Cost-Revenue Squeeze in Conventional Transit

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Transit ridership is increasing after more than 2 decades of decline. But the share of the travel market held by transit continues to decrease relative to that of the automobile, and the reverse of patronage decline has been achieved at enormous cost. Operating losses have escalated at a rate (more than 30 percent/year) that cannot be sustained. In part, this is due to inflation, the increasing cost of fuel, the aggressive bargaining posture of transit unions, and a policy of fare stabilization. But the more fundamental reasons are (a) the evolution of urbanization and social interaction patterns that are incompatible with the operating regime of conventional transit and (b) the introduction of costly and underused services stimulated by formula subsidy programs based on fair-share politics. The cost of transit deficits is evident in taxes. But there are other, less evident, costs of expecting too much from transit. These include the failure to develop a coherent national policy toward the future of the automobile and the highway system. Paratransit can be a part of the solution if it offers a way of lowering expectations and focusing attention on the cost-effectiveness and market potential of competing alternatives. It can be part of the problem if it creates new expectations that serve to establish the right to service regardless of need. The best possibility for restraining costs and matching services to needs seems to lie in the reform of the subsidy allocation process. If regional planning agencies or general purpose governments could be given greater discretion to allocate federal funds, competitive bidding arrangements could be used to secure quality service from the most efficient vendor. This would entail severing the direct connection from the federal treasury to the transit properties and designating nonoperating agencies as the recipients of federal operating funds.

The lead story in the Wall Street Journal on March 1, 1977, was headlined, "Public Transportation Wins More Passengers—At Taxpayer Expense. Government Funds Help Cut Fares, Expand Routes, But the Deficits Deepen." The heading at the top of the page added, "Riders Return."

Each week, Passenger Transport tells the success side of the transit story—the accounts of transit properties that have reversed the postwar trend of declining ridership and posted increases in patronage. Sometimes the increases are dramatic. In the San Francisco Bay Area, for example, Golden Gate Transit doubled the patronage in its bridge-bound corridor only 1 year after taking over operations from the Greyhound Bus Company, a private operator. The Southern California Rapid Transit District (RTD) increased its patronage by more than 25 percent from 1975 to 1976. And the aggregate nationwide patronage increased for the first time in 1973 after 28 years of decline.

But, as the Wall Street Journal observed, "transit gains come at a price—one that is usually paid by taxpayers." The size of the price is, in fact, staggering. A 45 percent increase in vehicle operating distances and a 53 percent increase in operating expenditure were required for RTD to register its 25 percent gain in patronage. The experience in Minneapolis is comparable: A 1973 to 1974 ridership gain of 8.3 percent was achieved by increasing regularly scheduled bus operating distances by 22 percent.

However, the bottom line for transit, which is currently viewed as a merit good, is no longer profitability. Under public management, the critical question is not the magnitude of operating losses, but the size of the anticipated unfunded deficit versus the quality of the service. Unfunded deficits are operating losses for which there are no currently available offsetting subsidies or revenues without a tax or fare increase. In California, for example, transit properties are facing a cumulative 5-year unfunded deficit that will probably exceed $600 million (1, p. 11). The Chicago Regional Transportation Authority has estimated its unfunded deficit for the 1976 to 1981 period as being in excess of $400 million (2, p. 25ff). And the Tri-State Regional Planning Commission in the New York-New Jersey-Connecticut region anticipates a 5-year unfunded deficit of approximately $1.2 billion (3, p. 29). These estimates include all currently available and authorized federal operating assistance. In fact, it appears that financing the nationwide unfunded deficit over the next 5 years would require an operating subsidy program almost as large as the current federal program and, even then, the funds would not be distributed in the manner necessary to relieve the debit position of older urban properties where the deficits are most pressing and the local tax bases least robust.

We do not have to look to forecasts of unfunded deficits to become alarmed at the rate at which the tax cost of mass transit is escalating. Between 1971 and 1975, transit operating losses increased 410 percent nationwide—an unsustainable compound growth rate of more than 30 percent/year (4, p. 28).

Numerous factors can be advanced to explain the rapid escalation of transit deficits:

1. Significant increases in service areas and service frequencies;
2. Public policies of fare stabilization intended to maintain and increase ridership;
3. The reduction of transit fares for the elderly, handicapped, and other special-need groups;
4. Maintenance cost increases associated with higher standards of vehicle performance and comfort;
5. The impact of inflation on operating expenses (hourly wage rates have approximately paced inflation, and work-rule changes have increased take-home pay, resulting in settlements in excess of the inflation adjustment);
6. The success of transit unions in bargaining for wage increases and improved benefit plans;
7. The impact of cartel-priced fuel on operating expenses; and
8. Increases in the planning and professional staff necessary to compete for federal grants and comply with external reporting requirements.

Of these explanations for the rapid escalation of operating deficits, labor costs have received the most attention. Transit management has focused the blame for rapidly escalating costs on the monopoly powers of labor unions and their ability to hold cities ransom through prolonged strikes. Labor costs do account for about 75 percent of the unit-cost escalation of recent years. But the escalation of unit costs should not be confused with the escalation of deficits. Among California transit properties, annual increments in the unit cost of labor, for example, have been averaging only 7 to 11 percent/year—increments that, in most cases, keep pace only with inflation. Cost-of-living adjustments account for less than half of the escalation of deficits and should not be viewed exclusively as debits on the ledger of community economics. To the extent that transit wages are spent for consumer goods and recycled through local economies, they represent an asset to the service sector and the local economy.

For a more convincing explanation of the rapid escalation of transit deficits, we must look beyond cost-of-living adjustments and focus on the political economy of the decline and rebirth of transit. It is in the consideration of transit as a merit good to which all jurisdictions have a rightful share that we can find the most convincing explanation for the escalation of deficits at a rate that has far outpaced the cost of living.

POLITICAL ECONOMY OF TRANSIT DEFICITS

Mass transit is the stepchild of franchise economics. During its early growth years, many private and quasi-private properties maintained their profitability by joint endeavors such as service supply, electricity sales, and real estate development. Similarly, commuter railroads realized profits by using trackage and equipment for joint passenger and freight operations. But, with the expansion of local roads and state highway systems, trucks and the private automobile captured a rapidly increasing share of these markets and eroded the transit profit base established on land development, freight operations, and passenger revenues. The market share of transit began to decline in the 1920s, but the dynamics behind this trend were masked by the great depression and World War II—both of which suppressed the diffusion of automobile ownership and the buying power of would-be homeowners (5, p. 87 ff; 6, p. 28).

Municipal ownership and subsidy rescued some transit properties from abandonment, but the fiscal distress of local governments in the 1930s led to a pattern of chronic underinvestment in fleet renewal and replacement. Political pressure to maintain the 5¢ fare generally prevailed, and capitalization and maintenance suffered. In many urban areas, private owners (many of them electrical utilities) wrote down capital assets, sought route abandonments, and won fare increases, accelerating the loss of patronage.

The market share of transit recovered, increased rapidly, and peaked during World War II, because of the effects of gasoline and rubber rationing, suspended automobile production, and the urbanization of population fostered by wartime mobilization. But, in the postwar recovery period of the late 1940s and the 1950s, the dynamics of ridership decline that had begun in the 1920s took over in full force. In a period of unparalleled economic growth (the United States and Canada were the only major industrial powers that did not have to rebuild war-ravaged economies), both home and automobile ownership increased dramatically. The sale of single-family homes and the diffusion of the automobile reconfigured the social interactions and spatial organization of urban America. Changes in technology and economic organization—the automatic transmission, the home freezer and other convenience appliances, the radio and later television, the shopping center and supermarket, the practices of tracting and subdividing, and changes in the scale of manufacturing and distribution processes—combined with federal home-loan guarantees and the automobile to reshape the structure of metropolitan areas.

State highway programs were placed on a firm financial basis in the first 5 years of the postwar period. With the growing power of urban constituencies and the continuing fiscal distress of local governments, routes of statewide significance were designated in metropolitan areas. Highway development fostered the growth of trucking and relaxed the constraints of labor and sales-market proximity that had confined industrial location in earlier years. Dependent, but vigorous, suburban service economies developed in metropolitan areas. As these trends accelerated, highways were built to bring the customers back downtown and to accommodate the growth of traffic generated by the expansion of the management and administrative apparatus associated with corporate multinationalism and federalism.

With improved access to downtown jobs and the growth of suburban industry, subdividers were able to assemble large tracts of land and market moderately priced housing on the assumption that highway construction would follow. Local governments in rapidly developing areas soon found themselves plagued with too much traffic, too many bedrooms, and too many children. The fiscal position of moderate- and middle-income bedroom suburbs led to pleas for state assistance in expressway development and local efforts to attract an industrial and commercial tax base by providing the services of an urban infrastructure on a promotional basis.

The cumulative dynamics of metropolitan growth have all the hallmarks of a social, cultural, and spatial revolution. These forces interacted with highway investments in a particularly intensive way after World War II because of the nation's favored position in the postwar world economy and the exploitation of wartime technological advances (electronics, for example) in the commercial marketplace. What should also be understood, however, is that the income gains of this period of unprecedented economic growth only reinforced consumption and location desires already evident in the 1920s. These desires—the preferences for private transportation and private homes—had been at work earlier, eroding transit patronage and discouraging capital reinvestment.

Thus, the escalation of transit deficits is rooted in the economic, social, and spatial dynamics of automobile-

oriented patterns of urbanization. These trends were eroding the share of the urban travel market occupied by transit long before the Interstate highway program was funded.

Efforts to recapture ridership are proving excessively costly because the spatial configuration of metropolitan areas has been so strongly influenced by the capabilities and availability of the automobile.

POLITICAL ECONOMY OF TRANSIT REVIVAL

Transit ridership declined from 23 billion to 9 billion passengers between 1945 and 1960 (4, p. 32). The decline in passengers and revenues was accompanied by bankruptcies, route abandonments, and fare increases. Predictably, the failing industry was unable to modernize its capital assets, attract innovative managers, or secure technological innovation by equipment suppliers. It is probably not exaggerating to say that the industry fell a generation behind in the techniques of market analysis, fleet procurement, labor relations, fiscal planning, and mass marketing.

By 1955, mass transit had become a creature of neglect: Commuter services were an unwanted second cousin of railroad operations whose major profits were based on land-holding subsidiaries and long-haul freight, and municipal properties were becoming an increasing drain on property tax revenues and, therefore, a political liability.

Pleas for federal and state assistance were typically rebuffed by legislatures with a representational bias toward rural areas. The message was clear: Cities would have to pay for their transit services themselves or abandon those services.

The abandonment crisis became much more serious in 1959 as eastern commuter railroads seized on a provision of the Federal Transportation Act of 1958 that permitted discontinuation of interstate commuter services without approval by state railroad commissions. Thus, the issue of financial assistance came before Congress with urgency in 1960 (7, p. 38).

The political atmosphere of 1960 was significantly different from that of the late 1950s when the first overtures for urban transit assistance had been rebuffed. The transit question now carried with it the political imperative of crisis, but more important, the demand for assistance came at a time of change in the coalition structure of American politics. The most obvious of those changes was the election of a new president beholden to the urban wards of Chicago and the industrialized cities of the East. President John F. Kennedy was accessible to big city mayors and labor leaders whose influence had been limited during the Eisenhower years. These mayors had forged local coalitions of common interest with the patrician leadership of their central business districts—the financial and commercial elites of their distressed cities. Kennedy was told that a public commitment to urban renewal and redevelopment was necessary to secure private reinvestment in the city. A partnership of public and private interests having the ability to command bipartisan support was in the making.

Kennedy was also accessible to a brain trust of urban intellectuals whom he recruited to serve in the new administration. They brought to Washington an awareness of the racial dynamics of the central city and the problems of urban poverty and a faith in social planning and public intervention.

Gains in the influence of urban elites were matched by larger structural changes in the location of political power. Migration and differential birth rates had increased the voting power of those living in metropolitan areas to an absolute majority. Constitutional reform and legislative redistricting had also begun to change the urban versus rural balance of congressional delegations (and state legislatures).

Attitudes toward governmental intervention and federal assistance were also changing. The cold war partnership between the U.S. Department of Defense and the aerospace industry and the mixed economy of the oil-automobile-highway sector were demonstrating to nominal conservatives the merit of public-private collaboration in economic development. A Marshall Plan type of operation for urban areas would still be opposed by most conservatives, but a growing minority of self-consciously progressive businessmen were discussing ways in which the enterprise of the private sector could help solve urban problems.

A federal role in transit—along with urban renewal—was a natural first thrust for the new urban coalition. Transit was perceived as vital for urban redevelopment and the economic welfare of the central business district; it had become a burdensome drain on local fiscal resources; its revitalization commanded labor and minority support. Later, it would also be perceived as an opportunity for the conversion and stabilization of the aerospace industry as the space program was cut back.

Just as important, transit was an issue that allowed the formation of a common-cause coalition between central cities and their suburbs.

The transit coalition gained momentum with plans for the Bay Area Rapid Transit (BART) offering an exemplary case of the opportunity to be seized and the excesses of urban freeway construction associated with the Interstate highway program offering a rallying point for highway opponents.

The first successes of the still tentative and fragile transit coalition were limited—a demonstration program located in the predecessor agency of the U.S. Department of Housing and Urban Development. But the rapidly deteriorating financial position of local transit properties and commuter railroads increased the pressure for a more aggressive federal role—one that was assumed with congressional approval of the Urban Mass Transportation Administration (UMTA) capital grant program in 1964.

UMTA capital grants permitted the public acquisition of failing transit properties, the tax financing of commuter railroad fleet replacement, and a limited but costly program of rapid transit construction.

However, while fleet modernization and replacement reduced the unit cost of maintenance, these savings were overwhelmed by the increases in operating losses that accompanied fleet expansion. These losses increased by $1.2 billion between 1964 and 1975 and led to congressional acceptance of a 6-year, $3.975 billion program of federal operating assistance. This operating-assistance program was given added impetus by the petroleum embargo of 1974, the emergence of an active environmental movement in the early 1970s, and the increasingly effective political voices of the elderly and handicapped.

The federal operating-assistance program (and predecessor state subsidy programs) embody formula-financing arrangements that reflect the areawide metropolitan base of the political support of transit. The votes of suburban legislators and congressmen have been necessary in obtaining majority support for transit finance legislation. As a consequence, transit routes have been extended and service deployed on the basis of the tax equity consideration of a fair share of the service.

The logic of fair-share politics and the associated policy headways (i.e., headways determined by political obligation) is illustrated by a staff report written for the Santa Clara County (California) Transportation District.

The primary means of paying for the deployment of buses influences that deployment. The resources that are available for operating cost payment are collected from the entire county. The deployment of buses should reflect the source of these funds....

A strict cost-per-rider measure of transit effectiveness is a narrow efficiency approach with an inherent assumption that the objective is to deploy vehicles so as to secure the most riders per hour. That objective is not now a part of the General Transit Plan.... Social concerns clearly govern, rather than costs.

The logic of fair-share politics is also captured in a January 19, 1976, report in the Palo Alto Times headlined, "Transit Plan Shortchanges Palo Alto."

Palo Alto won't get a fair and reasonable share of bus system improvements from a proposed half-cent sales tax increase for Santa Clara County, according to city traffic engineer Ted Noguchi.

The county has proposed the sales tax increase to expand the bus fleet from 236 to 516 buses and make other transit improvements. A county election on the increase is set for March 2.

Noguchi, in a report to the City Council, said that Palo Alto would get only 6 percent of the available peak-hour bus hours of service, but that 14 percent of county jobs are in Palo Alto and 10 percent of total vehicle trips are in Palo Alto.

Also, he said, of the 440 miles of extra bus routes that would be added to the existing 860 miles, only 8.1 miles, or 1.8 percent, would be in Palo Alto.

Palo Alto's present share of the peak-hour buses is 9.5 percent, which would drop to 6 percent of the expanded fleet, he said.

A few cases from the San Francisco Bay Area will illustrate the financial consequences of fair-share policies in service deployment and subsidy distribution. AC Transit operates bus service in both the dense Oakland-Berkeley axis of Alameda County and the postwar suburbs of Fremont and Union City. The cost per rider in the central service area is $0.80, but in the suburban area, it is $1.65.

The San Francisco Municipal Railway (Muni) carries 125 million passengers/year and recovers 39 percent of its costs from the fare box. In Santa Clara County, a 5-year-old transit system carries 5 million passengers/year and in 1975 recovered only 15 percent of its costs from the fare box. Muni carries 26 percent of the transit riders in California and operates 13 percent of the coach travel distance in the state. In comparison, the Santa Clara County system carries 1 percent of the statewide ridership and operates 1.5 percent of the statewide coach travel distance. Despite these operating results, Santa Clara County receives 9.1 percent of the state transit-assistance-program funds while Muni receives only 3 percent. A comparable situation prevails in the distribution of federal operating subsidies. Because of the formula structure of the operating assistance program, Muni must compete with BART, AC Transit, San Mateo, and Golden Gate Transit for a fractional share of $102 million, while the Santa Clara County Transit District will receive a free and clear apportionment of $32 million during the 6-year life of the federal program.

This begins to suggest another explanation for the escalation of transit operating deficits: The structure of state and federal aid programs is encouraging the expansion of transit beyond its natural market in densely populated urban areas and heavily trafficked corridors. At the same time, the local politics of fair-share service deployment are impelling transit managers to neglect fare-box recovery and service utilization as indicators of system effectiveness and service need.

We can state this another way: The political economy of transit revival is perversely out of synchronization with prevailing trends in spatial organization, household location, and automobile ownership. The preponderance of operating assistance funds are being directed to areas where transit will have limited and sometimes negative impacts on air quality and energy conservation; where the availability of operating funds encourages the introduction of services with low fare-box recovery capability; and, in some cases, where there is virtually no history of local financial contributions.

HIDDEN COST OF TRANSIT EXPANSION

The deterioration of transit service in older urban areas was, in my view, an appropriate matter of national concern. The revitalization of the San Francisco Muni and the impressive gains in ridership made by Golden Gate Transit indicate the merit of a social investment in the revival of an industry that has had insufficient capital investment and limited managerial competence during its last 4 decades of private ownership.

But transit revitalization has brought promises and expectations that cannot be fulfilled. Transit has been sold as a significant strategy for congestion relief, air pollution reduction, energy conservation, and the revitalization of downtown areas. Certainly the demise of transit in its natural markets would seriously compromise each of these social goals—air quality, energy conservation, and center city revival—as well as that of greater equality of mobility.

But the impact of losing heavily used services should not be confused with the effectiveness of new or extended services that will probably be chronically underused and underfinanced, never reaching the critical density of service frequency necessary to compete on favorable terms with the private automobile. In fact, some low-density services are probably emitting more pollutants and using more energy than an automobile-only alternative.

These costs may be minor compared with the hidden cost of transit revival based on exaggerated expectations and unachievable objectives. Despite state and federal operating-assistance programs, older urban areas still face a heavy burden of operating deficits.

The primary component of these operating losses is labor costs. It can be argued that the wage settlements in excess of the cost of living that are normal in the transit industry are, in part, a result of the labor-protective provisions of federal legislation. But it can also be argued that the aggressive bargaining posture of transit unions is a result of exaggerated public expectations about the social value of mass transit in reviving cities, combating congestion, and conserving energy. If transit is as important to society as its advocates maintain, then it is quite reasonable for transit workers to expect to share—through wage gains—the value added by the labor they supply. In this sense, the promotion of transit and the selling of its benefits can be seen as creating labor expectations—expectations that its work should be valued at the price commanded by an essential worker. Older urban areas have the most to lose from these rising expectations, for theirs is the greatest dependence on transit and the largest share of operating costs.

But suburban areas also have much to lose from exaggerated expectations about transit and its impacts. Suburban areas have the greatest stake in the future of the automobile and the highway program. The selling of mass transit has created exaggerated expectations about the ability of transit to capture ridership from the automobile. Transit advocates have also oversold the merits of transit as the centerpiece of a national strategy for energy conservation and air quality. This debate has confused the demonstrable energy efficiency of well-used transit operating in its natural market with the marginal energy efficiency of transit operating with low load factors in low-density, recently urbanized areas.

The exaggerated claims made for mass transit as a shaper of urban structure and conserver of energy entail

an opportunity cost that will be borne by the nation at large. Scarce resources, both intellectual and monetary, are being spent where they will probably have only marginal impact. The opportunity cost of focusing the attention of transportation planners and federal policy makers on transit, rather than the future of the automobile, is, I would submit, immense. Since 91 percent of personal trip making occurs by automobile or truck, the priority attention of transportation policy makers should be focused on automotive research and development; the economic stability of faltering automotive manufacturers; the rationalization of federal energy, safety, and air quality policy; and the managed introduction of new automobile technology. Instead, the debate over transit versus highways has preempted the attention of both Congress and recent administrations.

These are not meant as unkind words for mass transit. The revival and stabilization of public transportation in transit-dependent urban areas is a major accomplishment. But this accomplishment has occurred within the structure of fair-share politics and modal rivalry. As a consequence, the revival of transit has entailed the substantial excess cost of including suburban jurisdictions and the opportunity cost of our failure to develop a coherent national policy on the future evolution of the automobile and the highway system.

PARATRANSIT: PART OF THE PROBLEM OR PART OF THE SOLUTION?

Hardware and software fads occur in the transportation community on a regular basis. Transportation professionals have preached rail rapid transit, personal rapid transit, people movers, light-rail transit, dial-a-ride, and, most recently, transportation system management. Each has been promoted as the next generation innovation that will solve the transportation problem. Each has been able to establish a limited niche in the travel market; none has realized more than a subsidiary role in the larger urban mobility system.

Is paratransit another fad with a half-life of 2 or 3 years of professional enthusiasm? Or is it a meaningful response to the financing and budgeting problems that face conventional mass transit?

The answer, I suspect, depends on how much we expect from paratransit and how we proceed to deploy and manage it.

I think we have reason to be optimistic about paratransit if it

1. Serves to focus attention on the strategy of market segmentation as a method of service design and delivery;
2. Serves to lower the expectation of low-density areas that transit can offer a significant alternative to the automobile for most trip makers and trip purposes;
3. Offers a mobility lifeline for the elderly, handicapped, and automobileless without engendering demands from each and every political jurisdiction for a rightful share of service (i.e., if user needs, not jurisdictional shares, determine deployment);
4. Leads employers to share some of the costs they impose on the transportation system by their locational and scheduling decisions;
5. Provides a premium service whose operating costs can be recouped at a premium price;
6. Refocuses the metropolitan transportation planning process on the market potential of services rather than on the seldom-realized social benefits of services based on policy headways and level-of-service standards;
7. Provides an impetus for nonoperating agencies with fiscal powers to assess the cost-effectiveness of service provided by private vendors versus that provided by public operators;
8. Challenges the operators of conventional transit to pay more attention to market analysis, market segmentation, service differentiation, and consumer relations;
9. Engages cost-conscious private vendors and private employers in the dialog over transportation system efficiency; and
10. Provides a strategy for satisfying minimal level-of-service expectations in low-density areas while redirecting operating assistance to high-density markets where conventional transit can offer efficient services at a reasonable cost per rider.

At the same time, we should be careful that paratransit does not become part of the competition for limited resources that contributes to the rate of escalation of operating losses. This could happen if paratransit is conceived and deployed in a fashion that

1. Provides high-quality service at low prices, regardless of the ability and willingness of many users to pay a premium price for a premium service;
2. Embroils private taxi operations in the reporting, procurement, and labor-relations requirements of intergovernmental finance;
3. Eliminates the incentives for efficiency that motivate private vendors to economize;
4. Establishes the right of all jurisdictions, regardless of need, to a share of the service;
5. Establishes the right of employers to expect public assistance in getting their employees to work;
6. Fosters financially unrealistic expectations on the part of suburban and rural areas; and
7. Fails to determine which market segments will find paratransit useful for which trip purposes.

In short, paratransit can be part of the solution if its deployment is guided by rigorous assessment of market potentials and a realistic pricing policy. It can be part of the problem if the politics of rightful entitlement and jurisdictional shares prevail as they have in the deployment of conventional transit.

GETTING FROM HERE TO THERE: STRATEGIES OF COST CONTAINMENT AND SERVICE DIFFERENTIATION

In most metropolitan areas, transit authorities receive state and federal operating subsidies on the basis of formula entitlement. Formula entitlement programs were devised on the basis of legislative and congressional consensus about the fair share of expenditures owed to urban, suburban, exurban, and rural constituencies. They reflect the distribution of political power more realistically than the distribution of potential benefits from the introduction of transit service.

It would be naive to believe that the politics of formula apportionment can be suspended and each dollar allocated with attention to the marginal benefit of the incremental dollar. But there may still be room for improving cost-effectiveness within the constraints of formula apportionment. It may be possible, for example, to follow the example of Chicago and the San Francisco Bay Area in severing the direct connection between the federal treasury and the transit operator. In those regions, a planning authority, rather than an operating agency, is the designated recipient of federal operating-assistance funds and transit operators must justify cost increases and compete for operating funds—rather than receiving them as a matter of formula entitlement. In this way, transit

subsidies are allocated in a manner that bears some resemblance to competitive bidding.

If there is any canon of public administration that has withstood the test of time, it is the merit of competitive bidding as a means of service procurement. The status of most transit properties as the designated recipient of federal and state operating subsidies violates this principle of public finance and gives programming and budgeting powers to the member of the system with the least ability to work around the burdensome constraints of established work rules and the cost of full-time labor.

For many reasons, transit properties have been reluctant to subcontract peak-hour service, purchase service from taxi companies, or cope with the problems associated with negotiating contracts that permit hiring part-time personnel. Nor have they been eager to complicate maintenance management and personnel deployment by developing specialized services to accommodate localized or specialized needs.

The technology biases of transit operating agencies and their inability to circumvent the fixed costs associated with established work rules both argue for locating greater programming authority with regional planning agencies or general purpose government. Where this has been accomplished, in Chicago and San Francisco, planning has been redefined as service procurement and at least limited gains have been made in treating subsidy-allocation decisions as a competitive bidding process. Neither region has seriously solicited claims from unconventional service vendors, but an institutional apparatus that would accommodate competition between vendors is in place. The most important element of this institutional apparatus is the discretion to allocate state and federal operating-assistance funds among competing claimants. In practice, this discretion has been sharply limited by the rapid escalation of operating losses and the imperative of keeping the buses running.

As these agencies—the Chicago Regional Transportation Authority and the San Francisco Metropolitan Transportation Commission—mature, both politically and analytically, one can hope that they will be able to make de facto use of the discretion they already possess in the de jure sense. This will mean distinguishing between the imperative of keeping the buses running and the policy of moving people at a reasonable cost. If there is any hope of distinguishing between means and ends, between running buses and moving people, it lies with planning agencies and general purpose governments, not with agencies committed to a particular technology. And, I would argue, if there is any hope of restraining costs, it lies in the procedure of service procurement through competitive bidding.

None of these thoughts deals with the problem of fair-share politics and the disperson of funds in a way that encourages transit service in markets where it is unlikely to attract significant ridership. Here, too, there is at least limited promise in awarding designated recipient status to a nonoperating agency. This would permit local jurisdictions to use their fair-share entitlement to procure services designed for their specialized needs. This could well mean contracting with a transit property for service, which is an appropriate course of action if it is the result of a search among alternatives and not the only option available. In short, it is time for transit to compete. There are good reasons why transit should not be expected to compete on the terms of the marketplace. But there is no good reason why it should not be asked to compete in terms of cost and service quality with less conventional forms of public transportation.

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Costs and Productivities of Innovative Urban Transportation Services

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The aspects of supply and demand that determine the costs and productivities of paratransit services are described, the variations in performance of the services are explained, and ways of improving them are suggested. Publicly owned dial-a-ride services are observed to be very expensive operations and, although the potential for cost reduction exists, these trip costs will probably remain high. The current practices of ubiquitous dial-a-ride services and extremely low fares are questioned. It is also suggested that increased participation in paratransit operations by the private sector—the taxi industry—promises significant improvements in the cost performance.

Productivity and costs are critical aspects of paratransit operations. They determine the financial viability and economic success of these innovative urban transportation services, and improvements in them will be important determinants of wide-scale success of these operations. This paper discusses the factors that affect these costs and productivities and suggests possible ways of improving them. Costs are affected by the ownership and organization of the providers, the level and type of service, the local regulatory environment, existing labor agreements, and vehicle characteristics. Productivities are determined by the ability of the service to attract