

BOSTON REGION METROPOLITAN PLANNING ORGANIZATION

Richard A. Davey, MassDOT Secretary and CEO and MPO Chairman Karl H. Quackenbush, Executive Director, MPO Staff

MEMORANDUM

DATE April 27, 2011

TO Transportation Planning and Programming Committee

FROM Ariel Godwin, CMP Manager, MPO Staff

RE Inventory of Park-and-Ride Lots at MBTA Facilities

The purpose of this memo is to present the results of performance monitoring of parkand-ride lots at Massachusetts Bay Transportation Authority (MBTA) facilities.

Between January 2009 and August 2010, Boston Region MPO staff inventoried MBTA, private, and town-owned parking lots at 146 locations: 114 commuter rail stations, 28 rapid transit stations, 3 ferry terminals, and 1 express bus origin location. The main body of this memo presents selected results, with analysis. A comprehensive table of the results for parking utilization at all of the parking lots is in Appendix A. Information about parking fees is also included in the appendices, along with a map that shows the locations of all the inventoried lots.

BACKGROUND

The Congestion Management Program (CMP) is an ongoing MPO program for collecting and gathering performance data about the region's transportation systems. As part of the CMP, data are analyzed and used to provide planners and decision makers with tools to help prioritize transportation projects and program funds. For example, parking expansion projects can be monitored by identifying new or changing parking needs and analyzing trends by comparing results with previous inventories to determine where the most desire for additional parking lies, or where excess capacity exists. Data posted on the Web can also be used by the commuting public to make decisions about their own commutes based on information about the capacity and utilization of parking lots at MBTA facilities, including the time at which they fill.

Park-and-ride lots at MBTA stations were inventoried for the previous cycle of the CMP (which at that time was known as the Mobility Management System, or MMS) during the fall of 2005 and winter of 2006. Previous inventories had been conducted in 2000 and in the fall of 2002. The 2002 inventory included only park-and-ride lots located in the Boston Region MPO area and used data from the 2000 inventory for those lots that were located outside the MPO region.

DATA COLLECTION

Park-and-ride lots were inventoried during the morning peak period of a typical weekday between January 2009 and August 2010.¹

For the purpose of the survey, MPO staff developed a survey form, which is shown in Appendix B. When completed, the form contains information about the parking lot's ownership, parking cost and restrictions, number of parking spaces, number of occupied spaces, and at what time all the parking spaces became occupied (if this occurred before the end of the peak period). It also contains information about commuter amenities at the station, accessibility to the station, accessibility to the platform, and bicycle and pedestrian amenities at and around the station.

Surveyors were instructed to stay at each parking lot until it was full or until the end of the AM peak period, whichever occurred first. This varies by station. After the parking lot filled or after the last AM-peak-period train, the surveyor inventoried the parking lot and filled in all the questions on the survey form. A separate survey form was filled out for each parking lot, as some stations have more than one lot. In this way it is known at what time each individual parking lot filled.

All park-and-ride lots that are known to serve commuters on the MBTA system were inventoried (lots serving only commuters who use non-MBTA transportation were not surveyed). This includes all MBTA, private, and town-owned lots at all commuter rail, rapid transit, and commuter ferry stations and all express bus origin locations. The locations of these lots were ascertained from past inventories, information provided on the MBTA website (www.mbta.com), and anecdotal information provided by MBTA and CTPS staff.

Parking utilization was defined for this report as the percentage of public non-disability parking spaces used by the end of the MBTA-defined AM peak period. All of the parking spaces referred to in this memo are public non-disability spaces, unless otherwise indicated. Many stations have permit-only parking lots in addition to public lots. Permit parking lots are either municipally or privately owned, and their use is restricted to permit holders; in many cases, local residency is required in order to secure a permit. Because the focus of this memo is on the availability of parking to the general public at MBTA park-and-ride lots, permit-only and resident-only parking spaces are generally excluded from totals and utilization percentages for all modes of transit. However,

¹ The survey for each lot was a one-time observation performed on a day that was believed to be a typical working weekday. If unusual circumstances occurred on the day of observation and were known to the surveyor, the survey of that parking lot was done again. Examples of unusual circumstances include delays in MBTA service, inclement weather, construction, major events, holidays, and traffic incidents with major impacts throughout the transportation network.

permit-only and resident-only parking spaces were included in the survey, and this memo includes some discussion of the availability and utilization of these spaces.

The following two sections of this memo present the inventory results for parking utilization and amenities, respectively. They are followed by a comparison of the results with those for the 2000, 2002, and 2005–2006 inventories and by a summary of the conclusions that analysis of the 2009–2010 results has produced.

INVENTORY RESULTS: PARKING UTILIZATION

An analysis of inventory results indicated that a combined 58 percent of parking at all stations for all modes in the MBTA system was utilized on a typical weekday morning. The breakdown by type of service is 56 percent utilization for the commuter rail system, 61 percent utilization for the rapid transit system, 93 percent utilization for express bus lots, and 69 percent utilization for commuter ferry lots. As mentioned previously, Appendix A contains detailed information about each lot, including lot capacity, lot utilization rates, and parking fees.

Commuter Rail

Table 1 shows the percent of parking utilization by commuter rail line.

² Some stations with parking are served by both commuter rail and rapid transit. To avoid confusion, these stations are all categorized as rapid transit stations in this inventory.

TABLE 1
Commuter Rail Parking Inventory and Percent of Parking Utilization

	Number of Parking Spaces	Percent Utilization
Lines Terminating at North Station	9,929	61%
Fitchburg/South Acton Line	1,543	62%
Haverhill Line	1,832	61%
Lowell Line	3,162	82%
Newburyport/Rockport Line	3,392	40%
Lines Terminating at South Station	23,917	53%
Fairmount Line	389	34%
Framingham/Worcester Line	3,543	59%
Franklin Line	3,589	60%
Greenbush Line	2,662	37%
Kingston/Plymouth Line	3,127	51%
Middleborough/Lakeville Line	2,924	43%
Needham Line	1,122	53%
Providence/Stoughton Line	6,561	61%
Total	33,846	56%

Fitchburg Line – At the 15 stations on the Fitchburg Line that provide parking, no lot filled during the AM peak period. There are a total of 1,543 parking spaces available for public use on the Fitchburg Line. Sixty-two percent of all parking spaces on this line were full. There are an additional 467 parking spaces on this line, all resident-only; 88 percent of them were used.

Haverhill Line – At the 12 stations on the Haverhill Line that have parking lots, no lot filled to capacity during the AM peak period. Sixty-one percent of the 1,832 parking spaces available for public use at the 12 stations were full. There are an additional 300 parking spaces, exclusively for residents of Reading, at Reading Station. Of those parking spaces, 84 percent were used by the end of the morning peak period. There are also 29 permit parking spaces at Bradford Station, 21 of which were occupied.

Lowell Line – Of the seven stations on the Lowell Line that have parking, Wedgemere was the only one whose lot filled during the AM peak period. A total of 3,162 parking spaces are available for public use on this line, and 82 percent of them were full. Of the 45 resident-only parking spaces at West Medford Station, 44 were in use during the AM peak period.

Newburyport/Rockport Line – Of the 16 stations on the Newburyport/Rockport Line that have parking lots, Ipswich was the only one whose lot filled to capacity during the AM peak period. There are 3,392 parking spaces available for public use on the Newburyport/Rockport Line, 40 percent of which were used.³ There are 174 parking spaces that require parking permits at Beverly Station, 76 percent of which were used.⁴ There are 121 permit parking spaces at Salem Station, 120 of which were used. There are an additional 16 parking spaces, all resident-only,⁵ at Swampscott Station. All of those parking spaces were full.

Fairmount Line – Readville⁶ and Fairmount are the only two stations on the Fairmount Line that have parking. Of the 389 parking spaces, 34 percent filled during the AM peak period. There are no permit-only parking spaces on this line.

Framingham/Worcester Line – At the 14 stations on the Framingham/Worcester Line that have parking, no lot filled entirely during the AM peak period. Of the 3,543 parking spaces on this line, 59 percent filled during the AM peak period. Sixty-eight percent of the 71 resident-only parking spaces at Natick Station were in use during the AM peak period. There are an additional 68 permit parking spaces at Framingham Station, 44 percent of which were full.

Franklin Line – Of the 11 stations on the Franklin Line, Endicott was the only one whose parking lot filled completely during the AM peak period. There are 3,589 parking spaces on the Franklin Line that are available for public use, 60 percent of which filled during the AM peak period. There are an additional 45 permit parking spaces at Franklin Station, 36 of which were full.

_

³ This low percentage reflects in part the very low parking rate at Lynn Station, where only 23 percent of the 914 available spaces were utilized.

⁴ In late 2009, after the station was surveyed, a new lot was opened at Beverly Depot with an additional 102 spaces.

⁵ Resident-only parking at a station is municipally owned, and its use is restricted to residents of the municipality that owns the parking facility. Resident-only parking is excluded from all totals and utilization percentages.

⁶ Readville Station is served by both the Fairmount Line and the Franklin Line. To avoid confusion, Readville is included under the Fairmount Line for all quantitative analysis in this memo.

⁷ These totals exclude Readville Station; see the previous note.

Greenbush Line – At the seven stations on the Greenbush Line that have parking, no lot filled during the AM peak period. There are 2,662 parking spaces available for public use, 37 percent of which filled during the AM peak period.

Kingston/Plymouth Line – At the seven stations on the Kingston/Plymouth Line that have parking, no lot filled during the AM peak period. There are 3,127 parking spaces available on this line, 51 percent of which filled during the AM peak period. There are an additional 175 permit parking spaces at Kingston Station; 81 percent of these spaces were full. There is no AM-peak-period train service at Plymouth Station; all of the 96 parking spaces there were empty.

Middleborough/Lakeville Line – At the six stations on the Middleborough/Lakeville Line that have parking, no lot filled during the AM peak period. There are 2,924 parking spaces available for public use; 43 percent filled during the AM peak period.

Needham Line – None of the eight station parking lots filled during the AM peak period. There are 1,122 parking spaces available for public use; 53 percent filled during the AM peak period.

Providence/Stoughton Line – At the 10 stations on the Providence/Stoughton Line that have parking, no lot filled completely during the AM peak period. There are 6,561 parking spaces available for public use on the Providence/Stoughton Line, 61 percent of which filled during the AM peak period. There are an additional 1,126 parking spaces, all resident-only parking; 80 percent were in use during the AM peak period.

Rapid Transit

Table 2 shows the percent of parking utilization by rapid transit line.

TABLE 2
Rapid Transit Parking Inventory and Percent Utilization

	Number of Parking	Percent
	Spaces	Utilization
Blue Line	3,739	55%
Green Line	1,960	44%
Orange Line	4,469	66%
Red Line & Mattapan High Speed Line	8,926	64%
Total	19,094	61%

Blue Line – The Blue Line has six stations with parking. No lots filled during the AM peak period. Fifty-five percent of the 3,739 public parking spaces were used by the end

of the AM peak period.⁸ At Wonderland Station, 39 spaces are for permit holders only; 11 of these were occupied.

Green Line – None of the six parking lots at stations on the Green Line was observed to be full during the AM peak period. Forty-four percent of the 1,960 parking spaces on the Green Line were in use.

Orange Line – Six stations on the Orange Line have parking lots. Parking was not filled to capacity at any of these stations during the AM peak period. There are 4,469 parking spaces on this line, 66 percent of which were used. In addition, there are 39 permit parking spaces at Green Street Station, 24 of which were used.

Red Line and Mattapan High-Speed Line – Ten stations on the Red Line and Mattapan High-Speed Line have parking lots. Parking was not filled to capacity at any of these stations during the AM peak period. Of the 8,926 parking spaces available for public use, 64 percent filled.

Commuter Ferry

Quincy/Fore River, Hingham, and Hull are the three commuter ferry terminals with parking lots. Quincy/Fore River has 350 parking spaces, only 17 percent of which were in use during the AM peak period. This parking lot is also available for overnight parking for Logan Airport and Harbor Island users. The parking rates are different for day and overnight users. Seventy-eight percent of the 1,986 parking spaces at the Hingham ferry terminal were in use during the morning peak period. There are 240 parking spaces at the Hull ferry terminal, 67 percent of which were in use.

Express Bus

The express bus parking lot in Woburn was surveyed. The Woburn lot has 75 spaces, 70 of which filled during the AM peak period. The Watertown lot was not surveyed for this inventory but had been surveyed in 2005. At that time the lot had 194 spaces, 79 percent of which were full by the end of the AM peak period.

Regional Collector Parking Garages and Lots

There are several collector parking garages and lots throughout the MBTA system that are located strategically so as to attract a large number of users from multiple origin communities. These facilities are located off of state or interstate highways or at major roadway interchanges and generally have a capacity of greater than 500 spaces. Examples include the facilities at Alewife and Quincy Adams stations, which have

⁸ Over 1,000 of the available parking spaces on the Blue Line are provided by private operators at Wonderland Station. These spaces are included in the totals and utilization percentages.

ramps from Route 2 and Route 3, respectively. Other stations with such facilities include Riverside and Route 128, which are located directly off Route 128/I-95, and Anderson/Woburn Regional Transportation Center (RTC), which is located directly off I-93.

These parking facilities are significant because their convenience and size serve many users, and they supply more than 50 percent of all of the parking spaces available at MBTA transportation facilities, including express bus lots and commuter ferry terminals. Table 3 lists these facilities, the number of parking spaces at each, the percent of daily utilization, and the major roadway facilities they serve.

TABLE 3
Regional Collector Parking Garages and Lots

	Number of Parking	
	Spaces	Percent Utilization
Commuter Rail		
Franklin Line		
Forge Park	699	85%
Kingston/Plymouth Line		
Kingston	1,082	35%
Lowell Line		
Anderson/Woburn	1,297	85%
Lowell	850	76%
North Billerica	528	78%
Middleborough/Lakeville Line		
Middleborough/Lakeville	746	51%
Newburyport/Rockport Line		
Lynn	914	23%
Newburyport	775	18%
Salem	329	65%
Providence/Stoughton Line		
Attleboro	1,105	64%
Canton Junction	846	59%
Mansfield	373	79%
Route 128	1,909	62%
Ferry		
Hingham	1,986	78%
Rapid Transit		
Blue Line		
Wonderland	2,643	53%
Green Line		
Lechmere	297	71%
Riverside	938	36%
Orange Line		
Oak Grove	760	91%
Wellington	2,412	54%
Red Line		
Alewife	2,506	68%
Braintree	981	92%
North Quincy	1,395	59%
Quincy Adams	2,342	62%
Quincy Center	846	42%
Total	28,559	61%

Newburyport and Lynn have the lowest percent utilization of all of these parking garages and lots. During a typical morning peak period, 18% of the spaces at Newburyport are used and 23% of the spaces at Lynn. The utilization rate at Lynn is probably low because of its proximity to Wonderland Station. Wonderland has abundant parking and provides rapid transit service with a higher frequency and a lesser cost than the commuter rail service at Lynn.

In the 2005–2006 inventory, Anderson RTC was one of the most underutilized regional collector lots, with only 25% of parking spaces used during the morning peak period. To further increase the attractiveness of Anderson RTC to users, the MBTA modified its train schedule for Anderson RTC to increase AM and PM peak period train frequencies. In the current inventory, 85% of parking spaces at Anderson RTC were occupied during the morning peak period.

Table 3 does not include disability parking. The totals also omit 937 permit-only parking spaces: 602 at Mansfield, 175 at Kingston, 121 at Salem, and 39 at Wonderland. Overall, 75% of these permit-only spaces were used during the morning peak period. See the parking utilization results above for further details on the use of permit-only parking.

Demand for Parking

Although in the MBTA system as a whole a significant proportion of total parking capacity is not being used, parking utilization rates vary greatly among stations. In the 2009–2010 inventory, at only 23 percent of stations did the lots fill to 85 percent or more of their capacity, and the lots at 31 percent of stations were less than half full. Of the 34 lots that filled to 85 percent or more of capacity, 29 were smaller lots (with 250 spaces or fewer); by contrast, larger lots (with over 1,000 spaces) were only 61 percent full on average. Figure 1 shows the relationship between lot utilization and lot capacity.

With a few exceptions, utilization at the lots at the commuter rail stations farthest from downtown Boston, at or near the ends of the commuter rail lines, was not close to capacity. More stations that are the termini of rapid transit lines have utilization close to capacity (such as Oak Grove, Forest Hills, and Braintree). The map in Appendix A.5 shows park-and-ride lot utilization rates for the entire system.

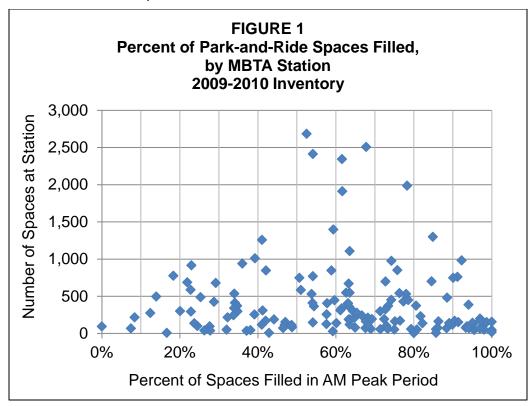
INVENTORY RESULTS: AMENITIES

The tables in Appendix C summarize the amenities located at MBTA stations with parking lots. Information pertaining to accessible platforms and ramps, along with the

⁹ Capacity and utilization totals for Anderson RTC include only parking spaces for the commuter rail, and not for the Logan Express bus. presence of benches, bicycle racks, and shelters, was collected as part of this inventory.

Accessibility

Of the 114 of the commuter rail inventoried, 82 have fully raised, or "mini-high," accessible platforms. All the stations included in this inventory on the Middleborough/Lakeville, Plymouth/Kingston, Fairmount, Greenbush, and Needham lines now have accessible platforms.



Of the 28 rapid transit stations inventoried, 24 have accessible platforms, including all the stations on the Red, Orange, and Blue lines. Four of the inventoried Green Line stations are still lacking accessible platforms. The express bus lots all have accessible sidewalk ramps, and all of the buses are low-level/kneeling buses. Table 4 lists the stations that lack accessible platforms.

Bicycle Racks

This discussion of bicycle parking is based on the data on bicycle parking facilities, capacity, and utilization recorded in the 2009–2010 inventory. That inventory only included MBTA stations with automobile parking. For that reason, it excluded 9 commuter rail stations, 97 rapid transit stations, and 4 ferry stations. Therefore, this discussion omits any bicycle parking facilities or activity that may be present at each of those stations.

Of the 146 stations included in the inventory, 88 percent have bicycle racks. This includes 103 of the 114 commuter rail stations, 24 of the 28 rapid transit stations, and 2 of the 3 ferry terminals. The station with the highest bike parking capacity is Alewife, with 321 spaces. Table 5 shows the percentages of bicycle rack utilization by mode and line throughout the system. The map provided as Appendix A.8 shows bicycle parking capacity and utilization by station.

Shelters

Most of the park-and-ride lot stations have shelters. In this inventory, a shelter is defined as any structure that provides some protection from the weather. The structure could be just a roof over the platform, a completely enclosed station, or a stand-alone structure with a roof and walls. Lincoln, Hastings, and Plimptonville are the only stations on commuter rail lines that do not have a shelter. All of the ferry terminals have shelters except Hull.

TABLE 4
Stations* without Accessible Platforms

Fitchburg/South Acton Line	Franklin Line	Providence/Stoughton Line
Ayer	Endicott	Sharon
Belmont	Franklin	Green Line
Concord	Islington	Chestnut Hill
Hastings	Plimptonville	Eliot
Kendal Green	Walpole	Lechmere
Lincoln	Haverhill Line	Waban
Littleton	Greenwood	
Shirley	Melrose Cedar Park	
Silver Hill	Wakefield	
Framingham/Worcester Line	Wyoming Hill	
Auburndale	Lowell Line	
Natick	Wedgemere	
Newtonville	West Medford	
Wellesley Farms	Winchester	
Wellesley Hills	Newburyport/Rockport Line	
Wellesley Square	Prides Crossing	
West Newton		

^{*}Stations included in the park-and-ride lot inventory.

COMPARISON WITH 2000 AND 2005-2006 INVENTORY RESULTS

Before comparing the results of this inventory with those of previous ones, it may be useful to describe again here the previous inventories. An inventory of park-and-ride stations was conducted as part of the Mobility Management System (MMS), now called the CMP, in the fall of 2005 and winter of 2006. Another inventory was conducted in the fall of 2002 for the CMP, known at that time as the Congestion Management System (CMS). The 2002 inventory only included park-and-ride lots located within Boston Region Metropolitan Planning Organization municipalities. A prior inventory, covering the entire MBTA system, was conducted in 2000; this inventory was not associated with the CMP, but it is comparable to the later inventories. This section primarily compares the 2009–2010 inventory results with those from 2005–2006; it also compares them with the 2000 results for selected subjects. A direct comparison with the 2002 inventory results was not possible because the complete data were not available.

TABLE 5
Bicycle Parking Capacity and Utilization

	Number of Bicycle	Percent
	Parking Spaces	Utilization
Commuter Rail	1,769	16%
Fairmount Line	46	2%
Fitchburg/South Acton Line	211	18%
Framingham/Worcester Line	248	24%
Franklin Line	116	14%
Greenbush Line	57	32%
Haverhill Line	239	11%
Kingston/Plymouth Line	83	11%
Lowell Line	89	7%
Middleborough/Lakeville Line	80	15%
Needham Line	83	19%
Newburyport/Rockport Line	214	18%
Providence/Stoughton Line	303	17%
Ferry	20	15%
Hingham - Rowes Wharf	16	13%
Hull - Long Wharf	4	25%
Rapid Transit	911	34%
Blue Line	75	37%
Green Line	80	25%
Orange Line	236	26%
Red Line	520	38%
Total	2,700	22%

In the 2009–2010 inventory, far fewer park-and-ride lots at commuter rail stations were found to be full than in previous inventories. In 2009–2010, the lots at only two commuter rail stations (Endicott and Wedgemere) were 100 percent full, compared to 28 stations in the 2005–2006 inventory and 14 stations in 2000. The percentage of parking utilization also decreased, from 82 percent in 2000 and 73 percent in 2005–2006 to 56 percent in 2009–2010. Only two lines saw an increase in parking utilization between the 2005–2006 and 2009–2010 inventories: the Haverhill Line and the Lowell Line.

Results were similar for park-and-ride lots at rapid transit stations. In 2009–2010, no rapid transit stations were 100 percent full, compared to 11 stations in the 2005–2006 inventory and 14 stations in the 2000 inventory. All four rapid transit lines saw decreases in parking utilization, and the total parking utilization percentage for all rapid transit stations with park-and-ride lots decreased from 97 percent in 2000 to 85 percent in 2005–2006, and to 61 percent in 2009–2010.

Parking utilization increased at the commuter ferry terminals, from 62 percent in 2005–2006 to 69 percent in 2009–2010. The express bus parking lot at Woburn was 93 percent full in the 2009–2010 inventory, a decrease from 2005–2006, when it filled to 100 percent. Ferry and express bus parking lots were not monitored in the 2000 inventory.

Since the 2005–2006 inventory, daily parking fees at many park-and-ride lots have increased. On November 15, 2008, the rates for most MBTA lots increased by \$2.00. This meant that at most commuter rail stations, daily parking fees went from \$2.00 to \$4.00, and at most rapid transit stations, fees went from between \$3.00 and \$5.00 to between \$5.00 and \$7.00. Previous parking rate increases took place on January 6, 2003 (by 50 cents at rapid transit stations and one dollar at commuter rail stations) and on July 1, 2005 (a 50-cent increase at most rapid transit stations). In January 2011, the MBTA announced the availability of monthly parking permits for 65 stations. The rate for most lots is \$70, saving regular commuters approximately \$10 a month compared to the cost of paying daily. Appendix A.7 shows the minimum fee at each station.

In January 2007, the MBTA increased commuter rail fares and restructured rapid transit fares. When paying with a CharlieCard (a reloadable, plastic fare medium), the rapid transit fare is now a flat fee of \$1.70. Rapid transit fares were previously subject to a more complex structure in which they varied depending on trip length, origin, and destination.

There have been changes in parking capacity since the 2005–2006 inventory was completed. Systemwide, public (non-permit) parking capacity decreased by about 1,000 spaces. This resulted from the removal of approximately 3,500 parking spaces at certain stations and the addition of about 2,500 spaces at other stations. This figure does not include over 3,000 spaces that were added for the Greenbush Line, which opened in October 2007.

Table 6 lists the stations where the total number of public parking spaces (not including permit-only parking) has increased or decreased either by 150 or more spaces or by over 50 percent.

CONCLUSIONS

In summary, analysis of the park-and-ride inventory results suggests the following:

 Far fewer park-and-ride lots at MBTA stations were full as compared to the 2000, 2002, and 2005–2006 monitoring results. The percentage of parking spaces utilized had decreased significantly since the previous monitoring periods. This is likely due to the large increase in parking fees that took place in 2008 and to the increase in commuter rail fares. Conceivably, the sluggish economy had an impact as well.

- Despite the decrease in the percentage of parking utilized and the number of park-and-ride lots that filled to capacity, a few stations experienced higher demand for parking, including Anderson RTC, Lawrence, and Belmont.
- Demand for commuter rail parking was greatest at stations located relatively far away from downtown Boston in the 2005–2006 inventory.
- There is at least one station on every line of the commuter rail system where 30 percent or more of the parking is available on a typical weekday morning.
- Major commuter garages and facilities, which are located near major highways, provide over 50 percent of the MBTA system's parking capacity. Most are at or near capacity, but some are underutilized.

AG/ag

TABLE 6
Stations with Significant Changes in the Number of Parking Spaces*
between 2005–2006 and 2009–2010

	Total Public Parking	Total Public Parking	Oh an ma in
	Spaces: 2005–	Spaces: 2009–	Change in
Commuter Rail	2006	2010	Total Spaces
Fitchburg/South Acton Line			
Ayer	53	88	35
Hastings	16	7	-9
Littleton	167	69	-98
Shirley	64	120	56
Haverhill Line			
Lawrence	1,076	709	-367
Kingston/Plymouth Line			
Abington	688	414	-274
Lowell Line			
Anderson/Woburn	1,510	1,321	-189
Providence/Stoughton Line			
Attleboro	957	1,121	164
Mansfield	1,110	382	-728
Route 128	2,223	1,936	-287
Sharon	757	231	-526
Ferry			
Hingham - Rowes Wharf			
Hingham	1,781	2,021	240
Hull - Long Wharf			
Hull	134	248	114
Rapid Transit			
Blue Line			
Wonderland	2,477	2,682	205
Orange Line			
Green Street	100	40	-60
Wellington	2,817	2,450	-367
Red Line			
Braintree	1,262	1,002	-260
North Quincy	1,189	1,422	233

^{*}Totals include disability parking spaces and do not include permit-only spaces.

APPENDIX A - Parking Utilization: Comprehensive Results of Inventory

Appendix A.1 - North Side Commuter Rail

Appendix A.2 - South Side Commuter Rail

Appendix A.3 - Rapid Transit

Appendix A.4 - Commuter Ferry and Express Bus

Appendix A.5 - Map of Park-and-Ride Lot Capacity and Utilization

Appendix A.6 - Map of Changes in Park-and-Ride Lot Utilization

Appendix A.7 - Map of Minimum Parking Fees at Stations

Appendix A.8 - Map of Bicycle Parking Capacity and Utilization

Notes on Appendix A Tables:

Blank fields: The surveyor did not record the information.

Parking fee: A hyphen indicates that parking was free.

TABLE A-1
North-Side Commuter Rail:
Inventory of MBTA Park-and-Ride Lots,
Non-Disability Spaces, 2009–10

Station	Lot Ownership	Parking Spaces	Occupied Parking Spaces at Time of Last AM-Peak- Period Inbound Train	% Parking Space Utilization	Time ofPea Observation	Time of Last AM- k-Period InboundP Train	arking Fee
Fitchburg Line							
Ayer	Town	82	80	98%	8:00 AM	7:41 AM	-
Belmont	Town	125	72	58%	9:00 AM	9:16 AM	\$3.00
Brandeis/Roberts	MBTA	67	5	7%	8:55 AM	9:04 AM	\$4.00
Concord	Town	137	122	89%	8:30 AM	8:52 AM	-
Fitchburg	MBTA	293	67	23%	7:20 AM	7:20 AM	\$3.00
Hastings	Town	7	3	43%	8:20 AM	8:20 AM	-
Kendal Green	Town	52	39	75%		9:00 AM	-
Lincoln	MBTA	97	49	51%	8:54 AM	8:54 AM	\$3.00
Lincoln	Private	20	17	85%	8:54 AM	8:54 AM	-
Lincoln	Town	44	43	98%	8:54 AM	8:54 AM	-
Littleton	Private	95	56	59%	9:45 AM	7:50 AM	-
Littleton	Town	66	65	98%	9:45 AM	7:50 AM	-
North Leominster	MBTA	135	111	82%		7:27 AM	\$3.00
Shirley	Town	118	75	64%	8:00 AM	7:35 AM	-
Silver Hill	Town	6	1	17%		8:18 AM	-

TABLE A-1 (Cont.) North-Side Commuter Rail: Inventory of MBTA Park-and-Ride Lots, Non-Disability Spaces, 2009–10

Station	Lot Ownership	Parking Spaces	Occupied Parking Spaces at Time of Last AM-Peak- Period Inbound Train	% Parking Space Utilization		Time of Last AM- k-Period InboundP Train	arking Fee
South Acton	Town	385	362	94%	8:45 AM	8:41 AM	\$2.50
Waltham	Town	94	88	94%	9:00 AM	9:09 AM	\$2.00
West Concord	Town	187	119	64%	8:30 AM	8:46 AM	\$4.00
Haverhill Line							
Andover	MBTA	146	79	54%	7:55 AM	7:51 AM	\$4.00
Ballardvale	MBTA	100	73	73%	8:30 AM	7:57 AM	\$4.00
Bradford	MBTA	267	82	31%	9:02 AM	9:08 AM	\$4.00
Bradford	On-Street	29	21	72%	9:00 AM	9:08 AM	-
Greenwood	Private	6	6	100%	8:50 AM	8:39 AM	-
Greenwood	Town	76	34	45%	8:50 AM	8:39 AM	\$2.00
Haverhill	MBTA	153	72	47%	9:15 AM	9:05 AM	\$4.00
Lawrence	Town	697	507	73%	8:00 AM	7:44 AM	\$3.00
Melrose Cedar Park	Town	56	40	71%	9:20 AM	8:44 AM	\$2.00
Melrose Highlands	Town	72	62	86%		8:42 AM	\$2.00
North Wilmington	Town	50	49	98%	7:50 AM	9:37 AM	-
Reading	MBTA	71	47	66%	8:00 AM	9:44 AM	\$4.00

TABLE A-1 (Cont.)
North-Side Commuter Rail:
Inventory of MBTA Park-and-Ride Lots,
Non-Disability Spaces, 2009–10

Station	Lot Ownership	Parking Spaces	Occupied Parking Spaces at Time of Last AM-Peak- Period Inbound Train	% Parking Space Utilization		Fime of Last AM- -Period InboundP Train	arking Fee
Reading	On-Street	37	37	100%	8:00 AM	9:44 AM	-
Reading	Town	263	215	82%	8:45 AM	9:44 AM	-
Wakefield	MBTA	111	54	49%	8:50 AM	8:36 AM	\$4.00
Wyoming Hill	Town	27	16	59%	8:55 AM	8:46 AM	\$2.00
Lowell Line							
Anderson/Woburn	MBTA	1,297	1,101	85%	9:00 AM	9:15 AM	\$4.00
Lowell	LRTA	850	644	76%		8:25 AM	\$5.00
North Billerica	LRTA	528	412	78%		8:33 AM	\$4.00
Wedgemere	MBTA	124	124	100%		9:26 AM	-
Wedgemere	On-Street	31	31	100%		9:26 AM	-
West Medford	MBTA	20	19	95%	9:00 AM	9:30 AM	-
West Medford	Town	45	44	98%	9:00 AM	9:30 AM	-
Wilmington	MBTA	161	139	86%	9:12 AM	8:41 AM	\$4.00
Winchester	Town	151	138	91%	8:20 AM	8:52 AM	\$2.00

TABLE A-1 (Cont.) North-Side Commuter Rail: Inventory of MBTA Park-and-Ride Lots, Non-Disability Spaces, 2009–10

Station	Lot Ownership	Oc Parking Spaces	cupied Parking Spaces at Time of Last AM-Peak- Period Inbound Train	% Parking Space Utilization	Time ofPe	Time of Last AM- ak-Period InboundP Train	arking Fee
Newburyport/Rockpo	ort Line	-					
Beverly Depot	On-Street	56	55	98%	9:00 AM	9:15 AM	-
Beverly Depot	Town	174	133	76%	9:00 AM	9:15 AM	-
Beverly Farms	Town	56	48	86%	8:02 AM	7:49 AM	-
Gloucester	MBTA	94	26	28%	9:07 AM	7:33 AM	\$4.00
Hamilton/Wenham	MBTA	188	83	44%	9:09 AM	8:14 AM	\$4.00
Ipswich	On-Street	22	22	100%	9:30 AM	8:07 AM	-
Ipswich	Town	128	126	98%	9:30 AM	8:07 AM	-
Lynn	MBTA	914	210	23%	8:24 AM	8:37 AM	\$4.00
Manchester	MBTA	68	66	97%	8:06 AM	7:44 AM	-
Montserrat	MBTA	117	48	41%	8:00 AM	7:56 AM	\$4.00
Newburyport	MBTA	775	142	18%	8:10 AM	7:55 AM	\$4.00
North Beverly	MBTA	58	46	79%	8:14 AM	8:18 AM	\$4.00
Prides Crossing	MBTA	7	6	86%	8:37 AM	7:51 AM	-
Rockport	Town	138	83	60%	8:57 AM	9:07 AM	-

TABLE A-1 (Cont.) North-Side Commuter Rail: Inventory of MBTA Park-and-Ride Lots, Non-Disability Spaces, 2009–10

Station	Lot Ownership	Parking Spaces	Occupied Parking Spaces at Time of Last AM-Peak- Period Inbound Train	% Parking Space Utilization		Time of Last AM- k-Period InboundP Train	arking Fee
Rowley	MBTA	274	34	12%	8:45 AM	8:02 AM	\$4.00
Salem	MBTA	329	214	65%	9:00 AM	8:27 AM	\$4.00
Salem	Town	121	120	99%		8:27 AM	-
Swampscott	MBTA	126	119	94%	9:10 AM	8:34 AM	\$4.00
Swampscott	On-Street	16	16	100%	9:00 AM	8:34 AM	-
West Gloucester	MBTA	42	16	38%	7:58 AM	7:38 AM	\$4.00

TABLE A-2 South-Side Commuter Rail: Inventory of MBTA Park-and-Ride Lots, Non-Disability Spaces, 2009–10

Station	Lot Ownership	Parking Spaces	Occupied Parking Spaces at Time of Last AM-Peak- Period Inbound Train	% Parking Space Utilization	Time ofPea Observation	Time of Last AM- lk-Period InboundP Train	arking Fee
Fairmount Line	-						
Fairmount	MBTA	50	16	32%		8:38 AM	\$4.00
Readville	MBTA	339	115	34%	8:50 AM	8:59 AM	\$4.00
Framingham/Worce	ster Line						
Ashland	MBTA	678	198	29%	8:00 AM	8:08 AM	\$4.00
Auburndale	MassDOT	60	55	92%	9:00 AM	8:28 AM	-
Auburndale	On-Street	59	52	88%	9:00 AM	8:28 AM	-
Framingham	MBTA	156	59	38%	9:00 AM	8:40 AM	\$4.00
Framingham	Town	152	68	45%	9:00 AM	8:40 AM	\$4.00
Grafton	MBTA	364	198	54%	8:30 AM	8:43 AM	\$4.00
Natick	Town	71	48	68%	9:00 AM	8:50 AM	-
Newtonville	On-Street	98	24	24%	8:07 AM	9:15 AM	-
Southborough	MBTA	356	226	63%		8:03 AM	\$4.00
Wellesley Farms	Town	188	119	63%	9:00 AM	9:03 AM	\$4.50
Wellesley Hills	On-Street	18	17	94%	8:30 AM	9:00 AM	-
Wellesley Hills	Town	51	48	94%	8:35 AM	9:00 AM	\$4.50

TABLE A-2 (Cont.) South-Side Commuter Rail: Inventory of MBTA Park-and-Ride Lots, Non-Disability Spaces, 2009–10

Station	Lot Ownership	Parking Spaces	Occupied Parking Spaces at Time of Last AM-Peak- Period Inbound Train	% Parking Space Utilization	Time ofPea Observation	Time of Last AM- ak-Period InboundP Train	arking Fee
Wellesley Square	Town	298	192	64%	8:45 AM	8:56 AM	\$4.50
West Natick	MBTA	170	130	76%	8:30 AM	8:45 AM	\$4.00
West Newton	MassDOT	150	109	73%	8:35 AM	8:31 AM	-
West Newton	Town	42	30	71%	8:45 AM	8:31 AM	-
Westborough	MBTA	448	352	79%	9:00 AM	8:47 AM	\$4.00
Worcester	MBTA	115	103	90%	9:00 AM	7:35 AM	\$3.00
Worcester	Town	208	132	63%	8:34 AM	7:35 AM	\$8.50
Franklin Line							
Dedham Corp Cent	er MBTA	486	123	25%	8:45 AM	8:52 AM	\$4.00
Endicott	Town	45	45	100%		8:54 AM	-
Forge Park	MBTA	699	591	85%	7:40 AM	7:45 AM	\$4.00
Franklin	MBTA	118	116	98%	7:53 AM	7:52 AM	\$4.00
Franklin	On-Street	5	0	0%	7:53 AM	7:52 AM	-
Franklin	Town	45	36	80%	7:53 AM	7:52 AM	-
Islington	MBTA	36	10	28%	8:55 AM	8:50 AM	\$4.00
Norfolk	MBTA	546	347	64%	8:07 AM	7:59 AM	\$4.00

TABLE A-2 (Cont.)
South-Side Commuter Rail:
Inventory of MBTA Park-and-Ride Lots,
Non-Disability Spaces, 2009–10

Station	Lot Ownership	Parking Spaces	Occupied Parking Spaces at Time of Last AM-Peak- Period Inbound Train	% Parking Space Utilization		Time of Last AM- -Period InboundP Train	arking Fee
Norwood Central	MBTA	68	68	100%	7:45 AM	8:45 AM	\$4.00
Norwood Central	Private	699	347	50%	7:45 AM	8:45 AM	\$4.00
Norwood Depot	MBTA	214	69	32%	8:30 AM	8:47 AM	\$4.00
Plimptonville	MBTA	5	4	80%	8:50 AM	6:58 AM	-
Walpole	MBTA	340	108	32%	8:04 AM	8:05 AM	\$4.00
Walpole	Private	328	315	96%	8:04 AM	8:05 AM	\$4.00
Greenbush Line							
Cohasset	MBTA	410	140	34%	8:30 AM	9:04 AM	\$4.00
East Weymouth	MBTA	335	206	61%	9:00 AM	9:17 AM	\$4.00
Greenbush	MBTA	685	150	22%	8:50 AM	8:50 AM	\$4.00
Nantasket Junction	MBTA	495	69	14%	9:00 AM	9:08 AM	\$4.00
North Scituate	MBTA	253	99	39%	8:45 AM	8:57 AM	\$4.00
West Hingham	MBTA	207	134	65%	9:00 AM	9:13 AM	\$4.00
Weymouth Landing	MBTA	277	181	65%	8:40 AM	8:23 AM	\$4.00

TABLE A-2 (Cont.) South-Side Commuter Rail: Inventory of MBTA Park-and-Ride Lots, Non-Disability Spaces, 2009–10

Station	Lot Ownership	Parking Spaces	Occupied Parking Spaces at Time of Last AM-Peak- Period Inbound Train	% Parking Space Utilization	Time ofPea	Time of Last AM- ak-Period InboundP Train	arking Fee
Kingston/Plymouth L	ine	-					
Abington	MBTA	405	234	58%	8:45 AM	9:01 AM	\$4.00
Halifax	MBTA	398	251	63%	8:50 AM	8:47 AM	\$4.00
Hanson	MBTA	428	331	77%	9:00 AM	8:52 AM	\$4.00
Kingston	Private	1,257	516	41%	7:50 AM	8:30 AM	\$4.00
Plymouth	MBTA	92	0	0%		Not appl.	\$4.00
South Weymouth	MBTA	530	285	54%	8:30 AM	9:06 AM	\$4.00
Whitman	MBTA	192	133	69%	9:00 AM	8:57 AM	\$4.00
Middleborough/Lake	/ille Line						
Bridgewater	MBTA	546	342	63%	8:00 AM	8:47 AM	\$4.00
Brockton	Town	255	147	58%		8:25 AM	\$3.00
Campello	MBTA	584	133	23%	7:00 AM	8:25 AM	\$4.00
Holbrook/Randolph	MBTA	369	128	35%		8:46 AM	\$4.00
Middleborough/ Lakeville	МВТА	746	378	51%	8:50 AM	8:00 AM	\$4.00
Montello	MBTA	424	122	29%	8:00 AM	8:40 AM	\$4.00

TABLE A-2 (Cont.) South-Side Commuter Rail: Inventory of MBTA Park-and-Ride Lots, Non-Disability Spaces, 2009–10

Station	Lot Ownership	Parking Spaces	Occupied Parking Spaces at Time of Last AM-Peak- Period Inbound Train	% Parking Space Utilization		ime of Last AM- Period InboundParkin Train Fe
Needham Line	-	-				
Bellevue	MBTA	35	13	37%	9:00 AM	8:52 AM \$4.0
Hersey	MBTA	134	72	54%	9:30 AM	8:41 AM \$4.0
Hersey	Town	175	117	67%	8:00 AM	8:41 AM \$4.0
Highland	MBTA	169	71	42%	8:30 AM	8:49 AM \$4.0
Needham Center	Town	124	118	95%	8:45 AM	8:30 AM \$4.0
Needham Junction	MBTA	171	166	97%	9:15 AM	8:38 AM \$4.0
Roslindale Village	MBTA	135	32	24%	8:45 AM	8:55 AM \$4.0
West Roxbury	MBTA	60	44	73%	8:25 AM	8:46 AM \$4.0
Needham Heights	MBTA	243	82	34%	8:20 AM	8:30 AM \$4.0
Providence/Stoughto	n Line					
Attleboro	MBTA	804	595	74%		9:00 AM \$4.0
Attleboro	Private	301	107	36%		9:00 AM \$4.0
Canton Center	MBTA	211	144	68%		8:36 AM \$4.0
Canton Junction	MBTA	694	371	53%	9:00 AM	8:54 AM \$4.0

TABLE A-2 (Cont.)
South-Side Commuter Rail:
Inventory of MBTA Park-and-Ride Lots,
Non-Disability Spaces, 2009–10

Station	Lot Ownership	Oo Parking Spaces	ccupied Parking Spaces at Time of Last AM-Peak- Period Inbound Train	% Parking Space Utilization	Time ofPea Observation	Time of Last AM- k-Period InboundP Train	arking Fee
Canton Junction	Private	152	127	84%	9:00 AM	8:54 AM	\$4.00
Hyde Park	MBTA	113	53	47%		9:04 AM	\$4.00
Mansfield	MBTA	373	293	79%	9:15 AM	8:38 AM	\$4.00
Mansfield	Private	370	255	69%	9:10 AM	8:38 AM	-
Mansfield	Town	232	176	76%	9:00 AM	8:38 AM	-
Providence	Private	369	271	73%	8:10 AM	8:10 AM	\$8.55
Route 128	MBTA	1,909	1,177	62%	7:00 AM	8:59 AM	\$5.00
Sharon	MBTA	37	37	100%	7:45 AM	8:47 AM	\$4.00
Sharon	Town	709	635	90%	7:55 AM	8:47 AM	\$4.00
South Attleboro	MBTA	549	376	68%	8:45 AM	8:20 AM	\$4.00
South Attleboro	Private	460	20	4%		8:52 AM	\$4.00
Stoughton	MBTA	208	103	50%	9:05 AM	8:28 AM	\$4.00
Stoughton	Private	21	12	57%	9:10 AM	8:28 AM	\$4.00
Stoughton	Town	175	140	80%	9:10 AM	8:28 AM	-

TABLE A-3
Rapid Transit:
Inventory of MBTA Park-and-Ride Lots,
Non-Disability Spaces, 2009–10

Station	Lot Ownership	Parking Spaces	Occupied Parking Spaces at Time of Last AM-Peak- Period Inbound Train	% Parking Space Utilization	Time of Observation	Frequency of AM-F Peak-Period Trains	Parking Fee
Blue Line							
Beachmont	MBTA	446	266	60%	9:05 AM	5 min.	\$5.00
Maverick	Private	58	40	69%	9:00 AM	5 min.	\$7.00
Orient Heights	MBTA	409	221	54%	8:15 AM	5 min.	\$5.00
Suffolk Downs	MBTA	101	69	68%	8:00 AM	5 min.	\$5.00
Wonderland	MBTA	1,083	838	77%	8:30 AM	5 min.	\$5.00
Wonderland	Private	1,560	559	36%	8:30 AM	5 min.	\$5.00
Wonderland	Town	39	11	28%	9:00 AM	5 min.	-
Wood Island	Private	82	77	94%	9:00 AM	5 min.	\$3.00
Green Line							
Chestnut Hill	MBTA	69	61	88%	9:00 AM	6 min.	\$5.50
Eliot	MBTA	52	42	81%	8:55 AM	6 min.	\$5.50
Lechmere	MBTA	297	212	71%	8:52 AM	6 min.	\$5.50
Riverside	MBTA	938	338	36%	9:00 AM	6 min.	\$5.75
Waban	MBTA	71	33	46%	8:55 AM	6 min.	\$5.50
Woodland	MBTA	533	181	34%	9:00 AM	6 min.	\$6.00

TABLE A-3 (Cont.) Rapid Transit: Inventory of MBTA Park-and-Ride Lots, Non-Disability Spaces, 2009–10

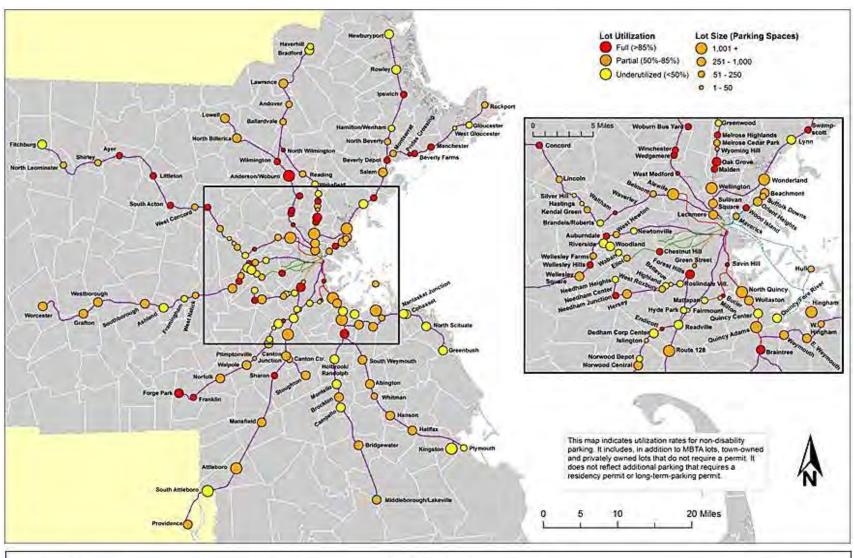
Station	Lot Ownership	Parking Spaces	Occupied Parking Spaces at Time of Last AM-Peak- Period Inbound Train	% Parking Space Utilization	Time of Observation	Frequency of AM-F Peak-Period Trains	Parking Fee
Orange Line							
Forest Hills	MBTA	202	199	99%		5 min.	\$6.00
Forest Hills	Private	277	225	81%	8:45 AM	5 min.	\$6.00
Green Street	Private	38	26	68%	8:45 AM	5 min.	\$5.00
Green Street	Town	39	24	62%	8:50 AM	5 min.	-
Malden	MBTA	198	192	97%	9:00 AM	5 min.	\$5.50
Oak Grove	MBTA	760	693	91%	8:32 AM	5 min.	\$5.50
Sullivan Square	MBTA	382	255	67%	8:00 AM	5 min.	\$5.50
Sullivan Square	Private	200	42	21%	8:00 AM	5 min.	\$5.00
Wellington	MBTA	1,300	806	62%		5 min.	\$5.50
Wellington	Private	1,112	499	45%		5 min.	\$5.00
Red Line							
Alewife	MBTA	2,506	1,698	68%	8:45 AM	4.5 min.	\$7.00
Braintree	MBTA	981	905	92%	8:45 AM	9 min.	\$7.00
Butler	MBTA	44	42	95%	9:00 AM	5 min.	-
Mattapan	MBTA	214	18	8%	8:45 AM	5 min.	\$4.00

TABLE A-3 (Cont.) Rapid Transit: Inventory of MBTA Park-and-Ride Lots, Non-Disability Spaces, 2009–10

	Lot	Parking	Occupied Parking Spaces at Time of Last AM-Peak-	% Parking Space	Time of	Frequency of AM-P	_
Station	Ownership	Spaces	Period Inbound Train	Utilization	Observation	Peak-Period Trains	Fee
Milton	MBTA	38	10	26%	9:00 AM	5 min.	\$5.00
North Quincy	MBTA	1,395	828	59%	9:00 AM	9 min.	\$5.00
Quincy Adams	MBTA	2,342	1,442	62%	8:30 AM	9 min.	\$7.00
Quincy Center	MBTA	846	356	42%	8:52 AM	9 min.	\$7.00
Savin Hill	MBTA	20	18	90%	8:35 AM	9 min.	-
Wollaston	MBTA	540	412	76%	8:45 AM	9 min.	\$5.00
Milton	MBTA	38	10	26%	9:00 AM	5 min.	\$5.00
North Quincy	MBTA	1,395	828	59%	9:00 AM	9 min.	\$5.00

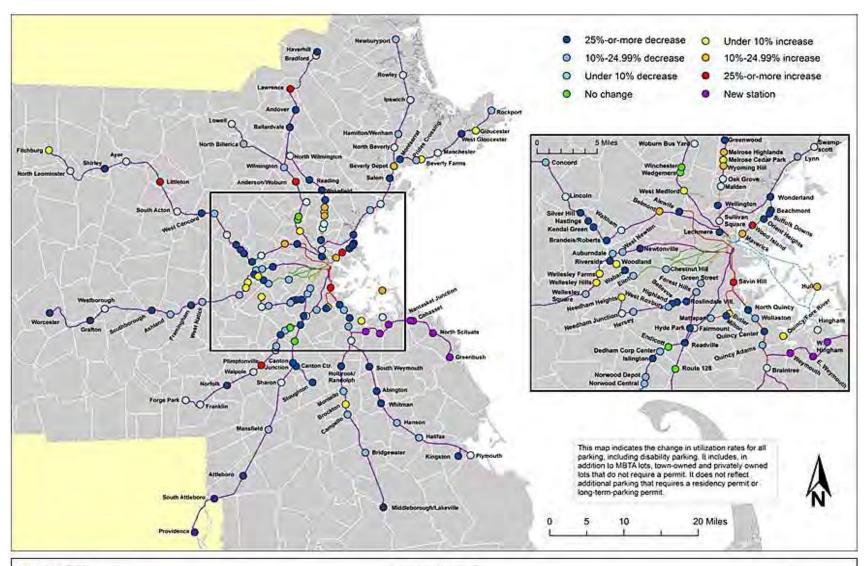
TABLE A-4
Commuter Ferry and Express Bus:
Inventory of MBTA Park-and-Ride Lots,
Non-Disability Spaces, 2009–10

	Lot	(Parking	Occupied Parking Spaces at Time of Last AM-Peak-	% Parking Space	Time ofPe	Time of Last AM- eak-Period Inbound	arking
Station	Ownership	Spaces	Period Inbound Train	Utilization	Observation	Trip	Fee
Bus							
Woburn Bus Yard	MBTA	75	70	93%	8:30 AM	Not appl.	-
Ferry							
Hingham	MBTA	1,693	1,268	75%	7:00 AM	8:45 AM	\$3.00
Hingham	Private	293	287	98%	7:00 AM	8:45 AM	\$3.00
Hull	On-Street	26	19	73%	7:55 AM	9:00 AM	-
Hull	Private	75	45	60%	7:55 AM	9:00 AM	-
Hull	Town	139	96	69%	7:55 AM	9:00 AM	-
Quincy/Fore River	MBTA	350	60	17%	7:00 AM	9:10 AM	\$3.00



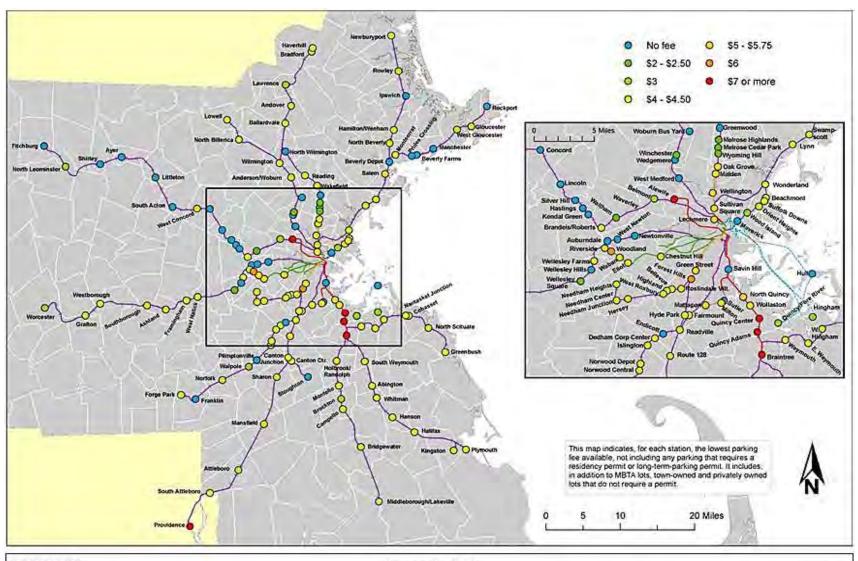
BOSTON REGION MPO Appendix A-5
Park and Ride Lot Capacity and Utilization, 2009–10 Inventory

Congestion Management Process



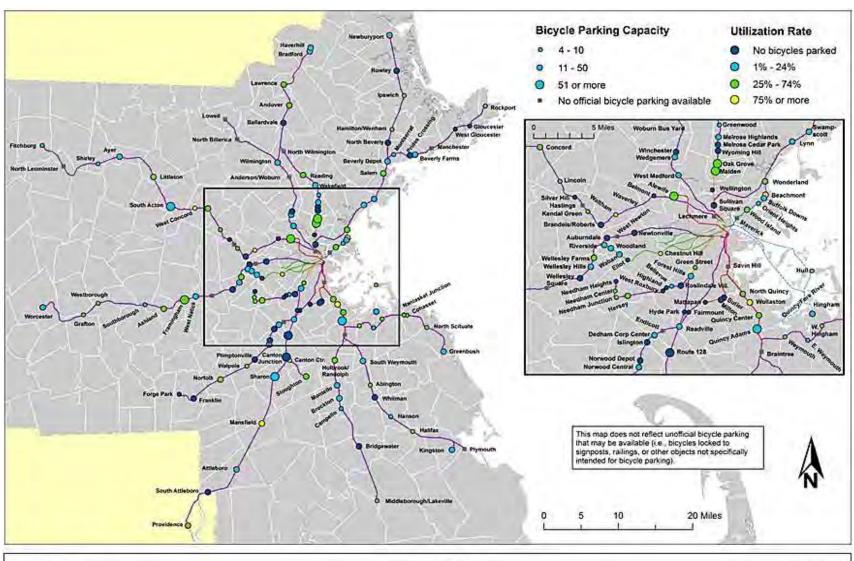
BOSTON REGION MPO Appendix A-6
Change in Park and Ride Utilization Rates, from the 2005–06 inventory to the 2009–10 inventory

Congestion Management Process



BOSTON REGION MPO Appendix A-7
Minimum Parking Fees at Stations,
2009–10 Inventory

Congestion Management Process



BOSTON REGION MPO Appendix A-8
Bicycle Parking Capacity and Utilization
2009–10 Inventory

Congestion Management Process

APPENDIX B - Survey Form

Park and Ride Lot Survey: Spring 2009 / Summer 2009

Station Name:	Rail l	Line:			
Data Collector's Name:	Date	Day of th	e Week:		
Address/Directions to Station Parking Lot:					
Weather:	Time Data Colle	ection Started:			
Information to Collect:					
# of Parking Spaces (non-HP):	# of U	Jsed/ Occupied Parking Sp	oaces (non-HP)	:	
# of HP Parking Spaces:	# of l	Jsed/ Occupied HP Parking	g Spaces:		
Time Lot Fills Up (non-HP):	A.M. # of F	Parked Cars Not in Marked	Spaces:		
Time of Last A.M. Peak Period Train:	A.M. Lot o	wnership type? MBT	TA On-Street	Private T	own
Parking Fee (\$): Method of	Parking Fee Col	lection Meter Attendent M	oney Box Permit	Other:	
Is there a bike rack? Yes No	What condition	is the bike rack in?	Good	Fair Poor	
What type of bike rack is it? Inverted U	Ribbon Single	Bike Post Dish Rack	Other:		
How many bicycle parking spaces are there?	How	many bicycles are parked	there?		
Are there bikes parked at locations other the	nan the bike rack	? Where?			
Are there any bike trails/paths leading to the	ne station? Name	of path?			
What condition is the bike trail in?	Good Fair	Poor			
Are there sidewalks leading to the station?	<i>No</i> Are t	nere crosswalks leading to	the station?	Yes No	0
What condition are the sidewalks in?	Page	condition are Good	Fair	Poor	
At what locations are sidewalks missing?					
At what locations are crosswalks missing?					
If there is a signalized intersection that peo station, does it have a working pedestrian		ccess the Yes	No		
Which number bus routes, if any, connect	to this station?				
What kind of platform is at the station?	Raised fully acce	ssible Mini-high platform	Other:		
Are there accessible ramps and/or elevato	rs at the station?	Yes No			
Describe possible accessibility concerns (i	.e. missing ramps	s, etc.)			
Are there benches at the station platform?	Yes	No			
If 'yes', what side of the platform?	Inbound	Outbound	Both		
Are there shelters at this station platform?	Yes	No			
If 'yes', what side of the platform?	Inbound	Outbound	Both		
If 'yes', what kind of shelters are they?	Fully Enclosed	Roof & Walls	Roof Only	Other	n

Additional Comments:

APPENDIX C - Amenities: Comprehensive Results of Inventory

- Appendix C.1 North Side Commuter Rail
- Appendix C.2 South Side Commuter Rail
- Appendix C.3 Rapid Transit
- Appendix C.4 Commuter Ferry and Express Bus

Station	Bike Rack at Station (Type)	Station Platform Type	Accessible Ramps and/or Elevators	Benches at Station (Side[s] of Platform)	Shelters at Station (Side[s] of Platform)	Shelter Type(s)
Ayer	rg/South Ac Inverted U; Dish Rack	Not accessible	No	Inbound	Inbound	Roof & Walls
Belmont	Ribbon	Not accessible	No	Inbound	Inbound	Roof Only
Brandeis/ Roberts	Dish Rack	Mini-high platform	Yes	Both	Inbound	Fully Enclosed
Concord	Inverted U	Not accessible	No	None	None	Not appl.
Fitchburg	Dish Rack	Mini-high platform	Yes	Inbound	Inbound	Roof & Walls
Hastings	None	Not accessible	No	None	None	Not appl.
Kendal Green	Dish Rack	Not accessible	No	Outbound	Outbound	Roof Only
Lincoln	Ribbon	Not accessible	No	Outbound	None	
Littleton	Dish Rack	Not accessible	No	Both	Both	Roof Only

Station	Bike Rack at Station (Type)	Station Platform Type	Accessible Ramps and/or Elevators	Benches at Station (Side[s] of Platform)	Shelters at Station (Side[s] of Platform)	Shelter Type(s)
North Leominster	None	Mini-high platform	Yes	Both	Both	Roof Only
Shirley	Dish Rack	Not accessible	Yes	None	None	Not appl.
Silver Hill	Dish Rack	Not accessible	No	Outbound	Outbound	Roof & Walls
South Acton	Inverted U	Lift for wheel- chairs	No	Both	Both	Roof & Walls
Waltham	Dish Rack	Mini-high platform	Yes	Both	Both	Roof & Walls
West Concord	Inverted U	Mini-high platform	Yes	Both	Both	Roof Only
Haverhill Lin	ne					
Andover	Ribbon	Mini-high platform	Yes	Both	Both	Roof & Walls
Ballardvale	Dish Rack	Mini-high platform	Yes	Both	Both	Roof Only
Bradford	Ribbon	Mini-high platform	Yes	Both	Both	Roof Only

Station	Bike Rack at Station (Type)	Station Platform Type	Accessible Ramps and/or Elevators	Benches at Station (Side[s] of Platform)	Shelters at Station (Side[s] of Platform)	Shelter Type(s)
Greenwood	Ribbon	Not accessible	No	Inbound	Inbound	Roof & Walls
Haverhill	Ribbon	Mini-high platform	Yes	Both	Both	Roof Only
Lawrence	Other	Raised, fully accessible	Yes	Both	Both	Fully Enclosed
Melrose Cedar Park	Other	Not accessible	No	Inbound	Both	Roof Only
Melrose Highlands	Dish Rack	Mini-high platform	Yes	Both	Both	Roof Only
North Wilmington	None	Mini-high platform	Yes	Both	Both	Roof & Walls
Reading	Dish Rack	Mini-high platform	Yes	Both	Both	Roof Only
Wakefield	Dish Rack	Not accessible	No	Both	Inbound	Roof Only
Wyoming Hill	Dish Rack	Not accessible	Yes	Inbound	Both	Roof Only

Station	Bike Rack at Station (Type)	Station Platform Type	Accessible Ramps and/or Elevators	Benches at Station (Side[s] of Platform)	Shelters at Station (Side[s] of Platform)	Shelter Type(s)
Lowell Line						
Anderson/ Woburn	None	Raised, fully accessible	Yes	None	None	Not appl.
Lowell	None	Partially raised	No	None	None	Not appl.
North Billerica	None	Mini-high platform	No	None	None	Not appl.
Wedgemere	Dish Rack	Not accessible	No	Both	Both	Roof Only
West Medford	Dish Rack	Not accessible	No	Both	None	Not appl.
Wilmington	Ribbon	Mini-high platform	Yes	Both	Both	Roof Only
Winchester	Dish Rack	Not accessible	Yes	Both	Both	Roof Only
Newburypor	t/Rockport	Line				
Beverly Depot	Dish Rack	Mini-high platform	Yes	Both	Both	Roof & Walls
Beverly Farms	Dish Rack	Mini-high platform	No	Inbound	Inbound	Roof Only

Station	Bike Rack at Station (Type)	Station Platform Type	Accessible Ramps and/or Elevators	Benches at Station (Side[s] of Platform)	Shelters at Station (Side[s] of Platform)	Shelter Type(s)
Gloucester	Inverted U	Mini-high platform	Yes	Inbound	Inbound	Roof Only
Hamilton/ Wenham	Ribbon	Mini-high platform	Yes	Both	Both	Roof Only
Ipswich	Ribbon	Mini-high platform	Yes	Both	Both	Roof & Walls
Lynn	Inverted U	Raised, fully accessible	Yes	Both	Both	Roof Only
Manchester	None	Mini-high platform	Yes	Both	Both	Roof & Walls
Montserrat	Ribbon	Mini-high platform	Yes	Inbound	Inbound	Roof & Walls
Newburypo rt	Ribbon	Raised, fully accessible	Yes	Both	Both	Roof Only
North Beverly	Dish Rack	Mini-high platform	Yes	Both	Both	Roof Only
Prides Crossing	Dish Rack	Not accessible	No	Inbound	Inbound	Roof & Walls
Rockport	Ribbon	Mini-high platform	No	None	Both	Roof Only

Station	Bike Rack at Station (Type)	Station Platform Type	Accessible Ramps and/or Elevators	Benches at Station (Side[s] of Platform)	Shelters at Station (Side[s] of Platform)	Shelter Type(s)
Rowley	Ribbon	Raised, fully accessible	Yes	Both	Both	Roof Only
Salem	Dish Rack	Mini-high platform	Yes	Both	Both	Roof Only
Swampscott	Dish Rack	Mini-high platform	Yes	Both	Both	Roof Only
West Gloucester	Ribbon	Mini-high platform	Yes	Inbound	Inbound	Roof Only

Station	Bike Rack at Station (Type)	Station Platform Type	Accessible Ramps and/or Elevators	Benches at Station (Side[s] of Platform)	Shelters at Station (Side[s] of Platform)	Shelter Type(s)
Fairmount L	ine					
Fairmount	Ribbon	Mini-high platform	Yes	Both	Both	Roof Only
Readville	Inverted U	Mini-high platform	Yes	Both	Both	Roof Only
Framingham	n/Worcester	Line				
Ashland	Inverted U	Mini-high platform	Yes	Both	Both	Roof Only
Auburndale	Dish Rack	Not accessible	No	None	Both	Roof Only
Framingha m	Ribbon	Mini-high platform	Yes	Both	Both	Roof Only
Grafton	Inverted U	Mini-high platform	Yes	Both	Both	Roof Only
Natick	None	Not accessible	No	None	None	Not appl.
Newtonville	Dish Rack	Not accessible	No	Inbound	Inbound	Roof & Walls
South- borough	Inverted U	Mini-high platform	Yes	Both	Both	Roof Only

Station	Bike Rack at Station (Type)	Station Platform Type	Accessible Ramps and/or Elevators	Benches at Station (Side[s] of Platform)	Shelters at Station (Side[s] of Platform)	Shelter Type(s)
Wellesley Farms	Dish Rack	Not accessible	No	Both	Both	Roof & Walls
Wellesley Hills	Dish Rack	Not accessible	No	Inbound	Inbound	Roof Only
Wellesley Square	Dish Rack	Not accessible	No	Both	Both	Roof & Walls
West Natick	Dish Rack	Mini-high platform	Yes	Both	Inbound	Roof Only
West Newton	None	Not accessible	No	Both	Both	Roof Only
West- borough	Dish Rack	Mini-high platform	Yes	Both	Both	Roof Only
Worcester	Ribbon	Mini-high platform	Yes	Both	Both	Roof Only
Franklin Lin	е					
Dedham Corp Center	Dish Rack	Mini-high platform	Yes	Both	Inbound	Roof Only
Endicott	None	Not accessible	No	Both	Inbound	Roof Only

Station	Bike Rack at Station (Type)	Station Platform Type	Accessible Ramps and/or Elevators	Benches at Station (Side[s] of Platform)	Shelters at Station (Side[s] of Platform)	Shelter Type(s)
Forge Park	Inverted U	Mini-high platform	Yes	Inbound	Inbound	Fully Enclosed
Franklin	Dish Rack	Not accessible	No	Both	Both	Fully Enclosed
Islington	Dish Rack	Not accessible	No	None	None	Not appl.
Norfolk	Inverted U	Mini-high platform	Yes	Both	Both	Roof Only
Norwood Central	Inverted U	Mini-high platform	Yes	Both	Both	Roof Only
Norwood Depot	Dish Rack	Mini-high platform	Yes	Both	Both	Roof Only
Plimpton- ville	Dish Rack	Not accessible	No	None	None	Not appl.
Walpole	Ribbon	Not accessible	No	Both	None	Not appl.

Station	Bike Rack at Station (Type)	Station Platform Type	Accessible Ramps and/or Elevators	Benches at Station (Side[s] of Platform)	Shelters at Station (Side[s] of Platform)	Shelter Type(s)
Greenbush						
Cohasset	Ribbon	Raised fully accessible	Yes	Inbound	Inbound	Roof Only
East Weymouth	Ribbon	Raised fully accessible	Yes	Both	Both	Roof Only
Greenbush	Ribbon	Raised fully accessible	No	Both	Both	Roof Only
Nantasket Junction	Ribbon	Raised fully accessible	No	Yes (side not recorded)	Yes (side not recorded)	Roof Only
North Scituate	Ribbon	Raised fully accessible	Yes	Yes (side not recorded)	Yes (side not recorded)	Roof Only
West Hingham	Dish Rack	Raised fully accessible	No	Inbound	Inbound	Roof Only
Weymouth Landing/E. Braintree	Inverted U	Raised fully accessible	Yes	Both	Both	Roof Only
Kingston/Ply	ymouth Lin	е				
Abington	Ribbon	Raised fully accessible	Yes	Yes (side not recorded)	Yes (side not recorded)	Roof Only
Halifax	Inverted U	Raised fully accessible	Yes	Both	Both	Roof Only

Station	Bike Rack at Station (Type)	Station Platform Type	Accessible Ramps and/or Elevators	Benches at Station (Side[s] of Platform)	Shelters at Station (Side[s] of Platform)	Shelter Type(s)
Hanson	Inverted U	Raised fully accessible	No	Yes (side not recorded)	Yes (side not recorded)	Roof Only
Kingston	Dish Rack	Raised fully accessible	No	Both	Both	Roof & Walls
Plymouth	None	Raised fully accessible	No	Inbound	Inbound	Roof & Walls
South Weymouth	Inverted U	Raised fully accessible	No	Both	Both	Roof Only
Whitman	Inverted U	Raised fully accessible	Yes	Yes (side not recorded)	Yes (side not recorded)	Roof Only
Middleborou	ıgh/Lakevill	e Line				
Bridgewater	Inverted U	Raised fully accessible	Yes	Both	Both	Roof & Walls
Brockton	Inverted U	Raised fully accessible	Yes	Both	Both	Roof Only
Campello	Inverted U	Mini-high platform	No	Both	Both	Roof Only

Station	Bike Rack at Station (Type)	Station Platform Type	Accessible Ramps and/or Elevators	Benches at Station (Side[s] of Platform)	Shelters at Station (Side[s] of Platform)	Shelter Type(s)
Holbrook/ Randolph	Inverted U	Raised fully accessible	Yes	Both	Both	Roof Only
Middle- borough/ Lakeville	Inverted U	Raised fully accessible	Yes	Both	Both	Roof Only
Montello	Inverted U	Raised fully accessible	Yes	Both	Both	Roof Only
Needham Li	ne					
Bellevue	Ribbon	Mini-high platform	Yes	Both	Both	Roof Only
Hersey	Ribbon	Mini-high platform	Yes	Both	Both	Roof Only
Highland	Dish Rack	Mini-high platform	Yes	Both	Both	Roof Only
Needam Heights	Ribbon	Mini-high platform	No	Both	Both	Roof Only
Needham Center	Ribbon	Mini-high platform	Yes	Both	Both	Roof Only
Needham Junction	Ribbon	Mini-high platform	Yes	Both	Both	

Station	Bike Rack at Station (Type)	Station Platform Type	Accessible Ramps and/or Elevators	Benches at Station (Side[s] of Platform)	Shelters at Station (Side[s] of Platform)	Shelter Type(s)
Roslindale Village	Dish Rack	Mini-high platform	Yes	Both	Both	Roof & Walls
West Roxbury	Ribbon	Mini-high platform	No	Both	Both	Roof Only
Providence/	Stoughton L	_ine				
Attleboro	Ribbon	Mini-high platform	No	Both	Both	Fully Enclosed
Canton Center	Dish Rack	Mini-high platform	Yes	Both	Both	Roof Only
Canton Junction	Dish Rack	Mini-high platform	Yes	Both	Both	Roof Only
Hyde Park	Inverted U	Mini-high platform	Yes	Yes (side not recorded)	None	Not appl.
Mansfield	Ribbon	Mini-high platform	Yes	Inbound	Inbound	Roof & Walls
Providence	Single Bike Post	Raised fully accessible	Yes	None	Both	Roof & Walls
Route 128	Dish Rack	Raised fully accessible	Yes	Both	Both	Roof & Walls

Station	Bike Rack at Station (Type)	Station Platform Type	Accessible Ramps and/or Elevators	Benches at Station (Side[s] of Platform)	Shelters at Station (Side[s] of Platform)	Shelter Type(s)
Sharon	Ribbon	Not accessible	Yes	Both	Both	Roof & Walls
South Attleboro	Dish Rack	Mini-high platform	Yes	Both	Both	Roof Only
Stoughton	Dish Rack	Mini-high platform	Yes	Both	Both	Roof Only

Appendix C-3 RAPID TRANSIT Amenity Inventory of MBTA Commuter Park-and-Ride Lots 2009–10

Station	Bike Rack at Station (Type)	Station Platform Type	Accessible Ramps and/or Elevators	Benches at Station (Side[s] of Platform)	Shelters at Station (Side[s] of Platform)	Shelter Type(s)
Red Line						
Alewife	Other	Raised fully accessible	Yes	Both	Both	Fully Enclosed
Braintree		Raised fully accessible	Yes	None	None	Not appl.
Butler	Dish Rack	Ramp for wheel-chairs	Yes	Both	Both	Roof Only
Mattapan	Ribbon	Ramp for wheel-chairs	Yes	Both	Both	Fully Enclosed
Milton	Dish Rack	Ramp for wheel- chairs	Yes	Both	Inbound	Roof Only
North Quincy	Ribbon	Raised fully accessible	Yes	Both	Both	Roof & Walls
Quincy Adams	Inverted U	Raised fully accessible	Yes	Both	Both	
Quincy Center		Raised fully accessible	No	None	None	Not appl.
Savin Hill		Raised fully accessible	Yes	Both	Both	Roof Only
Wollaston	Dish Rack	Raised fully accessible	No	Both	Both	Roof & Walls

Appendix C-3 (Cont.) RAPID TRANSIT Amenity Inventory of MBTA Commuter Park-and-Ride Lots 2009–10

Station	Bike Rack at Station (Type)	Station Platform Type	Accessible Ramps and/or Elevators	Benches at Station (Side[s] of Platform)	Shelters at Station (Side[s] of Platform)	Shelter Type(s)
Blue Line						
Beachmont	Ribbon	Raised fully accessible	Yes	Inbound	Both	Roof Only
Maverick		Raised fully accessible	Yes	Both	Both	Fully Enclosed
Orient Heights	Ribbon	Raised fully accessible	No	Both	Both	Roof & Walls
Suffolk Downs	Ribbon	Raised fully accessible	Yes	Both	Both	Roof Only
Wonderland	Ribbon	Raised fully accessible	Yes	Both	Both	Roof Only
Wood Island	Ribbon	Raised fully accessible	Yes	Both	Both	Roof & Walls
Orange Line						
Forest Hills	Ribbon	Raised fully accessible	Yes	Both	Both	Fully Enclosed
Green Street	Dish Rack	Raised fully accessible	Yes	Both	Both	Fully Enclosed
Malden	Inverted U	Raised fully accessible	Yes	Both	Both	Roof & Walls

Appendix C-3 (Cont.) RAPID TRANSIT Amenity Inventory of MBTA Commuter Park-and-Ride Lots 2009–10

Station	Bike Rack at Station (Type)	Station Platform Type	Accessible Ramps and/or Elevators	Benches at Station (Side[s] of Platform)	Shelters at Station (Side[s] of Platform)	Shelter Type(s)
Oak Grove	Ribbon	Raised fully accessible	Yes	Both	Both	Roof & Walls
Sullivan Square	Ribbon	Raised fully accessible	Yes	Both	Both	Roof Only
Wellington	Ribbon	Raised fully accessible	Yes	Both	Both	Roof & Walls
Green Line						
Chestnut Hill	Ribbon	Not accessible	No	Inbound	Inbound	Roof & Walls
Eliot	Ribbon	Not accessible	No	Both	Inbound	Roof & Walls
Lechmere		Not accessible	No	None	Both	Roof & Walls
Riverside	Ribbon	Raised to low-floor-car level	Yes	Both	Both	Roof Only
Waban	Ribbon	Not accessible	Yes	Both	Inbound	Fully Enclosed
Woodland	Ribbon	Raised to low-floor-car level	Yes	Both	Inbound	Roof & Walls

Appendix C-4 COMMUTER FERRY AND EXPRESS BUS Amenity Inventory of MBTA Commuter Park-and-Ride Lots 2009–10

Location	Bike Rack at Station (Type)	Station Platform Type	Accessible Ramps and/or Elevators	Benches at Station (Side[s] of Platform)	Shelters at Station (Side[s] of Platform)	Shelter Type(s)
Commuter F	erry					
Quincy/Fore River	None	Ramps to dock	Yes	Yes (side not appl.)	Yes (side not appl.)	Fully Enclosed
Hingham	Inverted U	Ramps to dock	No	No	No	Fully Enclosed
Hull	Single Bike Post	Ramps to dock	Yes	No	No	None
Express Bus						
Woburn Bus Yard	None	Buses are accessible	No	Inbound	Inbound	Roof & Walls