

**Quality of Life Issues  
On Boston's MBTA**

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If you are one of the 824,000 daily riders on the Massachusetts Bay Transportation Authority (MBTA), you are in the midst of an evolving transit system. Security has become the highest priority for the MBTA, with an advertising campaign encouraging riders to be vigilant, and new, somewhat controversial random bag check procedures being instituted. In January 2005, new Automated Fare Collection (AFC) system will start being phased in, replacing the familiar "T" tokens with fare cards. Yet if teenagers are rowdy on trains and litter mars stations, passengers will still not be happy with their public transit system.

The Massachusetts Bay Transportation Authority (MBTA) serves 175 cities and towns in the greater Boston area with subway, bus, ferry, and commuter rail service, the fourth largest transit system in the country. Its 6,500 employees include bus drivers, motorpeople (subway conductors) and attendants, inspectors, and MBTA police officers, all of whom can be marshalled to improve the quality of life of MBTA passengers.

Quality of life (QOL) issues may seem minor compared to weightier issues the MBTA must deal with, including decreasing revenue, terrorism, changing and upgrading the fleet to improve the environmental impact, and disparities between levels of service in different communities. But attitude and atmosphere have a big impact on the morale of passengers, as well as staff, and affect ridership levels. High violence crimes, such as shootings, will have a larger impact on ridership, but quality of life issues nibble around the edges, causing people to give up riding and drive instead.

A review of current MBTA procedures and dynamics and an evaluation of various alternatives shed some light on how the MBTA can solve QOL problems. Other transit systems are used for comparison, including the New York Metro-Transit Authority (NY MTA),

Philadelphia's Southeastern Pennsylvania Transportation Authority (SEPTA), and the Washington Metropolitan Area Transit Authority (Metro).

### **Current Systemic Problems and Upcoming Improvements**

Quality of life issues persist in part because of three problems in the current system at the MBTA. First is how occurring incidents and complaints are responded to. Currently, the Control Center is called for all incidents; thus if a passenger complains to a staff member (token booth attendant, motorperson), the Operations Control Center is contacted and they then make the appropriate calls. This system works if the police are known be needed immediately and are thus dispatched as soon as the call comes in.

But resolution of issues is delayed when the incident is not an emergency. For non-distress calls, an inspector is sent to the site first to resolve the issue or determine the severity and call for extra help; this tiered system creates long waits for victims or passengers who are being disturbed. Inspectors are assigned two or three stations to cover and must wait for the next train, which can take 4 minutes during rush hour or 14 minutes off-peak, to reach the station where the offense is taking place. If the situation warrants, inspectors will call line cops, who are assigned anywhere from five stations (on the Red line) to the entire system (Blue line), to report trouble, or a mobile unit, if an incident is currently taking place. Again, the line officers have to wait for a train, which might be held up due to the incident taking place. A similar tiered response system is used for buses, although municipal police will be asked to respond to a call if a mobile unit is not near the bus' location. Thus both mobility problems and the two-phase response system combine to delay arrival of the necessary officials.

The MBTA prefers this centralized system, although the police would prefer to be called first in emergencies, and in life-threatening situations often are. Using inspectors as a first-line of response prevents staff members from calling the police with false alarms; calls to Central Control are also tracked, showing response times for accountability purposes<sup>1</sup>. Whether the dispatchers can exercise more judgement about whether an officer is needed for non-emergencies or whether the police would prefer being called out unnecessarily to arriving late needs to be determined.

Mobility is the second factor in slow response times. The MBTA needs to think of ways officers and inspectors can move through the system faster. Converting part of the police force to a bicycle patrol would allow line officers to respond faster than they do now; bicycle or motorcycle police would not be appropriate for lines where the stations are far apart, but could be used on the Orange line and parts of the Red line. According to Lt. Gary Fredericks of the MBTA police, the force is looking into grants to supply bicycles<sup>2</sup>; extra costs are minimal, including a 3-day training for officers and bicycle maintenance. Finally, the greater presence of officers in stations due to anti-terrorism activity will create a positive externality in allowing faster responses to customer complaints.

Another barrier to speedy resolution of quality of life issues is the small size of the MBTA police force. Boston has a force of 243 officers for an estimated 1 million riders (numbers vary from 1.2 million fares to 824,000 daily trips, which can be multi-phased). This averages out to one cop per 4,938\* daily trips. This ratio is significantly higher than those of SEPTA and the Metro, which have ratios of 3,392 and 3,081 respectively. The Transit Bureau

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\* The ratio of 1 cop per 3,391 daily riders is more accurate, but 4,938 is used because the other systems list total fares collected, not total daily riders.

of the New York Police Department (NYPD) contains 3,200 NYPD officers, creating a ratio of one officer for every 2,000 passengers. See Appendix C for a comparison of the transit systems.

A larger police force correlates with lower crime rates. New York has a crime complaint rate of 1.34 per hundred million passengers, and the Metro has 3.82 complaints per hundred million passengers, while the MBTA has 5.45 complaints per hundred million passengers (see Appendix D). The MBTA has significantly more assaults and larceny than the Metro and New York MTA. New York tracks quality of life arrests under their “summonses” category, which has a “QOL” listing as well as “universal” for other infractions. The Metro and the MBTA do not list quality of life citations or arrests, so no comparison can be made. However, the MBTA police are using new smoking citations, which should enable tracking of at least this one issue, and changes over time will show whether citations are an effective deterrent of smoking.

Finally, passenger culture at the MBTA contributes to quality of life problems. Eating is considered such a right that only one of the respondents, an officer, mentioned food as a quality of life problem, though a number mentioned its offshoot, litter. In addition, passengers hold the subway doors open for friends and ignore the instructions of attendants to stay away from the doors. Expectations are not high among passengers; as one woman who was surveyed indicated, it's a good ride for the price. Thus solutions to a number of the QOL issues include changing passenger attitudes and behaviors.

The MBTA is instituting several changes that should improve the quality of life for passengers. First, the MBTA police are going to implement decentralized control over the force. Six sub-districts will be established with lieutenants in charge of organizing the staffing. This will allow more flexibility in deployment of staffpower and what shifts officers should work. In addition, the MBTA will begin an Automated Fare Collection (AFC) system in January 2005,

which will move token booth attendants out onto the platform where they will act as customer service agents. This increased staff presence should provide better control over quality of life issues. Finally, safety has become the number one priority for all MBTA staff, displacing on-time performance. Some procedural changes, such as random bag checks, may worsen the quality of life, according to some passengers, but other procedures, such as the anti-terrorism training for all vendors, will have a positive spill-over effect into QOL issues. Cleaners and merchants will be more likely to report fights and rowdy behavior in addition to suspicious packages.

## Appendix C: Comparison of Transit Systems

System	# riders (trips) yr / # riders weekday	Size--miles	Operating budget (expenses) / police budget (expenses)	# cops	crime rates listed / calculated from complaints	1 cop per ____ riders (trips)	cop budget/ total operating budget	cop budget/ # cops
<b>MBTA</b> <sup>3</sup>	330M/yr inferred /1.2M trips (824,000 passengers)	1038 sq. mi	\$827M / \$16.3M	243	6 per 1M/5.45 per 100,000	4,938	1.971	\$67,078
<b>NY</b> <sup>4</sup>	2.4B/yr/7.8M weekday	--	\$7.97B/--	3200	--/1.34 per 100,00	2,000	--	--
<b>SEPTA</b> <sup>5</sup>	296.7M yr/ 881,989 weekday inferred	--	\$875M / \$13M	260	--	3,392	1.376	\$50,000
<b>Metro</b> <sup>6</sup>	328.7M trips/1.1M	1500 sq.mi	\$796M/--	357	6.32 per 1M/3.84 per 100,000	3,081	--	--

### Notes:

Daily ridership inferred by weighting weekday passenger levels to twice that of weekend levels.

Expenses used is operating budgets not listed.

Crime rate listed in transit literature differs from calculations made in paper; it is not known how listed rates were computed so the disparities cannot be resolved.

The number of officers was divided by the number of daily passengers to get the figure of "1 cop per \_\_\_\_ riders."

**Appendix D1: Comparison of Crime Rates**

<b>2003</b>	<b>NY<sup>7</sup></b>	<b>% of passengers</b>	<b>METRO<sup>8</sup></b>	<b>% of passengers</b>	<b>MBTA<sup>9</sup></b>	<b>% of passengers</b>
<b>Rape</b>	3	0.0013	-	-	4	0.01
<b>Robbery</b>	1,126	0.4692	237	0.721	230	0.70
<b>Burglary</b>	7	0.0029	-	-	36	0.11
<b>Motor vehicle theft/attempt</b>	NA		353	1.074	83	0.25
<b>Arson</b>	NL		-	-	2	0.01
<b>Larceny</b>	1,821	0.76	568	1.728	705	2.14
<b>Aggravated assault</b>	257	0.11	98	0.298	152	0.46
<b>Simple assault</b>		-		-	585	1.77
<b>Homicide</b>	4	0.0017	1	0.003	3	0.01
<b>Total</b>	<b>3,218</b>	<b>1.34</b>	<b>1,257</b>	<b>3.82</b>	<b>1,800</b>	<b>5.45</b>

**Appendix D2**

	<b>NY<sup>10</sup></b>	<b>% of passengers</b>	<b>METRO<sup>11</sup></b>	<b>% of passengers</b>	<b>Boston<sup>12</sup></b>
<b>Summonses</b>	180,110	75.05	4,941	15.03	NL
<b>Fare evasion</b>	95,877	39.95	1,932	5.88	NL
<b>QOL</b>	73,186	30.49			NL
<b>Universal</b>	4,423	1.84			NL
<b>Parking</b>	6,624	2.76			
<b>TVCs issued</b>			51,522	156.74	NL

NA = not applicable NL = not listed

## Endnotes

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<sup>1</sup> Interview with Lydia Rivera, MBTA Press Secretary, June 30, 2004.

<sup>2</sup> Interviews and correspondence with Lt. Gary Fredericks, MBTA Police, Spring 2004.

<sup>3</sup> Information taken from Massachusetts Bay Transportation Authority website, "The MBTA FY 2004 Annual Budget Book" at [www.mbta.com/insidethet/pdf/2004-Budget\\_Book\\_section3.pdf](http://www.mbta.com/insidethet/pdf/2004-Budget_Book_section3.pdf), "Inside the T: Ridership" at [www.mbta.com/insidethet/taag\\_ridership.asp](http://www.mbta.com/insidethet/taag_ridership.asp), "2003 Transit Crime Review" at [www.mbtapolice.com/prevention/2003TransitCrimeReview-Final.pdf](http://www.mbtapolice.com/prevention/2003TransitCrimeReview-Final.pdf), [http://www.mbta.com/insidethet/taag\\_history11.asp](http://www.mbta.com/insidethet/taag_history11.asp)

<sup>4</sup> Information taken from New York Metro-Transit Authority websites, <http://www.mta.info/mta/network.htm>, <http://www.mta.nyc.ny.us/mta/budget/feb2004-finplan/feb2004-2.pdf>, as well as confidential correspondence with New York City police officer, Spring 2004.

<sup>5</sup> Information taken from Southeastern Pennsylvania Transportation Authority website, "Fiscal Year 2004 Operating Budget" at [www.septa.org/reports/opbud04.pdf](http://www.septa.org/reports/opbud04.pdf).

<sup>6</sup> Information taken from Washington Metropolitan Area Transit Authority website, "WMATA Facts" at <http://www.wmata.com/about/metrofacts.pdf>, "Metro Transit Police" at <http://www.wmata.com/about/mtpd.cfm>, [http://www.wmata.com/about/mtpd\\_crime\\_stats03.cfm](http://www.wmata.com/about/mtpd_crime_stats03.cfm), and "Fiscal 2001 Annual Report/Fiscal 2002 Budget" at <http://www.wmata.com/about/default.cfm>

<sup>7</sup> Confidential correspondence with New York City police officer, Spring 2004.

<sup>8</sup> Washington Metropolitan Area Transit Authority website, [http://www.wmata.com/about/mtpd\\_crime\\_stats03.cfm](http://www.wmata.com/about/mtpd_crime_stats03.cfm).

<sup>9</sup> MBTA "2003 Transit Crime Review."  
[www.mbtapolice.com/prevention/2003TransitCrimeReview-Final.pdf](http://www.mbtapolice.com/prevention/2003TransitCrimeReview-Final.pdf)

<sup>10</sup> Correspondence with New York City police officer, Spring 2004.

<sup>11</sup> Washington Metropolitan Area Transit Authority website, [http://www.wmata.com/about/mtpd\\_crime\\_stats03.cfm](http://www.wmata.com/about/mtpd_crime_stats03.cfm).

<sup>12</sup> 2003 Transit Crime Review. [www.mbtapolice.com/prevention/2003TransitCrimeReview-Final.pdf](http://www.mbtapolice.com/prevention/2003TransitCrimeReview-Final.pdf)