

# **ORGANIZATIONAL OPTIONS FOR PUBLIC TRANSPORT: A CRITICAL APPRAISAL OF EXPERIENCE TO DATE AND PROSPECTS FOR THE FUTURE IN NORTH AMERICA**

**Frederick P. Salvucci**  
**Massachusetts Institute of Technology**  
**Nigel H. M. Wilson**  
**Massachusetts Institute of Technology**  
**Sadayuki Yagi**  
**Pacific Consultants Co., Ltd.**

## **INTRODUCTION**

This paper focuses on the experience with re-introducing the private sector into a public transport provision role in North America and compares it with the evidence from other parts of the world. First, different models for organizing public transport are critically reviewed in light of experience. Second, the evidence from North America is summarized, focusing on the circumstances under which significant roles for private operators have emerged. Brief case studies from Boston and San Juan will be used as examples. Next the major obstacles to moving toward a larger role for private operators in North America are identified. Finally the prospects for future increase in the private sector role are assessed and specific strategies which may overcome the existing barriers suggested.

## **DIFFERENT ORGANIZATIONAL MODELS**

In this section some basic alternative models for structuring public transport service delivery are presented and the advantages and disadvantages of each summarized. We will focus on different roles for the public and private sector implied by each model. (14) In this discussion we will use the distinction introduced by Kolderie (5) between provision and production of public transport services. Provision is used to describe all policy and planning related activities including regulation, financing and planning. Production typically includes ownership, operation and maintenance of equipment, facilities and services. . Given the close link between finance and infrastructure and vehicle ownership, a case could be made to include ownership as part of provision, but for the sake of consistency we will leave it as part of production.

To expand on each of these aspects briefly, regulation includes fundamental concerns about safety and the environment, as well as the more debatable issues of entry, service and fare control. It seems clear that safety and environmental concerns are vital and should always remain under government control. It is the other regulatory issues which are often at the heart of the different organizational models to be discussed in this paper. Finance and the intimately related topic of subsidy are also at the core of the choice among organizational models, with a traditionally strong link between subsidy and public ownership. The final major element of service provision is planning, including capital planning, operations planning and service planning. Depending on the organizational model, all these planning functions could be in the public or the private sector

Production includes ownership of vehicles and infrastructure, either or both of which can be in the public or private sector, although at least for urban bus systems the basic infrastructure, i.e. the street, is likely to remain under public ownership. Similarly both operation and maintenance of both the vehicles and the infrastructure can be totally within the public or private sector or be shared in some way.



If the primary benefits of public transport systems are intended to be to increase accessibility and to improve social equity in terms of opportunities to work, live and take advantage of social and recreational activities, we need to consider how well alternative service delivery models will meet these objectives. At the same time the secondary objectives, or in some cases, intermediate objectives, or even constraints, of total cost, service quality and longer term sustainability cannot be ignored.

Six organizational models will now be introduced and assessed: unregulated (or deregulated), regulated competition, threatened competition, private monopoly, public monopoly and contracting out.

These organizational models are sequenced in this way for a reason. Specifically it represents a fairly typical sequence of evolution of urban public transport, at least in North America, and suggests that a desirable end state in many urban areas will be public provision and private production of service. The first few models typically apply to unsubsidized public transport services while the final two models describe the common subsidized states. The striking results achieved in London over a ten-year period, and reported on extensively at prior conferences in this series, show the potential for the contracting out model together with the benefits of retaining public provision. The question to be addressed in the second half of this paper is why progress from model 5 (public monopoly) to model 6 (contracting out) has been so halting and slow in North America compared with the UK in particular.

### **Unregulated (or Deregulated)**

The distinction between unregulated and deregulated simply refers to whether regulation had previously existed. Historically urban public transport began without regulation and for that reason this model is presented first, and this title is preferred. Deregulated is often used to describe the bus industry in the UK outside London, although the system is softened to the extent of allowing noncommercial but socially important services to be provided under contract.

The unregulated model involves few or no controls over entry to, and exit from, the system, fares, levels of service and markets served (routes). Safety or environmental vehicle regulation is often retained even in this model, usually in the form of requiring vehicle permits to private operators indicating attainment of some minimum standards. In developing countries, this model often occurs when the paratransit sector stays outside government control because of its "informality." This model may enable private operators to achieve high cost efficiency and reasonable service quality but only if the public transport market is strong and contestable.

**Advantages:** For private operators, this model may provide the greatest incentive to achieve the lowest input costs because of the competition in the public transport market. Private operators enjoy the freedom to decide fares, routes, levels of service, labor costs, work rules, and so forth, although these will be determined through the competitive market. In particular, if private operators have no difficulty in operating and maintaining any specific type of vehicles, vehicles chosen by operators with practical knowledge of road conditions, level of demand, and operating costs are more likely to be cost-effective and appropriate than vehicles specified by regulation. Thus, free from government intervention, private operators may be able to make a reasonable return, thereby encouraging the supply of services and investment in expansion. Again this is particularly true if the public transport market is strong.

Consumers can also benefit from this model if there is high demand. Although there is no regulation of fares, competition may reduce the chances of excessive fares being charged. The optimum routes and levels of service determined by the competition in high-demand markets should reflect the customers' needs. Customers may be able to choose from a variety



of vehicle types or routes. If a deregulated sector is introduced to complement a publicly operated and subsidized system, the deregulated producers may serve different market niches desiring higher frequency and less crowded service at higher prices, while the public entity provides a basic lower-fare service.

Deregulation may be beneficial particularly where the government is seen as incapable of fair regulation, either because of corruption or excessive orientation to producers' interests; in such cases, the deregulated model allows the market power of customers to play a stronger role.

**Disadvantages:** The unregulated model will often have difficulty meeting the primary objectives in providing urban public transport. Under free competition, it is likely that the low-density areas, unprofitable routes, and off-peak services will be neglected, while high-demand areas or routes will be over-served. This situation may not be appropriate in terms of mobility and social equity, and this problem will become more manifest in cities where public transport demand is not so high. Also, for reasons of cost efficiency or competitive advantage, private operators may choose to operate large numbers of smaller vehicles, which may in turn create serious road congestion and environmental problems.

Another concern about the effects of deregulation may be the lack of fare and service coordination, and system-wide public information and planning. This is likely to create an unstable situation for customers; it may result in large increase of fares, interruption of services, or withdrawal of operators. It may also bring disadvantages from the operators' perspective, such as unfair competition, predatory practices and inefficient use of facilities causing, for example, "bus traffic jams." An extreme form of abuse which has occurred in some unregulated contexts is the emergence of coercive or threatening tactics aimed at intimidating competitors and passengers. In addition, if one operator is more powerful than others, the model may lead to private monopoly, creating de facto barriers for new operators to enter the market.

In addition, excessive competition may also create some undesirable side effects. If the competition is severe, highly motivated and sometimes aggressive driving behavior of private operators may impair the safety and quality of services. Reports of aggressive driving by highly motivated private operators are fairly common in developing countries, particularly in cities where a large number of small companies or individual owner-operators are plying the same routes. Also, intense competition in the public transport market may keep the net income of private operators very low, leading to inadequate investment for system expansion.

Many of these concerns have manifested themselves in the UK deregulation model, particularly when contrasted with the London contracting out experience. With the benefit of hindsight some of these concerns could no doubt have been ameliorated, but the historic movement in the early days of public transport towards regulation combined with the current greater concern about social equity raise questions about the effectiveness of this model.

## **Regulated Competition**

The regulated competition model is typically introduced in direct response to the problems of the unregulated model. It attempts to maintain the benefits of a competitive, cost controlled environment (through direct competition in the market) while providing a coordinated public transport system. Governments in most cases regulate safety and maintenance standards, fares, entry to the system, and routes. They may also regulate levels of service, employment standards, or environmental criteria. Governments are responsible for monitoring the performance of the private operators, although the monitoring system in this model may not have to be as comprehensive as in the contracting out model because there is no contract between the private operators and the public authority.



Although the range of government intervention may vary from case to case, this model may be characterized as a mix of public and private provision with private production.

**Advantages:** Benefits result first from the competition in the market which can provide strong incentives to improve performance. The competition for fare revenue will put downward pressure on costs and may postpone the need for government subsidies. Also, because the operators compete for the passengers which produce the revenue, they may be more concerned with service quality, in particular service frequency.

Benefits may also derive from the associated government regulation. Governments can regulate the fares to meet social objectives, especially equity concerns. Government regulation can also help to produce a comprehensive and coordinated service. Regulation can require operators to carry unprofitable, weak routes and provide off-peak services and generally ameliorate (or mitigate) the private operators' desire to be cost efficient and maximize profits.

**Disadvantages** One major drawback is that this unsubsidized regulated competition will be most effective where the demand for transit service is high. Elsewhere, governments may have to lay down more regulations to meet societal objectives, causing some private operators to go out of business, because they are unable to provide adequate service at acceptable fares.

Fares are often regulated at relatively low levels in the belief that this will benefit the community. Even if private operators are currently profitable, their profitability will decline if governments are reluctant or slow to allow fares to increase during periods of cost escalation, generated by external factors, including inflation and urban congestion. As a result, private operators may have to withdraw part or all of their services.

Another concern about regulated competition is the potential for operators to use inappropriate influence with regulators to gain preferential treatment, opening the door to bribery and competition. Special care must be taken to guard against this risk, particularly in societies where such behavior is not uncommon.

If large parts of the area become unprofitable, it is difficult to maintain service, since there is no convenient subsidy mechanism. This is likely to create pressure toward merger, and eventually to private monopoly, in the belief that subsidy can be avoided through cross subsidy and economies of scale, or to create a public monopoly with subsidy.

## **Threatened Competition**

The threatened competition model uses the threat of competition to achieve the benefits associated with multiple operators but avoiding competition in the market. Operators are required (usually by contract) to meet service and fare standards or have their services competitively tendered. Threatened competition is also an element of many contracted out services where the government has the option of extending the contract without a new bidding process.

In this model contracts are based on areas or groups of routes with each served exclusively by one private operator; i.e., each private operator has its own franchised area(s). Provision of services can be determined by the private sector rather than the public sector; the model can be roughly characterized as regulated private provision and production.

**Advantages:** Through the threat of competition this model has the potential to produce cost-efficient, high-quality service. It will be effective only if there are multiple operators so that the threat of competition is perceived as real. Simultaneously, through government regulation in the form of contracts, the model has the potential to meet the primary objectives for urban public transport such as mobility and social equity, and congestion reduction. Well



coordinated services are also likely to be achieved, at least at the local level, because each area is served by a single private operator.

This model may serve as a good model moving from a non-competitive franchise system to a more competitive environment, particularly when there are several private operators serving adjacent areas or regions with similar conditions.

**Disadvantages:** The effectiveness of this model will depend on how seriously the operators take the threat of competition. If the threat is not taken seriously, they may have little incentive to provide services efficiently leading to higher operating costs than other alternative models with competition. There are several situations in which the threat of competition may not work well. First, if there are not enough existing franchised areas or potential operators or if collusion or cronyism reduces the threat. Second, if the private sector negotiators are too skillful, or if the contract renewal or bidding process is ineffective. In this model effective operator monitoring is essential,

### **Private Monopoly**

Private monopoly is where most of the provision and production of public transport services are under the control of a single private company, although regulation by government will typically cover safety and environmental standards, entry, fares, routes and levels of service. The monopoly may exist at the route level or at the system level. At the route level it is essentially a franchise model. The system level monopoly typically results from mergers and acquisitions among smaller private operators seeking to achieve economies of scale or to allow cross-subsidies.

In the U.S., many privately owned public transport monopolies evolved in the early part of the twentieth century and existed into the 1950s and 1960s. The private companies enjoyed monopoly status, because the transit markets were protected and the private companies were insulated from the threat of competition. (9) However, the situation became unstable and eventually led to public buy out and full public provision and production. The buyouts were often promoted by the private companies as the only way to recapture some value for their assets which had no market value. Similarly in developing countries, private monopolies sometimes appeared as a transition to privatization or "publicization," but nowadays few cases of this model exist.

**Advantages:** In the private monopoly model, government entry control often protects the private monopolies from the threat of competition. One argument for this is that the services provided will be more consistent and coordinated than the "chaotic" situation involving multiple operators. Furthermore, if government policy concerning the private monopoly is focused on broad social objectives such as mobility, equity, and environmental impact, while the private company focuses on cost efficiency and customer service, this model may produce a better outcome than the public monopoly model.

The argument of economies of scale has also been used to support monopoly operation of bus systems. However, there is strong evidence that larger, more bureaucratic bus systems may also increase the complexity of oversight and the loss of information about actual conditions and ridership, offsetting any potential savings. Studies by Viton (12) and others suggest that bus systems may even exhibit diseconomies of scale. In terms of value to riders, there may still exist benefits of scale; that is, it may be more valuable to get a bus ride in a system which has a more extensive network even if the cost per passenger-mile is higher. If this is the case, system-wide service planning by a single organization may make sense, but this argument still does not lead exclusively to this private production monopoly model.

**Disadvantages:** The private monopoly model may encourage operators to maximize returns by providing infrequent and overloaded services. Private monopoly as such tends to provide services which are less likely to fulfill the fundamental societal objectives for urban public



transport. Because of the low levels of service which may be the monopolists' optimal decision, the poor in particular are disadvantaged, and those who are willing to pay for something better are forced into using private automobiles or taxis, with increased traffic congestion, environmental pollution, and energy consumption.

It should also be mentioned that, as is the case with the public monopoly model, private monopolists have less incentive toward cost efficiency and service quality, because they are insulated from competition.

Further government regulation attempting to overcome such situations (e.g., regulated levels of service and fares) has tended to fall short of expectations and turn profits into losses. The past examples of private monopolies in the U.S. have shown that government regulation and control may exacerbate socially undesirable operational and financial performance of the monopolies. As costs rise, for example, transport systems come under financial pressure to increase fares, but governments are under pressure to keep fares at existing levels. Unless the system is subsidized, it will then have to eliminate some of its less profitable services. Once again, however, governments will be inclined to yield to pressure from those whose services are threatened and to insist on maintaining money-losing operations to certain standards. (5) This can lead to a lack of replacement of the fleet or other reductions in capital investment, and eventually to a demand by the private sector that the government buy out the system. Thus, the model may be unstable. The government may also find it politically difficult or legally impossible to subsidize a private monopoly, leading seemingly inevitably to public takeover.

## **Public Monopoly**

Public monopoly is full public provision and production in which all services are fully designed in, and owned and operated by the public sector. It has been the organizational model typically introduced when all other attempts to maintain unsubsidized public transport have failed. With the introduction of subsidy the desire to assume total public control has been almost irresistible around the world.

**Advantages:** Theoretically this model may be best able to serve the primary objectives of public transport: the accessibility and social equity concerns, since the government policies are directly reflected by the public operating entity. A strength of this model should be the relative ease of recognizing externalities, such as congestion, environment and energy, which may be tackled through public transport strategies. This model should be able to produce efficient services and develop coordinated multi-modal strategies and capital investment plans. This model may have the potential for long run stability since it is not subject to the private sector financial failure risk.

**Disadvantages:** The fundamental problem with this model is that there is nothing inherent to keep it functioning effectively or efficiently. It may not be subject to effective external monitoring and hence can lapse into problems such as buses emitting noxious and unsightly fumes, large vehicles providing infrequent service, lack of attention to the customer, and high costs.

First, as opposed to private operators who usually view their customers as the source of revenue and their production costs as a threat to profitability and therefore experience a consistent incentive to improve revenue and reduce costs or face the ultimate risk of going out of business, public sector organizations tend to have less incentive to strive for cost-effectiveness, to compete for revenues, or to sustain the high degree of consistent effort necessary to overcome the numerous day-to-day problems.

Secondly, the model lacks organizational flexibility, because incentives are provided only indirectly and intermittently through the political system by voters, legislators and appointed



commissions. Political control can lead to instability as leadership and management may change with the government, leading to employee incentives which are political and often unrelated to quality of service.

Finally, public transport systems of this model are commonly subsidized. Not only can subsidies become a serious burden for governments, but also the model may reduce or even eliminate incentives to reduce costs, falling short of providing the benefits expected from the level of subsidy. In the public monopoly context, this is because the institutional pressures are political and intermittent rather than continuous and market-driven, and the political pressures are dominated by the interests of the bureaucracy and labor rather than broader public concerns such as mobility, equity, or environment. Consequently, a public monopoly may serve less of the public need at higher costs, and pressure to avoid increasing subsidy may be reflected in service cutbacks rather than managerial effectiveness designed to reduce costs and attract more customers.

## **Contracting Out**

Contracting out is a model in which the public authority delegates operating responsibility for some or all public transport services to private companies through contracts. Usually the operation of transit service is awarded to the lowest qualified bidder through competitive tender. The public authority decides which routes should be tendered and specifies in the contract fares, schedules, vehicle characteristics, and service and safety standards. The competitive market responds to the requests of the public authority and one (or more) contractor is selected through the bidding process to provide each service for a specified length of time. Alternatively, the contracts may be designed with elements of internal cross-subsidy. That is, profits during the peak periods may offset losses on the same line during the off-peak periods, or profitable routes may be combined with unprofitable routes in the same contract. Light density routes or times of day could be contracted to operators running smaller buses with lower capital and labor costs. In short, contract structure is a major issue in this model.

Contracting out may be characterized as a model with public provision and private production. The public authority can exercise regulatory power by including various standards in the contracts with the private operators. The vehicles can belong either to the private operators or to the public authority. Operation and maintenance of vehicles is typically the responsibility of the private operators although maintenance can also be separately contracted out to other companies specializing in this task. Most of the planning tasks are in the hands of the public sector, implying that the public authority is responsible for monitoring service quality and the overall performance of the private operators. For this model to work effectively it is essential for the public authority to have sufficient resources and personnel to do a good job of planning, contract negotiation and oversight, and performance monitoring. Once again London experience shows the critical importance of these public authority roles in making this model successful.

**Advantages:** The main advantage of this model is the potential for improved cost efficiency. If the bidding process results in inefficient operators being outbid by more efficient operators, the private sector has an incentive to keep bid prices down, thus improving efficiency. Hence, cost efficiency will depend heavily on the competitiveness in the tendering process.

The potential for greater cost efficiency also implies that government deficit may be reduced by moving to this model of production. If the private operators provide services more effectively and at a lower cost than the public sector, then contracting out the transit services may not only reduce government subsidies (for unprofitable routes) but also provide a source of revenues either through revenue sharing or through negative bids. Contractual incentives and penalties can be used to ensure that the operators pay attention to providing good service



quality, and this needs to be reinforced through making the replacement of a poorly performing contractor possible.

This model can provide a comprehensive and coordinated system, because the government authority retains control over all aspects of the provision of service. In other words, the model can produce an optimal level and quality of service that fulfills the primary objectives for urban public transport such as mobility and social equity, and traffic congestion reduction, provided that contracts are well structured and contractor performance is effectively monitored.

Furthermore, the contracting out model has one other unique advantage; since contracting out can be done at the level of individual routes, it is possible to contract out only a portion of the entire system. Therefore, the public sector can contract out, for example, only a few poorly performing routes while retaining a different model for other routes.

**Disadvantages:** One weakness of the contracting out model is that, in the case of gross cost contracts, the contractor may not focus on the customers because all the compensation comes from the government agency. Using some form of revenue sharing may be an effective way of retaining the main advantages of gross cost contracts while ensuring that the operator still strives to maximize revenue collection.

Another weakness is the difficulty of efficiently monitoring performance to ensure that the terms in the contract are fulfilled. Private operators may hold back on the quantity or quality of services they render unless their performance is closely monitored. New technology such as vehicle locator systems, automatic vehicle identification, and advanced communications may make close monitoring feasible, but monitoring is generally costly. In any case, monitoring and contract administration will offset some of the savings from operators' efficiency.

Contracting out may not reduce costs if the bidding process is not competitive. In particular, essential factors of production such as bus fleets or maintenance facilities may be under monopoly control, so that competition is substantially restrained. In order for this model to be effective, the public authority must foster a fair, competitive transit market with high-quality participants.

The six organizational models for urban public are summarized in Figure 1 focusing on the public and private sector responsibilities along the six principal aspects of service provision and production.

	Unregulated	Regulated Competition	Threatened Competition	Private Monopoly	Public Monopoly	Contracting Out
Regulation	Minimum	Yes	Yes*	Yes	Yes	Yes*
Financing	PR	PR	PR	PR	PU	PR
Planning	PR	PU & PR	PU & PR	PR & PU	PU	PU
Ownership	PR	PR	PR	PR	PU	PR (or PU)
Operation	PR	PR	PR	PR	PU	PR
Maintenance	PR	PR	PR	PR	PU	PR
* The model is regulated in the form of contracts.					PU : Public Sector PR : Private Sector	

Figure 1 -- Six Organizational Models



This discussion of the advantages and disadvantages of each model has highlighted some important differences, some of which may become critical when considering a specific urban public transport system and its context. The intent here is not to eliminate any model as a solution which may be appropriate in a particular context. Rather it is better to understand the contexts most suited for a particular model.

With this as background we now turn to consider the recent experience with public transport organizations in North America, the particular context of interest here.

## NORTH AMERICAN EXPERIENCE

The dominant organizational structure for providing public transportation in North America today remains the fifth of the six models presented, with the public sector being responsible for both provision and production of service. This has been dominant since the failure and takeover of the regulated private operators, typically models 2 or 4, in the 1950s and 1960s. Over the past decade or so there has been significant growth in purchased transportation in the US transit industry however, as is indicated by the current use shown in Figure 2.

Mode	Operating Expense (\$ million)			% Purchased
	Directly Operated	Purchased	Total	
Bus	8,050	810	8,860	9.1
Heavy Rail	3,786	-	3,786	-
Commuter Rail	1,934	294	2,228	13.2
Light Rail	412	-	412	-
Demand Responsive	194	440	634	69.4
Other	353	48	401	12.0
Total	14,729	1,592	16,321	9.8

*Figure 2: Purchased Transit Service in US Transit Industry (1994) (3)*

Over the past decade the overall share of purchased transportation has almost doubled, even though it still represents only 10 percent of the industry operating expense. This growth has been uneven over the industry, however; both in terms of modes and across metropolitan areas. This is illustrated by Figure 3, which shows the number of buses operated in maximum service, separately for directly operated service and purchased service for the bus operations of the 30 largest US transit operators. Collectively, these 24 bus operators account for almost 50 percent of the industry bus fleet total. This figure shows that 15 out of these 24 agencies, or over 60 percent, had less than 5 percent of their maximum bus requirements met through purchased service and only 4 of the agencies have more than 12 percent of their bus requirements met through purchased service arrangements -- Dallas, Denver, New York City Department of Transportation and New Jersey Transit.



	Directly Operated	Purchased	Total	% Purchased
MARTA	559	-	559	-
MTA	636	75	711	10.5
Boston	750	72	822	8.8
Chicago	1,729	-	1,729	-
Cleveland	636	-	636	-
Dallas	519	216	735	29.4
Denver	504	181	685	26.4
Honolulu	408	31	439	7.6
Houston	915	76	991	7.7
OCTA	365	48	413	11.6
LACMTA	1,912	36	1,948	1.8
MDTA	496	21	517	4.1
MCTO	849	11	860	1.3
NYCDOT	-	922	922	100
NYCTA	3,153	-	3,153	-
NJ Transit	1,596	1,073	2,669	40.2
SEPTA	1,120	-	1,120	-
PAT	733	-	733	-
TriMet	490	9	499	1.8
AC Transit	583	5	588	0.9
Maui	386	-	383	-
Santa Clara	380	13	393	3.3
Seattle	818	26	844	3.1
WMATA	1,294	-	1,294	-
TOTAL	19,102	2,815	21,917	12.8

*Figure 3: Buses Operated in Maximum Service (1994) (4)*

Considering these four agencies, their circumstances vary considerably. Dallas has been running express service under contract for the past decade and is now beginning to extend contract service provision into local service. The privatization initiative in Denver came as a direct result of a State of Colorado requirement enacted by the State Legislature which required that the Regional Transit District (RTD) contract at least 20 percent of its service to qualified private operators. This has been the largest state-mandated contracting out activity in the recent past in the U.S. and has been closely studied as a result (2, 6, 7, 8, 10, 11). The



New York City Department of Transportation has had long-standing contracts with a number of private bus operators providing principally express bus service from Queens, the Bronx and Brooklyn into Manhattan although some local service is also provided. These are akin to subsidized franchised services which have not been awarded through competitive tender with part of the arrangement being that New York City buys the bus fleet required. New Jersey Transit was formed through the amalgamation of a large number of private transit operators throughout the state and once again the nature of the private service provision is more similar to long-term franchise arrangements rather than resulting from competitive tender. Thus only 2 of these 24 agencies can be reasonably characterized as incorporating the full features of the contracting out model for some portion of their bus operations.

Returning to Figure 2, there is modest use of purchased service arrangements in both commuter rail and in ferry service (included in "other" modes) while it represents the dominant form of providing demand responsive service. Commuter rail includes both new start ups and long established regional rail service which traditionally was operated as small elements of major inter-city passenger and freight rail systems. As these large networks went through decline and reorganization, the commuter rail service was generally transferred to the urban public transit operator. The systems are dominated by the New York City/Northern New Jersey operators, all of which operate rail services directly. Elsewhere it is common to use purchased service arrangements, although typically these are renewed periodically without re-bidding. For smaller commuter rail networks in particular, it is more attractive for the agency to buy the expertise from an established operator (generally AMTRAK) on a contract basis than to hire the required knowledgeable staff and employees in house.

Very much the same argument applies for purchasing ferry services - the public agency will not have the required skills and it is generally easier and less expensive to contract with an experienced operator.

For demand responsive services the differences in vehicle types (vans as opposed to buses) and driver skills, and the existence of a large number of qualified national, regional and local private operators argue strongly for the service contracting option.

While figures for Canada are not available in exactly the same form, the use of private contract operation is quite similar to the U.S. (1) Specifically more of the public transport agencies in the 21 largest municipalities (with population greater than 150,000) use private contractors for their fixed route services, although a majority use contracted paratransit services. In the smallest Canadian municipalities (with population less than 50,000) a large majority of transit services are provided through contracts, although not typically as a result of competitive tendering.

To illustrate the types of service contracting going on we will look very briefly at two U.S. metropolitan areas: Boston and San Juan.

### **The Boston Metropolitan Area**

Boston has a considerable range of purchased service arrangements including all commuter rail service, demand responsive service, ferry service and a small number of bus routes. Collectively, these services account for about 20 percent of annual MBTA operating expenses and all of them represent long-standing arrangements, i.e. they have been in place for at least ten years. The commuter rail service has been operated under contract for the past twenty years, first to the Boston and Maine and subsequently, for the past decade to AMTRAK. Thus, over this twenty year period there has been only a single competitive bidding process which led to a change of operator. In general, the contract has been extended through negotiated agreement, although the threat of re-bid may have been successful in inducing greater receptivity in the negotiation process on the part of the incumbent. Demand responsive service developed in response to the need to provide door-to-door service for



those unable to access the conventional bus, or indeed, get to the bus stop. Initially the service was operated by a non-profit agency, but as the system expanded the operation was put out to competitive tender which led to two transitions of lead operator until the current operator was selected some ten years ago. Over that period contracts have been renewed through negotiation without competitive re-bid. It is worth noting that in both these cases there was strong initial opposition from staff within the public agency to seeing these services operated outside the agency, even though they had never been part of the agency's direct operations.

Ferry service was introduced in the mid-1980's as part of the mitigation strategy during the reconstruction of a major expressway leading into central Boston. It was introduced as a contracted service and has remained so with periodic competitive re-bidding and with one or two operators providing the service. One important distinction between this ferry service and the other purchased services in the Boston region is in vehicle ownership. The ferries are owned by private operators, who can use them for other revenue services, notably sightseeing and other charters, outside normal service hours, whereas both the commuter rail rolling stock and the demand responsive vehicles are owned by the public authority.

The contracted fixed route bus services are long-standing services which were not folded into the public agency when it was created. Thus, they represented franchise operations directly subsidized by the public agency.

Thus all these purchased service arrangements can be characterized as either long term or associated with new services, and generally covering operations beyond the public agency's traditional services. In all cases the public agency is fully responsible for planning and fare policy and bears the revenue risk of the services.

However, in the past four years there has been active discussion on contracting major portions of the fixed route bus network out. This initiative has come from the Board of Directors which is appointed by the Governor of Massachusetts which is responsible for funding over 60 percent of the public agency's operating budget. Over the past three years two requests for proposals have been issued to privatize portions of the fixed route bus system, but it is still too early to speculate on whether any contracts will be awarded, let alone what the outcome may be.

### **The San Juan Metropolitan Area**

San Juan provides one interesting example of innovative private sector involvement in public transportation: competitive contracting of a high frequency trunk bus service, Metrobus. After a competitive procurement, Metrobus began operation in 1990 contracted to a private operator after long standing dissatisfaction with the performance of the public bus authority. By providing high quality and reliable service Metrobus was able to reverse the long term declining ridership in this key corridor and this contract has now been used as the model for a second Metrobus service recently introduced and operated by the public bus operator, subject to the same performance penalties.

This is a clear example of a contracting out strategy which is aimed at positively influencing the performance of the public bus authority as well as to provide higher quality public transportation service in San Juan. The Metrobus service was developed over the objections of the public bus authority and only through the entry of the Puerto Rico Highway and Transportation Authority as the public entity contracting for the Metrobus service, with both the private operator (the first route) and the public bus authority (the second route).



## OBSTACLES TO GREATER PRIVATE SECTOR PROVISION

Reviewing the limited role of the private sector in public transport in North America and comparing it with the experience in some other parts of the world, several observations can be made. Dealing first with the circumstances under which private sector participation has occurred in the U.S. typically one or more of the following circumstances apply:

1. The service in question is new and rather different from the service previously provided by the public authority. This clearly applies to the demand responsive services, and also to ferry and even commuter rail services. Even in these cases the public authority has tended to resist external service provision, in some cases successfully, but in other cases not.
2. There has been external intervention typically from the state level either through direct legislative intervention or through state appointed boards of directors. Often this intervention is a result of a crisis atmosphere surrounding the public transport system, perhaps generated by media reporting of public agency inefficiency (the Boston case in the late 1970s and the San Juan case in the late 1980s) or budgetary deadlock or simply concern about ever-rising subsidy needs for the public agency.
3. The assimilation of the private operators into the public agency was not complete and the shift from unsubsidized regulated privately operated service to subsidized service occurred retaining the private operating entities. This is the situation in both New Jersey and the New York City Department of Transportation. The preservation of these independent private operators is an important element in moving towards a more competitive procurement strategy. Importantly it also avoids the development of institutional resistance to a greater private sector role typically associated with the public monopoly model.

The first and third circumstances obviously will never apply to the core bus service of existing public monopolies and so significant future expansion of private service provision will depend on some form of external intervention. As will be argued below, external intervention will be in the face of strong opposition from a number of sources, and if it is to occur either the situation must indeed be of a crisis type, or very carefully structured scenarios need to be developed. Clearly then the prognosis is for continued rather slow increase in private sector participation in the face of strong opposition.

It appears that the public monopoly model is extremely stable, certainly in North America, and likely elsewhere, which suggests an important lesson for those cities and countries which have not yet reached this organizational state. It may well be far easier to reach organizational model 6 by bypassing the public monopoly model entirely.

Before turning to strategies likely to be effective in expanding the role of the private sector, it is worth reviewing the principal differences between North America and the rest of the world which explain the slower pace of change in North America.

The first, and most important difference, at least between North America and the UK is in the ability of central government to intervene in the local public transport domain. The relatively rapid change in the UK from public monopolies to contracting out, privatization and deregulation came over the opposition of the public transport authorities and occurred only because of the strong central government structure. In comparison, both the U.S. and Canada are federations in which central government has far more limited power to influence state or provincial matters, including public transport. In the U.S. the federal government role in public transport in terms of both financial support and regulation increased during the 1960s and 1970s, but has been on the decline ever since, particularly with respect to operating assistance where the federal contribution represents less than 5 percent of the industry's current operating expenses. Thus the federal government is not in a position to influence



local public authorities strongly - indeed in the 1980s when it attempted to increase the role for private operators in public transport service provision, it was notably unsuccessful. The situation in Canada is even more extreme with no substantive role for the federal government in local public transport.

This shifts leverage in creating change down to the state (provincial) and local government or to the operator itself. However the labor protection legislation in the U.S., known as Section 13(c) does mean that the federal level can seriously inhibit any local efforts which would negatively affect the circumstances of existing transit labor. This is generally interpreted to place a cap on the maximum rate of transition of existing service from the public authority to private provision at the attrition rate for the operating workforce.

At lower levels of government, including both state (province) and local, organized labor which will feel directly threatened by any prospect of competitive contracting, are a potent political force which can make it much less likely that government will intervene aggressively unless there are unusual circumstances such as those described above. Labor of course also directly deal with the customers and so are in a position to be highly influential and disruptive for the transit-using segment of the population if a confrontational approach is taken to contracting out.

Another important obstacle to broader adoption of competitive tendering arrangements is the surrounding controversy and rather ideological positions taken on the general approach and on the specific experiences. This is well illustrated in the case of Denver and in general by references (10, 11). This means that there is disagreement on the true impacts of what service contracting has occurred, and each new initiative very quickly becomes highly confrontational with a stalemate a very likely outcome.

In Canada there are moves afoot in several provinces, most notably Ontario, intended to reduce government outlays for public transport and to put greater emphasis on private operation, either through contracting out or through deregulation of inter-municipal bus services. Unfortunately these initiatives do not appear to have fully benefited from the experiences elsewhere in the world, and have a highly confrontational tone. It is likely that any changes will be strongly resisted by the affected interest groups, and may well result in some damaging mistakes for the public transport industry and its customers. This is likely to further entrench the views of opponents and may well mean that much more promising strategies may not be given a chance now or in the near future. The objectives may be to minimize government expenditures without any real concern about the impacts on the public transport customers and society as a whole. This may well repeat the mistakes made in the UK deregulation approach - and indeed for many of the same reasons, except that now the negative implications of this strategy are known, whereas ten years ago they could be debated.

A final distinction, which is a result of the slow pace and piecemeal nature of the contracting out process, is the lack of a well-developed private operator industry. It will take a much longer time for this industry to develop in North America than it did in the UK because of the much slower pace of organizational change.

## **STRATEGIES FOR PROGRESS**

Given the realities, particularly the critical role that external intervention is likely to play, and the influential roles that both transit labor and management can play in opposing change, what strategies might be effective in fostering change.

First it is important to have strategies developed which can quickly be advanced in the event of a crisis which might provide the impetus to break out of the standard operating model. These strategies should be based on non-confrontational and incremental change so as to make it more difficult for entrenched interests to object, to avoid possibly successful or at



least delaying legal challenges, and to build up experience about what mix of initiatives are most likely to succeed.

A reasonable first step would be to identify marginally performing routes which could be operated more cost-effectively with smaller buses or vans, rather than with standard size buses. By converting such routes to contract service there could be potential benefits in service quality at the same time as cost savings are accrued on these routes. One important part of this strategy would be to commit that any cost savings would be re-invested to obtain service quality improvements which would further tend to undermine likely labor opposition arguments about the true aim being to reduce costs and subsidy.

In order to shed more light on the issue and attempt to reduce the rhetorical and ideological nature of much of the current debate on the issue, it is important to get more information about the results of the few initiatives that are underway or those now being planned. The Canadian Urban Transit Association Guidelines for Assessing the Options report (1) is an important step in this direction, but there is still an unmet need for further detailed and unbiased assessments. It would seem clear that this would be an appropriate role for the Federal Transit Administration in the U.S., particularly since they currently have no strongly articulated position on this question and a strong vested interest in improving public transport performance. The Transportation Research Board is another suitable organization to undertake such a study.

Another model which is attractive in theory, but has not been effective in practice is to introduce a policy board which would be the authority responsible for service provision, separate from the traditional public operating authority whose role would be redefined strictly in terms of service production. This split policy and planning versus operation model was tried over the last decade in Minneapolis-St. Paul, but failed amid considerable acrimony between the two public authorities. A similar approach in Los Angeles also failed with the forced merger of the previous two public agencies into a single integrated public provision and production entity.

A further strategy which could address the obstacle of lack of strong competitive regional markets for fixed route bus provision is the corporatization and eventual privatization of bus depots, with the associated labor, vehicles and equipment, in the larger metropolitan areas. This was clearly part of the strategy used effectively in the case of London Transport and it could also be effective in North America.

In conclusion it seems unlikely that any of these strategies will be successful in significantly increasing the rate of growth of private sector service provision in the U.S. Rather a continued slow and frequently contentious growth process is most likely for the foreseeable future.



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