

*White Paper*

CENTER FOR RESTRUCTURING GOVERNMENT

---

February 1998  
No. 4

## MISSING THE BUS:

### The Fight to Contract Competitively for MBTA Bus Service

ROBERT M. MELIA



PIONEER INSTITUTE  
FOR PUBLIC POLICY RESEARCH

***Missing the Bus:  
The Fight to Contract Competitively for MBTA Bus Service***

Robert M. Melia

Pioneer Institute for Public Policy Research  
Boston, Massachusetts

### **Acknowledgments**

The author wishes to thank Shawni Littlehale for tracking down much of the data needed to complete this paper. Also, Cornelius Chapman, Peter Nessen, and John O'Leary read a draft version and provided many helpful comments.

## **Executive Summary**

Public transit agencies across the nation are struggling to control costs without reducing service. One effective strategy used by a growing number of public transit agencies is to contract competitively for bus operations. Almost without exception, these agencies report that private bus companies can deliver equal or better service at a 20 to 30 percent lower cost.

The Massachusetts Bay Transportation Authority (MBTA) wants to use the same strategy and has accepted two bids to run 40 percent of its bus operations. The MBTA's cost analysis shows that it will save \$23.1 million over five years. However, a 1993 anti-privatization law (commonly called the Pacheco Law) sets up a series of tests that an agency must pass before it can award a contract to a private company. Among the law's more significant provisions are the following:

- Contractors must pay wages not lower than the lesser of the minimum wage rate that had been paid to state employees or the average private sector wage rate for comparable positions, provided that such a rate has been established by the Executive Office for Administration and Finance.
- The private bid must be compared not to the existing cost of providing the service but to the cost that would result if public employees were working in the most cost-effective manner.
- The contracting agency must demonstrate that the quality of service likely to be provided by the private contractor will equal or exceed not the existing quality of service but the quality that "could be" provided by public employees.

The law gives the State Auditor the authority to decide whether these and other provisions of the Pacheco Law have been met. The law also allows the Auditor to issue guidelines directing how state agencies must apply the law.

The Auditor has rejected the MBTA's proposed contracts, claiming that they "will not result in a cost savings" and that the MBTA "does not know whether the proposed contractors can meet acceptable quality service levels." The MBTA has sued, claiming that the Auditor has applied the law in an "arbitrary and capricious" manner and that the law itself is unconstitutional.

In preventing the MBTA from privately contracting for bus service, the Auditor has not developed his own comparison of the MBTA's in-house cost with the cost of the private bids, nor has he provided any evidence that the service to be provided by the contractors is likely to be

inferior to the current level of service. While the Auditor has identified several mistakes in the MBTA's cost analysis, these mistakes are relatively small and do not justify denying the contract. In fact, even giving the Auditor the benefit of the doubt on certain of his objections, the larger of the two contracts (which this paper analyzes in detail) will still save a minimum of \$5.2 million over current costs.

This dispute between the Auditor and the MBTA reveals several important weaknesses in the Pacheco Law. On the surface, the law seems to call for an objective cost analysis. In fact, the law allows the Auditor to deny a contract based on highly subjective judgments.

As it stands, the Pacheco Law will prevent all but the most determined agency managers from even attempting to contract competitively for services. (In the three years before the law was enacted, there were 36 contracts awarded to private companies to provide a service formerly provided by state employees. Since the law was enacted, five contracts have been awarded, none of them significant in terms of dollars or staff. As competitive contracting usually provides significant productivity increases and cost savings, the public interest would be best served by amending the Pacheco law to eliminate its most undesirable and arbitrary features:

- The scope of the review needs to be narrowed to cost. It is difficult to predict quality in advance, and allowing the Auditor to speculate as to the level of quality the contractor is likely to provide serves no useful public purpose, especially as the Auditor lacks expertise in the service being contracted.
- The private contract must be compared to existing in-house costs, not the cost that "could be" achieved if the state agency worked in the most efficient manner possible.
- Estimates of future variables such as wage increases and interest rates should be established using the same assumptions the state uses to forecast tax collections. This will remove the opportunity for either the Auditor or the contracting agency to determine the outcome of the review by manipulating important underlying assumptions.
- The Auditor's back-end review should be limited to pointing out clear mistakes on the part of the contracting agency. The Auditor should not be allowed to raise generic doubts about an agency's accounting system or cost allocation methodology. (These issues should be worked out by the contracting agency and the Auditor before an agency solicits bids, to prevent either side from choosing a methodology according to whether it will help "prove" that the contract will or will not save money.)

- The Auditor must come to a firm conclusion. If he finds mistakes, he must quantify them, factor them into the analysis, and state what he believes the in-house cost is and what he thinks the contract cost is.

Bus transportation is a vital public service. The MBTA has recently announced a cost-neutral plan to maximize bus ridership by reducing service on certain bus routes in order to increase service on other, more heavily used routes. Many other transit agencies have discovered that privately contracting for bus service allows them to actually run more buses and still cut costs. Unfortunately, the Pacheco Law will prevent this from happening in Massachusetts.

*Missing the Bus:*  
*The Fight to Contract Competitively for MBTA Bus Service*

Robert M. Melia

**I. INTRODUCTION**

Public transit ridership in Boston has increased steadily since 1975, and the transit system has been both extended and modernized. In recent years, maintaining or increasing the level of transit has become more important, both to mitigate the impact of the Central Artery construction project and to help spur the development of the South Boston waterfront. The Massachusetts Bay Transportation Authority (MBTA) has recently extended commuter rail service to the South Shore and plans to extend service to Worcester.

But there is a problem—the MBTA has long been one of the costliest transportation agencies in the nation. The Federal Transit Agency (FTA) reports it costs the MBTA \$95 to run a bus for one hour. The median cost for the 25 largest U.S. transit agencies is \$72 per hour, making the MBTA 32 percent more expensive than average.<sup>1</sup>

The MBTA has also opted to maximize ridership by keeping fares low and extending service. At 85 cents for the subway and 60 cents for a local bus ride, the MBTA's fares are among the lowest in the nation and are 30 percent lower (in real terms) than they were in 1965. Keeping fares low is a time-tested way to maintain ridership. As affluence increases, so does suburbanization and the rate of automobile ownership. Without the offsetting impact of cheaper fares and better service, one study concludes that MBTA ridership would have decreased at least

---

<sup>1</sup> "Bus Service Delivery System. Final report to the Massachusetts Bay Transportation Authority," Comsis. Prepared in association with Howard Stein/Hudson Associates and John T. Doolittle Associates, Inc., 1993.

10 percent between 1970 and 1990.<sup>2</sup> Today, revenues cover just over one-third of the agency's annual operating costs. When capital costs are included, the fare recovery ratio sinks to just 22 percent.

In 1965, the MBTA's first full year of operation, its deficit (the difference between revenues and the annual operating and debt service costs) was \$20.8 million. By 1991, the deficit totaled \$575 million. In fiscal year 1998, the deficit will approach \$675 million.<sup>3</sup> One transit analyst estimates that the deficit will grow to \$1.62 billion by the year 2010, assuming the MBTA continues to follow the same fare and service policies.<sup>4</sup> That would require a subsidy of more than \$4,500 per commuter per year.<sup>5</sup>

The deficit cannot continue to grow faster than inflation (or tax revenue) forever, and there are four basic strategies to reduce its growth rate: cut service, raise fares, drastically reduce automobile usage, and cut the unit costs of running trains and buses.

Cutting service is extremely difficult to do. When faced with periodic budget squeezes, MBTA management inevitably floats the idea of cutting the least-used bus routes. But it is easier to close a military base than to cut a route where the bus is always nearly empty, because each bus route has a very vocal constituency.

Raising fares is also unlikely to help contain the deficit. The MBTA is required to conduct an environmental impact study before it can implement a fare increase, and to forego or reduce the fare increase if the study shows that there will be a significant loss of ridership.<sup>6</sup> Because ridership decreases about 1 percent for every 4 or 5 percent increase in fares, any fare increase large enough to have substantial impact on the deficit would almost certainly trigger a significant ridership reduction.

Several European and Asian cities are using advanced technology (smart cards, electronic tolls, etc.) to charge drivers a premium for entering the central city during rush hour. These experiments have shown that if the marginal cost of driving during rush hour is high

---

<sup>2</sup> Jose A. Gomez-Ibanez, "Big City Transit Ridership, Deficits and Politics: Avoiding Reality in Boston," Taubman Center for State and Local Government, Kennedy School of Government, Harvard University, 1994, p. 12.

<sup>3</sup> The 1965 and 1991 figures are from Gomez-Ibanez, p. 2.

<sup>4</sup> *Ibid.*, Table 7: Transit Projection for 2010 under Different Scenarios.

<sup>5</sup> In 1990, MBTA ridership was 660,000 linked trips. Assuming that most riders make two trips per day, this yields an estimate of 330,000 riders. Using the same assumptions to project the 2010 deficit at \$1.62 billion, Gomez-Ibanez estimates that ridership will grow 8 percent between 1990 and 2010, producing an estimate of 356,000 riders. If both his deficit and ridership numbers prove accurate, the annual subsidy per rider will come to \$4,550.

<sup>6</sup> Gomez-Ibanez, p. 8.



enough, automobile usage can drop 20 percent or more. With such policies in place, transit agencies can raise fares without fear of losing riders. But given recent efforts to reduce or eliminate tolls on the Massachusetts Turnpike, such a policy is unlikely to be adopted in Massachusetts anytime soon.

Fortunately, the evidence suggests that controlling unit costs can help curb the deficit. If the MBTA can become more efficient, it might be able to reduce its costs without cutting service or raising fares. Over the past 15 years, a number of European and American cities have achieved significant cost savings by contracting privately for bus service. The MBTA is now attempting to do the same, and in December 1996, it received bids to run about 40 percent of its bus service. According to the MBTA, the two selected bids would save the agency about \$23.5 million over the five-year term of the contracts.<sup>7</sup>

But under Massachusetts General Laws Chapter 7, Sections 52-55 (the so-called *Pacheco law*, after its primary sponsor, Senator Marc Pacheco), the MBTA must determine its in-house cost of performing the bus service and may award the contracts only if a private company can provide equal service for less money or better service for the same or less money. The State Auditor must then review the MBTA's analysis and either verify that the terms of the law have been met, or point out where the MBTA has not complied with the law.

This appears to be a fairly straightforward process. To determine the cost of providing the bus service in question, the MBTA would identify all of its direct costs (wages and fringe benefits for bus drivers and mechanics, diesel fuel, tires, uniforms, etc.), allocate a reasonable portion of indirect costs (management costs, and support costs such as payroll, human resources, etc), and then compare this total to the outside bids. But in the 12 months since bids were received, the following events have taken place: The Auditor has accused the MBTA of deliberately withholding and distorting information, thereby making it impossible for the Auditor to conduct a comprehensive and accurate review, and the MBTA General Manager has accused the Auditor of willfully ignoring his explanations. The two sides have disagreed over virtually every aspect of the cost analysis, with the MBTA claiming that the two contracts<sup>8</sup> in question would

---

<sup>7</sup> "Contracting for the Operation and Maintenance of Fixed-Route Bus Service. Charlestown/Fellsway Bundle," Vol. 1, MBTA, May 23, 1997, p. F-19. Hereinafter called the MBTA's "May Submission."

<sup>8</sup> The two contracts are very similar, and the Auditor's objections to each contract are almost identical. This paper will focus on a single proposed contract, for bus service originating from the Charlestown/Fellsway garage, by far the larger of the two contracts.

save at least \$16 million even if every one of the Auditor's criticisms were correct, while the Auditor has determined that "contracting out this service will not result in a cost savings."<sup>9</sup>

The Auditor has ruled that the contract is not in the public interest and has prevented the MBTA from awarding the contract, and the MBTA has sued, claiming the Auditor's review was "arbitrary and capricious."<sup>10</sup>

This dispute is significant not only because millions of taxpayer dollars and hundreds of union jobs are at stake, but because it is seen as a test case. If the court upholds the Auditor's decision, new competitive contracting by state government is essentially dead in Massachusetts. If the court overturns the Auditor's decision, and particularly if the court finds the law to be unconstitutional, then competitive contracting may expand rapidly and is likely to play a central role in the MBTA's efforts to maximize ridership without imposing an intolerable deficit on the taxpayers. The purpose of this paper is to determine whether the Pacheco law establishes an objective framework for deciding whether competitive contracting represents better value. The paper examines the role of the Auditor in this process and analyzes the MBTA's responses to the Auditor's objections. The paper concludes with recommendations for improving the process by which competitive contracting proposals are evaluated.

## **II: BACKGROUND**

To understand how this conflict has arisen, we need to examine three issues: the MBTA's history of cost control efforts, the experience of other transit agencies with privately contracted bus service, and the politics surrounding private contracting in Massachusetts.

### **A. The MBTA's Cost Control Efforts**

The MBTA's costs spiraled out of control during the 1970s. Jose A. Gomez-Ibanez, a transportation analyst at Harvard University, found that "real unit operating costs increased rapidly in the 1970s, accounting for 31.1 percent of the deficit growth in that decade."<sup>11</sup> Because the MBTA's costs grew faster than inflation, Gomez-Ibanez determined that in 1980, the MBTA's operating costs were \$29.2 million higher than they would have been had there been no growth

---

<sup>9</sup> A. Joseph DeNucci, Auditor of the Commonwealth, letter to Patrick J. Moynihan, General Manager, MBTA, June 20, 1997, p. 2. Hereinafter called the "June Objection Letter."

<sup>10</sup> Civil Action No. 97-2547, MBTA v. Auditor of the Commonwealth, First Amended Complaint, June 23, 1997, p. 14.

<sup>11</sup> Gomez-Ibanez, p. 15.

in real unit operating costs. With a total operating budget of less than \$275 million, this decline in productivity consumed more than 10 percent of the MBTA's 1980 operating budget.

Soon, the MBTA plunged into a fiscal crisis. The 78 cities and towns served by the MBTA demanded relief. Fares were doubled (but then partially rolled back), and the annual increase in the contribution that any city or town had to make toward the MBTA's deficit was capped at 2.5 percent, with the state paying the excess. To control costs, the legislature enacted the Management Rights Act of 1981. This law gave MBTA managers significantly stronger cost control tools, including ending automatic cost-of-living adjustments, eliminating pensions on overtime, the right to use part-time employees, and the option to contract privately for services that had traditionally been performed by MBTA employees. Six years after the legislation, the MBTA estimated cumulative savings at \$118 million.<sup>12</sup>

The Gomez-Ibanez analysis confirms that determined efforts to control costs can make a difference. His study found that real unit operating costs declined in the 1980s, in large part because of the use of the Management Rights Act. While the total deficit grew during the 1980s because of inflation, fare erosion, and a major capital improvements program, Gomez-Ibanez estimates that by 1990, the MBTA's cost control efforts were saving \$49.5 million per year.<sup>13</sup>

## **B. Privately Contracted Bus Service**

The private bus industry in the United States operates more than 120,000 vehicles<sup>14</sup> and is beginning to run a significant number of buses under contract to public transit agencies. In the mid-1980s, only 1 to 2 percent of public transit bus routes were privately contracted, but by 1997, 10 percent of all routes were run by private contractors.<sup>15</sup>

In the United States, San Diego pioneered competitive contracting in 1979. Denver and Los Angeles have been using private contractors for about a decade. More recently, Indianapolis and Las Vegas have moved to contract competitively for most of their bus service, with Las Vegas becoming the first transit agency to contract competitively for all of its bus service. Competitive contracting is also becoming common in Europe, with London being the first major city to rely on it extensively.

---

<sup>12</sup> Fiscal Year 1989 Budget Book, MBTA, p. 4-12.

<sup>13</sup> Gomez-Ibanez, Table 5: Components of the MBTA's Deficit Increase, 1970-1990.

<sup>14</sup> Jean Love and Wendell Cox, "Competitive Contracting of Transit Services," Texas Public Policy Foundation and Reason Foundation, 1993, p. 3.

In virtually every case, the use of competitive contracting allowed transit agencies to both reduce their unit costs and increase the level of bus service, as table 1 shows.

**Table 1. Results of Contracting Competitively for Bus Service**

<b>Metropolitan Area</b>	<b>Percent of Bus Service under Private Contract</b>	<b>Inflation-Adjusted Percent Savings</b>	<b>Percent Increase in Service</b>
San Diego	37	30	46
Las Vegas	100	33	243
Indianapolis	70	26	38
Denver	25	18	25
London	57	46	28
Copenhagen	56	22	5
Stockholm	59	20	3

Source: Wendell Cox, "Competitive Contracting in Public Transit: A Review of the Experience," Supplemental Report to the Legislative Transportation Committee, State of Washington, prepared by Cox, Hornung, Lahn, Mundle, and Prestrud, February 1996, pp. 7-13.

Public transit managers have been very careful to set quantitative performance measures for private contractors. The most common measures include percentage of scheduled trips run and mean miles between breakdowns. Most public transit agencies also require private contractors to meet additional quality standards related to cleanliness, safety, and passenger satisfaction. Follow-up studies in London, Denver, and Los Angeles have all concluded that the quality of service is equal or better after private contracting.<sup>16</sup>

After 18 years of experience with competitive contracting, the verdict is clear. Public agencies that contract competitively for bus service can expect to save 20 to 30 percent and maintain comparable quality. Most cities that have tried competitive contracting are pleased with the results and intend to expand its use. The Los Angeles official in charge of contracting for bus service has remarked, "For larger transit agencies, there is no one program or project that has the potential to decrease costs and improve service quality more than competitive contracting....From a cost savings perspective, I have seen enough bids and been involved in enough

<sup>15</sup> Wendell Cox, "Competitive Contracting in Public Transit: A Review of the Experience," Supplemental Report to the Legislative Transportation Committee, State of Washington, prepared by Cox, Hornung, Lahn, Mundle, and Prestrud, February 1996, p. 3.

<sup>16</sup> Wendell Cox and Nick Newton, "Competitive Contracting: The International Revolution and Implications for New York," paper presented at a New York City conference, "Getting from Here to There: A Transportation Plan for New York in the 21st Century," June 18, 1996, p. 15.

projects to know that [one] could open a private sector bus operating company tomorrow and save large transit agencies at least 25 percent."<sup>17</sup>

### **C. The Politics of Private Contracting in Massachusetts**

The very thing that makes private contracting attractive to transit agencies—cost savings of 20 percent or more—also makes private contracting controversial, because those savings ultimately come at the expense of labor. The two main ways that private companies reduce costs are through productivity improvements and reducing wages and benefits. Productivity improvements result in fewer transit jobs being necessary to provide the same level of service. Over the years, public transit agencies have entered into collective bargaining agreements containing restrictive work rules. These rules frequently limit the use of part-time employees (particularly important in bus operations, which require lots of drivers during rush hour, but many fewer drivers during mid-day) and restrict the types of maintenance work that particular classes of employees are allowed to perform. Public transit agencies also provide generous numbers of sick days, requiring a large "coverage ratio" (extra drivers available if an unexpectedly high number call in sick).

Administrative inefficiencies and extra layers of management also tend to build up over time. In a study of private contracting worldwide, Gomez-Ibanez concludes that "without the spurs of privatization and competition," public transit agencies decline into "slovenly lethargy."<sup>18</sup>

Private bus companies also typically pay lower wages and provide less generous fringe benefits than do public transit authorities. The cuts in fringe benefits are often particularly deep, because fringe benefit rates among public transit agencies are quite high (the MBTA uses a fringe benefit rate of 39.4 percent).<sup>19</sup> A bus driver at the top of the seniority scale at the MBTA earns a base salary of \$40,290. With fringe benefits, the total cost to the MBTA is \$57,445 per year. By contrast, a bus driver at the top of the seniority scale at Plymouth and Brockton, a local private bus company, earns \$26,520 per year, or 34 percent less than his MBTA counterpart. When fringe benefits are included, the total cost to Plymouth and Brockton is \$34,476. That is

---

<sup>17</sup> James McLaughlin, Deputy Executive Officer, Bus System Improvement Planning, Los Angeles County Metropolitan Transportation Authority, paper presented at a New York City conference, "Getting From Here to There: A Transportation Plan for New York in the 21st Century," June 18, 1996, p. 1.

<sup>18</sup> Jose A. Gomez-Ibanez and John R. Meyer, "The Political Economy of Transport Privatization: Successes, Failures and Lessons from Developed and Developing Countries," Final Report Prepared for the U.S. Department of Transportation under the University Transportation Center, Region One, 1992, p. 4-3

<sup>19</sup> MBTA May Submission, p. D-14.

\$22,969 or 40 percent less than the MBTA's costs for a similar position.<sup>20</sup> Because of this significant disparity in wages and benefits, attempts to contract privately for bus service have ignited a fierce battle between management and labor in Massachusetts.

When he was first elected, Governor William Weld vowed to use private contracting as a way to control costs. In 1993, however, the legislature passed the Pacheco law, designed to inhibit the use of private contracting. The law has the following major provisions:

- The purchasing agency must establish quantitative performance measures that the contractor must meet in the areas of quality, timeliness, and effectiveness.
- Contractors must pay wages "not less than the minimum wage rate that had been paid... (to) "regular agency employees."<sup>21</sup>
- Displaced public employees must (assuming they are qualified) be offered jobs with the private contractor.
- The private contractor must offer equal quality at a lower cost or better quality at an equal or lower cost.
- The private contractor's bid must be compared not to the current in-house cost but to the cost of public employees working in the most cost-effective manner possible.
- All contracts must be approved by the Auditor before they can be awarded.

The law provides the Auditor with considerable discretion in applying its provisions, including the ability to issue regulations mandating how to develop cost estimates. Moreover, by requiring the State Auditor to approve contracts, the law sets up an adversarial process. By the time an agency has prepared an RFP (Request for Proposals), reviewed proposals, and selected a private company to manage part of its operations, it has decided, correctly or incorrectly, that a particular service should be delivered via private contracting rather than directly by state employees. The requirement that another arm of government, which does not have any expertise in the service being provided, second-guess the contract sets the stage for conflict.

### **III: THE CONFLICT**

In 1995 the MBTA announced that it intended to become a "virtual transportation agency." The MBTA would continue to control key public policy decisions (such as level of

---

<sup>20</sup> *Quincy Patriot Ledger*, June 1, 1996, p. 28.

<sup>21</sup> Contractors have the option to pay the "average private sector wage for comparable positions," provided that such a rate has been established by the Executive Office for Administration and Finance. Presumably

service, fare levels, bus route planning, capital improvements), but daily operations would be contracted privately, shrinking the number of MBTA employees from nearly 6,500 to just a few hundred.

This attempt to contract privately for bus operations is the MBTA's first major step toward becoming a virtual transportation agency. To comply with the Pacheco law the MBTA has taken the following steps:

- 1) In July 1996, the MBTA submitted a management study of its in-house operations to the Auditor. The management study described the MBTA's bus operations, outlined in-house cost savings initiatives, discussed internal constraints to reducing costs further, and compared the MBTA's costs to those of other transit agencies.
- 2) In August 1996, the MBTA issued an RFP inviting private companies to bid on all or part of its bus operations. The RFP allowed companies to bid on one or more "bundles" of bus service, with a bundle usually consisting of an MBTA bus garage and all the routes run out of that garage. For bidding purposes, the MBTA organized its entire bus operations into five bundles.
- 3) On December 31, 1996, the MBTA received bids on two of the five bundles, Charlestown/Fellsway and Quincy.
- 4) On January 2, 1997 (the next working day, as required by law), the MBTA submitted to the Auditor its estimate of the in-house cost of providing bus service for these two bundles.
- 5) On April 18, 1997, the MBTA submitted the proposed contracts to the State Auditor. The MBTA also submitted a revised in-house cost analysis (the April Submission), to reflect the fact that bids were received on only two of the five bundles.
- 6) On May 16, 1997, the State Auditor issued a letter (the May Objection Letter) denying the proposed contracts and detailing his reasons for the denial.
- 7) On May 23, 1997, the MBTA resubmitted the proposed contracts along with a revised in-house cost analysis (the May Submission). The revised analysis incorporated certain of the State Auditor's findings and provided increased detail on why other findings were, in the opinion of the MBTA, incorrect or invalid.
- 8) On June 20, 1997, the State Auditor issued a letter (the June Objection Letter) finding that the proposed contracts would not save money and again denied the contracts.

---

the Auditor must agree that the positions are in fact comparable. Guidelines for Implementing the Commonwealth's Privatization Law, Office of the State Auditor, March 1994, p. 5.

9) On June 23, 1997, the MBTA filed suit in Massachusetts Superior Court, asking the Court to find that the Auditor's review violated the law and that the Pacheco law itself is unconstitutional.

The exchange of letters between the State Auditor and the MBTA General Manager during this time indicates that both sides perceived the analysis not as a dry accounting exercise but as a high stakes political battle. Each side accused the other of withholding and distorting information. As the following excerpts show, the letters drip with contempt and sarcasm and are indicative of a climate in which objective analysis is impossible and fact-finding takes a back seat to name-calling:

[The MBTA's proposals] "were so deficient as to preclude this office from conducting a full review....Although an agency's submission might not be free of error, be complete, or be reasonable, these deficiencies should not dominate each aspect of the submission."

A. Joseph DeNucci, State Auditor, May 16, 1997

"Even if we were to assume that every issue raised by your staff during its review was valid (notwithstanding the absurdity of such an assumption), the MBTA's proposed contracts would have still saved a minimum of \$16,000,000."

Patrick Moynihan, MBTA General Manager, May 19, 1997

#### **IV: ANALYSIS**

The two sides agree that the winning contractor for the Charlestown/Fellsway bundle, the larger of the two proposed contracts, submitted a bid of \$243.4 million. They disagree on the MBTA's own cost to run the system and the transition costs of outsourcing this operation. Between January and May, the MBTA submitted three different internal costs estimates.<sup>22</sup> The second internal estimate corrected some mistakes the MBTA made in its first estimate and reflected the fact that the MBTA did not receive bids for 100 percent of its bus operations, thereby requiring the MBTA to maintain more of its management and overhead structure. The third submission corrects some mistakes the Auditor found and defends certain cost estimates that the Auditor alleges are incorrect but which the MBTA insists are accurate.

---

<sup>22</sup> The law requires the contracting agency to submit two separate estimates. The estimate of in-house costs is due the day after bids are received. If the contracting agency decides to award a contract, it must next submit the proposed contract, along with a comparison of the in-house cost to the contract cost. The MBTA submitted its in-house cost analysis in January (hereinafter the "January Submission") and the cost comparison in April (hereinafter the "April Submission"). In May, the MBTA submitted a revised cost comparison (the May Submission) in an attempt to satisfy the Auditor's objections.



Before reviewing the specific charges and counter-charges regarding the cost of operating the Charlestown/Fellsway bundle, table 2 below outlines the scope of the services to be contracted—about one-third of the MBTA’s entire bus operations.

---

**Table 2: Dimensions of the Charlestown/Fellsway Operation**

Indicator	Charlestown/Fellsway	Percent of MBTA Total
Bus routes	80	33
Peak bus requirement	241	32
Employees	527	26
Revenue Hours	650,400	31
Revenue Miles	7,077,976	32

Source: MBTA May Submission, pp. B-2, B-3.

The MBTA claims its avoidable cost (cost that can be avoided by privately contracting) for running this bundle itself is either \$262.7 million (January), \$261.2 million (April), or \$261.0 million (May). The MBTA’s estimates of transition costs range between a net gain of \$1.9 million (April) and a net loss of \$0.6 million (May). The MBTA also estimates that it needs to spend \$2.3 million to monitor the contractor over the five-year life of the contract. Taken together, the MBTA claims total five-year savings ranging from \$17.5 million (April) to \$14.8 million (May). The MBTA’s own analysis, then, projects savings of just 5 percent, far less than what other transit agencies report. The major reason for this is that the contractor proposed to match the wages of MBTA employees, most likely to ensure that the contract met the terms of the Pacheco law.

In ruling that the MBTA cannot award this contract, the Auditor makes the following claims:

- The MBTA has made several mistakes in its in-house cost analysis with regard to operating and transition costs.
- The MBTA has improperly excluded certain costs from the contractor’s bid.
- The MBTA made unreasonable assumptions regarding the number of layoffs that will result, and the associated unemployment compensation, retirement, and vacation buy-out costs.
- The MBTA’s accounting system is so deficient that the Auditor’s office had insufficient information to make a comprehensive review.
- The MBTA did not adequately establish that quality of service would be equal or better.

Finally, the Auditor raises a number of other issues, including contractor compliance with environmental laws, the lack of a contingency plan for work stoppages, the value of union concessions, and procurement irregularities.

## A. Operating and Transition Cost Errors

In examining the MBTA's documentation of its internal costs, the Auditor notes the following errors:

<b>Error</b>	<b>Amount</b>
Double counting fuel tax savings	\$2,520,973
Incorrectly projecting annual increases in fuel taxes	130,242
Erroneous building and maintenance charges	263,595
Incorrectly assuming rental savings	75,608
Incorrect wage inflation rate for executives	168,202
Total	\$3,158,620

Source: A. Joseph DeNucci, Auditor of the Commonwealth, letter to Patrick J. Moynihan, General Manager, MBTA, May 16, 1997 (the May Objection Letter). As the Auditor does not specify the amount for annual increases in fuel taxes, rental savings, and wage inflation, I have calculated these amounts from information contained in the MBTA April and May submissions.

The MBTA acknowledges these mistakes (except for the executive wage inflation, which the MBTA disputes but agreed to change), but notes that even after correcting these errors, the contract would still produce significant savings.

## B. Mistaken Contract Costs

The Auditor also alleged that the MBTA incorrectly excluded two potential contract costs: incentives for improved service and liquidated damages should the MBTA terminate the contract early.

The proposed contract allows the contractor to earn incentive payments for superior service, which would include running at least 99.75 percent of all scheduled bus trips. The Auditor notes that the MBTA has already achieved this percentage of trip completion, allowing the contractor to earn an incentive for simply matching the existing level of service. The Auditor concludes that such incentives should be included in the base price of the contract and he is probably correct. While the MBTA does not routinely achieve 99.75 percent trip completion, the fact that the MBTA met this standard during a recent quarter supports the Auditor's claim that the amount of this incentive, which the Auditor places at \$271,515, should be added to the amount of the contract.

The contract also allows for the MBTA to terminate the contract at any time for any reason (termination without cause). This clause is frequently found in government contracts and increases the contractor's financial risk, because every major outsourcing contract involves start-up costs. Typically, contractors amortize those costs over the life of the contract. This means that if the MBTA were to terminate the contract without cause after only a few months, the contractor

would be unable to recoup its start-up costs. The contract therefore contains a liquidated damages provision to protect the contractor against such an event. The provision requires the MBTA to pay \$740,000 if the MBTA terminates the contract without cause during the first year. The amount of liquidated damages declines each year, reflecting the fact that as the contract continues, the contractor should be able to recoup start-up costs, as those costs are reflected in the price the contractor bid to run the bus operations.

The Auditor seems to have mistakenly concluded that this provision is intended to compensate the contractor for its possible loss of profit if the contract were to be terminated early. In his May Objection Letter the Auditor states, "In the absence of any data to the contrary, the payment for "projected profit" for services not performed is clearly not in the public interest."<sup>23</sup> However, the MBTA's submission shows that the contractor projects a profit of \$23.2 million over the five-year contract.<sup>24</sup> As the amount for liquidated damages ranges between \$740,000 and \$60,000, the intent of this clause is clearly not to ensure that the contractor meets its projected profit goal, as the Auditor claims.

### **C. Unreasonable Cost Savings Estimates**

The Auditor claims that the purported cost savings from this contract rest on a number of unreasonable assumptions. The most important of these is the MBTA's estimate of the number of employees to be laid off, and to what degree these employees will be eligible for compensation under federal law. Other assumptions relate to the number of employees eligible for retirement benefits and the proper treatment of accumulated vacation time.

#### *Lay-offs and 13(c) protection*

The MBTA currently employs 628 staff at the Charlestown/Fellsway bundle. The contractor estimates that it will hire up to 559 of those staff. Whether this contract saves money depends in large part on the number of employees who will lose their jobs, and what costs this will impose on the MBTA. In researching its private contracting options, the MBTA has found that private contractors typically hire between 70 and 90 percent of the employees of the public transit authority doing the work to be contracted. For purposes of its analysis, the MBTA is assuming that the contractor will hire 85 percent or 519 of the 628 affected employees, leaving 109 poten-

---

<sup>23</sup> May Objection Letter, p. 15.

<sup>24</sup> May Submission, p. E-72.

tially without jobs. The MBTA estimates that 57 of these employees can be absorbed elsewhere in the MBTA as vacancies occur, leaving 52 employees to be laid off.<sup>25</sup>

Each laid-off employee will cost the MBTA an average of \$4,900 in unemployment benefits. However, the main reason it is important to reach an accurate estimate of employees to be laid off is to determine the MBTA's potential liability under a federal law commonly known as 13(c). This section of the Urban Mass Transit Act of 1964 (49 U.S.C. §5333(b)) provides employees of transit authorities that receive federal funds (such as the MBTA) with significant protection, including

- the preservation of rights, privileges, and benefits under existing collective bargaining agreements
- the continuation of collective bargaining rights
- the protection against a worsening of their position with respect to their employment
- priority of reemployment for employees who are laid off
- paid training programs.

Section 13(c) "is an especially complex Federal requirement... administered by two Federal agencies... which do not always share the same policies or interpretations."<sup>26</sup> The Department of Labor, which has primary responsibility for administering this provision, takes the position that "Section 13(c) agreements should be the product of negotiations between the parties and therefore has not prescribed, for general application, the requisite elements of a Section 13(c) agreement. Thus, there is no single regulation, policy statement or other guidance that summarizes what Section 13(c) requires."<sup>27</sup> Instead, when management and labor disagree, the matter is often resolved by arbitration or by the courts.

Under Section 13(c), dismissed or displaced employees can receive a "dismissal" allowance equal to the difference between their old wages and their new wages. For example, a bus driver earning \$3,000 a month who was laid off and found a new job at \$2,000 a month would be eligible for a dismissal allowance of \$1,000 per month. The allowance would continue for the length of time the employee had worked for the transit agency, up to a maximum of six years. Unions have attempted to widen the protection offered to "worsened employees" to include any worsening in fringe benefits, working conditions, or hours.

---

<sup>25</sup> May Submission, p. E-6.

<sup>26</sup> Transit Cooperative Research Program, *Legal Research Digest*, Number 4 (June 1995), p. 1.

<sup>27</sup> *Ibid.*, p. 8.

To avoid testing its 13(c) liability, the San Diego rapid transit agency has contracted its bus operations in small chunks so that it can offer affected drivers the option to fill vacancies elsewhere in the transit agency. However other agencies (notably Las Vegas and Indianapolis) have taken the opposite approach and have privately contracted most or all of their bus operations in a single swoop.<sup>28</sup>

In part to minimize its 13(c) liability, the MBTA has developed a procedure it expects will result in layoffs being concentrated among the lowest seniority employees. Nonetheless, the MBTA and the Auditor have sharply different estimates of this liability. The MBTA estimates its liability at between \$2.9 and \$4.3 million,<sup>29</sup> while the Auditor suggests a minimum liability of \$36 million.<sup>30</sup> While the MBTA provides considerable analysis to justify its range of liability, the Auditor does not provide a comparable analysis in his objection letters and does not document how he arrives at his estimate of \$36 million.

#### *Retirement Savings*

After 10 years of service, MBTA employees become vested in the MBTA's retirement program. Once vested, the MBTA is obligated to provide certain retirement benefits. By concentrating layoffs among employees with the least seniority, the MBTA expects to avoid laying off employees who are already vested in the retirement system. Accordingly, the MBTA assumes that it will incur no pension liability during the transition, and that it will ultimately save pension costs, as individuals who would have eventually retired and drawn an MBTA pension go to work for a private contractor instead.

The Auditor notes that many of the MBTA's employees have five or fewer years of service and thus would not be vested at the end of the five-year contract. He then seems to conclude that because these employees would not become vested during the term of the contract, the MBTA would not have any pension obligation to them and therefore cannot claim any pension savings. This position is correct only if the MBTA plans eventually to bring the work back in-house. With MBTA management planning to increase the use of competitive contracting and in light of the fact that no other transit agency has brought bus service back in-house, the Auditor's

---

<sup>28</sup> A transit agency's 13(c) liability is determined primarily by its contract with its unionized workforce. The fact that other transit agencies have been able to privately contract large chunks of their bus service without incurring massive 13(c) liability does not necessarily mean that the MBTA can do the same.

<sup>29</sup> May Submission, p. E-15.

<sup>30</sup> June Objection Letter, p. 14.

position is indefensible. Moreover, the Auditor makes no attempt to quantify the amount by which he believes the MBTA has overstated savings.

#### *Vacation Buy-Out*

The MBTA will have to pay the accumulated vacation leave of the estimated 571 employees who would leave the MBTA because of this contract. The MBTA says that this cost should not be included as a transition cost because the vacation leave was earned prior to the start of the contract and the MBTA will eventually have to pay it regardless of whether this contract is approved. Either employees will quit or retire with accrued vacation time (and get paid for it), or they will use their additional vacation time, and the MBTA will have to pay other employees to perform the work. Although the Auditor takes the position that vacation buy-out should be included in the transition cost, he does not attempt to estimate the value of this accrued vacation time. On the assumption that the average employee has two weeks of vacation time and that the average weekly wage is \$800 (the top of the scale for a bus driver), the total liability would be about \$913,000. The MBTA's position is correct, however. If the contract is denied, accrued vacation time will remain as a liability on the MBTA's balance sheet. If the contract is approved and the MBTA pays \$900,000 in accrued vacation time, it will have less cash but it will no longer carry that liability, and therefore its net financial position will be unchanged.

#### **D. Accounting Deficiencies**

Many of the changes the MBTA made from one submission to the next reflect a reallocation of overhead costs. In its April submission, the MBTA made two significant sets of changes. First, it reduced the amount of administrative labor allocated to the Charlestown/Fellsway bundle by \$5 million. The MBTA explained that because it received bids on just two bundles, it will be unable to cut overhead and administrative costs as much as it could if it were able to contract privately for its entire bus service.

---

**Table 3: Changes in Overhead Cost Allocation, January to April**

<b>Item</b>	<b>January Estimate</b>	<b>April Estimate</b>
General Administrative Wages	\$ 3,432,924	\$ 2,384,101
Bus Operations Administrative Wages	10,454,380	8,182,245
Fringe Benefits (39.82%)	5,529,924	4,207,519
Indirect Costs	10,604,359	10,228,137
Total	\$30,021,587	\$25,002,002

Source: January Submission, Form 2A; April Submission, Form 2A.

Second, the MBTA made upward revisions in its cost estimates for materials, tires, diesel fuel, uniforms, supplies, and services, partly offsetting the \$5-million loss of savings described above.

**Table 4: Revised Estimates for Cost of Materials, April and May**

Item	April Estimate	May Estimate
Materials	\$ 3,563,218	\$ 3,936,582
Tires	1,604,261	1,772,452
Diesel Fuel	7,082,010	7,791,439
Uniforms	680,800	749,000
Supplies	3,630,606	4,011,037
Services	908,970	1,003,411
Total	\$17,469,865	\$19,263,921

Source: January Submission, Form 2A; April Submission, Form 2A.

In a July 1996 report to the Auditor, the MBTA acknowledged, "It is difficult to be precise regarding expenditures for each transit mode within the Authority—the accounting system has only recently been tailored to compile each transit mode as a distinct cost center."<sup>31</sup> In responding to the Auditor's questions regarding why these changes were made, the MBTA noted, "Actual costs for materials, supplies and services are 'mapped' to the appropriate account in the general ledger from the purchasing system. This mapping was imperfect for FY96."<sup>32</sup> Finally, in its May submission, the MBTA increased the cost of maintaining "non-revenue vehicles" (everything other than buses) by over 50 percent, from \$830,708 to \$1,273,209.<sup>33</sup>

Changes of this magnitude are not unusual for a government agency. Very few government accounting systems are capable of providing an accurate analysis of costs for any given sub-operation. For example, the MBTA needs to know how much it spends on bus tires so that it can properly monitor its current year budget and accurately prepare its budget request for next year. But before the MBTA developed its plan to contract privately for bus operations, it had no real need to know how much it spent on tires in the Charlestown/Fellsway bundle.

In total, the MBTA reduced its claimed savings by \$5 million and then increased its claimed savings by \$2.2 million, for a net reduction of \$2.8 million. As the MBTA's total five-year cost for running the Charlestown/Fellsway bundle is \$287 million, this net change of \$2.8 million represents just 1 percent of the total cost and would not appear to support the Auditor's

<sup>31</sup> "Management Study: Outsourcing of the Bus Operations and Maintenance Functions," MBTA, July 31, 1996, p. 9.

<sup>32</sup> May Objection Letter, p. 6.

depiction of the MBTA's accounting system as wholly deficient. However, the timing of certain of the changes gives the impression that the MBTA is being less than forthright about its internal cost allocation methods.

In December, the MBTA learns that it received bids on only 40 percent of the bus system and therefore needs to carry \$5 million more in management overhead related to the Charlestown/Fellsway bundle. Before submitting its April cost comparison, the MBTA reviews its materials, tires, diesel fuel, uniforms, supplies, and services line items and concludes that all six of these line items should have had higher amounts allocated to the Charlestown/Fellsway bundle. This increases projected savings by \$1.8 million and offsets more than one-third of the \$5-million loss.

In his May Objection Letter, the Auditor notes several MBTA mistakes worth \$469,445. In its May Submission the MBTA concedes those mistakes but informs the Auditor that it has revised its method of allocating non-revenue vehicle repair costs, yielding additional savings of \$442,501 and neatly offsetting the Auditor's most incontrovertible findings.

It is easy to see how the timing of the MBTA's changes made the Auditor suspicious. But while these cost allocation issues are troubling, they do not disqualify the MBTA's assertion that this proposed contract would still save money. If we disqualify every one of the MBTA's accounting revisions, the total amount only comes to \$2.2 million. Even with the Auditor's point about incentive payments, total savings are still \$12.3 million, as follows:

<b>Item</b>	<b>Amount (in millions)</b>
MBTA's estimated savings (May analysis)	\$14.8
Less:	
Deny all MBTA cost allocation revisions	(2.2)
Incentive Payments	(0.3)
Total Savings	\$12.3

To deny the contract, the Auditor needs to cast more doubt on the MBTA's analysis. He seeks to do this by examining how the MBTA treats repairs made in its Everett heavy maintenance facility. Each bus garage has a staff of mechanics and the facilities to handle routine maintenance and a certain amount of repair work. In addition, the MBTA operates a centralized heavy repair facility (the Everett facility). The Everett operation rebuilds engines and transmissions, repairs damaged frames, and does major electrical systems work. Over the five-year term of the contract, the MBTA estimates it will spend \$74 million to operate this facility. The Char-

---

<sup>33</sup> May Submission, Form 2A.



Charlestown/Fellsway contract requires the contractor to purchase repair services from the Everett facility for the first two years of the contract. After that, the contractor can elect to continue to purchase repairs from Everett or make other arrangements.

The Auditor questions the MBTA's estimate that it will avoid \$23.8 million in Everett costs during the five-year contract term. First, the Auditor asks how the MBTA can be sure that it will continue to get revenue from the contractor during years 3 to 5. If the contractor decides not to use the Everett facility during those years, the MBTA would either have to lay staff off (raising additional 13(c) issues) or else watch its projected savings evaporate. Second, the Auditor correctly notes, "There is a lack of reasonable assurance that the level of heavy maintenance and repairs to be paid for by the contractors during the required first two service years will approximate the MBTA's estimate thereof. Because the MBTA does not maintain bus repairs by garage, it based its projected cost savings on an estimate of how much of the total \$14.9 million budgeted for the Everett facility during the fiscal year 1997 pertains to the Charlestown/Fellsway bundle."<sup>34</sup>

The Auditor does not offer a specific critique of the MBTA's cost allocation methodology or offer an alternative methodology, even though this is a critical issue in determining the MBTA's in-house cost. The MBTA allocates Everett costs to each bundle according to the percentage of the buses each garage needs to operate.<sup>35</sup> This results in 32.21 percent of the total cost of the Everett facility being allocated to the Charlestown/Fellsway bundle. This is a reasonable methodology to use. If a particular bus garage has 32 percent of the bus fleet, it might well result in that garage using 32 percent of total heavy repair services.

But there are other, equally reasonable ways to allocate heavy repair costs. One obvious method is by total miles. The Charlestown/Fellsway bundle accounts for 28.73 percent of total bus miles.<sup>36</sup> If we allocate according to this percentage, the MBTA's avoidable costs (and thus total savings) decline by \$2.5 million. Another methodology is to use the number of bus breakdowns. The Charlestown/Fellsway buses are relatively new, break down less frequently and therefore place less demand on the Everett maintenance facility. In 1997, the Charlestown/Fellsway buses suffered 487 breakdowns, or 26.4 percent of total MBTA bus breakdowns.<sup>37</sup> If the MBTA were to use this methodology, total projected savings from this contract

---

<sup>34</sup> May Objection Letter, pp. 4-5.

<sup>35</sup> May Submission, p. E-41.

<sup>36</sup> May Submission, p. E-19.

<sup>37</sup> MBTA response to Pioneer Institute Freedom of Information Act request.

would decline still further. However, regardless of which methodology is used, the contract would still save money, requiring the Auditor to raise additional objections.

### **E. Quality Concerns**

The privatization law sets up two quality standards. First, the contracting agency must prepare measurable quality standards before it releases its RFP. Second, after receiving bids and negotiating a contract, the contracting agency must certify that the contractor will provide services “that equal or exceed the quality of services which could be provided by regular agency employees.”

Performance measures commonly used to evaluate the quality of bus service include mean distance between failures, percentage of scheduled trips run, accidents per million miles, on-time performance, passenger complaints per 100,000 boardings, and cleanliness standards such as daily exterior washings and daily interior cleanings.

Almost all transit agencies use at least some of these measures, and most public transit agencies put additional quality measures into place when they begin to contract privately for bus service. In a review done for the Texas Public Policy Foundation, transportation consultants Jean Love and Wendell Cox concluded that the quality standards set for most private contracts “routinely exceed those standards previously—and often concurrently—set for service provided by the public authority.”<sup>38</sup>

It is easy to understand why public agencies set higher quality standards for private contractors. First, such standards (and the financial penalties for failing to meet them) help deter inexperienced or unqualified firms from bidding. Second, those standards provide important leverage to public transit managers, who remain ultimately responsible for service quality even if they are no longer directly delivering the service. Finally, human nature being what it is, it is easier to tighten quality standards when you can hold someone else responsible for meeting those standards.

Injecting competition into any service tends to improve quality. If a monopoly agency (either public or private) lets quality slide, there are unlikely to be any consequences for a very long time. Ridership will decline, but as long as public money is available to subsidize the operation, the monopoly agency is unlikely to suffer any adverse effects. By contrast, a company that wins a competitively awarded contract has a strong incentive to meet quality standards.

---

<sup>38</sup> Love and Cox, p.11.

Failing to meet those standards can result in financial penalties and, ultimately, contract termination or non-renewal.

In attempting to ensure that quality remains at least equal to current standards, the MBTA has followed what is becoming standard industry procedure:

First, the MBTA has negotiated a contract that incorporates more stringent quality measures. Because many of these performance measures are new, the MBTA and the contractor agree to establish a baseline before actual performance levels can be established, but this is uncommon.

Second, the MBTA has established financial incentives and penalties. If the contractor meets all performance measures, it can earn an extra \$2.3 million. If the contractor fails to meet these incentives, it is subject to a maximum penalty of \$2.5 million.<sup>39</sup> As the contractor projects a baseline profit of \$23.2 million from this contract, meeting quality measures can mean the difference between a profit of \$25.5 million and \$20.7 million, giving the contractor a significant financial incentive to improve quality.

Finally, the MBTA has selected an experienced contractor. ATC/Vancom is providing bus service to a number of other public transit agencies and has had several of its contracts renewed by public transit agencies. The company has experienced management and adequate financial strength to undertake a contract of this magnitude.

Nonetheless, the Auditor has concluded, "The MBTA does not know whether the proposed contractors can meet acceptable quality service levels, let alone exceed the quality of service that is currently provided by regular MBTA employees."<sup>40</sup> It is important to note that the Auditor has not provided evidence that the quality of service likely to be provided by the contractor is inferior. Instead, the Auditor determined that the MBTA did not meet the Pacheco law's requirements in the area of determining service quality.

The Auditor's criticism of the MBTA's efforts to ensure quality service is the weakest part of his review. Specifically, the Auditor made the following criticisms:

*Insufficient benchmarks.* The MBTA proposes to create new quality measures and hold the contractor responsible for meeting those measures. The Auditor faults the MBTA for not having developed those measures earlier and submitting them as part of its July 1996 management study.

---

<sup>39</sup> May Submission, Section 3.0, Exhibit I, p. 12.

<sup>40</sup> June Objection Letter, p. 14.

The MBTA should be commended, not criticized, for its attempt to write additional quality indicators into the proposed contract. This is standard industry practice and helps give the public transit authority important leverage over the contractor, especially when the quality standards are combined with financial incentives/penalties, as the MBTA has done.

*Failure to establish maximum in-house level of service.* The Auditor notes that “existing standards do not correlate to Chapter 296 quality requirements which could be provided by regular agency employees. Accordingly, we believe that the need to establish appropriate performance factors for each pertinent performance attribute based on the quality of service which could be provided by regular agency employees is a relevant fact for the MBTA to clarify.”<sup>41</sup>

Estimating the quality of service that “could be provided by regular agency employees” is virtually impossible. For example, sometimes the MBTA is unable to run scheduled bus trips because too many bus drivers call in sick. The MBTA could develop and implement new policies to reduce sick leave utilization. However, it is impossible to determine what effect this would have on the percentage of trips run until such a policy were actually implemented.

*Lack of thorough reference checks.* Finally, the Auditor notes that the MBTA did much of its reference checking on the contractor after it submitted the proposed contract to the Auditor on April 18, 1997. The Auditor concludes that this calls “into serious question the integrity and completeness of the MBTA’s quality comparison.”<sup>42</sup>

The fact that the MBTA conducted site visits and reference checks after it negotiated the contract is in fact a flaw in the MBTA’s procurement process. However, this flaw needs to be weighed against the fact that the proposed contractor is experienced in the field, that other transit agencies report that privately contracting for bus service results in equal or better quality, and that the reference checks, although performed late, were uniformly positive.

## **F. Other Issues**

*Compliance with environmental laws.* Section 54(7)(iv) of Chapter 7 requires the contracting agency to certify that its proposed contractor “have no adjudicated record of substantial or repeated willful noncompliance with any relevant federal or state regulatory statute.” In his May Objection Letter the Auditor noted that the MBTA did not submit adequate documentation regarding the contractor’s compliance with environmental laws. The MBTA responded that the contractor had provided assurances that it met this standard and that the state Department of En-

---

<sup>41</sup> June Objection Letter, p. 17.

<sup>42</sup> May Objection Letter, p. 11.

vironmental Protection reported that the contractor did not have a record of substantial or repeated violation of environmental laws.

*Lack of contingency plans.* The Auditor notes that MBTA employees are enjoined from striking but that employees of the contractor are not so enjoined and concludes that "it is essential that contingency plans be prepared setting forth the measures that the contractor plans to institute in the event of employee work stoppages." In his review of private contracting for bus operations, Wendell Cox reports that only five days of service have been lost as a result of contractor default in the United States during the last decade.<sup>43</sup> Given this level of risk, it seems less than essential that the contractor develop contingency plans in the event of a strike.

*Procurement irregularities.* After receiving the bid, the MBTA negotiated some changes in both the contract and the price. The most important change was to advance the contractor 75 percent of the monthly contract cost, or about \$3 million per month. In exchange, the contractor reduced its bid by \$1.9 million. The Auditor opines that "any major revisions to the plans and specifications requested by a successful bidder during contract negotiations after bid opening must be denied or the procurement must begin anew."<sup>44</sup> This view is not widely held and is not in the public interest. In fact many states conduct a negotiating session known as "best and final offer." During such negotiations, the purchasing agency and the contractor discuss any changes to the contract that might result in lower cost and better value to the taxpayer. In this case, it looks like the MBTA and the contractor realized that because the MBTA can borrow at tax-exempt rates, it would be more advantageous to the taxpayers for the MBTA to borrow the money and advance it to the contractor. Surprisingly, the Auditor did not seek to estimate how much interest the MBTA would pay and subtract that amount from the total contract savings. The MBTA's interest costs will of course depend on actual interest rates over the next five years, but at current rates the MBTA should expect to pay \$1 million. While it would be legitimate to add this amount to the cost of the contract, the Auditor has overreacted by claiming that this change invalidates the entire contract.

*Union concessions.* In an attempt to prevent the MBTA from privately contracting any part of bus operations, the MBTA's unions developed a cost savings package and submitted it to MBTA management. The specific cost savings were to go into effect only if they were needed to reduce the in-house cost below the lowest bid by a private contractor. The unions value their

---

<sup>43</sup> Love and Cox, p. 10.

<sup>44</sup> June Objection Letter, p. 19.

concessions at \$29.5 million for both bundles.<sup>45</sup> MBTA management disagrees with many of the unions' proposed cost savings and puts the value of the proposed savings for the Charlestown/Fellsway bundle at \$3 million.<sup>46</sup> If the MBTA is correct, the private bid still represents the lowest value. If the unions are correct (or even half correct), then their package of cost savings results in the lowest bid, and the work should be kept in-house. The Auditor has not made any attempt to analyze this issue. Instead, the Auditor warned that if the MBTA succeeds in overcoming his existing objections, he "would be required to place a value on the submitted concessions, and to further determine whether the value of those concessions would negate the identified amount of savings."<sup>47</sup>

## V. SCORECARD

The Auditor has raised numerous objections to this contract. In certain cases, such as incorrectly calculating savings from fuel taxes and other items, the Auditor is clearly correct. In other cases, reasonable people can disagree over the validity of the Auditor's arguments. Finally, the Auditor has made several objections that detract from the overall credibility of his position (quality issues, lack of contingency plans, compliance with environmental laws, procurement irregularities). But the Auditor's most important objection concerns the reliability and accuracy of the MBTA's accounting system.

The MBTA claims that its five-year total avoidable cost of operating the Charlestown/Fellsway bundle is \$261 million. Table 5 shows the major categories of expense:

**Table 5: Avoidable Cost for Charlestown/Fellsway**

<b>Expense Item</b>	<b>Five-Year Cost (in millions)</b>	<b>Percent of Total</b>
Direct Wages and Fringe Benefits	\$195.1	74.8
Materials, Supplies and Services	20.9	8.0
Other Direct Costs	9.7	3.7
Everett Heavy Repair	23.8	9.1
Non-Revenue Vehicle Repair	1.3	0.5
Indirect Departmental Management	10.2	3.9
Total	\$261.0	100.0

Source: May Submission, pp. D-5-6.

<sup>45</sup> May Submission, p. F-2.

<sup>46</sup> May Submission, p. F-6.

<sup>47</sup> June Objection Letter, p. 22.

The Auditor has not made any objections to two categories of expense: direct wages and fringe benefits and indirect departmental management. Together these two items account for 78.7 percent of the total avoidable cost. Moreover, while the Auditor has pointed out some relatively minor mistakes and/or invalid assumptions in “other direct costs,” he has not made any findings that suggest the MBTA’s underlying accounting system is unreliable in this area. Together with the two line items mentioned above, this means that the Auditor accepts that 82.4 percent of the total cost is based on reliable accounting.

However, the Auditor questions the MBTA’s accounting and/or cost allocation system in the remaining three areas—materials, supplies, and services; Everett heavy maintenance; and non-revenue vehicle repair.

*Materials, supplies, and services.* The MBTA’s documentation in this area has been problematic. For example, in April the MBTA told the Auditor that actual materials costs for fiscal year 1996 were \$237,869, but that it was budgeting almost three times as much in fiscal year 1997, \$671,149. Other line items were also dramatically revised, some up, some down. However, while the individual line items often changed dramatically, the overall total did not. In fiscal year 1996, the MBTA reported spending a total of \$3.9 million on material and supplies for the Charlestown/Fellsway bundle. In April, the MBTA reported it was budgeting \$3.6 million for this bundle in fiscal year 1997, and in May, it reported that it was increasing the budgeted amount back up to \$3.9 million (see table 4). While these changes are unfortunate, it is important to remember that the maximum possible difference between the three estimates is just \$0.3 million, hardly enough to justify denying the award of the contract on the basis of an unreliable accounting system. But with the MBTA itself unsure of exactly what its costs are in this area, it would be reasonable for the Auditor to require that the MBTA use its lowest estimate (contained in its December 31, 1996 in-house estimate). This would reduce total savings from this contract by \$1.8 million.

*Everett Heavy Maintenance and non-revenue vehicle repair.* The Auditor is on strong ground when he questions the methods used to allocate a percentage of the cost of running the Everett heavy repair facility and the non-revenue vehicle repair facility. As we have seen, the MBTA has apparently used a cost allocation methodology for Everett that results in the highest possible savings. A middle-of-the-road methodology would reduce savings by \$2.5 million. Moreover, the MBTA’s 52 percent increase in its cost estimate for non-revenue vehicle repair, made without adequate explanation, can also be reasonably denied by the Auditor, reducing savings by another \$0.4 million.

None of these issues are serious enough to justify denying the contract. At most, these issues would reduce the MBTA's total in-house cost by \$4.7 million, or 1.6 percent of the total five-year operating cost. Cost allocation methodologies are necessarily imperfect. Indeed, the fact that there is some uncertainty in the MBTA's accounting system is an argument in favor of private contracting. If the MBTA were to contract privately for a portion of bus operations, it would finally know exactly what this service costs, and it could use that knowledge to benchmark and manage the cost of the 60 percent of bus operations that would remain in-house.

The Auditor's next justification for denying the contract is his determination that the contract does not save money. Table 6 summarizes the Auditor's objections to the contract. Where the evidence supports the Auditor's finding, the chart deducts the appropriate amount from the MBTA's claimed savings. Where the evidence does not support the Auditor's finding, the table contains a zero in the amount column. Where the Auditor did not attempt to quantify the amount of his dispute with the MBTA, I have supplied my own estimate. The starting point for this table is the MBTA's final cost analysis (May 24, 1997). That analysis assumes cost savings of \$14.8 million and incorporates several of the Auditor's objections (fuel tax, rent, building and maintenance, etc.). Accordingly, table 6 displays only the unresolved issues.

**Table 6: Auditor's Objections to the MBTA's Cost Analysis (in millions)**

<b>Item</b>	<b>Amount</b>
Materials, Supplies and Services	\$1.8
Incentive Payments	0.3
Liquidated Damages	0.0
Vacation Buy-Out	0.0
Retirement and Post-Employment Benefits	0.0
Everett Heavy Repair	2.5
Non-vehicle repair	0.4
Interest on Advance Payments	1.0
Total	\$6.0

Although this analysis gives the Auditor the benefit of the doubt, the contract still saves \$8.8 million. This amount should be further reduced by the MBTA's 13(c) liability, which the MBTA estimates will range from \$2.9 to \$4.3 million. If we use the mid-point of the range, we get a figure of \$3.6 million. This reduces ultimate savings to \$5.2 million. As the MBTA estimates that it could reduce its in-house costs \$3 million by accepting the concessions made by the union, private contracting is the most cost-effective option.



## **VI. CONCLUSION AND RECOMMENDATIONS**

Virtually every transit authority that contracts privately for bus service achieves savings of 20 to 30 percent. Yet the MBTA's own analysis estimates savings at just 5 percent. And the Auditor (after discounting his more improbable assertions), has identified several problematic elements of the MBTA's analysis that could reduce total savings to \$5.2 million or 1.8 percent.

The differences between the Auditor's estimate, the MBTA's estimate, and the experience of other transit agencies raises three sets of issues: Why are potential savings from contracting at the MBTA so much lower than elsewhere in the nation? How can we be sure which party is right or if either party is correct? And what does this conflict teach us about the Pacheco law?

### **A. Why MBTA savings are lower**

Based on the experience of other agencies, the MBTA should have been able to save 20 to 30 percent (\$57 to \$86 million) over five years by contracting privately. Instead, savings will range from \$5.2 million to \$14.8 million. The two main reasons for the discrepancy are the cost accounting method used to determine the MBTA's in-house cost and the provision of the Pacheco law that requires contractors to provide substantially similar wages.

The MBTA's internal costs can be divided into two main elements, direct costs and indirect costs. Direct costs are such things as the wages and benefits of bus drivers and mechanics and all of the materials and supplies consumed by a bus operation. Indirect costs are primarily MBTA management and support services. Examples of indirect costs include MBTA senior management time, the law office, human resources, the treasury department, and other central services. In a cost allocation scheme, a transit agency might allocate one-third of its senior management cost to bus operations on the assumption that they spend that proportion of their time on buses, with the rest being devoted to subway, trolleys, commuter rail, etc. The FTA recommends that transit authorities include all such indirect costs when they attempt to determine their internal costs, on the assumption that in the long-term, such costs will decline if a transit agency privately contracts for a significant amount of its operations. Many of the 20 to 30 percent savings figures are based on this so-called full cost allocation method.

In Massachusetts, the Auditor excludes certain indirect costs from the cost comparison. His rationale is that many indirect costs will continue over the life of the contract and are therefore not "avoidable." The Auditor used this rationale when he excluded a portion of the rent for MBTA headquarters, noting that the MBTA would still have to make the same rental payments

even though it was employing a few less staff at headquarters. In the short run, his position is accurate. In the long run, if the MBTA expands its use of private contracting it will need significantly less headquarters space, and it is reasonable to assume that it would take less space when its lease comes up for renewal. Excluding its short-term debt (which most other transit agencies do not have to pay), the MBTA excluded \$19.2 million in cost. If the MBTA had followed the FTA's methodology, most of these costs would be included in its in-house cost, and potential savings would seem much higher.

The Pacheco law requires contractors to pay wages that are not lower than the lesser of a) the minimum wage rate that has been paid for those positions for which the duties are substantially similar to the duties performed by regular employees of the MBTA, or b) the average private sector wage paid for comparable positions.

Labor is the primary cost of bus operations, making up at least 80 percent of the total cost. The potential savings from private contracting are greatly diminished if the private contractor is locked into the same wage rates and fringe benefits as the public agency. One study of this issue concluded that 62 percent of the private sector's cost advantage was due to lower wages and fringe benefits.<sup>48</sup> It is not unusual for a private bus company to pay \$5 less per hour than a public transit agency. As this contract involves about 590 employees, a cut of \$5 per hour would reduce wages by \$6.1 million annually or about \$32.5 million over five years. Add in payroll taxes that vary with wages, and the total comes to about \$35 million over five years.

Change to full-cost accounting and assume that, absent the Pacheco law, the MBTA would have received bids based on lower wages, and the MBTA would have achieved additional savings of about \$54.2 million and reached the 20 percent threshold that other transit agencies report as minimum savings.

## **B. How can we be sure who is right?**

You don't have to believe in the old adage, "figures lie and liars figure" to be confused about whether the MBTA is correct when it claims that it will save \$14.8 million or whether the Auditor is right when he claims that there are no savings. The two main areas in which the Auditor and the MBTA differ involve cost allocation methodologies and assumptions about the future. This paper has already discussed the MBTA's cost allocation methodologies and con-

---

<sup>48</sup> Roger F. Teal, "Issues Raised By Competitive Contracting of Bus Transit Service in the USA," *Transportation Planning and Technology*, vol. 15 (1991), p. 402.

cluded that, at most, the MBTA overstated savings by \$4.7 million. Now it is time to assess the reasonableness of the MBTA's assumptions about future costs.

The MBTA acknowledges that cost savings ultimately depend on such unknown and unknowable factors as the number of bus drivers to be laid off and how an arbitrator or judge will apply 13(c) protections. In fact, there are a whole set of assumptions that the Auditor has not questioned but that can determine the outcome of the review. The MBTA assumes that wages will rise 3 percent per year over the life of the contract, for a total increase of 12.2 percent. Neither the MBTA nor the Auditor can predict labor market conditions over the next five years. Moreover, if MBTA management cannot agree on a wage increase with its unions, the matter is settled via arbitration. In the past, arbitrators have shown a willingness to make significantly higher awards than what the MBTA offers. This is of particular concern given today's tight labor market. Unemployment is at or near a 20-year low, and wages are beginning to rise more quickly than they have in several years. If this trend continues, the MBTA's predictions of a 3 percent wage increase may prove unrealistic and in-house costs may be significantly higher. Assuming a 4 percent average annual increase in wages instead of 3 percent increases total in-house costs by nearly \$4 million. This type of sensitivity analysis was not performed by either the MBTA or the Auditor, but can determine the final result.

### **C. Pacheco Law Flaws**

The Pacheco law has slowed the pace of competitive contracting to a crawl. In the three years before the law was passed, the Weld administration issued 36 competitive contracts, but in the four years since the law was passed, just 7 contracts have been submitted to the Auditor. From a public policy perspective, the Pacheco law is poorly constructed. Its more important flaws include the following:

*Avoidable cost standard.* The Auditor requires that the full cost of a private contract be compared to the avoidable in-house cost. The FTA recommends that transit agencies determine in-house costs on a full-cost rather than an avoidable cost basis. The FTA reasons that if the full cost of the first, small-scale private contract is compared to a less-than-full in-house cost, then private contracting will be unable to gain a foothold. If competitive contracting is in fact less expensive than the full in-house cost, and its use is gradually expanded, then over time the contracting agency will indeed be able to reduce management, rent, and other costs that at first appear unavoidable. These savings will never be realized if the first attempt to introduce

competitive contracting is denied because the private contract is compared to a less-than-full in-house cost.

*Quality standards.* It takes time (and money) to develop enough data to establish reliable benchmarks. The Auditor's insistence that the MBTA develop such measures could, in theory, indefinitely delay the MBTA's ability to contract privately for bus service. Other transit agencies routinely develop new quality measures when they begin to contract privately, and there is no reason that bus riders in Massachusetts should be deprived of whatever improvements in service those measures can effect. Moreover, if the Auditor can disagree with the contracting agency over a relatively simple service such as bus operations, the scope for potential disagreement over how to measure the quality of complex human and social services is far greater. Finally, the Auditor's emphasis that the contractor's proposed service be measured not against the current level of service but the level of service that could be provided creates an impossible hurdle.

*Raising new issues and keeping issues in reserve.* The MBTA claims that the Auditor raised new issues in his second objection letter. The Auditor claims that he is justified in raising those issues because the MBTA provided new information in its second submission. In addition, the Auditor warns that if the MBTA ever succeeds in meeting his earlier objections, he will raise this issue of the unions' concessions. Clearly, this combination of raising new issues and keeping issues in reserve offers the possibility of endless delay.

*The Auditor does not have to say what he thinks the internal costs are.* Nowhere in the Auditor's work is there a statement of what he thinks the MBTA's in-house cost is. This allows the Auditor simply to raise objections (What if more MBTA employees are laid off? What if the 13(c) ruling is less favorable than MBTA management expects? What if the contractor does not use the Everett repair shop after the second year?) rather than to take an affirmative position on these issues. It is as if the Auditor sees his role as that of a defense lawyer, trying to plant a reasonable doubt rather than trying to come to an independent and defensible cost comparison. Furthermore, it is the Auditor himself who acts as the judge and jury, determining whether the doubts he has raised are sufficient to justify denying the contract.

## **Recommendations**

This struggle between the Auditor and the MBTA demonstrates that Massachusetts needs a fundamentally different strategy for establishing whether a particular private contract is likely to save money. In most states, this task is left to the judgment of the agency entrusted with providing the service involved. Massachusetts has attempted to replace this judgment with a cost

accounting exercise. But we have seen that no matter how much analysis is done, in the end certain issues come down to judgment. The Auditor's ability simply to criticize and cast doubt on a contract without providing his own cost estimates gives the Auditor an essentially arbitrary power to approve or deny contracts.

If the state legislature wants an independent, objective review of contracts, it must revise the Pacheco law as follows:

- 1) The scope of the review should be narrowed to cost. Quality is very difficult to measure and almost impossible to predict in advance. The authority given the Auditor to claim that certain aspects of a contract are not in the public interest, and to deny the contract on that basis, should be eliminated.
- 2) The private contract should be compared to existing in-house costs, not the cost that "could be" achieved if the state agency worked in the most efficient manner possible.
- 3) Assumptions about wage increases, interest rates, and other future variables should be identical to those assumptions the state uses to forecast tax collections. This will provide a consistent set of assumptions and remove the opportunity for either the Auditor or the contracting agency to determine the outcome of the review by manipulating important underlying assumptions.
- 4) Agencies should be required to publish cost allocation plans as part of their annual budget requests, regardless of whether they plan to contract privately. This removes most of the temptation to choose a cost allocation methodology according to whether it will help the contracting agency "prove" that the contract will save money. For example, if the MBTA had to allocate maintenance costs to all five bundles well before it put out an RFP, it would not have had any incentive to choose a methodology that maximized the cost of the Charlestown/Fellsway bundle, because it would not have known that it would receive a bid for that bundle and not other bundles.
- 5) The Auditor's review of an agency's accounting system and cost allocation plan should be completed before an agency issues an RFP, and for the same reason. If the Auditor disagrees with an agency's cost allocation plan, he should quantify the amount of his disagreement, and specify where the amount in question should be allocated. As long as the Auditor must account for 100 percent of an agency's budget, there is no incentive for the Auditor to seek to skew the cost allocation. For example, if the Auditor reduces the heavy maintenance amount allocated to the Charlestown/Fellsway bundle, he has to increase the amount allocated to some other bundle. While this may make the Charlestown/Fellsway bundle a harder operation to contract privately, it makes some other bundle easier to contract out, and, since the review must be conducted be-

fore an RFP is issued, there is no reason for the Auditor to conduct anything other than a strictly objective review.

6) The Auditor's back-end review should be limited to clear mistakes. It is perfectly appropriate for the Auditor to point out clear-cut mistakes, such as double-counting fuel tax savings. But at this point the Auditor should not be allowed to raise generic doubts about an agency's accounting system or cost allocation methodology.

7) The Auditor must come to a firm conclusion. If he finds mistakes, he must quantify them, factor them into the analysis, and offer his own defensible estimates of both the in-house cost and the contract cost.

### **Postscript**

As this paper was being written, the MBTA was attempting to maximize bus ridership within its existing budget by adding service to its most heavily used routes and reducing service on lightly used routes. The plan has run into intense protest from communities that would lose service. At a public hearing on December 9, 1997, public officials representing the South End, Roxbury, and Jamaica Plain demanded that the MBTA not cut service on three routes in those neighborhoods, and the crowd shouted "Add! Add! Add!" as it called for more bus service, not less.

The estimated savings from contracting for the Charlestown/Fellsway bundle would allow the MBTA to maintain the existing level of service on the three routes in question.

### **About the Author**

Robert M. Melia specializes in helping government agencies increase productivity, either by improving their in-house operations or by helping them competitively contract.

From 1991 to 1995, Melia was First Deputy Commissioner of the Massachusetts Department of Revenue. While there, he developed the nation's first automated child support enforcement program, which used computers and databases to locate and seize the income of those who ignored their child support obligations. His work in this area won several national awards, and in 1994 Melia was named *Governing Magazine's* Public Official of the Year. From 1996 to 1997, Melia was vice president of a company that runs child support enforcement programs under contract to state government.

Melia served as the MBTA's deputy budget director in 1989 and 1990 and holds a Master's degree in Human Service Management from Brandeis University.