the first perverse effects of regulating urban transportation in the United States.

By 1915 over 62,000 privately owned and operated automobile passenger services, called jitneys, were plying their trade in U.S. cities.<sup>13</sup> Within three years, however, nearly all of them were regulated out of existence by public authorities at the insistence of streetcar and trolley line owners who felt the jitneys were a threat to their businesses.<sup>14</sup> Taxis, which exploded in numbers during the Depression years when thousands of Americans were out of work, came under similar attack. Streetcar operators and later bus companies sought to restrict the entry of taxis in most U.S. cities to lessen their competition. Protestations that free competition would lead to violent taxi wars were common. Large taxi companies generally welcomed regulation in hopes of limiting the number of part-time drivers and of increasing fares.<sup>15</sup>

Although municipal authorities have historically regulated taxis, both state governments and the federal government have had a hand in suppressing them as well. The subsidization of transit fares has undermined the ability of taxis to compete in many urban transportation markets. Moreover, legislation that protects transit employees from being hurt by any program involving state and federal grants has retarded the emergence of taxis and other modal alternatives by ensuring continued high levels of transit operations.

Other services, such as private dial-a-ride vans and commuter club buses, have similarly been inhibited by transit authorities, which enjoy monopoly rights as sole service providers in their communities. In some states, carpools operated on a profit basis and large privately run vanpools come under restrictive regulations as well. The attitude of protectionism has become so pervasive in many urban transportation settings that free competition has all but vanished.

A byzantine network of local, regional, and state authorities has evolved for administering and enforcing these regulations. Often,

<sup>13</sup>R. D. Eckert and G. W. Hilton, "The Jitneys," *Journal of Law and Economics* 15 (October 1972): 293–325.

<sup>14</sup>*Ibid.*, p. 294.

<sup>15</sup>*Ibid.*, p. 295.

local police departments and public utility or service commissions are empowered to regulate and license taxis, dial-a-ride services, and (in the few cities where they remain) jitneys. These authorities usually exercise control over fare and service features (for example, routes, hours of service, and fare structure) while safety matters typically remain vested in the state (for example, the licensing of drivers). In many cases regional transit authorities also exert control over the routing of taxis and dial-a-ride services within their district boundaries. In most metropolitan areas, a state regulatory commission has authority to oversee private common-carrier bus operations and vanpools. Where services cross state boundaries, the Interstate Commerce Commission has jurisdiction.

Usually, private bus companies must obtain a certificate of public convenience and necessity from the regulatory body before they initiate service. If unfair competition is alleged, the new entrant shoulders the burden of proof that the overall quality of service in the region will materially improve. Local and regional transit, taxi, and intercity bus competitors are generally involved in the review of service applications, and any one of the reviewers can often complain loudly enough to block entry. State regulatory commissions also usually place limits on school bus usage, restrict special chartered services in urban areas, and impose limits on the passenger loads of privately sponsored vanpools.

Regulatory agencies have generally developed a reputation for being conservative and favoring the status quo. The charge of these regulatory commissions has been to protect monopolistic rights of public transit systems, and most commissions tend to rigidly enforce existing laws in this pursuit. Existing services almost always prevail in unfair competition suits. Regulatory agencies have become identified as enforcers rather than advocates of change, as have most policing authorities. Regardless of the merits, the fact remains that this posture has impeded innovation and has inhibited the emergence of integrated urban transportation services. In view of the current situation, it is helpful to explore specific areas for regulatory reform.

### Deregulating Taxi, Dial-a-Ride, and Jitney Services

Taxis, dial-a-ride vans, and jitneys, often referred to as forms of paratransit, have service features that fall between those of the private automobile and conventional bus transit. All three forms respond immediately to travel requests made by phone or curbside hail, and they often charge a premium fare for this feature. By comparison,

other forms of paratransit, such as vanpools and commuter buses, provide services that are typically prearranged and operated on a fixed schedule between given points.

### *Taxis*

The regulation of taxis in U.S. cities is universal, and few people question the propriety of regulating driver qualifications and insurance coverage. Limits on the number of taxis that can operate in a city, however, as well as limits on the types of services provided and the rates that can be charged have not generally been accepted by the traveling public. Most cities place a ceiling on the number of licenses (medallions) granted, often based on the number of cabs per capita. In the case of a handful of cities, notably Los Angeles and Chicago, exclusive franchises are granted to one company or a few companies. Because of these restrictive practices, large fleets offering fairly uniform-quality services have become the norm in most big cities.

Limits on supply more often than not have also meant relatively high fare rates. For instance, Washington, D.C., allows almost unrestricted entry into the taxi market and boasts a ratio of over 13 cabs per 1,000 residents, by far the highest in the country. For a typical four-mile trip, the cab fare in the nation's capital is only about \$2.75. By comparison, New York City's notoriously restrictive taxi regulations have resulted in fewer than 1.5 cabs per 1,000 residents. A four-mile taxi ride in Manhattan costs about \$4.75. With a New York City taxi medallion today bringing in \$65,000 or more, it is clear that the cost of monopoly privileges are being passed on to customers.

Studies have found that travelers are more sensitive to the availability of taxis than they are to travel times, speeds, or almost any other service features.<sup>16</sup> Where taxis are given unrestricted freedom to ply their trade, the quality of urban transportation has generally improved. Not only do unregulated cities have more than three times as many cabs per capita, but services are often closely integrated with local bus and rail services as well.<sup>17</sup> Taxis have also proven their strength in low-density areas where public transit is highly unprofitable or uncompetitive. Where individual owner-operators are allowed to act as entrepreneurs, marginal markets abandoned by large fleets are again being served.

<sup>16</sup>Kirby et al., chap. 7.

<sup>17</sup>Mark Frankena and Paul Paulter, *An Economic Analysis of Taxicab Regulation* (Washington, D.C.: Bureau of Economics, Federal Trade Commission, 1984).



Deregulation would be a particular boon to small taxi companies and private individuals who are currently denied entrepreneurial freedom. Moreover, lifting entry controls should be expected to increase employment opportunities for some urban residents, particularly among low-income and minority populations in which joblessness is the highest.<sup>18</sup>

#### *Shared-Ride and Dial-a-Ride Services*

Another constructive regulatory reform would be to allow cabs to pick up more than one party en route. The serving of multiple passengers by cab is often referred to as shared-ride taxi; when a van-sized vehicle is dispatched to pick up and unload unrelated trips with only minor route deviations, the service is referred to as dial-a-ride. Dial-a-ride vans are often run by private, profitmaking companies that receive public subsidies for serving special passenger groups, such as the elderly and physically disabled. Shared-ride taxis, on the other hand, are typically unsubsidized.

During World War II, shared-ride taxis flourished in Washington, D.C., and they have had a modest resurgence there since the 1970s.<sup>19</sup> Washington taxi drivers openly displayed destination signs on their front windows during the war period, allowing people to hail cabs going their direction. Riders received a break in fares, and scarce war-time resources were being used efficiently. In 1974 Washington again adopted a version of taxi ride-sharing, primarily in response to gasoline shortages.

As in the case of the nation's capital, use of the shared-ride concept in other areas would require the decontrol of taxi price structures to allow zonal fares rather than distance metering so that riders would not be overcharged. It would not be necessary to operate all cabs on a shared-ride basis, however, as some passengers could be dissuaded by even modest time delays in picking up other fares. A mix of exclusive-ride and shared-ride taxis, however, is the best way to satisfy the riding public's preferences.

Experiences with shared-ride taxis in El Cajon, Calif., Davenport, Iowa, and some 20 other cities have been positive.<sup>20</sup> Shared-ride taxis have operated at a much lower cost per passenger than subsidized dial-a-ride vans. Much of the cost savings has been attributed to lower

<sup>18</sup>Patricia Buckley, "The Deregulation of Urban Taxicab Markets: A Note," *American Economist* 27 (Spring 1982): 73-76.

<sup>19</sup>Kirby et al., chap. 7.

<sup>20</sup>Roger Teal et al., "Subsidized Shared-Ride Taxi Services," *Transportation Research Record* 778 (1980): 25-32.

wage levels and higher productivity among privately employed taxi workers. Shared-ride taxis have actually been a boon to local bus systems in these areas by siphoning off some of the already oversaturated peak demands, in addition to serving as feeders into bus lines and rail stations. They have proven particularly cost-effective in suburban, peak-hour markets.

The shedding of peak loads to private taxi operators could result in real cost-savings to public transit. The peak is transit's nemesis, largely because of restrictive work rules requiring time-and-half pay for spreading drivers' duties over the morning and evening peaks. Studies have shown the cost of running an additional bus during rush hours to be two to three times as much as during the off-peak period.<sup>21</sup> The shedding of peak loads to shared-ride taxis would likely be welcomed by transit managers, as well as by commuters seeking a service of a higher quality than that offered by buses.

U.S. experiences with substituting shared-ride taxis for fixed-route bus services on a contract basis have proven particularly successful. In Phoenix, for example, the local transit authority contracted with a taxi company to replace minimal-level Sunday fixed-route bus services—an arrangement that resulted in an estimated cost savings of \$600,000 per year.<sup>22</sup> Similar arrangements have recently been made for evening services in Ann Arbor, Mich., and Chapel Hill, N.C. In the Norfolk–Chesapeake–Virginia Beach area, a number of poorly patronized bus runs have been replaced with private services that use smaller vehicles tailored to lower demand levels; taxis operate between suburban residential neighborhoods and a number of shopping–office complexes in the region, replacing comparable bus services at an estimated savings of \$16 per hour.<sup>23</sup>

Another advantage of incorporating shared-ride taxis into the urban transportation market is that they can also provide more specialized curb-to-curb services for elderly and handicapped populations.<sup>24</sup> Programs that have given senior citizens, disabled persons, and poor

<sup>21</sup>See J. Boyd et al., *Evaluation of Rail Rapid Transit and Express Bus Service in Urban Commuter Markets* (Washington, D.C.: Institute of the Defense, 1973); Charles Lee and I. Steedman, "Economies of Scale in Bus Transportation," *Journal of Transport Economics and Policy* 4 (January 1970): 15–28; and J. Stuart Wabe and Oliver B. Coles, "The Peak and Off-Peak Demand for Bus Transport: A Cross-sectional Analysis of British Municipal Operators," *Applied Economics* 7 (March 1975): 25–30.

<sup>22</sup>Ronald Fisher, "Megatrends in Urban Transport," *Transportation Quarterly* 38 (January 1984): 87–102.

<sup>23</sup>A. Jeff Becker and James C. Echols, "Paratransit at a Transit Agency: The Experience in Norfolk, Virginia," *Transportation Research Record* 914 (1983): 49–57.

<sup>24</sup>Roger Teal et al., *Taxi-Based Special Transit Services* (Washington, D.C.: Urban Mass Transportation Administration, U.S. Department of Transportation, 1983).

people travel vouchers (that is, user-side subsidies) for riding their choice of transportation—be it bus, shared-ride taxi, dial-up van service—have encouraged healthy competition among different service providers while serving an important public need. Clearly, shared-ride taxis would mesh nicely into most cities' transportation milieu by complementing peak-hour transit operations and providing a necessary off-peak service to disadvantaged persons.

### *Jitneys*

Jitneys extend the shared-ride concept even further. Perhaps the purest form of transportation entrepreneurship, jitneys (cars or station wagons with room for 5–12 passengers) pick up and drop off patrons over a semi-fixed route on a fairly regular basis. Customers are generally taken until the vehicle is full, and only slight detours from a major street are typically made. Political pressure mounted by trolley operators to bar jitneys from “skimming the cream” resulted in the banning of jitneys in most cities. Although jitneys may well have threatened municipal transit systems in 1915, a time when those systems were in their infancy and struggling to survive, they would actually benefit urban transit systems today by providing, as shared-ride taxis do, a much-needed supplement to peak-period capacity.

Publicly sanctioned jitneys currently operate in San Francisco, Atlantic City, and, most recently, San Diego, but ordinances restrict their numbers to below 500. By contrast, in many Latin American, Asian, and Middle East cities, jitneys are the chief mode of urban transportation. It has been estimated, for instance, that in Caracas, Buenos Aires, and Istanbul jitneys serve over half of the daily commuters.<sup>25</sup>

Despite restrictive ordinances, the market demand for jitneys has become so great that they operate illegally in Chicago, Pittsburgh, Baton Rouge, Miami, Chattanooga, and probably other cities as well. In Chattanooga alone, it has been estimated that over 85 jitneys illegally serve over 20 million willing customers a year.<sup>26</sup> These clandestine operations generally thrive in low-income, minority communities where a market exists for a service that is a hybrid between more expensive taxis and less convenient bus transit. Authorities have tended to look the other way when confronting these illegal, albeit successful, operations.

<sup>25</sup>Robert Poole, “Alternatives to Government-Financed Public Transit,” *Oakland Tribune*, 30 September 1980.

<sup>26</sup>Ibid.

*Recent Experiments with Taxi and Jitney Deregulation*

Recent experiences with taxi entry and fare deregulation in 22 U.S. cities over the past five years, and with jitney deregulation in San Diego, have been encouraging.<sup>27</sup> Most areas either have removed the ceiling on taxi permits or have raised it significantly. Some have permitted ride-sharing in taxis, along with the introduction of zonal fares. Some cities also have allowed exclusive-ride fares to vary. Although taxi operators and transit interests have fought these open-door policies in most places, strong city council and public support for these programs ultimately have prevailed.

In almost every setting, the number of firms and cab service hours have increased markedly since deregulation. Between 1979 and 1983, for instance, the total number of cab permits in Seattle rose 178 percent. Small cab companies and private owner-operators have proliferated the most. In Seattle, for instance, small fleets (those with four to 13 cabs) increased in number from nine to 23, whereas the share of cabs held by the three largest firms declined from 70 percent to 54 percent.

More cabs have generally meant more and better service (in particular, shorter waits, fewer nonresponses to phone requests, and cleaner vehicles). Total weekly hours of cab service in San Diego, for example, has increased 26 percent since deregulation. Passenger waits at major cabstands have almost disappeared in several places. Average waits for San Diego's radio-dispatched cabs, moreover, fell from 10 minutes to 8 minutes in the first two years of deregulation. In Seattle, price decontrol has also led to a variety of fare structures, including off-peak discounts and lower fares for repeat, advanced-reservation customers.

Overall, fares have essentially remained unchanged (in real terms) since deregulation in most cities, while service quality has generally improved (in particular, shorter waits, fewer nonresponses to phone requests, and cleaner vehicles). In addition, decontrol has also led to greater market specialization, with smaller and newer operators concentrating on hail and long-haul business, and the larger and older companies going after the phone-request and package-delivery business.

San Diego's experiences with legalized jitneys have been equally impressive. By early 1983 15 jitney companies, owning a total of 48

<sup>27</sup>See Frankena and Paulter; and Pat Gelb, *Effects of Taxi Regulatory Revision in Seattle, Washington, Effects of Taxi Regulatory Revision in San Diego, California, and Taxis Regulatory Revision in Portland, Oregon: A Case Study* (Washington, D.C.: U.S. Department of Transportation, Urban Mass Transportation Administration, 1983, 1984).

licensed vehicles and serving nearly 12,000 weekly customers, had entered the market. They operate on streets paralleling the new light-rail trolley and main bus routes, concentrating mainly on commercial strips and tourist spots. Jitney and shared-ride taxi fares can be set at any level as long as they are posted in the vehicle's front window (in two-inch-high lettering) and do not exceed a maximum rate. Fares have proven to be a real bargain. A five-mile trip from San Diego's airport to the downtown area, for instance, today costs about \$3 by jitney compared to \$12 by exclusive-ride taxi.

The only major snag with deregulation to date in most cities has been isolated incidences of price-gouging, particularly at airports, where there are tourists unfamiliar with the competitive pricing program. Seattle, San Diego, and several other cities have subsequently imposed fare ceilings on airport cabs. San Diego, moreover, placed a moratorium on new cab permits in 1983 to give the city council time to reassess the entire program. Overall, however, residents and visitors in all three cities have materially benefited from the specialization of services and revised pricing made possible by deregulation.

### Deregulating Vanpools and Commuter Buses

Vanpools and commuter buses—paratransit modes that provide prearranged or book-in-advance commuting—have similarly been stifled by regulation, although perhaps to a lesser extent than taxis and jitanes. Court rulings in a number of states during the 1970s generally held that vanpools are public carriers and thus subject to various certification requirements. Some courts even interpreted vanpools to be illegal bus lines. Several states, notably California and Tennessee, subsequently passed legislation exempting employer-sponsored vehicles carrying 15 or fewer passengers from any government regulations, while in others (such as Washington, D.C.) fairly strict compliance requirements remained in place.<sup>28</sup> Voluntary, share-the-expense carpools are permitted in all states, while nonemployment-related van services operating on a profit basis are generally prohibited.

Commuter buses have become particularly popular in recent years, providing subscribers with high-quality services (for example, comfortable seats and express rides) between suburban neighborhoods and central office locations. Today, subscription buses commute regularly to government offices in Washington, D.C., San Francisco's

<sup>28</sup>Roger Teal and Genevieve Giuliano, "Increasing the Role of the Private Sector in Commuter Bus Service Provision," *Built Environment* 8 (1982): 172-83.

financial district, and military bases in Virginia's tidewater area. The largest fleets of subscription buses in the United States, however, are in Los Angeles and Chicago, where over 5,000 commuters ride in comfort to major employment centers in each area.

Although there appears to be a much larger market demand for subscription services, local transit authorities have succeeded in holding down the number of subscription services. A recent study by the Southern California Association of Governments estimates that 22 public transit routes in the area could be replaced by subscription buses for about one-half of current costs, saving over \$5 million annually.<sup>29</sup> Yet transit authorities have filed protests against a number of commuter bus operations. The reactions of transit properties toward private competition in other parts of the country, however, have been much different. In Marin County, Calif., for example, the regional transit authority was instrumental in establishing a number of private commuter van and bus services simply because it realized that the cost of running its own buses along certain corridors would be prohibitive.

Most recently Tennessee lifted controls over private bus operations. The state Public Service Commission has designated certain counties as "citizen transportation areas" to allow privately owned vehicles to be used for passenger services. Church and other special-purpose buses are doubling as commuter vehicles in these counties. These reforms have provided vital travel alternatives to residents of small communities that have recently lost intercity bus services.

## Deregulating Parking

Relaxing the parking requirements of municipal zoning ordinances should also be a reformative priority. Most ordinances mandate a minimum number of off-street parking spaces based on the intensity of land use—for example, per dwelling unit or per square foot of office space. Although minimum-parking-space regulations aim to ensure that incoming traffic can be adequately handled, more often than not they also serve to establish a strong automobile orientation along highway corridors. Repeated practices of requiring a minimum number of parking spaces have unquestionably been at the expense of relegating public transit to more of a second-class status.

<sup>29</sup>Southern California Association of Governments, "Commuter and Express Bus Service in the SCAG Region: A Policy Analysis of Public and Private Operations," unpublished report (Los Angeles, 1982).

Minimum-parking-space regulations, in some sense, become self-fulfilling prophecies. They are based on the assumption that parking-space requirements reflect a "need" to travel by automobile and that consequently they encourage private vehicle use. In addition, there is a rule-of-thumb air about such regulations that is particularly disquieting. One study, for instance, found that minimum parking space requirements for a 10,000-square-foot office building in California varied from 10 in Long Beach to 80 in Placentia.<sup>30</sup> Moreover, local planning departments often bargain for more than the minimum number of spaces in negotiating with private developers. The fact that some ordinances require more parking than what the private market will bear while others require less points to the general arbitrariness of these regulations.<sup>31</sup> Both options are reasonable—congestion can be reduced by either getting cars off the streets once they reach their destination or by limiting the number of vehicles that can park at a site. The best way to balance these competing rationales, however, is to let market forces determine the appropriate level of parking supply.

Zoning regulations effectively reduce the price of parking and encourage long-term parking. Congestion is often aggravated in that automobile trips converge on a single area. Minimum-parking-space regulations also distort the land market because they effectively become a tax on the quantity of floor space in a new building. Where more spaces are required beyond that dictated by the market, inner-city redevelopment can be discouraged. Also, the parking tax can shift new development away from downtown areas well served by public transit to lower-density areas where land can be acquired more cheaply for parking construction.

Rigid parking regulations have generally been unresponsive to changing parking needs brought on by rising fuel costs and the switch to smaller vehicles. For these very reasons, according to the Urban Land Institute, most shopping center developers are now willing to provide up to 18 percent fewer spaces than in years past.<sup>32</sup> Some cities have recently modified their zoning ordinances in recognition of changing characteristics of demand and broader transportation objectives.

Recently, Seattle, San Francisco, and Portland, Ore., have all lifted minimum-parking-space requirements for new downtown develop-

<sup>30</sup>Donald Shoup and Don Pickrell, "Problems with Parking Requirements in Zoning Ordinances," *Traffic Quarterly* 32 (July 1978): 545–61.

<sup>31</sup>*Ibid.*, p. 551.

<sup>32</sup>Urban Land Institute, *Parking Requirements for Shopping Centers: Summary Recommendations and Research Study Report* (Washington, D.C., 1982).

ments, while Chicago and Boston have placed a ban on new downtown parking construction altogether.<sup>33</sup> Since the late 1970s Seattle has witnessed a 2 percent reduction in total parking supply, even though 13 major proposals for new development have been introduced. Other cities now allow private developers to make “in-lieu” cash contributions to support transit or ridesharing programs for their tenants in exchange for reducing or eliminating off-street parking requirements. In both Los Angeles and Palo Alto, Calif., builders provide “effective alternatives to auto access,” such as vanpool leasing and cash payments to transit agencies in return for less-stringent parking requirements. Fee-in-lieu-of-parking programs also exist in Toronto, Chicago, and New York for the purpose of pooling monies for building central parking garages and supporting local transit services. And in Montgomery County, Md., 5–35 percent reductions in the number of parking spaces are allowed for new buildings in close proximity to Metrorail stations.<sup>34</sup>

The easing of parking regulations would probably be one of the more effective means of modifying current travel behavior. A stronger reliance on market pressures to set the level of parking supply would undoubtedly benefit public transit and urban redevelopment efforts.

### Other Candidates for Deregulation

Other regulations have hampered progress in the urban transportation sector. The subdivision regulations of most U.S. communities place a lid on the allowable densities of various types of land uses. Maximum density requirements are usually set to comply with regional development goals and to ensure that excessive demands will not be placed on local sewer, water, and road facilities. In more suburban settings, regulations have generally encouraged the provision of ample roadway capacity and off-street parking, often as a precondition to the approval of a subdivision construction request. Local planners have also tended to recommend the downsizing of new subdivisions whenever traffic impact analyses suggest that the additional automobile travel will congest nearby intersections.

The problem with this low-density bias is that it precludes the development of the customer base needed to support transit and ridesharing alternatives to the automobile. Subdivision regulations are generally myopic regarding transportation matters; they are more

<sup>33</sup>Wilbur Smith, “What’s New in Parking,” *Planning* (June 1983): 10–14.

<sup>34</sup>*Ibid.*, p. 13.



concerned with immediate traffic impact issues rather than with building a longer-term mass-transit orientation. Modifying subdivision regulations to allow some flexibility in the establishment of residential densities could prove to be a tremendous inducement to public transit and other forms of ridesharing over the long run.

Repressive controls over urban transportation have not come solely from the local level. The federal government, in particular, has had a direct hand in the financial problems that have plagued urban transit systems by imposing various requirements (often tied to subsidy programs) that effectively increase the costs of local transit services. Among these are mandates involving labor protection and fully accessible transit vehicles. Section 13(c) of the amended Urban Mass Transportation Act of 1964 guarantees that transit employees will not be adversely affected by any program involving federal transit grants.<sup>35</sup> This stipulation has been blamed for tying the hands of transit management during contract negotiations by giving labor the equivalent of veto power over federal grants. In addition to augmenting the resource base available for generous settlements, 13(c) has also promoted work rules involving guaranteed pay clauses and prohibitions on part-time employment. Moreover, 13(c) has prevented taxis from providing lower-cost services along many urban corridors. In Norfolk, Va., for instance, unions used 13(c) in suing the local transit agency when unproductive routes were turned over to a private shared-ride taxi operator.<sup>36</sup> Similarly, the Davis-Bacon Act, which requires that the highest prevailing union wage level be paid on federally funded construction projects, has also been cited as a cost escalator—particularly on new rapid rail systems in Washington, D.C., and Atlanta. In that labor expenses account for roughly 70 percent of the cost of operating most transit systems in the United States, the fiscal consequences of these regulations have been substantial.

Federal regulations mandating barrier-free accessibility and off-peak fare discounts for elderly and handicapped persons have also been criticized for their adverse financial effects. Equal accessibility requirements place substantial capital cost burdens on local operators, while special pricing mandates suppress farebox income. The Congressional Budget Office has projected, for instance, that the ultimate cost of providing fully accessible buses and rail stations to

<sup>35</sup>Alan Altshuler, *Testimony before the Subcommittee on Investigation and Oversight, Committee on Public Works and Transportation*, unpublished testimony (Washington, D.C.: U.S. House of Representatives, 23 June 1981).

<sup>36</sup>Becker and Echols.

handicapped passengers would reach \$38 per trip.<sup>37</sup> By comparison, demand-responsive taxis would serve about 3.5 times the number of severely disabled persons at one-fifth the cost. Although the Reagan administration has loosened some of the full-accessibility requirements, the combined introduction of user-side subsidies and deregulation of shared-ride services would do much more for America's elderly and handicapped than these public mandates.

## Conclusions

Regulations governing urban transportation have been built up, layer by layer, over time to the point where today they represent major obstacles to innovation. Foremost, they have impeded the emergence of jitneys, vanpools, shared-ride taxis, private club buses, school bus charter services, and a host of other alternatives to the automobile. Repealing present-day controls to allow freer entry would probably do more to alleviate urban transportation problems than would any assortment of technological fixes.

The removal of entry restrictions and exclusive franchise privileges would open the way for a rich mix of new services to penetrate urban transportation markets. Fare deregulation, moreover, would enable shared-ride services to be offered and would likely lead to time-of-day charges to reflect the higher costs of peak period services. Even in Washington, D.C., where taxis are fairly plentiful, there is still a shortage of cabs during rush hours. Experiences in San Diego, Seattle, and other places are graphic testimonies to the potential benefits of paratransit deregulation.

Perhaps most disconcerting has been the general arbitrariness of many regulations to date. Jitneys have been practically regulated out of existence, whereas carpools have been almost untouched by regulation. In some localities, zoning ordinances require abundant off-street parking while in neighboring communities only minimal on-site parking may be called for. Some states place stringent controls on subscription bus services while others actively encourage this form of ride sharing. Such inconsistencies cast doubt on the underlying rationales behind these controls and suggest that private market forces would probably be more effective in allocating resources within the urban transportation sector.

Deregulation would not be without side effects, however. For one, certain groups could suffer particularly if public transit services were

<sup>37</sup>*Urban Transportation for Handicapped Persons: Alternative Federal Approaches* (Washington, D.C.: U.S. Congressional Budget Office, 1979).

replaced by paratransit on a wholesale scale. A shift toward higher-quality services priced at premium fares would increase travel options for more affluent commuters while perhaps diminishing them for poorer persons. It is also possible that some carriers would pursue exclusionary practices, such as refusing to serve minority neighborhoods. To date, however, there has been no incidence of such discrimination among deregulated cities. Moreover, the fare reductions that result from taxi decontrol would likely benefit the poor the most since they spend a larger share of their incomes on taxis than other groups. User-side subsidies could also be introduced to help defray the travel costs of low-income residents. Overall, it would seem more likely that a deregulated environment would offer all Americans a richer assortment of travel options than they now have.

The relaxation of entry restrictions on taxis and shared-ride services would also pose some inequities among cab owners. Those who have paid as much as \$65,000 for taxi medallions, for instance, would stand to lose a lot of money from the decontrol of taxi entry. A municipality could opt to buy back all medallions at their purchase price, but not without a substantial cash outlay. On the other hand, it may also be argued that those who benefited from regulation have no implicit right to special protection and must bear the risks of deregulation—no one promised them protection in perpetuity. Still, those who paid high entry fees under the regulatory regime could be the first to file suit against localities to recoup their losses.

The decontrol of entry regulations may also be expected to undermine transit services along certain corridors where a single service provider could most economically operate. Given the diversity of travel demands in the United States, however, areas where a true natural monopoly could be justified would likely be the exception rather than the rule. Past research suggests that with the exception of rapid rail operations, most transit services operate under conditions of constant returns to scale.<sup>38</sup> Thus the natural monopoly argument for regulating entry into the urban transportation market would seem to have limited application. On balance the benefits accruing to the traveling public from deregulation would far offset any detrimental effects a few transit systems may experience from heavy competition.

In closing, deregulation would not give rise to a purely *laissez-faire* system of urban transportation, nor would it produce the chaos

<sup>38</sup>Joseph Berechman, "Analysis of Costs, Economies of Scale and Factor Demand in Bus Transport," working paper (Irvine: University of California, Institute of Transportation Studies, 1982).

and disregard for traffic laws found in some highly congested Third World cities where private transportation flourishes. Clearly, controls over safety, driver qualifications, and operating practices would still be in order. However, there seems to be no compelling reason why price and supply controls should be imposed on taxis, jitneys, vanpools, club buses, and parking. The marketplace has proven its prowess at responding to the many and varied preferences of American consumers in other areas, so there is no reason why the same would not hold true in the urban transportation sector. What is needed more than ever in our cities is a freely competitive transportation environment—one in which services and prices can be closely tailored to the diverse needs of America's traveling public.