

COMPETITIVE TENDERING OF PUBLIC TRANSPORT

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ABSTRACT

Public transport service is increasingly being provided in the high-income world by private operators through competitive tendering. The principal reason for this development is achievement of market determined unit costs, which allows service to be maximized. In many other areas of the world, private operators provide most public transport service without subsidies.

COMPETITIVE TENDERING OF PUBLIC TRANSPORT

From 1930 to 1970, urban transport systems throughout the western world were taken over by the public sector. This was justified, in large measure, by a belief that removing necessity for profits would reduce the cost of operations. The anticipating cost savings did not materialize, and in fact, it became clear the government monopolies were as prone to excessive cost escalation as those in the private sector. During the same period, greater affluence drove an increase in motorization that led to serious public transport market share losses.

As public transport systems became more expensive, governments began experimenting with service provision forms incorporating competition. The most notable early examples were in the United Kingdom. London Transport's bus system was competitively tendered over a 15 year period beginning in 1985, while public transport services were deregulated outside London. Competitive tendering occurred in a number of urban areas in Europe, Australia, the United States and elsewhere. However, deregulation remained largely a British phenomenon,' with governments generally preferring a greater policy role.

At the same time most public transport service is provided by private companies in Japan, Hong Kong and Korea. In addition, private operators provide most public transport service throughout many countries in South America and Africa.

COMPETITIVE TENDERING: BACKGROUND

Economists generally agree that monopoly --- the lack of competition --- results in higher costs than would be achieved if there were competition. Only in recent decades has it become clear that this applies to both private and government monopolies.

The cost escalation that has occurred in the United States is not unique. In other parts of the high-income world that rely or formerly relied upon public monopoly, unit costs have also escalated (Canada, Australia, New Zealand and Western Europe). As a result, reforms to implement competition, reduce costs and expand service have been undertaken in many nations.

One justification for establishing government public transport monopolies was to monopolies has been system integration. Policymakers felt that it was important for services and fares to be coordinated, so that ridership might be maximized and the benefits of public transport extended. Competitive tendering allows this policy control to continue, without the requirement for all services to be operated by the public transport authority itself.

- The public transport agency retains policy control of system and continues to make all policy decisions. The public transport agency determines route alignments, establishes timetables, sets fares and determines vehicle and safety standards.
- Service is provided by operators that are selected through a competitive process that uses requests for proposals. A contract is executed for a specific period of time --- usually five years or less, with a new competitive process beginning late in the contract period.. Individual procurements may be for single routes, packages of routes, geographical sectors or even entire public transport systems.
- The operators themselves may be private companies, or public operators selected through an objective evaluation process. Generally, contracts are awarded to the lowest cost operator demonstrating the financial and technical ability to provide the service.
- Fares remain the property of the public transport agency. Fares are remitted to the public transport agency, which pays the private operator the amount specified in the contract per hour or kilometer of service. As a result, it does not matter whether the competitively tendered routes are among the least or most productive in terms of fare recovery

Service quality is typically the same or higher than without competition. Moreover, ridership tends to rise, at least partially because the public transport agency is able to afford to provide higher levels of service with the savings.

The result is a public transport system provided competitively, at competitive costs and guaranteed by the public transport agency. Passengers are generally not aware of the difference between competitively tendered service and service operated directly by the public transport authority. Buses appear the same, whether operated by private companies or the public transport authority. Fares are the same, and transfers from one route to another are unchanged.

The cost reductions are generally of two types.

- **Direct Savings:** Direct savings are the difference between the non-competitive cost of operating a service and the market based cost established through competitive tendering. Direct savings occur from services that are produced at market rates. Direct savings from competitive tendering have been from 20 percent to 60 percent compared to the costs of the non-competitive services replaced.
- **“Ripple Effect” Savings:** The “ripple effect” or “competitive effect” produces savings as public transport agencies reduce the cost of their non-competitive services in response to competition.

The conversion to competitive tendering can be managed in various ways. The entire system can be converted over a short period of time, or more gradual approaches can be used. For example, bus services can be gradually competitively tendered within the rate of employee attrition (resignations and retirements), or more rapid conversions can be made, including virtually “overnight” conversion.

CANADA

Competitive tendering of urban public transport is more limited in Canada than in most high-income world nations. A number of public transport systems are competitively tendered in western provinces and in the Toronto area. There is also extensive competitive operation in the suburbs of Montreal. School bus transport, however, is overwhelmingly operated competitively -- private operations are estimated at approximately 80 percent. School bus operations are substantial, with daily ridership on school days estimated at approximately one-half the combined urban public transport (bus and rail) and school bus ridership.

EUROPE

The European Union is developing regulations for mandatory conversion of public transport systems to competitive tendering. This conversion process is expected to take many years, but bus and rail services are already being competitively tendered in France, Belgium, Finland, Poland, Germany, the United Kingdom and Italy.

London: Transport for London (formerly London Transport) manages the largest public transport bus system in the world, with more than 6,000 vehicles (service area population: 7 million). From 1970 to 1985, bus costs per vehicle kilometer had risen 79 percent.¹ In response, the British parliament enacted legislation that led to conversion of the entire bus system to competitive tendering. By 1999, the conversion had been virtually completed. The results are as follows: (Table #1):²

- Costs per vehicle kilometer were reduced 48 percent from 1985 to 2001 (inflation adjusted).
- Overall annual expenditures, capital and operating, dropped 26 percent.

¹ Unless otherwise noted, all financial data is inflation adjusted.

² All information from or calculated from London Transport Annual Reports.

- Despite the lower expenditures, the lower operating costs per kilometer permitted service to be expanded 26 percent.
- Productivity --- measured by the level of service produced per unit of currency rose 91 percent, or 4.1 percent annually.

Eventually, public assets (vehicles and operating bases) were sold to the private sector. But, before this sale, the public monopoly operator tended to improve its service quality on routes that it was awarded under competitive contracts.³ Through the years of competitive tendering, London Transport bus service has continued to be of high quality. Ridership has increase 30 percent since competitive tendering began, and is now at its highest point since the 1960s. If London Transport costs had continued at the rate prior to competitive tendering, the operated service levels would have required expenditure of C\$15 billion more over the past 16 years.⁴

Table #1 Competitive Tendering in London	
Period	1985-2001
Converted to Competition	100%
Total Expenditures	-26%
Change in Service Level	42%
Change in Unit Costs	-48%
Change in Productivity (Service/\$)	91%
Annual	4.1%

Copenhagen: The Danish parliament required conversion of bus services in Copenhagen to competitive tendering starting in 1989. The public transport system has approximately 1,200 buses, with annual ridership of approximately 260 million. Because of a concern that the public transport authority could not objectively evaluate proposals by private companies and its own internal operating department, the law banned government agency participation. Later, the public bus operating division was sold to the private sector, which raised the prohibition. The bus service conversion was completed in 1995.

- Costs per vehicle kilometer were reduced 24 percent from 1989 to 1999. Overall capital and operating expenses declined eight percent from 1990, while service was expanded 14 percent. Management estimated savings at approximately \$250 million through 1999. The productivity improvement has been 32.2 percent (Table #2).
- Ridership has risen nine percent after years of decline. Management attributes the higher ridership to expanded service levels from more cost efficient operations and high service quality.

³ During these early years, the public transport monopoly bus operator was found to be bidding in competitive procurements at below its actual costs. London Transport took actions to remove contracts wrongly awarded and to ensure that the operator no longer submitted below cost bids. When public operators bid below actual costs, the resulting deficit must be financed by taxpayers and some or all of the cost reduction is not actually achieved.

⁴ Calculated from London Transport data.

Table #2 Competitive Tendering in Copenhagen	
Period	1989-1999
Converted to Competition	100.0%
Total Expenditures	-13.5%
Change in Service Level	14.4%
Change in Unit Costs	-24.4%
Change in Productivity (Service/\$)	32.2%
Annual	2.8%

Stockholm: An act of the Swedish parliament led to conversion of virtually all public transport service (bus and rail) in Sweden. The Stockholm public transport system has 1,700 buses and 1,200 rail cars. During the 1990s, the conversion of all bus and rail service (subway, light rail and suburban rail) to competitive tendering was completed.

From 1991 to 1999, overall costs per vehicle kilometer were reduced 20 percent. Overall capital and operating expenses declined seven percent, while service was expanded 16 percent. If costs had continued to rise at the rate of inflation, an additional \$900 million would have been required. The productivity improvement has been 25.0 percent (Table #3).

Table #3 Competitive Tendering in Stockholm	
Period	1991-1999
Converted to Competition	100.0%
Total Expenditures	-7.1%
Change in Service Level	16.1%
Change in Unit Costs	-20.0%
Change in Productivity (Service/\$)	25.0%
Annual	2.8%

THE UNITED STATES

US public transport competitive tendering began with the demand-responsive systems established in the 1970s. These services were principally designed for senior citizens and the disabled. The quickest way to start these services was to seek competitive bids from the private sector. Today, approximately 70 percent of demand-responsive service is competitively tendered.⁵ Overall, approximately 10 percent of bus service is competitively tendered and 15 percent of suburban rail service. A principal barrier to expansion of competitive tendering has been a section of federal law requiring laid off employees to be compensated for up to six years at the full wage and benefit rate.

As in Canada, a considerable amount of service is provided by dedicated school bus operations that are under the control of education authorities. On school days, it is estimated that school bus services carry approximately 70 percent of the combined school bus and urban public transport (bus and rail) ridership.

⁵ All financial and service information in this section is from the US Department of Transportation Federal Transit Agency National Transit Database and the American Public Transportation Association unless otherwise noted.

The first large conversion of public transport bus service to competitive tendering occurred in San Diego in the early 1980s. It might be expected that in the United States, with the world's strongest market economy, competitive tendering would have spread rapidly, but surprisingly restrictive labor legislation made this virtually impossible. As a result, the greatest progress toward incorporating competition in public transport has occurred elsewhere, where general economic regulation tends to be greater.

San Diego: Between 1968 and 1979, new public transport subsidies had permitted to service to be substantially expanded, but costs had risen even more. After adjusting for inflation, costs per service hour rose 49 percent from 1968 to 1979.⁶ In response, San Diego began perhaps the world's first major bus competitive tendering program in 1980, five years before London Transport. By 2001, 44 percent of bus services were competitively tendered.

As of 2001, competitively tendered costs were 40 percent lower per kilometer than non-competitive costs.⁷ If costs had continued at the pre-competitive tendering 1979 rate (inflation adjusted), San Diego would have needed to spend at least C\$500 million more to produce the same amount of service through 2002.

But the greatest cost impact has been on the services still provided non-competitively. In the new competitive environment, The government owned San Diego Transit has been able to control its operating costs much more successfully. "Ripple effect" savings, the impact of competition on the costs of internally produced service, have reduced San Diego Transit's costs 16 percent (inflation adjusted) since 1979.⁸ By contrast, over the same period, US public transport operating costs per kilometer rose four percent. The following results were achieved from 1979 to 2001 (Table #4):

- Overall costs per kilometer were reduced 30 percent (inflation adjusted).
- Overall annual operating expenditures increased 20 percent.
- Service was expanded substantially more, 72 percent.
- Productivity rose 43 percent, or 1.6 percent annually.

Bus ridership has risen 50 percent. This is a considerable increase, in view of the fact that three light rail lines opened during the period, and replaced some of the most productive bus services in the area.

Table #4 Competitive Tendering in San Diego		
Period	1968-1979	1979-2001
Converted to Competition	0%	44%

⁶ 1968 is the oldest data reported by regional sources.

⁷ Calculated from San Diego Metropolitan Transit Development Board data.

⁸ Before all services were competitively tendered in London, the ripple effect was noted on costs there as well.

Expenditures	183%	20%
Service Level	90%	72%
Unit Costs	49%	-30%
Productivity (Service/\$)	-33%	43%
Annual Change	-3.5%	1.6%

Denver: In 1988, the Colorado legislature enacted what remains as the only mandatory competitive tendering law in the United States.⁹ Denver's Regional Transportation District (RTD) was compelled to competitively contract 20 percent of its bus service within an 18-month period. The success of the program led to an expansion of the legislative mandate to 35 percent in 1999 and 50 percent in 2003.¹⁰

As of 2002, competitively tendered bus costs were 48 percent lower than non-competitive costs. If costs had continued at the pre-competitive tendering rate (inflation adjusted), Denver would have needed to spend \$550 million more to produce the same amount of service through 2002.

As in San Diego, ripple effect savings have occurred as the cost of internal service production has declined in the competitive environment. Internal costs per hour have declined 30 percent from 1988 to 2002, after having risen 22 percent from 1978 to 1988.

Competitive tendering has been associated with a substantial improvement in RTD's overall productivity (Table #5).

- Before competitive tendering (1978¹¹ to 1988), RTD's operating expenditures rose 16 percent, while its service levels was reduced 13 percent. Costs per service hour increased 33 percent, and overall productivity (service per dollar) declined 2.8 percent annually.
- From 1988 (the last year before competitive tendering) to 2002, RTD operating expenditures rose 32 percent, while service levels were increased 90 percent. Costs per service hour declined 30 percent and there has been a 2.6 percent annual increase in productivity. RTD has recovered virtually all of the productivity losses of the pre-competitive tendering period.

Period	1978-1988	1988-2002
Converted to Competition	0%	38%
Expenditures	16%	32%
Service Level	-13%	90%
Unit Costs	33%	-30%

⁹ The 1988 act was drafted by the author for the sponsors, State Senator Terry Considine and State Representative Bill Owens (now governor of Colorado).

¹⁰ The new mandate includes demand-responsive services. The previous 35 percent mandate included only buses.

¹¹ First year of the National Transit Database reporting system.

Productivity (Service/\$)	-25%	44%
Annual Change	-2.8%	2.6%

Las Vegas: Las Vegas is the only major US metropolitan area in which all service is competitively tendered. This was possible because as late as the early 1990s, there had been no publicly subsidized system in Las Vegas.

Ridership has grown at a rate unprecedented virtually anywhere else in the high-income world. The former private operator served 10 million trips in its final year of operation. Today, the public transport system carries approximately 50 million passengers per year. From 1990 to 2000, the US Census indicated that Las Vegas had experienced by far the greatest increase in public transport work trip market share, at 100 percent.¹² This was a particularly significant development, since Las Vegas was also the fastest growing major metropolitan area in the nation. Costs have remained comparatively low. In 2001, operating costs per vehicle hour were the lowest among the 36 public transport authorities operating more than 1,000,000 vehicle hours, and 41 percent below the average.

Los Angeles: Los Angeles began competitively tendering services in the middle 1980s. By 2001, more than 900 buses were operating under competitive contracts, nearly 25 percent of service. Competitive tendering operating costs per vehicle hour in 2001 were approximately 45 percent below the rate for services produced in-house.

Seattle: For more than 15 years, suburban Snohomish County has competitively tendered an express bus network that principally feeds downtown Seattle and the University of Washington from the northern suburbs. This service had previously been provided by the Seattle agency under a negotiated (non-competitive) contract. Nearly 100 buses are operated, at costs 41 percent below that of the suburban agency's in house service and 38 percent below the cost of the Seattle public transport agency.

Boston: Approximately 15 percent of commuter rail (suburban rail) service is competitively tendered. By far the largest competitively tendered system is in Boston, which has a system similar in size to that of GO Transit in Toronto. The Boston system is operated by Connex and is the third largest suburban rail system in the United States, after New York and Chicago.

Private, Unsubsidized Service: New Jersey private express companies provide service to New York without operating subsidy and would rank as the nation's 8th largest public transport system if it were separate.¹³

OUTSIDE EUROPE AND NORTH AMERICA

Australia and New Zealand: The bus systems have been competitively tendered in Adelaide and Perth, Australia, while both the bus and rail systems in Melbourne have been competitively tendered. New Zealand implemented a national conversion to competitive tendering in 1991.

¹² Public transport's share is still small, however, at 4.0 percent. Second ranked Sacramento gained 13 percent. Public transport's share declined in 40 of the 49 metropolitan areas over 1,000,000 population.

¹³ www.publicpurpose.com/ut-nj2001.htm

Though billed as a deregulation, most services are competitively tendered. The impetus for each of these conversions has come from national or state parliaments and savings have been achieved.

Other Areas: Elsewhere in the high-income world there is considerable public transport operation by the private sector. The high ridership levels generally make public subsidies unnecessary. Virtually all suburban rail service in Japan is privately operated, and the private railroads also provide a majority of the bus service in Tokyo-Yokohama and Osaka-Kobe-Kyoto. In the Tokyo area alone, 80 percent of the service is privately operated. Even the government owned systems receive little or no capital or operating subsidy. Annual ridership on private systems in Tokyo alone exceeds the total US public transport ridership. The private elements of the Osaka system carry more than three times the ridership of all Canadian systems combined. Virtually all bus service in Hong Kong and Hong Kong is privately provided.

The situation is similar in the middle and low-income world. Private bus operators predominate in Seoul and many metropolitan areas of both Asia and Africa. Manila's principal surface public transport system is privately operated "Jeepneys," shared ride vehicles descended from military vehicles. Throughout South Africa, private shared-ride taxis provide much of the public transport service, with large systems also provided by private bus operators.

Throughout South America, most public transport bus service is privately operated, including the well-known rapid bus systems of Bogota, Porto Alegre, Sao Paulo and Curitiba. In these locations, the rapid bus systems carry volumes rivaling ridership on many of the world's metros. A new private rapid bus system has now been opened in Leon, Mexico. There are also substantial private minibuses, vans and shared-ride taxi services throughout Mexico, the Caribbean, Central America and South America. Private shared-ride and van services tend to predominate throughout Africa.

CONCLUSION

While private operation of public transport services is somewhat limited in Canada, it is expanding rapidly in much of the high-income world, through competitive tendering. In addition, unsubsidized private operation is dominant in many metropolitan areas of the high-income, middle-income and low-income worlds.