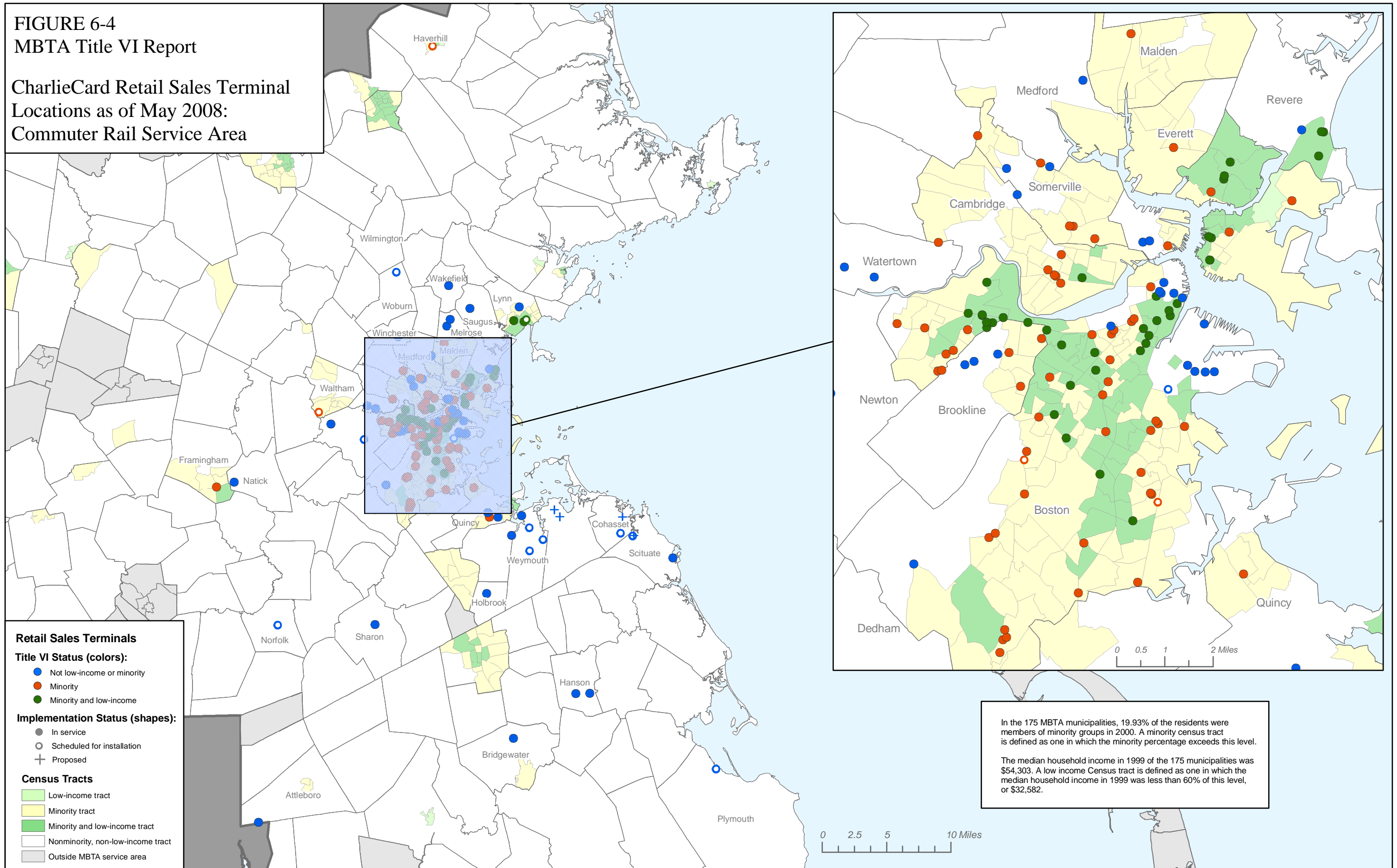


**FIGURE 6-4**  
**MBTA Title VI Report**

**CharlieCard Retail Sales Terminal  
 Locations as of May 2008:  
 Commuter Rail Service Area**



non-low-income stations. The table also presents the average number of incidents per elevator and per station, followed by the average out-of-service time per elevator and per station. In addition, the tables show the median out-of-service time, to indicate the extent to which outliers may affect the average (mean).

Out-of-service time differs from repair time in that it equals the total number of revenue hours between the went-out-of-service and returned-to-service times for all overlapping groups of incidents, while repair time is a per-incident measure.<sup>2</sup> However, out-of-service time is comparable to the result of multiplying the average repair time per incident by the number of incidents per elevator or station. Average repair time is the appropriate measure on a per-incident basis, while average out-of-service time is the appropriate measure on a per-elevator or per-station basis.

### ***Elevators***

Elevators in stations designated as minority had, on average, shorter repair times per incident than those in nonminority stations. Minority stations had a slightly higher average rate of incidents per elevator, but a lower average rate of incidents per station than nonminority stations. Because the average repair time per incident was lower for minority stations than for nonminority stations, the average out-of-service time per elevator and per station was lower for minority stations.

Elevators in stations designated as low-income had, on average, a shorter repair time per incident than non-low-income stations. However, low-income stations had a higher average rate of incidents per elevator and per station than non-low-income stations. Thus, although the low-income repair times per incident were lower, the average rate of out of service time per elevator and per station was higher for low-income stations than for non-low-income stations.

The median number of hours out of service per station, while less than the respective average (mean), was not sufficient to indicate that high incident rates at some stations significantly raised the averages.

The MBTA will determine why there were higher rates of incidents per elevators in minority and low-income stations, and higher rates of incidents per station in low-income stations, and address these issues, while endeavoring to maintain the lower average repair times per incident at minority and low-income stations.

**Table 6-18: Elevators Out of Service April 1, 2007, through April 1, 2008**

	<b>Average # of Hours to Repair</b>	<b>Average # of Incidents</b>		<b>Average # of Hours Out of Service</b>		<b>Median # of Hours Out of Service</b>
	Per Incident	Per Elevator	Per Station	Per Elevator	Per Station	Per Station
Minority	3.5	10.9	24.7	36.0	81.5	57.2
Nonminority	4.6	10.2	26.4	40.3	104.4	48.4
Low-income	3.5	13.9	36.0	46.4	120.5	88.5
Non-low-inc.	4.0	9.6	22.4	35.1	81.5	47.7
All stations	3.9	10.6	25.3	37.7	89.8	54.1

<sup>2</sup> For example, if one elevator (or escalator) is out of service from 1:00 PM until 3:00 PM, and another elevator (or escalator) at the same station is out of service from 2:00 PM until 4:00 PM, the repair time for each incident is two hours, but the out-of-service time for the station is three hours, as the two incidents overlap each other.

## Escalators

Escalators in stations designated as minority had, on average, a longer repair time per incident than those in nonminority stations. Minority stations had a higher average rate of incidents per escalator, but a lower average rate of incidents per station than nonminority stations. Because the average repair time per incident was higher for minority stations than for nonminority stations, the average rate of out-of-service time per escalator and per station was higher for minority stations.

Escalators in stations designated as low-income had, on average, a slightly longer repair time per incident than those in non-low-income stations. Low-income stations had a higher average rate of incidents per escalator and per station than non-low-income stations. Because the average repair time and the average number of incidents per escalator and per station were higher for low-income than for non-low-income stations, the average number of hours out of service per escalator and per station were also higher.

The median out-of-service time per station was significantly less than the respective average (mean), indicating that these high station incident rates significantly raised the averages. The five stations with the highest rate of incidents per escalator were Downtown Crossing (72.5), Government Center (71.0), Park Street (49.0), Copley (26.0), and Andrew (25.3).<sup>3</sup> As Downtown Crossing is designated minority and low-income, and Government Center is designated nonminority and non-low-income, the high station incident rates did not raise the average of minority or low-income stations disproportionately.

The MBTA will determine why there were greater rates of incidents involving minority and low-income escalators and low-income stations, and address these issues, while endeavoring to lower the average repair time per incident at minority and low-income stations.

**Table 6-19: Escalators Out of Service April 1, 2007, through April 1, 2008**

	Average # of Hours to Repair	Average # of Incidents		Average # of Hours Out of Service		Median # of Hours Out of Service
	Per Incident	Per Elevator	Per Station	Per Elevator	Per Station	Per Station
Minority	11.3	9.2	22.9	91.2	228.1	48.6
Nonminority	9.1	7.7	24.4	67.6	215.6	43.1
Low-income	10.5	13.8	30.2	141.6	308.9	59.0
Non-low-inc.	10.3	7.4	21.7	67.6	199.3	39.7
All stations	10.3	8.4	23.5	80.1	223.0	43.9

## Station Parking Distribution and Utilization

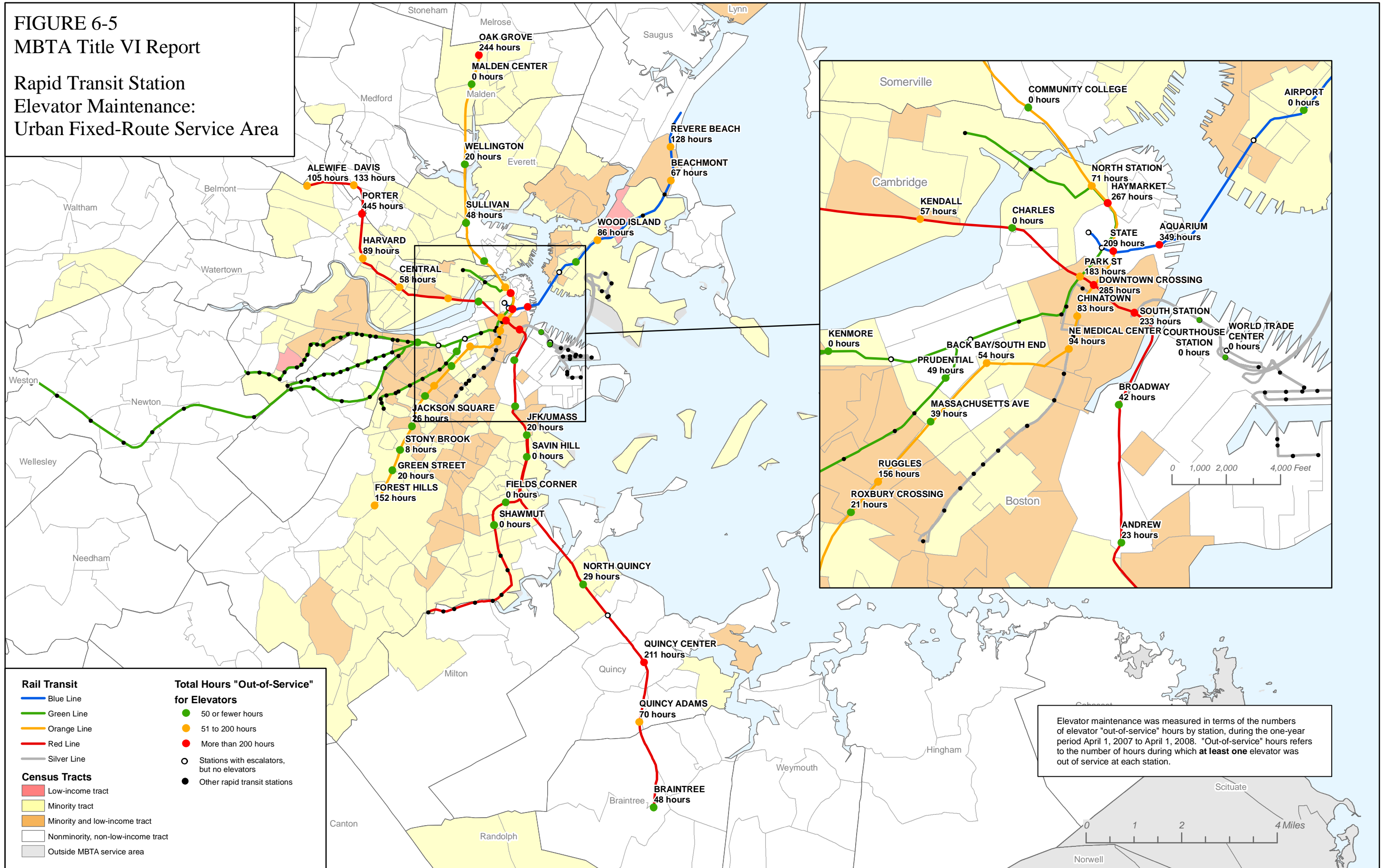
For the purpose of monitoring Title VI compliance, the Long-Range Planning Department is responsible for the level-of-service assessment of station parking. This monitoring evaluates whether the distribution, utilization, and condition of station parking in minority areas is commensurate with the distribution, utilization, and condition of station parking throughout the system.

<sup>3</sup> Of these five stations, Downtown Crossing and Park Street are both minority and low-income, and the other three stations are nonminority and non-low-income.



**FIGURE 6-5**  
**MBTA Title VI Report**

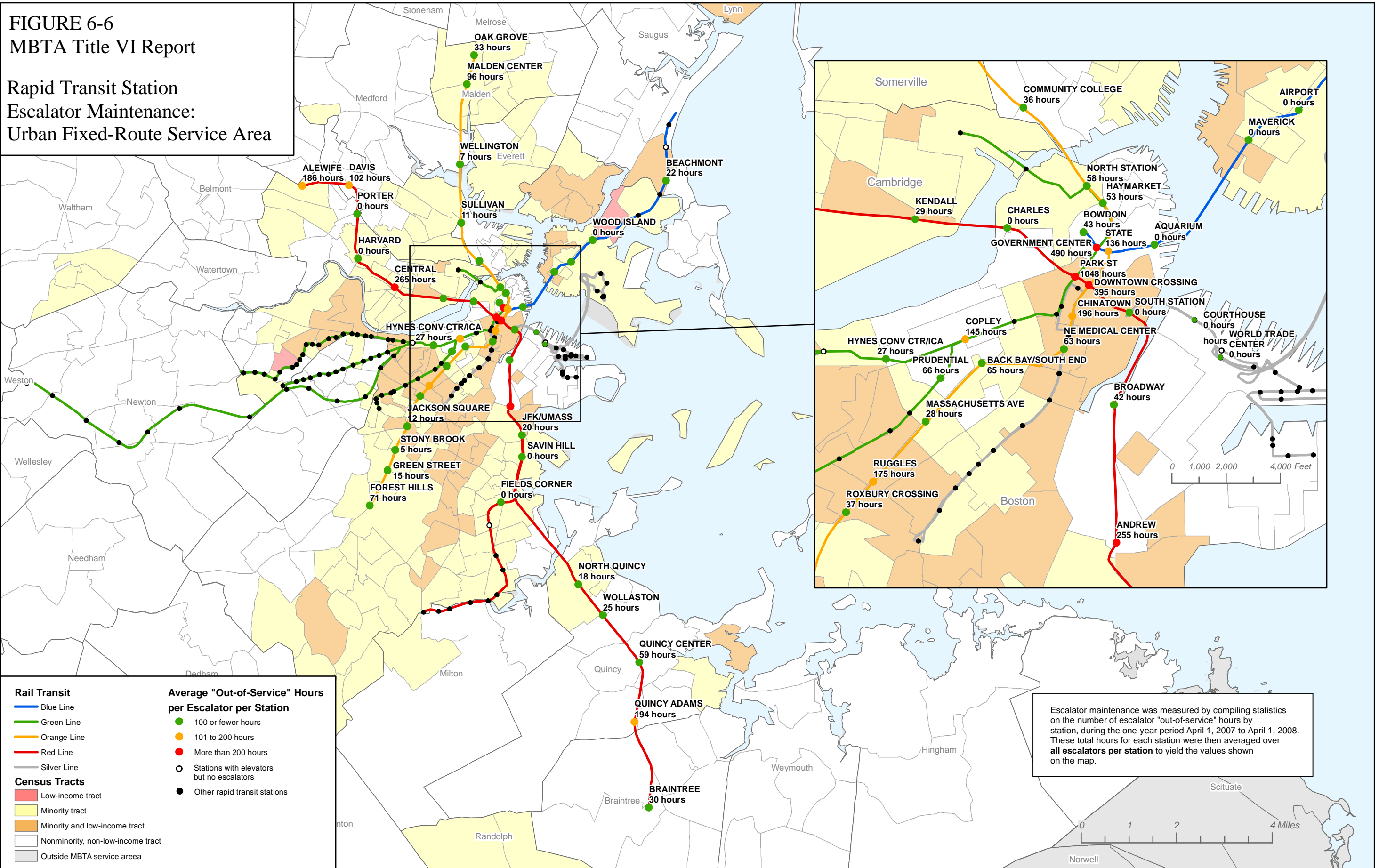
**Rapid Transit Station  
 Elevator Maintenance:  
 Urban Fixed-Route Service Area**



Elevator maintenance was measured in terms of the numbers of elevator "out-of-service" hours by station, during the one-year period April 1, 2007 to April 1, 2008. "Out-of-service" hours refers to the number of hours during which at least one elevator was out of service at each station.

**FIGURE 6-6**  
**MBTA Title VI Report**

**Rapid Transit Station  
 Escalator Maintenance:  
 Urban Fixed-Route Service Area**



If a disparity is found in the parking supply, the Title VI Working Group coordinates with Planning and other relevant MBTA departments to develop a plan for future remediation, taking into account numerous feasibility, spatial, and other constraints at MBTA stations.

Parking at MBTA stations and terminals can benefit the community by making access to transit more convenient. Lack of parking or inadequate parking can make transit difficult to access, especially in nonurban communities, where population and housing densities do not allow most residents to access the MBTA by walking. Conversely, parking can also negatively impact a community in terms of creating increased auto trips, which can contribute to congestion and air quality deterioration. The MBTA, in its capital planning, recognizes the need for a balanced parking program that takes into account demand, the variety of parking facility functions (regional collector, intercommunity, local/neighborhood, and urban central), environmental and neighborhood impacts, and the need to promote transit-access alternatives to the automobile. Across the entire MBTA system, according to the Program for Mass Transportation, 84% of transit users bike or walk to stations. Within the commuter rail system, 54% of users drive automobiles to stations and other transit services. Title VI analysis includes assessing how parking functions and supply are distributed throughout the service area and identifying whether there is an imbalance in the siting of parking facilities in low-income-minority and minority neighborhoods versus nonminority neighborhoods.

### Parking Distribution

There are 245 train stations in the MBTA system, two express-bus lots, and three ferry terminals. Of these facilities, 148 have some kind of parking, provided by the MBTA, other RTAs, municipalities, or private entities. The breakdown of parking availability by mode and in low-income minority, minority, and nonminority communities is provided in Table 6-20.

**Table 6-20: MBTA Facilities with Parking**

	Total	Low-Income-Minority	Minority	Nonminority
Total Facilities w/ Parking	137	7 5%	29 21%	108 79%
Total Parking Spaces*	54,515	3,565 7%	13,942 26%	40,573 74%
Rapid Transit Facilities w/ Parking	19	2 11%	9 47%	10 53%
Rapid Transit Parking Spaces*	11,346	540 5%	6,288 55%	5,058 45%
Commuter Rail Facilities w/ Parking	110	5 5%	18 16%	92 84%
Commuter Rail Parking Spaces*	38,850	3,025 8%	7,260 19%	31,590 81%
Rapid Transit/Comm. Rail/Bus Facilities w/ Parking	3	0 0%	2 67%	1 33%
Rapid Transit/Comm. Rail/Bus Parking Spaces	1,716	0 0%	394 23%	1,322 77%
Ferry Facilities w/ Parking	3	0 0%	0 0%	3 100%
Ferry Parking Spaces*	2,325	0 0%	0 0%	2,325 100%
Express Bus Facilities w/ Parking	2	0 0%	0 0%	2 100%
Express Bus Parking Spaces*	278	0 0%	0 0%	278 100%

\*Includes non-disability spaces only.



Table 6-21 lists park-and-ride lots for all of the stations in the MBTA system and categorizes the community in which each station is located as low-income-minority, minority, or nonminority. The function of a lot is described for each station as regional collector, intercommunity, local/neighborhood, or urban central. If there is parking at a facility, the number of non-disability spaces, along with typical daily usage and the condition of the parking facility, is listed. The typical daily usage is reported for a sample of all lots, which contains the average daily use of MBTA revenue lots in March 2008.

Stations' parking facilities are categorized based on their function within the MBTA transportation system. The four classifications are:

- Regional collector facilities: Designed to serve customers from multiple origin communities, they are located off highways/interstates or major roadway intersections, and generally have a capacity of more than 500 automobile spaces.
- Intercommunity facilities: Designed and sited to collect customers from the host community and nearby communities, located off secondary routes/roadways, they generally have a capacity of 100 to 500 automobile spaces.
- Local/neighborhood facilities: Designed and sited to serve primarily customers from the neighborhood or immediate community, they have a capacity of less than 100 automobile spaces.
- Urban central: These stations usually do not have parking (with the exception of Maverick, Wood Island, and Chestnut Hill) and are located in the central core of the urban area that the MBTA serves.

**Table 6-21: Distribution of Park-and-Ride Lots**

Mode/Line	Station Name	Minority/ Nonminority	Non- Accessible Capacity	Usage	Function	Lot Condition
<b>Rapid Transit</b>						
<b>Orange Line</b>						
	Oak Grove	Minority	788	92%	Regional collector	Paved surface
	Malden	Minority	188	100%	Intercommunity	Paved surface
	Wellington	Nonminority	1316	95%	Regional collector	Paved surface
	Sullivan Sq.	Nonminority	222	100%	Intercommunity	Paved surface
	Community Col.	Nonminority	NP*	NA	Urban central	NP
	North Station	Minority	NP	NA	Urban central	NP
	Haymarket	Minority	NP	NA	Urban central	NP
	State	Nonminority	NP	NA	Urban central	NP
	Downtown Cross.	Low-income minority	NP	NA	Urban central	NP
	Chinatown	Low-income minority	NP	NA	Urban central	NP
	NE Medical Ctr.	Low-income minority	NP	NA	Urban central	NP
	Back Bay	Minority	NP	NA	Urban central	NP
	Mass Ave.	Minority	NP	NA	Urban central	NP
	Ruggles	Low-income minority	NP	NA	Urban central	NP

\*NP - No parking.

(continued)

**Table 6-21** (continued)

Mode/Line	Station Name	Minority/ Nonminority	Non- Accessible Capacity	Usage	Function	Lot Condition
	Haymarket	Low-income minority	NP	NA	Urban central	NP
	Jackson Sq.	Low-income minority	NP	NA	Urban central	NP
	Stony Brook	Minority	NP	NA	Local/neighborhood	NP
	Green St. (private lots only)	Minority	139	ND**	Local/neighborhood	Paved surface
	Forest Hills	Minority	206	100%	Intercommunity	Paved surface
<b>Green Line</b>						
	Lechmere	Minority	347	89%	Regional collector	Paved surface
	Chestnut Hill	Nonminority	70	96%	Urban central	Paved surface
	Eliot	Nonminority	55	100%	Local/neighborhood	Paved surface
	Waban	Nonminority	74	90%	Local/neighborhood	Paved surface
	Woodland	Nonminority	548	43%	Intercommunity	Multilevel structure
	Riverside	Nonminority	925	84%	Regional collector	Paved surface
	Arlington	Minority	NP	NA	Urban central	NP
	Boylston	Low-income minority	NP	NA	Urban central	NP
	Copley	Nonminority	NP	NA	Urban central	NP
	Government Ctr.	Minority	NP	NA	Urban central	NP
	Haymarket	Minority	NP	NA	Urban central	NP
	Hynes Conv. Ctr.	Nonminority	NP	NA	Urban central	NP
	Kenmore	Minority	NP*	NA	Urban central	NP
	North Station	Minority	NP	NA	Urban central	NP
	Park St.	Low-income minority	NP	NA	Urban central	NP
	Science Park	Minority	NP	NA	Urban central	NP
	AllSt.on St.	Minority	NP	NA	Urban central	NP
	Babcock St.	Low-income minority	NP	NA	Urban central	NP
	Blandford St.	Low-income minority	NP	NA	Urban central	NP
	Boston Col.	Nonminority	NP	NA	Urban central	NP
	BU West	Low-income minority	NP	NA	Urban central	NP
	BU Central	Low-income minority	NP	NA	Urban central	NP
	BU East	Low-income minority	NP	NA	Urban central	NP
	Chestnut Hill Ave.	Nonminority	NP	NA	Urban central	NP
	Chiswick Rd.	Nonminority	NP	NA	Urban central	NP
	Fordham Rd.	Minority	NP	NA	Urban central	NP

\*\*ND - No data.

(continued)



**Table 6-21** (continued)

<b>Mode/Line</b>	<b>Station Name</b>	<b>Minority/ Nonminority</b>	<b>Non- Accessible Capacity</b>	<b>Usage</b>	<b>Function</b>	<b>Lot Condition</b>
	Greycliff Rd.	Nonminority	NP	NA	Urban central	NP
	Griggs St.	Low-income minority	NP	NA	Urban central	NP
	Harvard Ave.	Low-income minority	NP	NA	Urban central	NP
	Mt. Hood Rd.	Minority	NP	NA	Urban central	NP
	Packards Corner	Low-income minority	NP	NA	Urban central	NP
	Pleasant St.	Low-income minority	NP	NA	Urban central	NP
	St. Paul St. (B)	Low-income minority	NP	NA	Urban central	NP
	South St.	Nonminority	NP	NA	Urban central	NP
	Summit Ave.	Minority	NP	NA	Urban central	NP
	Sutherland Rd.	Nonminority	NP	NA	Urban central	NP
	Warren St.	Minority	NP	NA	Urban central	NP
	Washington St.	Nonminority	NP	NA	Urban central	NP
	Brandon Hall	Nonminority	NP	NA	Urban central	NP
	Cleveland Circle	Minority	NP	NA	Urban central	NP
	Coolidge Corner	Minority	NP	NA	Urban central	NP
	Dean Rd.	Nonminority	NP	NA	Urban central	NP
	Englewood Ave.	Nonminority	NP	NA	Urban central	NP
	Fairbanks St.	Nonminority	NP	NA	Urban central	NP
	Hawes St.	Nonminority	NP	NA	Urban central	NP
	Kent St.	Nonminority	NP	NA	Urban central	NP
	St. Paul St. (C)	Nonminority	NP	NA	Urban central	NP
	St. Mary's St.	Nonminority	NP	NA	Urban central	NP
	Tappan St.	Nonminority	NP	NA	Urban central	NP
	Washington Sq.	Nonminority	NP	NA	Urban central	NP
	Winchester St.	Nonminority	NP	NA	Urban central	NP
	Beaconfield	Nonminority	NP	NA	Urban central	NP
	Brookline Hills	Nonminority	NP	NA	Urban central	NP
	Chestnut Hill	Nonminority	70	96%	Urban central	NP
	Brookline Village	Minority	NP*	NA	Urban central	NP
	Fenway	Low-income minority	NP	NA	Urban central	NP
	Longwood Ave.	Nonminority	NP	NA	Urban central	NP
	Newton Ctr.	Nonminority	NP	NA	Urban central	NP
	Newton Highlands	Nonminority	NP	NA	Urban central	NP

(continued)

**Table 6-21** (continued)

<b>Mode/Line</b>	<b>Station Name</b>	<b>Minority/ Nonminority</b>	<b>Non- Accessible Capacity</b>	<b>Usage</b>	<b>Function</b>	<b>Lot Condition</b>
	Reservoir	Nonminority	NP	NA	Urban central	NP
	Back of the Hill	Minority	NP	NA	Urban central	NP
	Brigham Circle	Minority	NP	NA	Urban central	NP
	Fenwood Rd.	Low-income minority	NP	NA	Urban central	NP
	Heath St.	Minority	NP	NA	Urban central	NP
	Longwood Medical	Low-income minority	NP	NA	Urban central	NP
	Mission Park	Low-income minority	NP	NA	Urban central	NP
	Northeastern	Low-income minority	NP	NA	Urban central	NP
	Prudential	Minority	NP	NA	Urban central	NP
	Riverway	Minority	NP	NA	Urban central	NP
	Ruggles/MFA	Low-income minority	NP	NA	Urban central	NP
	Symphony	Minority	NP	NA	Urban central	NP
<b>Red Line</b>						
	Alewife	Minority	2733	100%	Regional collector	Multilevel structure
	Davis	Nonminority	NP	NA	Urban central	NP
	Porter	Nonminority	NP	NA	Urban central	NP
	Harvard	Minority	NP	NA	Urban central	NP
	Central	Minority	NP	NA	Urban central	NP
	Kendall	Low-income minority	NP	NA	Urban central	NP
	Charles/MGH	Nonminority	NP	NA	Urban central	NP
	Park St.	Low-income minority	NP	NA	Urban central	NP
	Downtown Cross.	Low-income minority	NP	NA	Urban central	NP
	South Station	Low-income minority	NP	NA	Urban central	NP
	BRd.way	Nonminority	NP	NA	Urban central	NP
	Andrew	Nonminority	NP	NA	Urban central	NP
	JFK/UMass	Minority	NP	NA	Urban central	NP
	Savin Hill	Minority	33	ND	Local/neighborhood	Paved surface
	Shawmut	Minority	NP	NA	Local/neighborhood	NP
	Fields Corner	Minority	NP	NA	Local/neighborhood	NP
	Ashmont	Minority	NP	NA	Local/neighborhood	NP
	N. Quincy	Minority	1206	87%	Regional collector	Paved surface
	Wollaston	Nonminority	550	93%	Intercommunity	Paved surface
	Quincy Ctr.	Nonminority	872	74%	Regional collector	Multilevel structure

(continued)

**Table 6-21** (continued)

Mode/Line	Station Name	Minority/ Nonminority	Non- Accessible Capacity	Usage	Function	Lot Condition
	Quincy Adams	Nonminority	2538	80%	Regional collector	Multilevel structure
	Braintree	Nonminority	1322	94%	Regional collector	Multilevel structure
<b>Red - Mattapan</b>						
	Mattapan	Minority	200	17%	Local/neighborhood	Paved surface
	Milton	Nonminority	41	26%	Local/neighborhood	Paved surface
	Butler	Minority	40	ND	Local/neighborhood	Paved surface
	Capen St.	Nonminority	NP	NA	Local/neighborhood	NP
	Cedar Grove	Minority	13	ND	Local/neighborhood	Paved surface
	Central Ave.	Nonminority	NP	NA	Local/neighborhood	NP
	Valley Rd.	Nonminority	NP	NA	Local/neighborhood	NP
<b>Blue Line</b>						
	Wonderland	Nonminority	1257	98%	Regional collector	Paved surface
	Revere Beach	Nonminority	NP*	NA	Urban central	NP
	Beachmont	Low-income minority	430	80%	Intercommunity	Paved surface
	Suffolk Downs	Low-income minority	110	86%	Intercommunity	Paved surface
	Orient Hts.	Minority	434	73%	Intercommunity	Paved surface
	Wood Island	Minority	74	ND	Urban central	Paved surface
	Airport	Minority	NP	NA	Urban central	NP
	Maverick	Minority	97	ND	Urban central	Paved surface
	Aquarium	Nonminority	NP	NA	Urban central	NP
	State	Nonminority	NP	NA	Urban central	NP
	Government Ctr.	Nonminority	NP	NA	Urban central	NP
	Bowdoin	Nonminority	NP	NA	Urban central	NP
<b>Express Bus</b>						
	Watertown	Nonminority	200	91%	Intercommunity	Paved surface
	Woburn	Nonminority	78	100%	Intercommunity	Paved surface
<b>Commuter Rail</b>						
<b>Newburyport/ Rockport Line</b>						
	Newburyport	Nonminority	814	34%	Intercommunity	Paved surface
	Rowley	Nonminority	282	17%	Intercommunity	Paved surface
	Ipswich	Nonminority	146	ND	Intercommunity	Paved surface

(continued)

**Table 6-21** (continued)

<b>Mode/Line</b>	<b>Station Name</b>	<b>Minority/ Nonminority</b>	<b>Non- Accessible Capacity</b>	<b>Usage</b>	<b>Function</b>	<b>Lot Condition</b>
	Rockport	Nonminority	150	ND	Intercommunity	Dirt and paved
	Gloucester	Nonminority	100	ND	Local/neighborhood	Paved surface
	W. Gloucester	Nonminority	44	58%	Local/neighborhood	Paved surface
	Manchester	Nonminority	71	ND	Local/neighborhood	Paved surface
	Beverly Farms	Nonminority	53	ND	Local/neighborhood	Paved surface
	Prides Cross.	Nonminority	3	ND	Local/neighborhood	Paved surface
	Montserrat	Nonminority	117	79%	Intercommunity	Paved surface
	Hamilton/Wenham	Nonminority	194	65%	Intercommunity	Paved surface
	N. Beverly	Nonminority	87	67%	Local/neighborhood	Paved surface
	Beverly Depot	Nonminority	168	ND	Intercommunity	Paved surface
	Salem	Nonminority	340	100%	Regional collector	Dirt and paved
	Swampscott	Nonminority	131	100%	Intercommunity	Paved surface
	Lynn	Low-income minority	985	13%	Regional collector	Multilevel structure
	Riverworks	Low-income minority	NP	NA	Local/neighborhood	NP
	Chelsea	Low-income minority	NP	NA	Local/neighborhood	NP
<b>Haverhill Line</b>						
	Haverhill	Minority	159	60%	Intercommunity	Paved surface
	Bradford	Nonminority	303	49%	Intercommunity	Paved surface
	Lawrence	Low-income minority	1076	ND	Intercommunity	Multilevel structure
	Andover	Nonminority	152	77%	Intercommunity	Paved surface
	Ballardvale	Nonminority	120	77%	Intercommunity	Paved surface
	N. Wilmington	Nonminority	49	ND	Intercommunity	Paved surface
	Reading	Nonminority	113	71%	Local/neighborhood	Paved surface
	Wakefield	Nonminority	117	73%	Intercommunity	Paved surface
	Greenwood	Nonminority	58	ND	Intercommunity	Paved surface
	Melrose Highlands	Nonminority	146	ND	Local/neighborhood	Paved surface
	Melrose Cedar Park	Nonminority	56	ND	Local/neighborhood	Paved surface
	Wyoming	Nonminority	32	ND	Local/neighborhood	Paved surface
<b>Lowell Line</b>						
	Lowell	Minority	774	ND	Regional collector	Multilevel structure
	N. Billerica	Nonminority	541	93%	Regional collector	Paved surface
	Wilmington	Nonminority	191	90%	Intercommunity	Paved surface

(continued)



**Table 6-21** (continued)

Mode/Line	Station Name	Minority/ Nonminority	Non- Accessible Capacity	Usage	Function	Lot Condition
	Anderson RTC	Nonminority	1510	ND	Regional collector	Paved surface
	Mishawum	Nonminority	NP*	NA	Local/neighborhood	NP
	Winchester	Nonminority	150	ND	Intercommunity	Paved surface
	Wedgemere	Nonminority	119	ND	Intercommunity	Paved surface
	W. Medford	Nonminority	36	ND	Intercommunity	Paved surface
<b>Fitchburg Line</b>						
	Fitchburg	Low-income minority	316	ND	Intercommunity	Multilevel structure
	N. Leominster	Nonminority	135	ND	Intercommunity	Paved surface
	Ayer	Nonminority	53	ND	Local/neighborhood	Paved surface
	Shirley	Nonminority	64	ND	Local/neighborhood	Dirt and paved surface
	Littleton	Nonminority	73	ND	Intercommunity	Dirt and paved surface
	S. Acton	Nonminority	218	ND	Intercommunity	Paved surface
	W. Concord	Nonminority	146	93%	Intercommunity	Paved surface
	Concord	Nonminority	92	ND	Local/neighborhood	Paved surface
	Lincoln	Nonminority	164	ND	Intercommunity	Dirt and paved surface
	Silver Hill	Nonminority	6	ND	Local/neighborhood	Dirt lot
	Hastings	Nonminority	16	ND	Local/neighborhood	Dirt lot
	Kendal Green	Nonminority	52	ND	Local/neighborhood	Dirt and paved surface
	Brandeis/Roberts	Minority	70	35%	Local/neighborhood	Paved surface
	Waltham	Minority	82	ND	Local/neighborhood	Paved surface
	Waverly	Nonminority	NP	NA	Local/neighborhood	NP
	Belmont	Nonminority	113	ND	Intercommunity	Paved surface
<b>Needham Line</b>						
	Needham Hts.	Nonminority	243	100%	Intercommunity	Paved surface
	Needham Ctr.	Nonminority	34	100%	Local/neighborhood	Paved surface
	Needham Junction	Nonminority	171	100%	Intercommunity	Paved surface
<b>Needham Line</b>						
	Hersey	Nonminority	309	ND	Intercommunity	Paved surface
	W. Roxbury	Nonminority	62	85%	Local/neighborhood	Paved surface
	Highland	Nonminority	175	78%	Local/neighborhood	Paved surface
	Bellevue	Nonminority	37	83%	Local/neighborhood	Paved surface
	Roslindale Village	Nonminority	160	56%	Local/neighborhood	Paved surface

(continued)

**Table 6-21 (continued)**

Mode/Line	Station Name	Minority/ Nonminority	Non- Accessible Capacity	Usage	Function	Lot Condition
<b>Framingham Line</b>						
	Worcester	Low-income minority	384	ND	Intercommunity	Paved surface
	Grafton	Minority	373	ND	Intercommunity	Paved surface
	Westborough	Nonminority	448	89%	Intercommunity	Paved surface
	Southborough	Nonminority	364	95%	Intercommunity	Paved surface
	Ashland	Nonminority	678	60%	Intercommunity	Paved surface
	Framingham	Minority	166	100%	Intercommunity	Paved surface
	W. Natick	Nonminority	178	100%	Intercommunity	Paved surface
	Natick	Nonminority	73	ND	Local/neighborhood	Paved surface
	Wellesley Sq.	Nonminority	298	ND	Intercommunity	Paved surface
	Wellesley Hills	Nonminority	70	ND	Local/neighborhood	Paved surface
	Wellesley Farms	Nonminority	188	ND	Intercommunity	Paved surface
	Auburndale	Nonminority	60	ND	Intercommunity	Paved surface
	W. Newton	Nonminority	172	ND	Intercommunity	Paved surface
	Newtonville	Nonminority	90	ND	Local/neighborhood	Paved surface
	Yawkey	Low-income minority	NP	NA	Urban central	NP
<b>Fairmount Line</b>						
	Fairmount	Minority	50	32%	Local/neighborhood	Paved surface
	Morton St.	Minority	NP*	NA	Local/neighborhood	NP
	Uphams Corner	Low-income minority	NP	NA	Local/neighborhood	NP
<b>Franklin Line</b>						
	Forge Park	Nonminority	716	80%	Regional collector	Paved surface
	Franklin	Nonminority	173	100%	Intercommunity	Paved surface
	Norfolk	Nonminority	532	90%	Intercommunity	Paved surface
	Walpole	Nonminority	343	74%	Intercommunity	Paved surface
	Plimptonville	Nonminority	5	ND	Local/neighborhood	Dirt lot
	Windsor Gardens	Nonminority	NP	NA	Local/neighborhood	NP
	Norwood Central	Nonminority	781	67%	Intercommunity	Paved surface
	Norwood Depot	Nonminority	393	25%	Intercommunity	Paved surface
	Islington	Nonminority	39	50%	Local/neighborhood	Dirt and paved surface
	Dedham Corp. Ctr.	Nonminority	497	33%	Intercommunity	Paved surface
	Endicott	Nonminority	46	ND	Local/neighborhood	Paved surface
	Readville	Minority	347	64%	Intercommunity	Paved surface

(continued)

**Table 6-21** (continued)

Mode/Line	Station Name	Minority/ Nonminority	Non- Accessible Capacity	Usage	Function	Lot Condition
<b>Greenbush Line</b>						
	Greenbush	Nonminority	1000	29%	Intercommunity	Paved surface
	N. Scituate	Nonminority	235	59%	Intercommunity	Paved surface
	Cohasset	Nonminority	410	40%	Intercommunity	Paved surface
	Natasket	Nonminority	495	21%	Local/neighborhood	Paved surface
	W. Hingham	Nonminority	214	63%	Intercommunity	Paved surface
	E. Weymouth	Nonminority	325	70%	Intercommunity	Paved surface
	Weymouth	Nonminority	290	55%	Intercommunity	Paved surface
<b>Providence Line</b>						
	Providence	Nonminority	330	ND	Intercommunity	Paved surface
	S. Attleboro	Nonminority	567	100%	Intercommunity	Paved surface
	Attleboro	Minority	765	ND	Regional collector	Paved surface
	Mansfield	Nonminority	830	ND	Regional collector	Dirt and paved surface
	Sharon	Nonminority	542	45%	Intercommunity	Paved surface
	Stoughton	Nonminority	333	86%	Intercommunity	Paved surface
	Canton Ctr.	Nonminority	215	97%	Intercommunity	Paved surface
	Canton Junction	Nonminority	764	96%	Regional collector	Paved surface
	Route 128	Nonminority	2589	92%	Regional collector	Multilevel structure
	Hyde Park	Minority	121	91%	Local/neighborhood	Paved surface
<b>Middleborough Line</b>						
	Middleborough/ Lakeville	Nonminority	769	83%	Regional collector	Paved surface
	Bridgewater	Nonminority	504	72%	Intercommunity	Paved surface
	Campello	Minority	535	44%	Intercommunity	Paved surface
	Brockton	Low-income minority	264	ND	Intercommunity	Paved surface
	Montello	Minority	347	68%	Intercommunity	Paved surface
	Holbrook/Randolph	Minority	369	78%	Intercommunity	Paved surface
<b>Kingston Line</b>						
	Plymouth	Nonminority	96	2%	Intercommunity	Paved surface
	Kingston	Nonminority	1039	63%	Regional collector	Paved surface
	Halifax	Nonminority	402	77%	Intercommunity	Paved surface
	Hanson	Nonminority	482	70%	Intercommunity	Paved surface
	Whitman	Nonminority	208	95%	Intercommunity	Paved surface

(continued)

**Table 6-21** (continued)

Mode/Line	Station Name	Minority/ Nonminority	Non- Accessible Capacity	Usage	Function	Lot Condition
	Abington	Nonminority	405	82%	Intercommunity	Paved surface
	S. Weymouth	Nonminority	543	82%	Intercommunity	Paved surface
<b>Commuter Ferry</b>						
	Quincy Fore River	Nonminority	350	73%	Intercommunity	Paved surface
	Hingham	Nonminority	1841	46%	Regional collector	Paved surface
	Hull	Nonminority	134	ND	Intercommunity	Dirt lot

### Parking Utilization

The analysis of parking facility utilization is based on data collected by the MBTA Revenue Department for MBTA-owned and operated lots (95 of a total 148 lots). Utilization rates of these sample lots were compared to assess whether there were disparities between minority-area facilities and the system as a whole in terms of parking supply needs. Facilities used at less than 50% of capacity are considered to have an excess of parking. Facilities with parking usage over 85% are considered to be approaching over-capacity. Table 6-22 shows the breakdown of parking facility utilization across the system.

**Table 6-22: Parking Facility Utilization**

Utilization Rate	Total		Low-Income-Minority		Minority		Nonminority	
	# of Facilities	% of Total Facilities	# of Facilities	% of Low-Income-Minority Facilities	# of Facilities	% of Minority Facilities	# of Facilities	% of Non-Minority Facilities
Less than 50%	19	20%	1	33%	5	24%	14	19%
50% to 85%	38	41%	1	33%	7	33%	31	43%
Greater than 85%	36	39%	1	33%	9	43%	27	38%
Total	93	100%	3	3%	21	23%	72	77%

A comparison of utilization rates for all the facilities and for those in low-income-minority, minority, and nonminority areas shows that on a systemwide level: 39% of all MBTA-owned-and-operated revenue facilities are over 85% full, while 38% of revenue facilities in nonminority areas, 33% of revenue facilities in low-income-minority areas, and 43% of revenue facilities in minority areas are over 85% full. This overall utilization rate is lower than the rate reported for 2007 (60%), which was based on a systemwide inventory conducted in fall 2005/winter 2006 that included non-MBTA revenue lots and non-revenue lots. The utilization data for fall 2005/winter 2006 for the non-MBTA-owned-and-operated lots showed that 56% of these lots were over 85% full.



Low-income-minority and minority areas have a higher percentage of facilities that have excess parking (less than 50% utilization) compared with all the facilities and with the facilities in nonminority areas. One in three (33%) parking facilities in low-income minority areas has less than 50% utilization. Of all parking facilities in minority areas, 24% have less than 50% utilization, compared to 20% of parking facilities systemwide and 19% of parking facilities in nonminority areas.

Table 6-23 presents the distribution of parking facilities by function throughout the entire system and in low-income-minority, minority, and nonminority areas. The analysis of the breakdown of facilities by function indicates that parking facility types are distributed similarly within minority and nonminority areas. Of the large regional collector facilities, 7 of 23 (20%) are located at minority-area stations, which is slightly less than the percentage of all parking lots systemwide that are located in minority communities (24%). Low-income-minority neighborhoods do not have any local/neighborhood or urban center parking facilities; many of these communities are densely populated urban communities, and most people in these communities live within walking distance of transit.

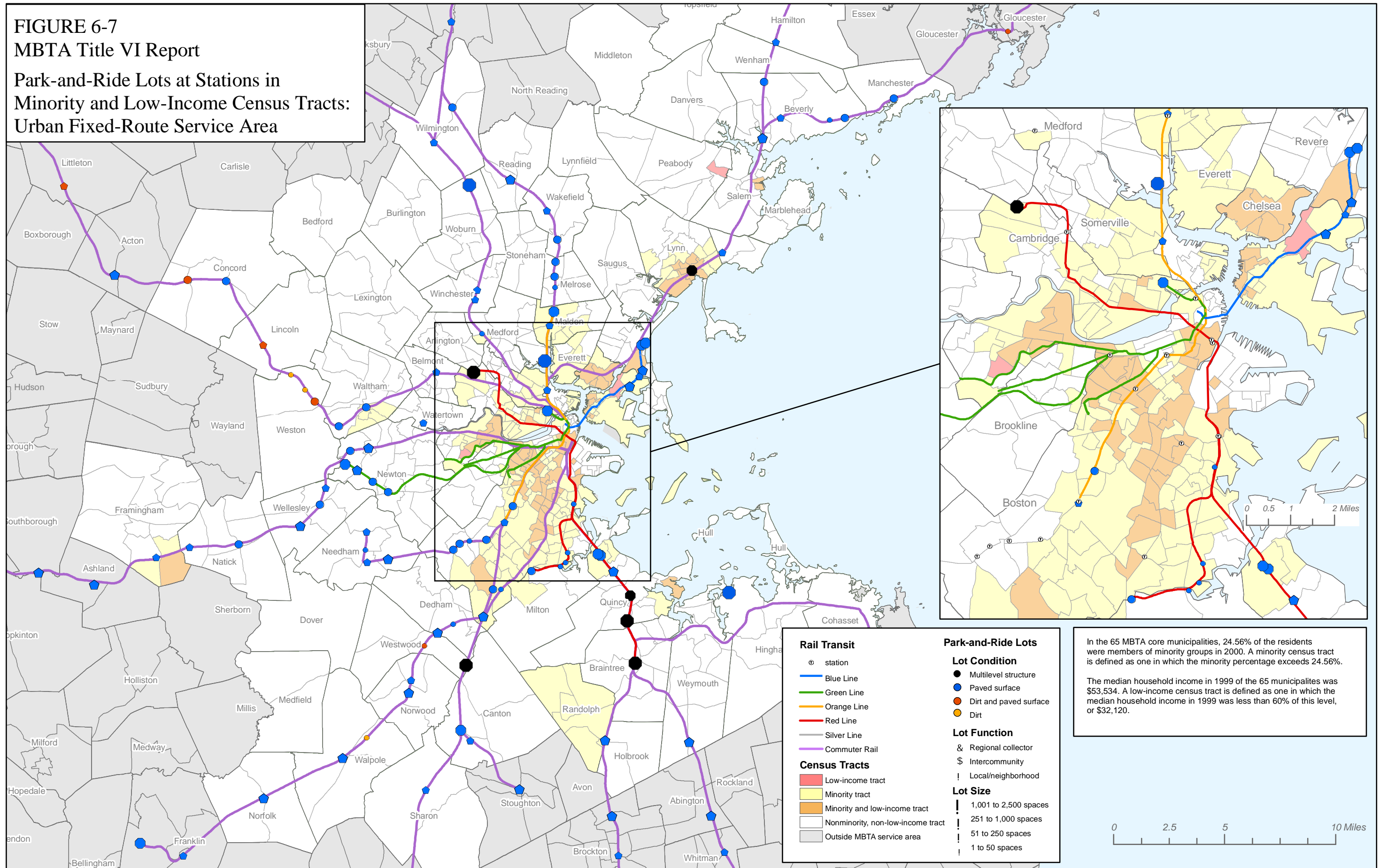
**Table 6-23: Parking Facility Function**

	Total		Low-Income-Minority		Minority		Nonminority	
	# of Facilities	% of Total Facilities	# of Facilities	% of Low-Income-Minority Facilities	# of Facilities	% of Minority Facilities	# of Facilities	% of Non-Minority Facilities
Regional collector	23	16%	1	13%	7	20%	16	14%
Intercommunity	82	55%	7	88%	16	46%	66	58%
Local/neighborhood	40	27%	0	0%	10	29%	30	27%
Urban central	3	2%	0	0%	2	6%	1	1%
Total	148		8		35		113	

### Condition of Parking Lots

The condition of station parking facilities at low-income-minority-area facilities, minority-area facilities, and nonminority-area facilities was assessed by categorizing each facility by the type of construction. These conditions are summarized in Table 6-24.

**FIGURE 6-7**  
**MBTA Title VI Report**  
**Park-and-Ride Lots at Stations in**  
**Minority and Low-Income Census Tracts:**  
**Urban Fixed-Route Service Area**



In the 65 MBTA core municipalities, 24.56% of the residents were members of minority groups in 2000. A minority census tract is defined as one in which the minority percentage exceeds 24.56%.

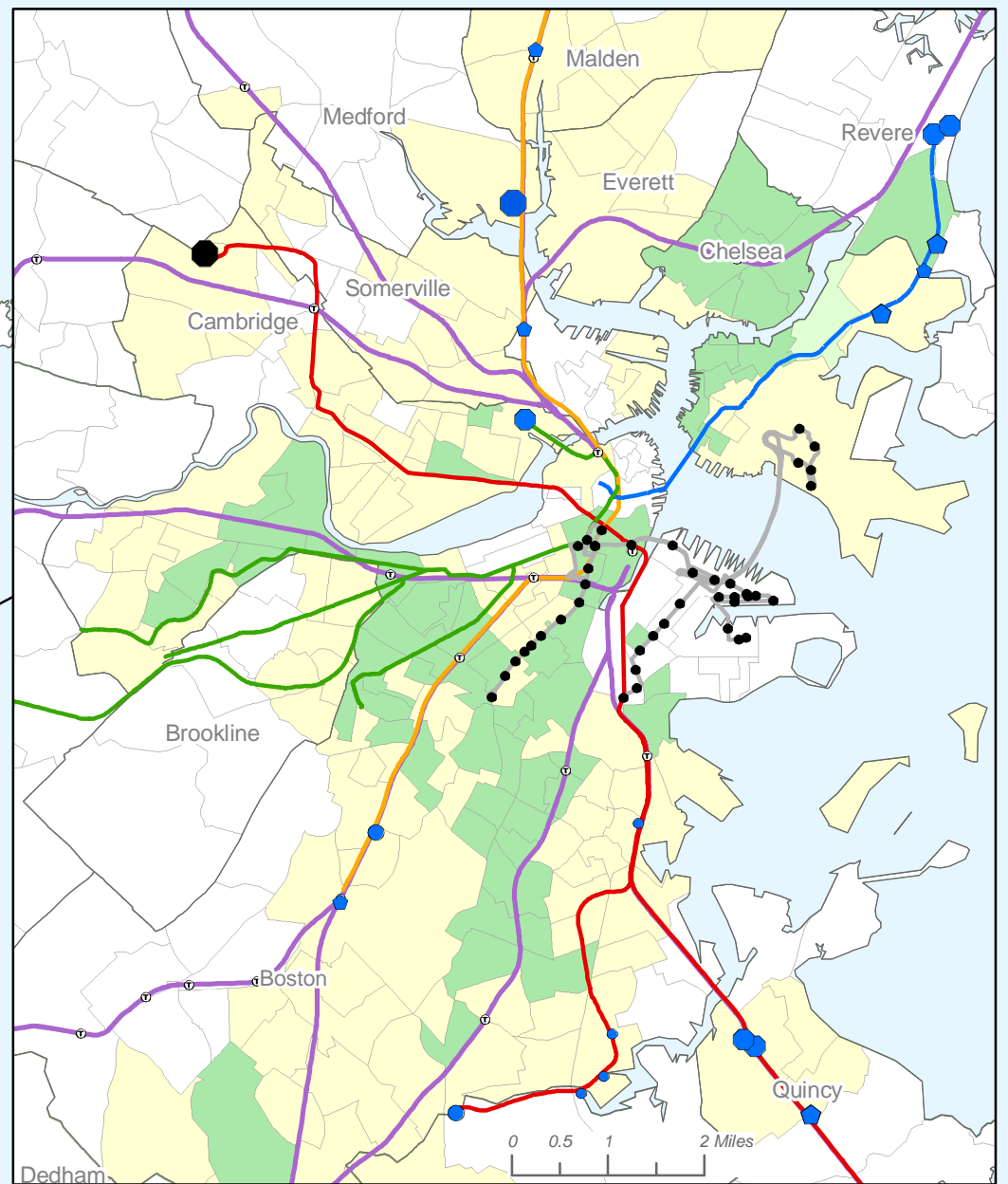
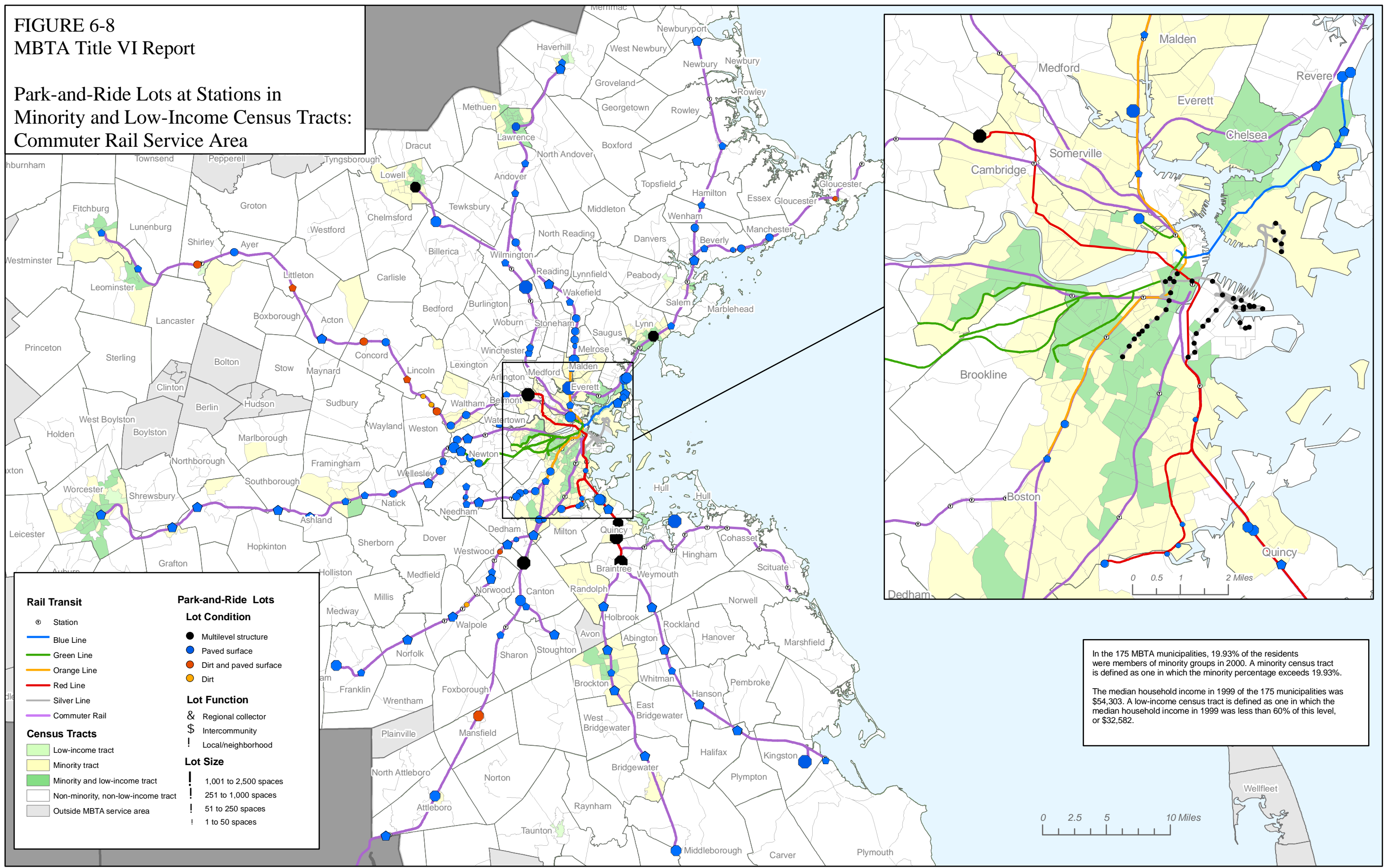
The median household income in 1999 of the 65 municipalities was \$53,534. A low-income census tract is defined as one in which the median household income in 1999 was less than 60% of this level, or \$32,120.





**FIGURE 6-8**  
**MBTA Title VI Report**

**Park-and-Ride Lots at Stations in  
 Minority and Low-Income Census Tracts:  
 Commuter Rail Service Area**



<p><b>Rail Transit</b></p> <ul style="list-style-type: none"> <li>⊙ Station</li> <li>— Blue Line</li> <li>— Green Line</li> <li>— Orange Line</li> <li>— Red Line</li> <li>— Silver Line</li> <li>— Commuter Rail</li> </ul> <p><b>Census Tracts</b></p> <ul style="list-style-type: none"> <li>■ Low-income tract</li> <li>■ Minority tract</li> <li>■ Minority and low-income tract</li> <li>□ Non-minority, non-low-income tract</li> <li>□ Outside MBTA service area</li> </ul>	<p><b>Park-and-Ride Lots</b></p> <p><b>Lot Condition</b></p> <ul style="list-style-type: none"> <li>● Multilevel structure</li> <li>● Paved surface</li> <li>● Dirt and paved surface</li> <li>● Dirt</li> </ul> <p><b>Lot Function</b></p> <ul style="list-style-type: none"> <li>&amp; Regional collector</li> <li>\$ Intercommunity</li> <li>! Local/neighborhood</li> </ul> <p><b>Lot Size</b></p> <ul style="list-style-type: none"> <li>! 1,001 to 2,500 spaces</li> <li>! 251 to 1,000 spaces</li> <li>! 51 to 250 spaces</li> <li>! 1 to 50 spaces</li> </ul>
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In the 175 MBTA municipalities, 19.93% of the residents were members of minority groups in 2000. A minority census tract is defined as one in which the minority percentage exceeds 19.93%.

The median household income in 1999 of the 175 municipalities was \$54,303. A low-income census tract is defined as one in which the median household income in 1999 was less than 60% of this level, or \$32,582.



**Table 6-24: Parking Facility Conditions**

	Total		Low-Income-Minority		Minority		Nonminority	
	# of Facilities	% of Total Facilities	# of Facilities	% of Low-Income-Minority Facilities	# of Facilities	% of Minority Facilities	# of Facilities	% of Non-Minority Facilities
Multilevel structure	10	7%	3	38%	5	14%	5	4%
Paved surface	126	85%	5	63%	30	86%	96	85%
Dirt lot or combination dirt/paved	12	8%	0	0%	0	0%	12	11%
<b>Total</b>	<b>148</b>		<b>8</b>		<b>35</b>		<b>113</b>	

Half of the 10 multilevel parking structures are located in minority communities, and three of these are located in low-income-minority communities. This represents a much higher proportion than the 5% of all parking facilities that are located in low-income-minority communities and the 24% of all parking facilities that are located in minority communities. This should serve to benefit low-income-minority and minority communities, since the amount of land area utilized per parking space by multilevel structures is much less than that used for paved surface lots. There are no unpaved lots located in low-income-minority or minority communities; however, there are 12 unpaved lots located in non-minority areas. Paved surface lots make up the majority of parking surfaces throughout the system: 85% of all parking facilities have paved surfaces.

**Parking Assessment**

The results of the data analysis show an equitable distribution of parking utilization and types of parking facilities within the MBTA system when considering the density of development and population in an area. Low-income-minority and minority communities have a lower percentage of parking facilities that fill to over 85% of capacity than minority communities and the system as a whole. A higher percentage of parking facilities fill to less than 50% of capacity in low-income-minority and minority communities than in the non-minority communities. In terms of size and function, the distribution of facilities in minority and nonminority neighborhoods is equivalent when considering the location of the neighborhood. Finally, with respect to facility conditions, paved surface lots predominate in all areas, with a higher distribution of multilevel structures in low-income-minority and minority communities than in the system as a whole.

*Vehicle Assignment*

**Bus Vehicle Assignment**

For the purposes of monitoring Title VI compliance, the Bus Operations Department is responsible for the Level of Service assessment of bus vehicle assignment, which is performed on an annual basis. It involves evaluating the operational distribution of buses throughout the system based on vehicle age and the functionality of air-conditioning.



In general, buses are assigned to one of the eight MBTA bus storage and maintenance facilities, and operate only on routes served by that garage. Daily, within each garage, individual vehicles are not assigned to specific routes, but circulate among routes based on a number of operating constraints and equipment criteria.

To complete the annual bus vehicle assignment monitoring for Title VI, Bus Operations collects data on a summer day using bus pull-out and swing-on sheets, which display information pertaining to the operator, the bus, and the route number. From these data, the average age and the functionality of air-conditioning on the vehicles assigned to each route are determined. Analysis is then completed to compare the average age and proportion of air-conditioner failures on routes that serve minority areas and low-income areas with the data for routes that serve nonminority and non-low-income areas.

If the data demonstrate any adverse disparities in vehicle assignments on routes serving minority or low-income areas, data from two additional days of monitoring are collected and analyzed to determine whether the data for the first day are truly representative. If a disparity is again demonstrated, Bus Operations reviews both the distribution of vehicles by facility and the manner in which vehicles are assigned within facilities to determine which appears to be the source of the problem. After review, appropriate actions are taken to modify either the distribution of vehicles to facilities or the route assignments of vehicles within facilities. Additional monitoring is conducted six months later in order to determine whether the disparity had been rectified.

For the purposes of this report, Bus Operations intentionally collected vehicle assignment data on an unusually warm day in the summer of 2007 (August 3, 2007) to ensure an accurate assessment of air-conditioner functionality. CTPS analyzed the pull-out sheets, which show what bus was assigned to each operator run, and matched the bus type to each trip operated. In addition, CTPS examined maintenance logs for the same day to determine which buses had been flagged as having defective air-conditioning systems. Using the pull-out sheets, a bus vehicle number was matched to each trip on each route. Routes were grouped into minority and nonminority categories. An average age was then calculated for buses based on route types.

As shown in the Table 6-25, the average age for the entire bus fleet observed was 4.12 years, the average age for buses operating on minority routes was 4.17 years, and the average age for buses operating on low-income are routes was 3.66 years. Based on bus number, CTPS then determined, by trip, if an assigned bus was equipped with air-conditioning, and if so equipped, whether the air-conditioning system had been marked in the maintenance-reporting database as defective. It was found that 99% of buses on minority routes, 99% of buses on low-income routes, and 99% of buses on routes systemwide were identified as having working air-conditioning.

**Table 6-25: Bus Vehicle Assignment**

<b>Route Classification</b>	<b>Average Vehicle Age (Years)</b>	<b>% of Buses with Functional A/C</b>
Minority	4.17	99%
Nonminority	4.25	99%
Low-income	3.66	99%
Non-low-income	4.25	99%
Total	4.25	99%

## Heavy Rail and Light Rail Vehicle Assignment

For the purposes of monitoring Title VI compliance, Subway Operations is responsible for the Level of Service assessment of vehicle assignments on light and heavy rail routes. This is completed on an annual basis to evaluate the distribution of rail vehicles throughout the system based on vehicle age.

Each of the three heavy-rail lines (Red Line, Blue Line, and Orange Line) operates with dedicated equipment, meaning that the equipment on one line is not interchangeable with equipment on any of the other lines. In addition, all three heavy-rail lines are defined as minority and as non-low-income routes under Title VI guidelines. Therefore, an analysis of minority vs. nonminority routes or low-income vs. non-low-income routes is not possible for the heavy rail system.

Light rail consists of the Green Line and the Mattapan High Speed Line. The Mattapan Line operates as a short, stand-alone, light-rail extension of the Red Line's Ashmont Branch, with a dedicated fleet; its equipment cannot be used elsewhere in the system. The Green Line, however, is an extensive light-rail system, with four branches (B, C, D, and E) that feed into a core service. For Title VI, the B and E branches are defined as minority and as low-income routes, and the C and D branches are defined as nonminority and as non-low-income. The Mattapan Line is minority, but is not low-income (see Table 6-5). Periodic Title VI monitoring is therefore necessary for vehicle assignment on light rail.

To complete the annual light-rail vehicle assignment monitoring for Title VI, Subway Operations collects data on at least one sample spring weekday. If analysis of these data shows disparities between light-rail vehicle assignments on routes that serve minority areas and assignments for all light rail lines, Subway Operations works in conjunction with Service Planning to resolve them, and a subsequent analysis is completed six months later in order to monitor whether the remediation was sufficient to eliminate the problem.

For the purposes of this report, CTPS analyzed Green Line vehicle assignments, by branch, using data provided by Subway Operations for a randomly chosen day in July 2008. The age of each car for each trip on all four Green Line branches was calculated. An average age was then generated for those lines considered minority routes (Green Line branches B, E and the Mattapan Line), those routes considered minority and low-income (Green Line branches B and E) and those considered nonminority and non-low-income (Green Line branches C and D).

Table 6-26 shows that the average age per car-trip of light-rail equipment operated on minority Green Line routes and the Mattapan Line, combined, was 19.1 years; the average age per car-trip of light-rail equipment operated on low-income Green Line routes was 8.6 years; and the average age for all Green Line routes was 17.0 years. The Mattapan Line, which is physically isolated from the Green Line network, utilizes a fleet of 10 historic PCC streetcars that were built in 1945 and extensively rebuilt since 1999. The age of these cars significantly increases the average age for vehicles on minority routes and on the entire light-rail network. These cars are now being equipped with air-conditioning systems, which will significantly improve the passenger amenities offered on this line.

**Table 6-26: Light Rail Vehicle Assignment**

Line Classification	Average Vehicle Age (Years)
Minority	19
Nonminority	15
Low-income	9
Non-low-income	24
Total	17

## Commuter Rail Vehicle Assignment

For the purposes of monitoring Title VI compliance, Railroad Operations is responsible for the Level of Service assessment of vehicle assignments on commuter rail routes. This assessment is completed on an annual basis to evaluate the distribution of commuter rail vehicles throughout the system based on vehicle age.

Vehicle assignments are developed to correspond with specific characteristics of commuter rail service. These characteristics include minimum seating requirements for each scheduled trip, one functioning toilet car in each trainset, a train length consistent with infrastructure constraints, and modified equipment for a specific operating environment, such as the power doors on the Old Colony trains. In order to optimize coach utilization and the requirements for the train characteristics stated above, the bilevel coaches are operated on trains with the largest volume of ridership.

All coaches in the commuter rail fleet are equipped with similar amenities (such as air-conditioning), with the primary variation among coaches being age. To determine the average age of a trainset, Railroad Operations looks at a sample of consist utilization summary reports. Within the operating constraints of the commuter rail system, Railroad Operations works to alleviate any Title VI vehicle-assignment disparities found in the analysis.

For this report, Railroad Operations collected consist data for every train that operated on each line on October 31, 2007. CTPS then developed a consist summary report to determine the average age of the equipment by line. The data are summarized in Table 6-27. It should be noted that no commuter rail line is classified as low-income. Therefore, only a comparison of minority with nonminority is reported.

**Table 6-27: Commuter Rail Vehicle Assignment**

Status	Line	Average Coach Age (years)
Minority	Fairmount	19
	Middleborough	12
Nonminority	Rockport	21
	Newburyport	21
	Haverhill	22
	Lowell	21
	Fitchburg	21
	Worcester	18
	Needham	17
	Franklin	17
	Providence	16
	Kingston	11
	Stoughton	16
	Greenbush	15
<b>Average Age:</b>	<b>Minority Routes</b>	<b>16</b>
<b>Average Age:</b>	<b>Nonminority Routes</b>	<b>18</b>
<b>Average Age:</b>	<b>All Routes</b>	<b>18</b>

The analysis shows that the newer vehicles are generally assigned to the south-side operation, where all the minority routes are located. All commuter rail coaches purchased since 1991 are high-capacity, bilevel coaches. These coaches are utilized on the south-side lines, as they have the heaviest ridership in the system, and also because several tracks at South Station can only accommodate six-car trains. The average age of the coaches on one of the two minority lines (the

Middleborough/Lakeville Line) is equal to or less than the average age for the system, as bilevel equipment must be used on the Middleborough/Lakeville Line to accommodate both heavy demand and track constraints at South Station. Only one minority line, Fairmount, exceeded the average for age for nonminority lines. This is consistent with the present allocation of equipment, as the Fairmount Line (like the north-side lines) has lower ridership and therefore utilizes more of the lower-capacity single-level coaches, which are older than the high-capacity, bilevel cars.

### *Transit Security*

#### **Placement of Callboxes at Stations**

As discussed in Chapter 4, the MBTA has placed emergency callboxes in its stations in accordance with its crime prevention through environmental design program. Table 6-28 shows an analysis of the number and percentage of callboxes at minority, nonminority, low-income, and non-low-income stations. As can be seen in the table, the percentage of callboxes at minority stations is higher than at nonminority stations, and the percentage of callboxes is also higher at low-income stations than at non-low-income stations.

**Table 6-28: Placement of Callboxes at Stations**

<b>Station Classification</b>	<b>Stations</b>	<b># of Stations with Callboxes</b>	<b>% of Stations with Callboxes</b>
Minority	84	49	58%
Nonminority	56	15	27%
Low-income	32	16	50%
Non-low-income	108	48	44%
Systemwide	140	64	46%

#### **Placement of Surveillance Cameras on Buses**

Currently, 290 buses at four MBTA garages are equipped with surveillance cameras, and another 20 buses at these garages will soon have cameras, as shown in Table 6-29.

**Table 6-29: Surveillance Cameras on MBTA Buses**

<b>Garage</b>	<b>Buses with Cameras</b>	<b>Total Buses at Garage</b>
Quincy	65	82
Lynn	70	88
Charlestown	139	225
Cabot	16 current, 20 planned	200
Total (current and planned)	310	595

There are no cameras on the 733 buses at the other five MBTA bus garages: Albany, Arborway, Fellsway, North Cambridge, and Southampton.

Some routes that serve minority and low-income areas operate out of each of the above garages. Due to the way in which bus vehicle assignments occur (see Chapter 4), all or most minority and low-income routes will have buses with cameras operating on them some of the time. Upon request, the vehicles with cameras can, and have been, assigned to routes with high crime rates.

## Station Security Inspections

As discussed in Chapter 4, the MBTA is currently conducting periodic, random station inspections in which passengers' handbags, briefcases, and other carry-on items are searched to deter passengers from carrying explosives or other weapons onto MBTA vehicles. The analysis shown in Table 6-30 indicates that, a lower percentage of all station inspections has occurred at minority and low-income stations (across all modes) than at stations that are nonminority and non-low-income.

**Table 6-30: Station Security Inspections, July 2008**

	# of Station Inspections	% of Total Station Inspections
Minority stations	49	49%
Nonminority stations	51	51%
Low-income stations	11	11%
Non-low-income stations	89	89%
Total station inspections	100	

## Option B: Quality-of-Service Monitoring

Although the Circular no longer requires recipients to complete both Title VI Level of Service and Quality of Service monitoring, the MBTA is reporting on both in this submittal. The Quality of Service analysis was incorporated into the on-going service planning process through the MBTA's 2006 revisions of the *Service Delivery Policy*. This analysis is applied to the final recommendations in the Service Plan so that if inequities are found they can be addressed before the proposed service changes are implemented.

Historically, the Quality of Service analysis has been completed by CTPS in accordance with the procedures outlined in C 4702.1, Chapter IV, §2.c.[2][a-e]. The procedures set forth in the revised circular (C 4702.1A) are somewhat different than those used in the past. The MBTA has chosen to continue to use the methodology it has been using so that comparisons can be made with past analyses.

The Quality of Service assessment was first completed for the MBTA's 2002 Title VI submittal. At that time, CTPS used the Boston Region MPO's regional model to identify the 10 most densely populated minority TAZs and the 10 most densely populated nonminority TAZs in the MBTA service area. In addition, CTPS used the regional model to select the 3 TAZs with the highest densities of work-trip attractions as representative destinations for the Quality of Service analysis, with the stipulation that each of the three would be from a different neighborhood. This methodology ensured the objectivity of the TAZ selection criteria. The regional model was then used to complete the Quality of Service analysis.

The Quality of Service analysis presented in the March 2005 MBTA Title VI Triennial Report was completed for the 2004 Service Plan, and included the service changes proposed in that plan. The assessment used the same residential trip-origin and work-trip destination TAZs that were used in 2002, with the addition of two major regional employment destinations—Logan Airport and the South Shore Plaza. Logan was selected because of the large and varied number of services it provides, and the South Shore Plaza was selected based on its suburban location and its role as a regional trip generator.

While the selection methodology for destination zones was designed to be unbiased, one might expect some differences between the work trips attracted to these five selected zones, given that three of the zones—Longwood Medical Area, Logan Airport, and the South Shore Plaza—are likely to contain a higher proportion of lower-income jobs.

In addition to including two additional destinations, the Quality of Service analysis reported in the March 2005 MBTA Title VI Triennial Report differed from the 2002 analysis in that it was completed using the MBTA's new Web-based trip-planning tool, which is more sensitive than the MPO's regional model for measuring individual transit-trip times, transfers, and costs. Because the regional model is no longer being used for this analysis, the MBTA has gone back to using census tracts. Tracts tend to be more stable over time, while TAZs may change to accommodate modeling needs.

Because census tracts were used for this report instead of TAZs, it was necessary to change two of the nonminority origins that were used in the previous Quality of Service analyses. Therefore, nonminority tracts were chosen that are as close as possible to the previous origins for the sake of consistency. Table 6-31 shows the 10 minority and 10 nonminority origins and indicates whether each is also low-income. Table 6-32 shows the five destinations and indicates the minority and income status of each.

**Table 6-31: Quality-of-Service Origins**

Tract	Minority Neighborhood Origin	Low-Income?	Tract	Nonminority Neighborhood Origin	Low-Income?
90100	Grove Hall (Dorchester)	Y	60300	South Boston	N
101102	Wellington Hill (Dorchester)	Y	30100	North End	N
70200	Chinatown	Y	20100	Beacon Hill	N
91800	Bowdoin/Geneva (Dorchester)	N	350400	Somerville Powderhouse Square	N
81200	Mission Hill	Y	400500	Brookline Washington Square	N
81300	Eggleston Square (Roxbury)	Y	352900	Mid-Cambridge	N
160100	Chelsea (East Side)	Y	70600	South End (North of Tremont)	N
50300	East Boston Central Square	Y	401	Brighton Center	Y
110401	Roslindale Square	N	354500	Cambridge Avon Hill	N
354900	Cambridge Rindge Towers	N	351000	Somerville Spring Hill	N

**Table 6-32: Quality-of-Service Destinations**

Tract	Destinations	Minority?	Low-income?
30300	State Station	N	N
10700	Copley Square	N	N
81000	Longwood Medical Area	Y	Y
51200	Logan Airport	Y	N
419100	South Shore Plaza	N	N

Table 6-33, below, shows the results of the Quality of Service analysis. Although the data show minority areas to have higher trip fares, a greater number of transfers, longer trip lengths, and longer travel times on average when compared to nonminority areas, none of the differences between minority and nonminority areas are statistically significant at the 95% confidence level. Fur-



thermore, when these variables are normalized for distance, the average travel speed for minority neighborhoods is slightly higher than that for nonminority neighborhoods, and the trip cost per mile is slightly lower. The only difference that is statistically significant at the 95% confidence level is the greater rate of transfers per mile for minority neighborhoods than for nonminority neighborhoods. Aside from this difference, there is no indication of a systemwide disparity between minority and nonminority neighborhoods.

Low-income neighborhoods, on average, also have higher trip fares and a greater number of transfers per trip and per mile than non-low-income areas; however, low-income neighborhoods have shorter trip lengths and travel times, greater travel speeds, and the same trip cost per mile. None of the differences between low-income and non-low-income areas are statistically significant at the 95% confidence level. There is therefore no indication of a systemwide disparity between low-income and non-low-income neighborhoods.

All neighborhoods designated as low-income are also designated as minority, meaning that the figures for areas that are both low-income and minority will match those for low-income alone.

**Table 6-33: Quality-of-Service Analysis**

Average Performance	Avg. Peak-Hr. Travel Time (min)	Trip Length (mi)	Avg. Travel Speed (mph)	Transfers/Trip	Transfers/Mile	Total Trip	Trip Cost/Cost
Minority	44.76	7.48	9.38	1.38	0.21*	\$1.70	\$0.37
Nonminority	44.65	7.44	9.21	1.12	0.15	\$1.61	\$0.40
Low-income	41.93	6.84	9.11	1.29	0.22	\$1.70	\$0.42
Non-low-income	43.89	7.07	8.80	1.18	0.16	\$1.64	\$0.42

\* Indicates that the difference is statistically significant.



# Appendix **A**

MBTA Limited English Proficiency (LEP) Policy and Procedure



# Massachusetts Bay Transportation Authority

<b>SUBJECT:</b> LEP Policy and Procedure	<b>AFFECTED PERSONNEL:</b>	<b>STATUS &amp; DATE:</b>
<b>DOCUMENT #:</b>	<b>ISSUED BY:</b> ODCR	<b>SUPERCEDES:</b>

## 1.0 PURPOSE

This document serves as the Policy and Procedure and Plan of Action for the Massachusetts Bay Transportation Authority (“MBTA”) or (“the Authority”) to provide services to individuals with limited English proficiency. The purpose is to provide a framework for the provision of timely and reasonable language assistance to persons whose primary language is not English, or to those who are limited in speaking, reading, writing or understanding the English language. It demonstrates the MBTA’s best efforts in providing excellent customer service and ensuring meaningful access to all its customers as we continue to build a premier world class transit system.

The MBTA’s LEP Policy and Procedure is in compliance with Title VI of the Civil Rights Act of 1964. It is also in accordance with Federal guidelines that require recipients of federal financial assistance to take adequate steps to ensure that persons with limited English proficiency receive appropriate language assistance. Additionally, it is a proactive way of meeting customer needs, and is consistent with the Authority’s objective to improve overall customer satisfaction.

## 2.0 DEFINITION OF TERMS

2.1.1 *Title VI of the Civil Rights Act of 1964* – was enacted as part of the landmark Civil Rights Act of 1964, which prohibits recipients of federal financial assistance from discriminating based on race, color or national origin by, among other things, failing to provide meaningful access to individuals who are limited English proficient.

2.1.2 *Individuals with Limited English Proficiency* - individuals who do not speak English as their primary language and who have a limited ability to read, write, speak, or understand English.

2.1.3. *Federal financial assistance* – any federal funds in the form of grants, loans or any other assistance that an agency receives towards any program, project, service or activity.

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2.1.4. *Recipients* – all entities (such as the MBTA) that receive Federal financial assistance, either directly or indirectly, through a grant, contract or some other agreement.

2.1.5. *Meaningful access* – the obligation to provide meaningful access is fact-dependent. A person has meaningful access when he or she is able to obtain important communications and information without barriers in a timely and accurate way.

2.1.6. *Vital document* – whether or not a document is “vital” may depend upon the importance of the program, information, encounter, or service involved, and the consequence to the person with LEP if the information in question is not provided accurately or in a timely manner. Vital documents could include, for example, information regarding critical change to service or material with potential for important health, safety and security consequences.

2.1.7. *Language assistance* – the MBTA may provide interpretation, translation and other language services to customers who are limited English proficient based on the need, activity or encounters. There is no “one size fits all solution” for providing assistance and assessments will be made on a case-by-case basis.

2.1.8. *Universal symbols* – pictorial symbols that are used internationally to guide passengers through transportation facilities and are cross-culturally recognized.

2.1.9. *Oral translation* – the act of translating spoken words from one language to another.

2.1.10. *Written translation* – the act of translating written words from one language to another.

2.1.11. *Interpretation* – the unrehearsed transmitting of a spoken or signed message from one language to another.

### 3.0 SCOPE

This policy establishes the framework and guidelines by which the Authority’s departments will meet the requirements of Title VI and related Federal regulations. It ensures effective communication by developing a comprehensive written language assistance program so that all customers including those who are not proficient in English can have meaningful access to the Authority’s programs and activities, as required under the regulations. The scope of the policy covers a range of language assistance programs including the translation of certain written materials, the provision of oral language assistance and interpretation, public

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announcements and the provision of universal symbols and permanent signs in LEP languages for guidance.

#### **4.0 RESPONSIBILITIES**

The LEP policy and procedure is an authority-wide initiative requiring active participation and involvement from various departments within the MBTA including ODCR, Operations, Customer Support Services, Marketing, Public Affairs and others with responsibility for serving this community. ODCR is responsible for monitoring, reporting and overall coordination of the program and will collaborate with relevant departments to ensure effective and efficient implementation.

#### **5.0 MEANINGFUL ACCESS POLICY**

Federal standards require that any agency receiving federal funds must provide meaningful access to its services, programs and activities for customers who have limited English proficiency. A person has meaningful access when he or she is able to obtain important communications and information without barriers in a timely and accurate way. To ensure that the Authority is providing meaningful access, language assistance services will be offered as required.

##### **5.0(A) Language Needs Assessment**

The Authority will apply the following four factors to determine meaningful access and when assessing customer language needs:

1. The number and proportion of persons of limited English proficiency eligible or likely to be served or encountered by a program, activity, or services;
2. The frequency with which persons with limited English proficiency come into contact with the program or service;
3. The nature and importance of the program, activity, or service provided to people's lives;
4. The resources available to the recipient.

The greater the number of persons with LEP, the greater the frequency they will have contact with services, and the greater the programs and activities, the more likely enhanced service will be needed.

##### **5.0(B) Identification of Language Needs in Service Areas**

The Authority, in collaboration with Central Transportation Planning Services ("CTPS"), evaluated MBTA customer neighborhoods, stations,

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bus routes, and subway and commuter rail lines to identify language dominances, other than English, in those areas. Under the regulation criteria, the primary languages break down as follows for the Authority’s customers:

- Spanish 6.1%
- Chinese 2.1%
- Cape Verdean Creole/Portuguese 2.0%
- Italian 1.9%
- Haitian Creole/French 1.5%

For the purpose of this policy, Cape Verdean Creole and Haitian Creole are the preferred languages for translation. However, if translation and/or interpretation services for Cape Verdean Creole and Haitian Creole are not accessible, then the Authority may choose to authorize Portuguese and French as acceptable substitutes.

**6.0 LANGUAGE ASSISTANCE**

Communication with limited English proficient customers in a timely and accurate manner is critical when providing meaningful language assistance. As such, the MBTA will provide interpretation and translation services to assist with language assistance needs. This can be done by contracting with outside language service organizations; engaging qualified bilingual staff to assist; offer language training to essential employees to better prepare them to effectively communicate; community outreach efforts; distributing materials in the dominant LEP languages; and by screening customer feedback for language related issues and concerns.

**6.1(A) Oral Translation/Interpretation Services**

The Authority will make reasonable efforts to provide oral translation and interpreting services when necessary to facilitate MBTA projects and initiatives so as to accurately communicate important and relevant information to customers that have a limited ability to speak, write, read, and understand English.

Additionally, oral translation/interpretation services will be provided at public hearings and other pertinent events as necessary. Oral translation may include voice announcements, and interpretation services that will be provided for telephone conversations regarding critical matters involving safety, security, and emergency.

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**6.1(A)1 Procedure for Accessing Oral Translation/Interpretation Services**

The MBTA has contracted with a language assistance firm to provide professional oral translation and interpretation services. Persons requesting translation services can make request in person, by telephone or fax, E-mail, or in writing. The authorization for translation services will be made by the Department requesting the services. The Office of Diversity and Civil Rights, Public Affairs, Marketing, and Customer Support Services Center may also be used to assist in processing requests made by other departments as well. The following are appropriate contacts based on the need for obtaining services or assistance:

- **ODCR (Government Compliance)** - general assistance and request for information (617) 222 3305;
- **Public Affairs** - assistance regarding public meetings and/or customer support (617) 222- 3304
- **Marketing** - assistance regarding marketing materials and/or printed communications (617) 222-5470;
- **CSS** - assistance regarding translation services for direct customer telephone contact, communications and complaints (617) 222-3200.

**6.1(A)2 Interpreters for meetings/public hearings:**

Upon request, staff from Marketing, ODCR or CSS will coordinate language requests between the MBTA and vendor. The firm will request the Authority’s language needs, the date, time, place and general purpose of the meeting or event. The MBTA’s requests for interpreters should be submitted at least 5 business days prior to public hearing/meeting.

**6.1(A)3 Telephone Interpreter:**

MBTA will contact the language assistance firm to request an interpreter for telephone communications as necessary. The firm will require that the Authority’s language needs be identified prior to being contacted. As an example, this can be achieved by MBTA staff utilizing “I Speak Calling Cards” printed in various languages for the customer to identify his or her spoken languages (i.e. “I speak Spanish”) translated in the Spanish language. The department requesting the services will be charged for the translations.

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## 6.1(B) Written Translation Services

The Authority will make every effort to translate documents or use universal symbols and signs for its customers with limited English proficiency, and in doing so, the Authority will take into consideration the importance, benefits, costs, and feasibility of translating such materials.

### 6.1(B)1 Vital materials

For the purpose of this policy, vital materials are defined as information or documents that are critical for accessing MBTA services, programs and activities. Vital documents may include, but are not limited to:

- communications affecting health and safety;
- security announcements and signage;
- emergency related public announcements;
- public participation in the decision making processes involving the Authority;
- public meeting translations (advance notice will be given 48 ours before event);
- materials regarding Title VI Rights and complaint procedures;
- materials concerning major Authority-wide initiatives that affect customer services (e.g. AFC);
- information affecting a rider's ability to access and use the system safely and effectively (e.g. major station changes, renovations, permanent changes in service or service routes).

### 6.1(B)2 Non-vital materials

Less vital materials, that may not be subject to translation include, but are not limited to:

- train and bus schedules;
- information regarding schedules, trip-planning, inquiries, and customer feedback;
- paper and/or Charlie card tickets;
- general advertisements;
- general announcements; and,
- publications of internal major Authority policies and procedures.

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### 6.1(B)3 Signage and Universal Symbols

A vital part of a well-functioning LEP compliance program includes having effective non-verbal communication such as signage, and electronic messaging and related methods for informing customers of Limited English Proficiency of basic communications. The Authority will assess, post and maintain signs in regularly encountered languages other than English in trains, buses, stations and other appropriate Authority property where deemed beneficial or necessary as an effective way of communicating frequently recurring messages necessary for customer safety and service.

The lack of space or feasibility of translated signage or electronic messaging may sometimes hinder where signs are placed. In some cases, universal symbols will be used as appropriate. Priority areas for signage and universal symbols may include, but are not limited to:

- Accessibility/Priority seating
- Do Not Enter
- Do Not Leave Bags Unattended
- Elevator/Escalator
- Emergency Brake
- Emergency Exit
- Danger
- No Smoking
- In Case of Emergency, Press Button
- Hazardous
- Stand Behind Yellow Line
- Third Rail

### 6.1(C) Procedure for Accessing Written Translation Services

As indicated on pages two and three, departments requiring assistance will initiate service request through ODCR, Marketing or CSS based on kind of assistance needed. The MBTA will send documentation to the language assistance firm for written translation services. The language assistance firm will review the request and submit a cost estimate for the requested services back to the MBTA. The department ordering the services will be charged for the translations.

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After the MBTA approves the translation costs for the materials, the firm will then proceed with the translation and store materials as an electronic file that will be emailed back to the originating MBTA department.

**6.1(D) How To Access MBTA Translation Services**

To request services, based on need, departments may contact the Office of Diversity and Civil Rights (ODCR) at 617-222-3305, Marketing at 617-222-5470, Public Affairs at 617-222-3304 or Customer Support Services Center (CSS) at 617-222-2515.

**7.0 TRAINING**

The MBTA will train its workforce, especially its managers and employees who interact with the Authority’s customers and are responsible for implementation of program, to ensure that they are knowledgeable and aware of the MBTA’s Limited English Proficiency (LEP) Policy and Procedure. Trainings will be conducted in coordination through HR, ODCR, Marketing, and CSS. Other employee trainings will be implemented through the following:

- New hire orientation and policy training sessions for supervisors and other staff who are responsible for implementing LEP policy.
- Language courses will be encouraged and reimbursable under the MBTA’s Tuition Reimbursement program (these courses must be taken on employees’ own time.)
- Training and written information on the scope and nature of available language assistance services.

**8.0 OUTREACH**

The Authority through ODCR, Marketing, CSS, Public Affairs and other departments will ensure that its Limited English Proficiency (LEP) Program reaches out to communities, especially those with high levels of populations with Limited English Proficiency. This can be achieved by holding public meetings, written communications, and by inviting members of the community with Limited English Proficiency to identify needs, provide feedback, and to make suggestions on how the MBTA can improve its language services. Additional outreach efforts may include, but are not limited to:

- Title VI brochures
- Publication of notices in newspapers;
- Radio and TV stations that serve limited English proficiency groups; and

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- Discussions with community organizations regarding problems and solutions

## 9.0 MONITORING AND REPORTING

ODCR in conjunction with Customer Support Services Department (CSS), Public Affairs and Marketing will monitor, review and amend, if necessary, the MBTA's Limited English Proficiency (LEP) Policy & Procedure through consideration given to the following:

- Reports and observations from the Customer Support Services Department;
- Changes in demographics that trigger consideration of translation language;
- Analysis of staff requests for translations services, needs and costs; and
- FTA reviews of the Title VI Program and LEP Plan;
- Customer feedback
- ODCR in collaboration with other departments will include progress on implementation of the program in its Quarter GM and other reports.

## 10.0 POLICY DISTRIBUTION

This Limited English Proficiency (LEP) Policy and Procedure will be distributed to all MBTA supervisors and all departments. Additionally, the policy will be available at:

New hire orientation and training;  
 Human Resources;  
 Office of Diversity and Civil Rights (ODCR)  
 Customer Support Services (CSS)  
 Marketing

## 11.0 REFERENCE DOCUMENTATION

- 11.1 Circular FTA C4702.1A
- 11.2 Executive Order 13166
- 11.3 Title VI of the Civil Rights Act of 1964

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# Appendix

# B

MBTA Security Inspection Program



# MBTA Transit Police

DEPARTMENT MANUAL  
**CHAPTER 152**

## General Order No. 2006-12

SUBJECT PATROL Security Inspection Program		DATE OF ISSUE 10/05/06	EFFECTIVE DATE 10/10/06
REFERENCES	PAGE 1 OF 9	ISSUING STATUS <input type="checkbox"/> NEW <input checked="" type="checkbox"/> AMENDS <input type="checkbox"/> RESCINDS	ISSUING AUTHORITY  JOSEPH C. CARTER Chief

1.0 **BACKGROUND.** The terrorist attacks of September 11, 2001, in the United States, March 11, 2004, in Madrid, Spain, July 7, 2005 in London, England and July 11, 2006 in Mumbai, India; illustrate the vulnerability of critical public transportation facilities to violent attack. Moreover, the United States Department of Homeland Security warns that the nation's mass transit systems – part of America's "critical infrastructure" – are at high risk of being targeted by terrorist groups determined to carry out mass destruction/casualty attacks. The MBTA Transit Police Department is committed to maintaining a safe mass transit system by instituting procedures designed to prevent potential attacks while honoring the spirit and the letter of the United States Constitution and the Constitution of the Commonwealth of Massachusetts. To accomplish these goals, the Department will implement a number of carefully designed, supervised, and documented security measures, including security inspections of persons' handbags, briefcases, and other carry-on items. The purpose of these measures is to deter persons from carrying explosives or other weapons aboard MBTA vehicles, and thereby to prevent an attack from occurring on the MBTA transit system. In implementing these measures, the Department is taking all reasonable steps to protect the privacy interests of MBTA passengers and to minimize the intrusion caused by the increased security measures.

### 2.0 DEFINITIONS.

- 2.1 **Explosive Detection Dogs (EDD).** A police canine that has been trained in the detection of explosive materials by means of their distinctive odors. Department EDD canines are certified by either the North American Police Work Dog Association (NAPWDA) or the Transportation Security Administration (TSA) in explosives detection before their assignment in the field.
- 2.2 **Explosive Trace Detection (ETD)/Explosive Detection System (EDS).** Transportation Security Administration (TSA) certified electronic equipment designed to detect and identify the presence of explosive materials based on chemical signatures and/or other unique core characteristics.
- 2.3 **Improvised Explosive Device (IED).** A non-military, non-commercial, or modified explosive device designed by the builder with available knowledge and materials. Contains an explosive charge, fusing system and optional container. (FBI definition)
- 2.4 **Non-intrusive Inspection.** A Security Inspection performed on an unopened handbag, briefcase or other carry-on item by means of an Explosive Detection Dog (EDD) or electronic Explosive Trace Detection (ETD)/Explosive Detection System (EDS) equipment.
- 2.5 **Physical Inspection.** The examination of a handbag, briefcase, or other carry-on item conducted by a Transit Police Officer.

- 2.6. **Prohibited Item.** Any unlawfully possessed firearm or ammunition; explosives (including but not limited to dynamite, nitroglycerin, black powder, fireworks, plastic explosives or blasting caps); inflammable or combustible liquid; acid; poisonous substance, liquid or gas; radioactive article, substance or material; biological or hazardous material; or any kind of device or substance that could be used as a weapon to kill or injure one or more victims on the mass transit system, or that in the manner in which it is being transported poses an unreasonable danger to persons or to the property, equipment or facilities of the mass transit system.
- 2.7 **Security Inspections.** The inspection of handbags, briefcases, and other carry-on items by ETD, EDS, EDD or physical examination for the primary purpose of preventing the carrying or placement of any Prohibited Item on the transit system.
- 3.0 **POLICY.** Security Inspections of handbags, briefcases and other carry-on items possessed by MBTA passengers are for the purpose of preventing a terrorist attack on the transit system by deterring persons from carrying Prohibited Items aboard MBTA vehicles.
  - 3.1 It is the policy of the Department that all Security Inspections will be done pursuant to selection criteria in accordance with Sections 4.3 and 4.4, and shall not be based to any degree upon a particularized suspicion of criminal activity. Nothing in this General Order shall be construed in any way to preclude, prevent or otherwise limit the authority of a Transit Police Officer to initiate a lawful consensual field inquiry, or a lawful investigative detention based upon a reasonable and articulable suspicion to believe that a particular individual may be engaged in criminal activity, or a lawful arrest and/or search based upon probable cause.
  - 3.2 It is the policy of the Department that all Security Inspections of passengers' handbags, briefcases, and other carry-on items will be supervised and documented.
  - 3.3 It is the policy of the Department that no Officer shall rely to any extent upon a person's race, ethnicity or apparent religious faith or affiliation in conducting a Security Inspection, or otherwise in exercising police discretion, except when responding to a suspect-specific "Be on the Lookout" (B.O.L.O.) alert. It is a violation of this policy for any Officer to treat a person differently based on his or her race, ethnicity or apparent religious faith or affiliation.
  - 3.4 It is the policy of the Department that Security Inspections are to be conducted in a manner designed to minimize intrusion into the privacy interests of MBTA passengers while preventing/deterring acts of terrorism. Whenever possible, Security Inspections will be performed by means of electronic Explosive Trace Detection (ETD) or Explosive Detection System (EDS) equipment or by the use of Explosive Detection Dogs (EDD). Security Inspections shall be conducted in strict observance of the constitutional rights of the parties, with due regard for the safety of all Officers, other persons, and property involved.
- 4.0 **OPERATIONAL GUIDELINES.** Security Inspections will be conducted in accordance with the following operational guidelines:
  - 4.1 **NOTICE.** The MBTA will post signs in conspicuous locations at station entrances, within transit vehicles, and at other locations on MBTA property, notifying patrons that all persons choosing to use the MBTA transit system will be subject to Security Inspection of their handbags, briefcases and other carry-on items. Such notices will be posted at least five (5) days before the Department begins to conduct Security Inspections and will remain posted for as long as the Department conducts Security Inspections.

- 4.2 **APPEARANCE.** Security Inspections will only be performed by uniformed Transit Police Officers. In the event that Detectives or plainclothes Transit Police Officers are assigned to conduct Security Inspections, they must wear an article of clothing that clearly identifies them as MBTA Transit Police Officers and must display their badges conspicuously.
- 4.3 **PRE-ENTRANCE SECURITY INSPECTIONS.** Pre-Entrance Security Inspections will be conducted where practical before persons proceed through the "paid" entrance area of an MBTA station. A Transit Police Supervisor and a minimum of three (3) Transit Police Officers will be assigned to conduct pre-entrance Security Inspections. At the commencement of the Security Inspection process, the Supervisor will establish in writing the frequency of individuals subject to Security Inspections, *e.g.*, that every eleventh passenger with a bag or parcel will be subjected to a Security Inspection. Supervisors may vary the frequency of the individuals subject to Security Inspections at regularly set intervals provided that such changes are documented and occur no more than once an hour. Supervisors will use hand counters supplied by the MBTA Transit Police Department to calculate when inspections will be performed.
- 4.3.1 **NON-DISCRETIONARY APPLICATION.** Pre-Entrance Security Inspections will be conducted only pursuant to this policy, and Police Officers will not be permitted to exercise discretion to inspect the carry-on items of any passenger out of the established sequence absent the existence of probable cause or some other constitutional or legal justification.
- 4.3.2 **REPORT/CAD RECORD.** A Pre-Entrance Security Inspection (code 4095) entry will be made in the CAD system noting the time the Transit Police Supervisor and Officers arrive at the inspection site, the location where Pre-Entrance Security Inspections are to be conducted and the Officers assigned. The total number of Pre-Entrance Security Inspections performed, inspection results and refused inspections will be noted in the CAD record.
- **RACE/GENDER REPORT.** All Supervisors will record on a separate recording sheet for each Pre-Entrance Security Inspection the race and gender of the passenger who was subject of the inspection to assure that there is no actual or perceived bias-based profiling.
- 4.3.3 **PASSENGER COOPERATION.** Pre-Entrance Security Inspections are only to be conducted of persons choosing to use the MBTA transit system. Consequently, a person may avoid a Pre-Entrance Security Inspection by electing not to board an MBTA vehicle or enter MBTA property. A person who refuses to allow a Pre-Entrance Security Inspection will either be denied entry or requested to leave MBTA property. A person's refusal to allow a Pre-Entrance Security Inspection does not alone constitute probable cause or reasonable suspicion. Therefore, absent other factors that would justify a search based on probable cause or a threshold inquiry based on reasonable suspicion, a person who refuses to allow a Pre-Entrance Security Inspection will not be detained or questioned. Rather, such person will be denied access to the MBTA transit system or requested to leave MBTA property.
- 4.3.4 **LANGUAGE BARRIER.** The Department will provide public information relative to Pre-Entrance Safety Inspections in multiple languages with the assistance of both private and public organizations dedicated to services to non-

English speaking populations. Nevertheless, Officers conducting inspections may encounter a non-English speaking passenger with whom the Officers have difficulty communicating. In that case, the Officers will use the Department's contracted "Language Line" interpreter service.

4.3.5 **ITEMS TO BE INSPECTED.** Officers are authorized to inspect passengers' handbags, briefcases, and any other carry-on items.

4.3.6 **REFUSAL.** In the event that a person refuses to allow a Pre-Entrance Security Inspection of his or her handbag, briefcase, or other carry-on item, he or she will either be denied entry or requested to leave MBTA property. If the person persists in his or her demand to enter the system, the Supervisor must intervene and explain the policy of the MBTA in this area and reiterate that entrance is dependant upon compliance with the policy. If a passenger who has refused to submit to a Pre-Entrance Security Inspection continues to refuse to leave the system, the Supervisor will warn that a continued presence on MBTA property may result in the arrest of the passenger for the criminal offense of Trespass pursuant to Massachusetts General Law Chapter (M.G.L.) 266, §120.

- **REFUSAL REPORT.** Whenever a passenger refuses to permit a Pre-Entrance Security Inspection, and he or she attempts to enter the system or refuses to leave the system, a Pre-Entrance Security Inspection (code 4095) entry code will be made in the CAD system and an FIO Report completed.

4.4 **CRITICAL INFRASTRUCTURE SECURITY INSPECTIONS.** Critical Infrastructure Security Inspections will be conducted at strategic locations within the MBTA transit system. Critical Infrastructure Security Inspections will involve the inspection of packages of a size equal to or larger than a standard airline carry-on bag (approximately 12" by 18" by 7") being transported on board an MBTA vehicle between two identified stations on the transit system. A Transit Police Supervisor will oversee and coordinate the activities of all Transit Police Officers and/or MBTA Transportation Officials assigned to conduct Critical Infrastructure Security Inspections. At the commencement of the Critical Infrastructure Security Inspection process, the Supervisor will establish in writing the frequency of individuals subject to Security Inspections, *e.g.*, that every passenger or every third passenger with a bag or parcel equal to or larger than noted above will be subjected to a Critical Infrastructure Security Inspection. Supervisors may vary the frequency of the individuals subject to Security Inspections at regularly set intervals provided that such changes are documented and occur no more than once an hour. Supervisors will use hand counters supplied by the MBTA Transit Police Department to calculate when inspections will be performed.

4.4.1 **NON-DISCRETIONARY APPLICATION.** Critical Infrastructure Security Inspections will be conducted only pursuant to this policy, and Officers will not be permitted to exercise discretion to inspect the carry-on items of any passenger out of the sequence established by the Department or of an item that is not equal to or larger than the size noted above absent the existence of probable cause or some other constitutional or legal justification.

4.4.2 **REPORT/CAD RECORD.** A Critical Infrastructure Security Inspection (code 4096) entry will be made in the CAD system noting the location where Critical Infrastructure Security Inspections are being conducted as well as the names



of the Transit Police Supervisor and Officers and MBTA Transportation Officials assigned. The total number of Critical Infrastructure Security Inspections performed, inspection results, and refused inspections will be noted in the CAD record.

- **RACE/GENDER REPORT.** All Supervisors will record on a separate recording sheet for each Critical Infrastructure Security Inspection the race and gender of the passenger who was subject of the inspection to assure that there is no actual or perceived bias-based profiling.

**4.4.3 PASSENGER COOPERATION.** Critical Infrastructure Security Inspections are only to be conducted of persons choosing to use the MBTA transit system that are in the possession of packages of a size equal to or larger than a standard airline carry-on bag (approximately 12" by 18" by 7"). Consequently, a person may avoid a Critical Infrastructure Security Inspection by electing to leave MBTA property. A person who refuses to allow a Critical Infrastructure Security Inspection will not be allowed to travel beyond the inspection location and will be instructed to immediately leave MBTA property. A person's refusal to allow a Critical Infrastructure Security Inspection does not alone constitute probable cause or reasonable suspicion. Therefore, absent other factors that would justify a search based on probable cause or a threshold inquiry based on reasonable suspicion, a person who refuses to allow a Critical Infrastructure Security Inspection will not be detained or questioned. Rather, such person will be denied access to the MBTA transit system or requested to leave MBTA property.

**4.4.4 LANGUAGE BARRIER.** The Department will provide public information relative to Critical Infrastructure Safety Inspections in multiple languages with the assistance of both private and public organizations dedicated to services to non-English speaking populations. Nevertheless, Officers conducting inspections may encounter a non-English speaking passenger with whom the Officers have difficulty communicating. In that case, the Officers will use the Department's contracted "Language Line" interpreter service.

**4.4.5 ITEMS TO BE INSPECTED.** All carry-on items that are of a size equal to or larger than a standard airline carry-on bag (approximately 12" by 18" by 7") are subject to Critical Infrastructure Security Inspections.

**4.4.6 REFUSAL.** In the event that a person refuses to allow a Critical Infrastructure Security Inspection of his or her handbag, briefcase, or other carry-on item 16" by 24" by 8" or larger, he or she will be denied further travel on the transit system and requested to leave MBTA property. If the person persists in his or her demand to travel on the transit system, the Supervisor must intervene and explain the policy of the MBTA in this area and reiterate that continued travel is dependent upon compliance with the policy. If a passenger who has refused to submit to a Critical Infrastructure Security Inspection continues to refuse to leave the system, the Supervisor will warn that a continued presence on MBTA property may result in the arrest of the passenger for the criminal offense of Trespass pursuant to Massachusetts General Law Chapter (M.G.L.) 266, §120.

- **REFUSAL REPORT.** Whenever a passenger refuses to permit a Critical Infrastructure Security Inspection, and he or she attempts to continue to travel on the system or refuses to leave the system, a

Critical Infrastructure Security Inspection (code 4096) entry code will be made in the CAD system and an FIO Report will be completed.

- 4.5 **DURATION OF INSPECTION.** The duration of each inspection will be no longer than necessary to inspect the passenger's handbag, briefcase, or other carry-on item(s). The Department pledges to perform all inspections in as efficient and expeditious manner as possible so as not to cause customers or transportation services undue delay.
- 4.6 **SCOPE OF INSPECTION.** The inspection of any carry-on items that are of a size equal to or larger than a standard airline carry-on bag (approximately 12" by 18" by 7") will be limited to what is minimally necessary to determine whether the item being inspected contains any Prohibited Items.
- 4.7 **METHOD OF INSPECTIONS.** The primary means for conducting Critical Infrastructure Security Inspections will be either an Explosive Detection Dog (EDD), electronic Explosive Trace Detection (ETD) equipment or Explosive Detection System (EDS) equipment. If none of these resources are available, a Physical Inspection will be conducted.
- 4.8 **EXPLOSIVE DETECTION CANINE INSPECTIONS.** Explosive Detection Unit (EDU) personnel will conduct Critical Infrastructure Security Inspections by having Explosive Detection Dogs (EDD) check carry-on items that are of a size equal to or larger than a standard airline carry-on bag (approximately 12" by 18" by 7") for the presence of an explosive odor. In all other respects, including reporting under Section 4.3.6 and Section 4.4.6 of this chapter, the protocol for EDU personnel conducting Security Inspections will remain the same.
- 4.9 **EXPLOSIVE TRACE DETECTION (ETD)/EXPLOSIVE DETECTION SYSTEM (EDS) INSPECTIONS.** Officers will conduct Critical Infrastructure Security Inspections by utilizing Electronic Explosive Trace Detection (ETD)/ Explosive Detection System (EDS) equipment when available. In all other respects, including reporting under Section 4.3.6 and Section 4.4.6 of this chapter, the protocol for personnel conducting Security Inspections will remain the same.
- 4.10 **PHYSICAL INSPECTIONS.** In the event that neither an ETD,EDS or EDD is available, a Physical Inspection will be conducted by having the passenger open the carry-on item for inspection. The Officer conducting the Physical Inspection may carefully move, manipulate, or remove as necessary the contents of the carry-on item in order to reveal and expose to view other items contained therein that may constitute a Prohibited Item. In the event that an article of baggage is found to contain another closed container or compartment that, by its shape, size, design, or weight may conceal a Prohibited Item, the Officer may proceed to open that interior container or compartment to inspect for Prohibited Items.
- 5.0 **RESPONSIBILITIES.** In order to implement an effective Security Inspection Policy that complies with prevailing state and federal constitutional law, specific duties are assigned to the Administrative Services Division, the Patrol Operations Division, all Supervisors, and all MBTA Transit Police personnel.

5.1 **ADMINISTRATIVE SERVICES DIVISION.** The Administrative Services Division Commander will:

- coordinate with the MBTA General Manager, the Chief Operating Officer, the Director of Marketing Communications, and other appropriate offices of the Authority the implementation of a comprehensive public information program that will include advertising in both print and electronic media and the installation of notices in accordance with Section 4.1 above;
- utilize appropriate citizen complaint procedures to document and investigate allegations of deviation from Department policy or prevailing law in this area;
- recommend immediate and appropriate corrective measures if deviations from law or policy occurs;
- develop and utilize procedures for the proactive review of performance, complaint, and other employment information to assist Supervisors in identifying and modifying potentially problematic behavior and to promote professionalism throughout the Department;
- ensure that all Officers understand the definition and practical application of a Security Inspection, its uses and its limitations under the law;
- ensure that a sufficient number of latex "stick resistant" gloves are available to Officers conducting Security Inspections; and
- ensure that the Patrol Operations Division is provided with all information requisite to contacting and utilizing the Department's contracted "Language Line" service.

5.2 **PATROL OPERATIONS DIVISION.** The Patrol Operations Division Commander will:

- ensure that Supervisors are consistently assigned to oversee implementation of Pre Entrance and Critical Infrastructure Security Inspections;
- notify the Administrative Services Division Commander of any complaints he/she has received alleging any deviation or violation of Department policy or the law relative to Security Inspections;
- monitor the scheduling of Security Inspections and ensure that the locations and rates of Critical Infrastructure Security Inspections and Pre-Entrance Security Inspections conducted are appropriate for the existing Department of Homeland Security alert level and/or current intelligence information; and
- ensure that all Supervisors have been trained in the protocol for use of the Department's "Language Line" service and possess the requisite equipment and information to access that service.

5.3 **SUPERVISORS.** All Supervisors will:

- ensure that a sufficient number of Officers are assigned to conduct Security Inspections at locations and times determined by the Patrol Operations Division Commander;

- inspect transit stations where Security Inspections are to be conducted to ensure that conspicuous signs are posted notifying persons that they will be subject to a Security Inspection if they choose to enter or continue to use the MBTA transit system;
- ensure that all Transit Police Officers, MBTA Transportation Officials and other support personnel assigned comport their conduct to the Department's rules and regulations and the core values of integrity, courtesy and professionalism while conducting Security Inspections, and that all reporting requirements are met;
- ensure that every passenger whose carry-on item is inspected is given a briefing card explaining the policy of Security Inspections. If asked, Supervisors shall identify a contact from the Patrol Operations Division Command should there be any further questions or concerns;
- the Supervisor **must** be in possession of the written instructions for use of the "Language Line" interpreter service and all necessary information to access that service, e.g., Department's client i.d. number and personal code; and
- ensure that a cellular telephone is available with a speakerphone capability in the event that the inspection team needs to contact the Department's contracted "Language Line" interpreter service. If the location of the Security Inspection does not allow the use of a cellular phone, then the Supervisor must identify the location of a "land line" telephone for use in the event that the "Language Line" service is to be utilized.

6.0 **WEAPON AND EXPLOSIVE PROTOCOL.** In the event that an ETD/EDS indicates a positive finding, or an EDU canine alerts on a carry-on item or person, or an Officer observes what he or she believes to be an Improvised Explosive Device (IED) or other type of Prohibited Item during a Security Inspection, the following procedures will be initiated:

- 6.1 The Supervisor will instruct the person to step away from the carry-on item and instruct the Officers to both secure the item and clear any other patrons or employees from the immediate area.
- 6.2 The Supervisor will direct an Officer to contact the Dispatch Supervisor, by landline phone, and advise him/her of the situation.
- 6.3 The Supervisor will conduct a threshold inquiry of the person to determine if any additional information can be obtained regarding the suspected device.
- 6.4 If the Supervisor is unable to determine the exact nature of the device and/or weapon, it will be considered to be an IED and Officers will initiate the safety and response procedures outlined in sections, 4.0, 5.0, and 6.0 of Chapter 252, Explosive Detection Unit.

**7.0 INVESTIGATIONS NOT GOVERNED BY THIS POLICY.** The terms and conditions of this Chapter govern minimally invasive security inspections that are designed to protect the system and its riders, to deter terrorism and not to gather evidence of criminal conduct. Notwithstanding that imperative, nothing in this chapter limits or expands the statutory and common law authority of Transit Police Officers to initiate and pursue investigations and conduct searches based upon reasonable suspicion, probable cause, or any recognized exception to the probable cause requirement. M.G.L. c. 41, §98; M.G.L. c. 276, §1; and Terry v. Ohio, 392 U.S. 1 (1968). See Also Searches, Chapter 147 of the Department Manual.

Section 4.1 Revised 8/2006

# Appendix

# C

MBTA Bus Routes: Minority and Low-Income Status

MBTA Rapid Transit Lines and Stations: Minority and Low-Income Status

MBTA Commuter Rail Lines and Stations: Minority and Low-Income Status



## Bus Routes: Minority and Low-Income Status

Based on 40% of boardings at minority and/or low-income stops, using primary route variations

Route	Route Name	Minority	Low-Income	Minority & Low-Income
1	Harvard/Holyoke Gate - Dudley via BU Medical Area	Y	N	N
4	North Station - World Trade Center	Y	N	N
5	City Point - McCormick Housing	N	N	N
6	South Station - Haymarket	Y	Y	Y
7	City Point - Otis & Summer Sts. via Summer St.	N	N	N
8	Harbor Pt/UMass - Kenmore via S. Bay & BU Medical Area	Y	Y	Y
9	City Point - Copley	N	N	N
10	City Point - St. Copley via S. Bay Mall	Y	N	N
11	City Point - Bedford & Chauncy Sts.	N	N	N
14	Roslindale Sq. - Heath St. via Dudley	Y	Y	Y
15	Kane Sq. - Ruggles	Y	Y	Y
16	Forest Hills - UMass Campus via JFK & S. Bay	Y	N	N
17	Fields Corner - Andrew via Uphams Corner	Y	N	N
18	Ashmont - Andrew	Y	N	N
19	Fields Corner - Kenmore	Y	Y	Y
21	Ashmont - Forest Hills	Y	N	N
22	Ashmont - Ruggles via Jackson Sq.	Y	Y	Y
23	Ashmont - Ruggles via Washington	Y	Y	Y
24	Wakefield Ave./Truman Pkwy. - Mattapan	Y	N	N
25	Franklin Park - Ruggles via Dudley	Y	Y	Y
26	Ashmont - Norfolk St. Loop via Norfolk	Y	N	N
27	Mattapan - Ashmont	Y	N	N
28	Mattapan - Ruggles via Dudley	Y	Y	Y
29	Mattapan Sq. - Jackson Sq.	Y	Y	Y
30	Mattapan - Forest Hills via Roslindale Sq.	Y	N	N
31	Mattapan Sq. - Forest Hills	Y	N	N
32	Wolcott Sq. - Forest Hills via Cleary Sq.	Y	N	N
33	River & Milton Sts., Dedham - Mattapan	Y	N	N
34	Dedham Line - Forest Hills via Washington	Y	N	N
34	Walpole Center - Forest Hills via Dedham Mall (local)	N	N	N
35	Dedham Mall - Forest Hills via Centre & Belgrade	Y	N	N
36	VA Hospital, W. Roxbury - Forest Hills via Charles	N	N	N
37	Baker & Vermont Sts. - Forest Hills	N	N	N
38	Wren St. - Forest Hills	N	N	N
39	Forest Hills - Back Bay	Y	N	N
40	Georgetown - Forest Hills via Alwin St.	Y	N	N
41	Center & Elliott Sts. - JFK UMass via Dudley	Y	Y	Y
42	Forest Hills - Dudley	Y	N	N
43	Ruggles - Park & Tremont Sts.	Y	Y	Y
44	Jackson Sq. - Ruggles via Seaver St.	Y	Y	Y
45	Franklin Park - Ruggles via Grove Hall	Y	Y	Y
47	Central Sq., Cambridge - Broadway	Y	Y	Y
48	Centre & South Sts. - Jackson Sq.	Y	N	N
50	Cleary Sq. - Forest Hills	Y	N	N
51	Reservoir - Forest Hills	N	N	N
52	Dedham Mall - Watertown via Oak Hill	N	N	N

## Bus Routes: Minority and Low-Income Status

Based on 40% of boardings at minority and/or low-income stops, using primary route variations

Route	Route Name	Minority	Low-Income	Minority & Low-Income
55	Jersey & Queensbury - Park & Tremont Sts.	Y	Y	Y
57	Watertown Bus Yard - Kenmore Sq.	Y	N	N
59	Needham Junction - Watertown Sq.	N	N	N
60	Chestnut Hill - Kenmore Sq.	N	N	N
62	Bedford VA Hosp - Alewife via Lexington Center	N	N	N
64	Oak Sq. - Kendall/MIT via Union & Central	Y	N	N
65	Brighton Center - Kenmore Sq.	Y	N	N
66	Harvard - Dudley via Union Sq., Allston	Y	Y	Y
67	Turkey Hill - Alewife via Arlington Center	N	N	N
68	Harvard - Kendall	Y	N	N
69	Harvard - Lechmere	Y	N	N
70	N. Waltham - University Park via Central Sq., Waltham	Y	N	N
70	Cedarwood - University Park via Central Sq., Waltham	Y	N	N
71	Watertown Sq. - Harvard via Mt. Auburn St.	N	N	N
72	Aberdeen Ave. & Mt. Auburn St. - Harvard via Huron Ave.	N	N	N
73	Waverly Sq. - Harvard Subway via Belmont	N	N	N
74	Belmont Center - Harvard Alley	N	N	N
75	Belmont Center - Harvard Alley via Huron Towers	Y	N	N
76	Lincoln Labs - Alewife via Hanscom (inbound)	N	N	N
77	Arlington Heights - Harvard	N	N	N
78	Arlmont Village - Harvard	Y	N	N
79	Arlington Heights - Alewife	N	N	N
80	Arlington Center - Lechmere	Y	N	N
83	Rindge Ave. - Central Sq., Cambridge	Y	N	N
84	Alewife - Alewife via Arlmont Loop	N	N	N
85	Spring Hill - Kendall	N	N	N
86	Sullivan - Cleveland Circle	Y	N	N
87	Arlington Center - Lechmere	N	N	N
88	Clarendon Hill - Lechmere via Highland Ave.	N	N	N
89	Clarendon Hill - Sullivan	Y	N	N
90	Davis - Wellington via Sullivan	N	N	N
91	Central Sq., Cambridge - Sullivan	N	N	N
92	Assembly Sq. Mall - Franklin St. via Sullivan	N	N	N
93	Sullivan - Downtown Boston via Bunker Hill	N	N	N
94	Medford Sq. - Davis Sq. via West Medford	N	N	N
95	West Medford - Sullivan via Mystic Ave.	Y	N	N
96	Medford Sq. - Harvard via Davis Sq. & George St.	N	N	N
97	Malden - Wellington via Commercial St.	Y	N	N
99	Boston Regional Medical Center - Wellington	Y	N	N
100	Elm St. - Wellington via Fellsway	N	N	N
101	Malden Center - Sullivan via Winter Hill	Y	N	N
104	Malden Center - Sullivan	Y	N	N
105	Malden - Sullivan via Newland St. Housing	Y	N	N
106	Lebanon Loop - Wellington via Malden	Y	N	N
108	Linden Sq. - Wellington via Malden	Y	N	N
109	Linden Sq. - Sullivan via Broadway	Y	N	N

## Bus Routes: Minority and Low-Income Status

Based on 40% of boardings at minority and/or low-income stops, using primary route variations

Route	Route Name	Minority	Low-Income	Minority & Low-Income
110	Wonderland - Wellington via Woodlawn	N	N	N
111	Woodlawn - Haymarket via Bellingham Sq.	Y	Y	Y
112	Wellington - Wood Island via Mystic Mall	Y	N	N
114	Bellingham Sq. - Maverick	Y	Y	Y
116	Wonderland - Maverick via Revere St.	Y	Y	Y
117	Wonderland - Maverick via Beach St.	Y	Y	Y
119	Northgate Shopping Center - Beachmont	N	N	N
120	Orient Heights - Maverick	Y	N	N
121	Wood Island - Maverick via Lexington St.	Y	Y	Y
131	Melrose Highland - Oak Grove via East Side	N	N	N
132	Redstone Shopping Plaza - Malden	N	N	N
134	N. Woburn - Wellington via Riverside Ave.	N	N	N
136	Reading Depot - Malden Center	N	N	N
137	Reading Depot - Malden Center	N	N	N
170	Oakpark - Dudley via Waltham & Back Bay (outbound)	Y	N	N
171	Logan Airport - Dudley via Andrew & Terminals (outbound)	N	N	N
191	Mattapan - Haymarket	Y	Y	Y
192	Cleary Sq. - Haymarket via Forest Hills	Y	N	N
193	Watertown Sq. - Haymarket Sq.	Y	N	N
194	Clarendon Hill - Haymarket via Sullivan	Y	N	N
201	Fields Corner Loop via Neponset Ave.	Y	N	N
202	Fields Corner Loop via Adams St.	Y	N	N
210	Quincy Center - Fields Corner	N	N	N
211	Quincy Center - Squantum via N. Quincy	Y	N	N
212	Quincy Center - N. Quincy	N	N	N
214	Quincy Center - Germantown	N	N	N
215	Quincy Center - Ashmont via W. Quincy	N	N	N
216	Quincy Center - Hough's Neck	N	N	N
217	Quincy Center - Ashmont	N	N	N
220	Quincy Center - Hingham Center via Old Center	N	N	N
221	Quincy Center - Fort Point via N. Weymouth	N	N	N
222	Quincy Center - East Weymouth	N	N	N
225	Quincy Center - Weymouth Landing via Des Moines Rd.	N	N	N
230	Quincy Center - Montello Commuter Rail via Braintree	N	N	N
236	Quincy Center - S. Shore Plaza via Braintree	N	N	N
238	Quincy Center - Holbrook/Randolph Station	N	N	N
240	Avon Sq. - Ashmont	Y	N	N
245	Quincy Center - Mattapan via Quarry St. & Edgehill Rd.	N	N	N
325	Elm St. - Haymarket (PM Version)	N	N	N
326	West Medford - Haymarket	N	N	N
350	Chestnut Ave., Burlington - Alewife	N	N	N
351	Oak Park/Bedfd Wds. - Alewife via Mall Rd.	N	N	N
352	Chestnut Ave., Burlington - State St., Boston	N	N	N
354	Woburn Line - State St., Boston	N	N	N
355	Mishwaum - Government Center	N	N	N
411	Jack Satter House, Revere - Malden	N	N	N

## Bus Routes: Minority and Low-Income Status

Based on 40% of boardings at minority and/or low-income stops, using primary route variations

Route	Route Name	Minority	Low-Income	Minority & Low-Income
424	Eastern Ave./Essex St. - Haymarket (outbound)	N	N	N
426	Central Sq., Lynn - Haymarket via Clifftondale Sq.	Y	Y	Y
428	Oaklandvale - Haymarket via Granada Highlands	N	N	N
429	Northgate Shopping Center - Central Sq., Lynn	N	N	N
430	Saugus Center - Malden	N	N	N
431	Neptune Towers - Central Sq.	Y	Y	Y
434	Main St., Peabody - Haymarket via Goodwin Circle	N	N	N
435	Liberty Tree Mall - Central Sq., Lynn via Peabody Sq.	N	N	N
436	Liberty Tree Mall - Central Sq., Lynn via Goodwin Circle	N	N	N
439	Nahant - Central Sq., Lynn	N	N	N
441	Marblehead - Haymarket via Central Sq. & Paradise Rd.	Y	Y	Y
442	Marblehead - Haymarket via Central Sq. & Humphrey St.	Y	Y	Y
448	Marblehead - Downtown Crossing Express via Paradise Rd.	Y	N	N
449	Marblehead - Downtown Crossing Express via Humphrey	N	N	N
450	Salem Center - Haymarket Sq. via Western Ave.	N	N	N
451	N. Beverly - Salem via Dodge St. & Cummings Office Park	N	N	N
455	Salem Depot - Haymarket via Central Sq., Lynn	Y	N	N
456	Salem - Central Sq., Lynn via Highland & Eastern	N	N	N
459	Salem Depot - Downtown Crossing via Logan Airport	Y	N	N
465	Danvers Sq. - Salem Dpt via Liberty Tree Mall	N	N	N
468	Danvers - Salem Depot via North St.	N	N	N
500	Riverside - Federal & Franklin St.	N	N	N
501	Brighton - Federal & Franklin St.	Y	N	N
502	Watertown Sq. - Copley Sq.	N	N	N
503	Brighton - Copley Sq.	Y	N	N
504	Watertown Sq. - Federal & Franklin Sts.	N	N	N
505	Waltham Center - Federal & Franklin Sts.	N	N	N
553	Roberts - Federal & Franklin Sts.	N	N	N
554	Waverly Sq. - Federal & Franklin Sts.	N	N	N
555	Riverside - Federal & Franklin Sts.	N	N	N
556	Waltham Hghlands - Federal & Franklin Sts.	N	N	N
558	Riverside - Federal & Franklin Sts.	N	N	N
701	CT-1: Central Sq., Cambridge - BU Medical Area	Y	N	N
708	Longwood Medical Area - Andrew	Y	Y	Y
741	Silver Line Waterfront, SL1: Airport - South Station	Y	N	N
742	Silver Line Waterfront, SL2: BMIP - South Station	N	N	N
743	Silver Line Waterfront, SL3: City Point - South Station	N	N	N
746	Silver Line Waterfront: South Station - Silver Line Way	N	N	N
747/748	CT2: Sullivan - Ruggles	Y	N	N
749	Silver Line Washington St.: Dudley - Downtown Boston	Y	Y	Y

# Rapid Transit Lines and Stations: Minority and Low-Income Status

Station status based on census tracts

Line status based on 40% of boardings at minority and/or low-income stations

Rapid Transit	Minority	Low-Income	Minority & Low-Income
<b>Major Transfer Stations</b>			
<i>(not included in boarding calculations for line status)</i>			
State Street: Blue & Orange Lines	N	N	N
Government Center: Blue & Green Lines	N	N	N
Downtown Crossing: Orange & Red Lines	Y	Y	Y
Haymarket: Green & Orange Lines	Y	N	N
North Station: Green & Orange Lines	Y	N	N
Park Street: Green & Red Lines	Y	Y	Y
South Station: Red Line & Silver Line Waterfront	Y	Y	Y
<b>Blue Line</b>	<b>Y</b>	<b>N</b>	<b>N</b>
Wonderland	N	N	N
Revere Beach	N	N	N
Beachmont	Y	Y	Y
Suffolk Downs	Y	Y	Y
Orient Heights	Y	N	N
Wood Island	Y	N	N
Airport	Y	N	N
Maverick	Y	N	N
Aquarium	N	N	N
State Street	N	N	N
Government Center	N	N	N
Bowdoin	N	N	N
<b>Orange Line</b>	<b>Y</b>	<b>N</b>	<b>N</b>
Forest Hills	Y	N	N
Green Street	Y	N	N
Stony Brook	Y	N	N
Jackson Square	Y	Y	Y
Roxbury Crossing	Y	Y	Y
Ruggles	Y	Y	Y
Massachusetts Ave.	Y	N	N
Back Bay	Y	N	N
New England Medical Center	Y	Y	Y
Chinatown	Y	Y	Y
Downtown Crossing	Y	Y	Y
Haymarket	Y	N	N
State Street	N	N	N
North Station	Y	N	N
Community College	N	N	N
Sullivan	N	N	N
Wellington	N	N	N
Malden Center	Y	N	N
Oak Grove	Y	N	N

# Rapid Transit Lines and Stations: Minority and Low-Income Status

Station status based on census tracts

Line status based on 40% of boardings at minority and/or low-income stations

Rapid Transit	Minority	Low-Income	Minority & Low-Income
<b>Red Line</b>	<b>Y</b>	<b>N</b>	<b>N</b>
Ashmont	Y	N	N
Shawmut	Y	N	N
Fields Corner	Y	N	N
Savin Hill	Y	N	N
Braintree	N	N	N
Quincy Adams	N	N	N
Quincy Center	N	N	N
Wollaston	N	N	N
North Quincy	Y	N	N
JFK/UMass	Y	N	N
Andrew	N	N	N
Broadway	N	N	N
South Station	Y	Y	Y
Park Street	Y	Y	Y
Charles	N	N	N
Kendall	Y	Y	Y
Central	Y	N	N
Harvard	Y	N	N
Porter	N	N	N
Davis	N	N	N
Alewife	Y	N	N
<b>Green Line - B Branch</b>	<b>Y</b>	<b>Y</b>	<b>Y</b>
Blandford St.	Y	Y	Y
BU East	Y	Y	Y
BU Central	Y	Y	Y
BU West	Y	Y	Y
Saint Paul St.	Y	Y	Y
Pleasant St.	Y	Y	Y
Babcock St.	Y	Y	Y
Packards Corner	Y	Y	Y
Harvard Ave.	Y	Y	Y
Griggs St.	Y	Y	Y
Allston St.	Y	N	N
Warren St.	Y	N	N
Washington St.	N	N	N
Sutherland Rd.	N	N	N
Chiswick Rd.	N	N	N
Chestnut Hill Ave.	N	N	N
South St.	N	N	N
Boston College	N	N	N



# Rapid Transit Lines and Stations: Minority and Low-Income Status

Station status based on census tracts

Line status based on 40% of boardings at minority and/or low-income stations

Rapid Transit	Minority	Low-Income	Minority & Low-Income
<b>Green Line - C Branch</b>	<b>N</b>	<b>N</b>	<b>N</b>
Saint Marys St.	N	N	N
Hawes St.	N	N	N
Kent St.	N	N	N
Saint Paul St.	N	N	N
Coolidge Corner	Y	N	N
Winchester St.	N	N	N
Brandon Hall	N	N	N
Fairbanks St.	N	N	N
Washington Square	N	N	N
Tappan St.	N	N	N
Dean Rd.	N	N	N
Englewood Ave.	N	N	N
Cleveland Circle	Y	N	N
<b>Green Line - D Branch</b>	<b>N</b>	<b>N</b>	<b>N</b>
Fenway	Y	Y	Y
Longwood Ave.	N	N	N
Brookline Village	Y	N	N
Brookline Hills	N	N	N
Beaconsfield	N	N	N
Reservoir	N	N	N
Chestnut Hill Station	N	N	N
Newton Centre	N	N	N
Newton Highlands	N	N	N
Eliot	N	N	N
Waban	N	N	N
Woodland	N	N	N
Riverside	N	N	N
<b>Green Line - E Branch</b>	<b>Y</b>	<b>Y</b>	<b>Y</b>
Northeastern	Y	Y	Y
Museum of Fine Arts	Y	Y	Y
Longwood Medical Area	Y	Y	Y
Brigham Circle	Y	N	N
Fenwood Rd.	Y	Y	Y
Mission Park	Y	Y	Y
Riverway	Y	N	N
Back of the Hill	Y	N	N
Heath Street	Y	N	N

# Rapid Transit Lines and Stations: Minority and Low-Income Status

Station status based on census tracts

Line status based on 40% of boardings at minority and/or low-income stations

Rapid Transit	Minority	Low-Income	Minority & Low-Income
<b>Green Line - Central Subway</b>			
Kenmore	Y	N	N
Hynes Convention Center	N	N	N
Symphony	Y	N	N
Prudential	N	N	N
Copley	N	N	N
Arlington	Y	N	N
Boylston	Y	Y	Y
Science Park	Y	N	N
Lechmere	Y	N	N
<b>Mattapan High Speed Line</b>			
Mattapan	Y	N	N
Capen St.	N	N	N
Valley Rd.	N	N	N
Central Ave.	N	N	N
Milton	N	N	N
Butler	Y	N	N
Cedar Grove	Y	N	N
Ashmont	Y	N	N

## Commuter Rail Lines and Stations: Minority and Low-Income Status

Station status based on census tracts

Line status based on 40% of boardings at minority and/or low-income stations

Northside Commuter Rail	Minority	Low-Income	Minority & Low-Income
<b>Rockport/Newburyport Line</b>	<b>N</b>	<b>N</b>	<b>N</b>
Rockport	N	N	N
Gloucester	N	N	N
West Gloucester	N	N	N
Manchester	N	N	N
Beverly Farms	N	N	N
Prides Crossing	N	N	N
Montserrat	N	N	N
Newburyport	N	N	N
Rowley	N	N	N
Ipswich	N	N	N
Hamilton/Wenham	N	N	N
North Beverly	N	N	N
Beverly	N	N	N
Salem	N	N	N
Swampscott	N	N	N
Lynn	Y	Y	Y
River Works	Y	Y	Y
Chelsea	Y	Y	Y
<b>Haverhill Line</b>	<b>N</b>	<b>N</b>	<b>N</b>
Haverhill	Y	N	N
Bradford	N	N	N
Lawrence	Y	Y	Y
Andover	N	N	N
Ballardvale	N	N	N
North Wilmington	N	N	N
Reading	N	N	N
Wakefield	N	N	N
Greenwood	N	N	N
Melrose Highlands	N	N	N
Melrose/Cedar Park	N	N	N
Wyoming Hill	N	N	N
Malden Center	Y	N	N
<b>Lowell Line</b>	<b>N</b>	<b>N</b>	<b>N</b>
Lowell	Y	N	N
N. Billerica	N	N	N
Wilmington	N	N	N
Anderson/Woburn	N	N	N
Mishawum	N	N	N
Winchester	N	N	N
Wedgemere	N	N	N
West Medford	N	N	N

## Commuter Rail Lines and Stations: Minority and Low-Income Status

*Station status based on census tracts*

*Line status based on 40% of boardings at minority and/or low-income stations*

<b>Northside Commuter Rail</b>	<b>Minority</b>	<b>Low-Income</b>	<b>Minority &amp; Low-Income</b>
<b>Fitchburg Line</b>	<b>N</b>	<b>N</b>	<b>N</b>
Fitchburg	Y	Y	Y
North Leominster	N	N	N
Shirley	N	N	N
Ayer	N	N	N
Littleton	N	N	N
S. Acton	N	N	N
West Concord	N	N	N
Concord	N	N	N
Lincoln	N	N	N
Silver Hill	N	N	N
Hastings	N	N	N
Kendal Green	N	N	N
Brandeis/Roberts	Y	N	N
Waltham	Y	N	N
Waverley	N	N	N
Belmont	N	N	N
Porter Square	N	N	N

## Commuter Rail Lines and Stations: Minority and Low-Income Status

Station status based on census tracts

Line status based on 40% of boardings at minority and/or low-income stations

Southside Commuter Rail	Minority	Low-Income	Minority & Low-Income
<b>Framingham/Worcester Line</b>	<b>N</b>	<b>N</b>	<b>N</b>
Worcester	Y	Y	Y
Grafton	Y	N	N
Westborough	N	N	N
Southborough	N	N	N
Ashland	N	N	N
Framingham	Y	N	N
W. Natick	N	N	N
Natick	N	N	N
Wellesley Square	N	N	N
Wellesley Hills	N	N	N
Wellesley Farms	N	N	N
Auburndale	N	N	N
West Newton	N	N	N
Newtonville	N	N	N
Yawkey	Y	Y	Y
Back Bay	Y	N	N
<b>Needham Line</b>	<b>N</b>	<b>N</b>	<b>N</b>
Needham Heights	N	N	N
Needham Center	N	N	N
Needham Junction	N	N	N
Hersey	N	N	N
W. Roxbury	N	N	N
Highland	N	N	N
Bellevue	N	N	N
Roslindale	N	N	N
Forest Hills	Y	N	N
Ruggles	Y	Y	Y
Back Bay	Y	N	N
<b>Franklin Line</b>	<b>N</b>	<b>N</b>	<b>N</b>
Forge Park	N	N	N
Franklin	N	N	N
Norfolk	N	N	N
Walpole	N	N	N
Plimptonville	N	N	N
Windsor Gardens	N	N	N
Norwood Central	N	N	N
Norwood Depot	N	N	N
Islington	N	N	N
Dedham Corp.	N	N	N
Endicott	N	N	N
Readville	Y	N	N
Hyde Park	Y	N	N
Ruggles	Y	Y	Y
Back Bay	Y	N	N

## Commuter Rail Lines and Stations: Minority and Low-Income Status

Station status based on census tracts

Line status based on 40% of boardings at minority and/or low-income stations

Southside Commuter Rail	Minority	Low-Income	Minority & Low-Income
<b>Fairmount/Readville Line</b>	<b>Y</b>	<b>N</b>	<b>N</b>
Readville	Y	N	N
Fairmount	Y	N	N
Morton St.	Y	N	N
Uphams Corner	Y	Y	Y
<b>Attleboro/Stoughton Line</b>	<b>N</b>	<b>N</b>	<b>N</b>
South Attleboro	N	N	N
Attleboro	Y	N	N
Mansfield	N	N	N
Sharon	N	N	N
Stoughton	N	N	N
Canton Center	N	N	N
Canton Junction	N	N	N
Route 128	N	N	N
Hyde Park	Y	N	N
Ruggles	Y	Y	Y
Back Bay	Y	N	N
<b>Middleborough/Lakeville Line</b>	<b>Y</b>	<b>N</b>	<b>N</b>
Middleborough/Lakeville	N	N	N
Bridgewater	N	N	N
Campello	Y	N	N
Brockton	Y	Y	Y
Montello	Y	N	N
Holbrook/Randolph	Y	N	N
Braintree	N	N	N
Quincy Center	N	N	N
JFK/Umass	Y	N	N
<b>Kingston/Plymouth Line</b>	<b>N</b>	<b>N</b>	<b>N</b>
Plymouth	N	N	N
Kingston	N	N	N
Halifax	N	N	N
Hanson	N	N	N
Whitman	N	N	N
Abington	N	N	N
South Weymouth	N	N	N
Braintree	N	N	N
Quincy Center	N	N	N
JFK/Umass	Y	N	N



## Commuter Rail Lines and Stations: Minority and Low-Income Status

*Station status based on census tracts*

*Line status based on 40% of boardings at minority and/or low-income stations*

<b>Southside Commuter Rail</b>	<b>Minority</b>	<b>Low-Income</b>	<b>Minority &amp; Low-Income</b>
<b>Greenbush Line</b>	<b>N</b>	<b>N</b>	<b>N</b>
Greenbush	N	N	N
N. Scituate	N	N	N
Cohasset	N	N	N
Nantasket Junction	N	N	N
W. Hingham	N	N	N
E. Weymouth	N	N	N
Weymouth Landing	N	N	N
Quincy Center	N	N	N
JFK/Umass	Y	N	N