



Jamey Tesler, MassDOT Secretary and CEO and MPO Chair
Tegin L. Teich, Executive Director, MPO Staff

TECHNICAL MEMORANDUM

DATE: December 2, 2021
TO: Congestion Management Committee
FROM: Ryan Hicks, MPO Staff
RE: 2017–18 Inventory and Utilization of Bicycle Parking Spaces at MBTA Stations

1 INTRODUCTION

The purpose of this memorandum is to summarize the findings of the 2017–18 Massachusetts Bay Transportation Authority (MBTA) bicycle parking survey. For this survey, the Boston Region Metropolitan Planning Organization (MPO) collected bicycle parking information at commuter rail stations, commuter boat terminals, and rapid transit stations, including surface rapid transit stations and some bus stops. (For the purposes of this memorandum, the term “stations” includes bus stops.) This monitoring is part of the Congestion Management Process (CMP), which is carried out in accordance with federal regulations to help determine the Boston region’s multimodal transportation investments for reducing congestion.

MPO staff inventoried MBTA, municipal, and private bicycle racks at each of the 143 rapid transit stations, 129 commuter rail stations, six commuter ferry terminals, and two of the major bus stops. There was a six percent increase in parked bicycles and a 20 percent increase in bicycle rack spaces from the 2012–13 inventory to the 2017–18 inventory. Of the 280 stations included in the bicycle survey inventory, 86 percent have bicycle racks. This includes 114 of the 143 rapid transit stations, 120 of the 129 commuter rail stations, five of the six ferry terminals, and one of the two major bus stops.

As discussed later in this memorandum, the factors contributing to the change in utilization include construction of additional bicycle facilities, changes in motor vehicle parking fees, improvement of bicycle infrastructure leading to MBTA stations, and increased presence of bikesharing, among other factors.

Civil Rights, nondiscrimination, and accessibility information is on the last page.

2 BACKGROUND

The CMP is an ongoing, federally mandated program that is required of all MPOs. The Boston Region MPO's CMP is multimodal and focuses on monitoring pedestrian facilities, bicycle facilities, transit facilities, park-and-ride lots, roadways, and high-occupancy vehicle (HOV) lanes. Staff collected and analyzed data from these modes of travel. The results of this analysis provide planners and MPO members with tools to help prioritize projects and program funds. For example, the inventory of bicycle racks can help determine if additional bicycle racks will need to be installed at certain stations or if covered bicycle spaces are suitable.

This memorandum provides analysis on bicycle parking capacity and utilization at every MBTA station. Bicycle parking utilization is defined in this memorandum as the percentage of bicycle spaces occupied by the end of the MBTA-defined AM peak period.¹ The data can be useful when posted on the web, as it can inform people who bicycle about stations that have available parking. It can also inform planners of local municipalities that stations in their communities may need additional bicycle parking capacity. Sharing this information with municipalities is important since bicycle spaces at MBTA stations are often provided by local municipalities or even private business owners.

Before the 2017–18 inventory, bicycle parking data were last collected in 2012–13. Previous bicycle parking data were also collected in 2009–11, 2005–06, 2002 (MPO area only), and 1999–2000.

3 DATA COLLECTION PROCESS

Inventories occurred during fair weather days in the spring and fall of 2017 and 2018 for all rapid transit stations, commuter rail stations, commuter ferry stations, and the two bus stations. The major data collection protocol difference between the 2017–18 inventory and the 2012–13 inventory was that the commuter rail stations were surveyed in the summer of 2012, compared to the spring and fall of 2017–18. Additionally, the rapid transit stations were surveyed exclusively in the fall of 2012. Data for current and past inventories are in Appendix A.

In general, MPO staff inventoried each station once. Data were collected using the survey form shown in Appendix B. The number, location, and condition of bicycle racks were recorded, and the number of bicycles parked in the racks and

¹ The end of the AM peak period is defined as time where the last inbound peak period vehicle leaves the respective station or stop. The last peak period commuter rail train typically begins its inbound trip before 9:00 AM and arrives at either North Station or South Station by 9:50 AM. The last peak period rapid transit, bus or ferry vehicle typically begins its inbound trip before 9:00 AM.

elsewhere in the station. Data on amenities and other characteristics of the station and its vicinity were also collected, including lighting, security, and the presence or absence of shared-use paths (trails) and bicycle lanes near the station.

At many of the MBTA stations that lacked bicycle parking, there were bicycle racks near the station on municipal property or along the sidewalks. These bicycle racks were included in the inventory if there was no bicycle parking at the nearby transit station or if it appeared likely that the municipal bicycle racks would be convenient for transit riders. If bicycle racks were located nearby but were very inconvenient for transit riders, that information was not included in the inventory.

The observed utilization of the bicycle racks was assumed to be typical for the station. Detailed observations over time, which is an effort beyond the scope of this project, would be necessary to gather a more accurate bicycle rack utilization percentage to consider fluctuations due to weather and work schedules, among other factors.

4 FACTORS IMPACTING BICYCLE PARKING

Certain factors have influenced bicycle parking utilization since the last bicycle inventory was collected. These factors include the change in parking capacity, bicycles on MBTA vehicle policies, MBTA station parking fee changes, bikesharing, bicycle parking safety, the presence of bicycle facilities along station approaches, the general increase in popularity of bicycling, and data collection inconsistencies.

Other factors, such as MBTA service changes, land use policies, and the economy affect both bicycle and motor vehicle parking at MBTA stations. For more information on these factors, please refer to the *2017–18 Inventory of Park-and-Ride Lots at MBTA Facilities* memorandum.²

4.1 Changes in Capacity

Certain stations have experienced a change in capacity in various ways since the last inventory was collected, including the installation of bicycle cages and the removal of bicycle racks at different stations. Some changes in the capacity include adding a secure cage, inducing latent demand, and increasing the

² Boston Region MPO memorandum titled *2017–18 Inventory of Park-and-Ride Lots at MBTA Facilities*, available online at <https://www.ctps.org/data/pdf/programs/cmp/park-and-ride-memo-2017-2018.pdf>.

number of overall bicycles parked at a station primarily due to the increased sense of security.

4.2 Bicycles Parked in Areas Near Stations Other than Bicycle Racks

Many bicycles parked at locations other than at bicycle racks may be an indication that the existing racks are not located in areas that are safe; the racks are in an inconvenient location; the racks are in disrepair; the racks are poorly designed; or the rack utilization is at or exceeding the design capacity. This can also indicate that local retail shops and other commercial establishments may need to provide additional bicycle racks for their patrons. For example, at Central and Harvard stations, many of the bicycles were locked to railings, trees, and signposts.

4.3 The Retrofitting of Buses/Bicycles on Train Policy

The MBTA began the process of outfitting their bus fleet with bicycle racks in 2006. Since then, the MBTA has made significant improvements with the help of a grant in 2010 through the MPO's Clean Air and Mobility Program. Currently, all non-electric MBTA buses are equipped with bicycle racks.³ This is an improvement from the 2012–13 inventory, as now 95 percent of the MBTA bus fleet have bicycle racks. Additionally, bicycles are allowed on commuter rail and rapid transit vehicles during non-peak period hours (all times except 7:00 AM–10:00 AM and 4:00 PM–7:00 PM) for both the 2012–13 and 2017–18 inventories, with the exceptions of the Green Line, Mattapan trolley, and Silver Line Routes 1, 2, and 3.

Bicycle racks at rapid transit stations allow people to use their bicycles at one end of a transit trip, while bicycle racks on buses allow customers to use their bicycles at both ends of a trip. For information about the MBTA's rules for parking bicycles and bringing bicycles on MBTA vehicles, visit the MBTA's [website](#), which has the most up-to-date information.⁴

4.4 Motor Vehicle Parking Fee Changes at MBTA Stations

In recent years, parking fees have increased at some MBTA stations. The increase in parking fees may influence commuter behavior if the parking demand at an MBTA system is determined to be elastic compared to the parking fees. If the demand is elastic, then parking fee increases could cause commuters to engage in alternative methods of commuting between their homes and the MBTA

³MBTA, "Bringing Your Bike on the Bus." Available online at <https://www.mbta.com/bikes/using-bus-bike-racks> (accessed April 16, 2021).

⁴MBTA, "Bikes." Available online at https://mbta.com/riding_the_t/bikes/ (accessed April 16, 2021).

station to save money, such as leading more people to bike to the stations, which could result in an increase in the number of parked bicycles.

4.5 Implementation of Bikesharing

Over the past few years, bikesharing has grown in popularity. Docked bikesharing first arrived in the Boston region in 2011. Docked bikesharing is provided in the Boston region by BlueBikes. More recently, dockless bikesharing, which allows a user to ride a bicycle within a designated area and leave it at any location, became popular in the mid-2010s. Dockless bikeshares may impact bicycle parking at MBTA stations because commuters can use these bicycles for first- and last-mile trips. This could eliminate the need to own a bicycle for commuting purposes—making parking a bicycle at the MBTA station a nonissue.

Dockless bikeshares have been banned in many communities in the Boston region shortly after the 2017–18 bicycle parking data were collected and several dockless bikeshare companies have transitioned their dockless bikeshare fleet to electric bicycles (or E-bicycles). Since the completion of the data collection effort, electric scooter (or E-scooter) share programs have emerged throughout the Boston region. It remains to be seen if these new commuting options will directly impact bicycle parking at MBTA stations.

4.6 Safety/Theft Rate

The perception of the safety of an MBTA station can affect bicycle parking. More riders are willing to park their bicycle if riders are confident that their bicycle will not be stolen or vandalized. In past inventories, theft rates were available for bicycles at MBTA stations, however, the data are no longer available.

4.7 The Implementation of Bicycle Facilities leading to Station

The comfort of people bicycling has an enormous influence on the frequency and popularity of bicycle riding. Adding bicycle friendly features, such as bicycle lanes and shared-use paths, along routes to stations increases the separation between bicycle and motor vehicle traffic. These features help people bicycling feel more comfortable riding from their homes to MBTA stations.

4.8 Increase in Popularity in Bicycling

In recent years, there has been an increase in bicycling in the Boston region. Several factors contributed to this increase, including the cost of having a car, changes in land use patterns that make bicycling more comfortable, environmentally conscious behavior changes, and the desire to explore different ways to exercise. Land use changes, such as the increase in multifamily dwellings, have influenced the popularity of bicycling in recent years as

municipalities have purchased bicycle friendly amenities, such as secure bicycle parking and showering facilities.

4.9 Data Collection Inconsistencies

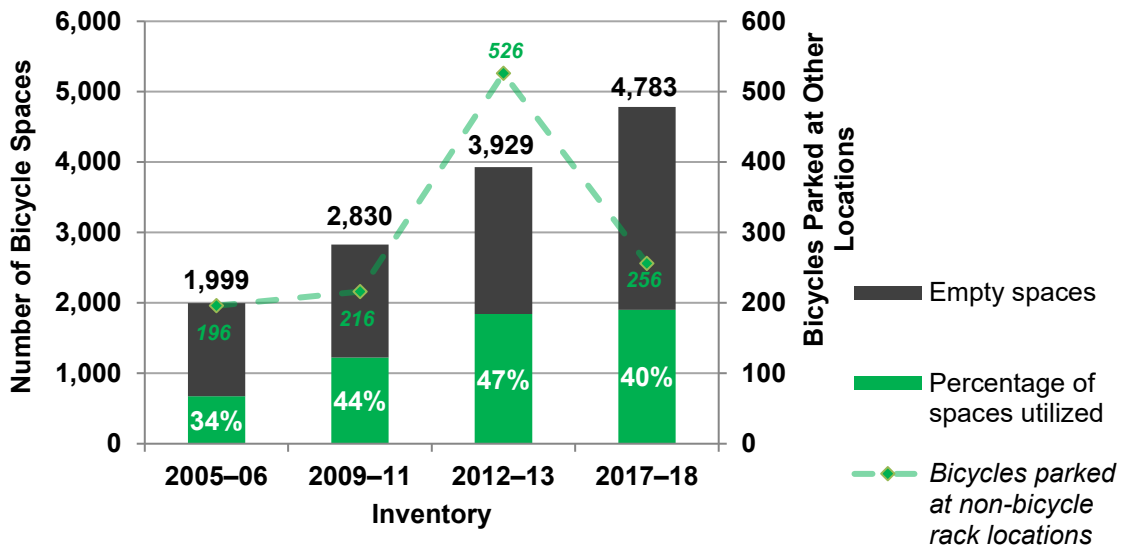
There are several factors that could result in inconsistent data collection. For instance, several different data collectors surveyed the MBTA stations. Additionally, there have been staff changes between inventories, leading to inconsistencies in station surveys between inventory years. For example, surveyors may not have included a bicycle rack in 2012–13 that was later included in 2017–18. Alternately, a bicycle rack's type or capacity may have been miscalculated at a station in one of the inventory years. However, with every inventory collection, data are checked and are often corrected with station revisits, if necessary.

5 RESULTS AND ANALYSIS OF BICYCLE PARKING INVENTORY

5.1 Rapid Transit

The total number of bicycle parking spaces on rapid transit lines increased by 22 percent between the 2012–13 and the 2017–18 inventories, during which time there was a three percent increase in the number of bicycles parked at rapid transit stations. This resulted in a seven percent decrease in utilization between the 2012–13 and 2017–18 inventories. Figure 1 shows the number of bicycles parked, the number of bicycle parking spaces, and the bicycle parking space utilization in the rapid transit system for the four inventory periods between 2005 and 2018.

Figure 1
MBTA Rapid Transit Bicycle Parking Utilization:
2005–06, 2009–10, 2012–13 and 2017–18 Inventories



MBTA = Massachusetts Bay Transportation Authority.

In Table 1, bicycle racks located at transfer stations (stations serving more than one line) were included in the data for all lines at a given station. For example, if there were 12 bicycle parking spaces at Downtown Crossing, those 12 spaces were included in the total for “Red Line,” and in the total for “Orange Line.” For stations that serve more than one line, the total number of bicycle racks at the station were also counted for each line. However, the total number shown is the actual number of bicycle spaces at the stations, not a summation of the “duplicate” numbers at a transfer station that serves multiple lines.

At an individual station, the number of parking spaces may differ between the two surveys for a variety of reasons, including that the number of parking spaces changed, the parking spaces were counted inconsistently, or field staff did not

find all of the parking during one of the inventories. While the number of bicycle parking spaces is independent of seasonal variation, the number of parked bicycles does vary by season; therefore, most of the data for the 2017–18 inventory were collected in favorable bicycling weather, in the spring and fall. An inspection of the previous inventories indicates that most of the data were collected under conditions like those of the 2017–18 inventory.

**Table 1
Bicycle Parking Inventory and Percentage of Spaces Utilized: Rapid Transit Stations, 2012–13 and 2017–18 Inventories**

Line and Branch	2012–13 Bicycles Parked	2012–13 Parking Spaces	2012–13 Percent Utilization	2017–18 Bicycles Parked	2017–18 Parking Spaces	2017–18 Percent Utilization
Red Line	1,004	1,553	65%	1,026	1,875	55%
Mattapan High-Speed Line	5	90	6%	3	99	3%
Blue Line	92	409	22%	154	512	30%
Orange Line	374	941	40%	389	1,074	36%
Green Line Subway	82	207	40%	121	349	35%
Green Line B	145	224	65%	116	259	45%
Green Line C	34	187	18%	37	197	19%
Green Line D	95	207	46%	67	250	27%
Green Line E	17	45	38%	8	62	13%
Sliver Line						
Washington Street Sliver Line	37	125	30%	26	194	13%
Waterfront	77	230	33%	71	202	35%
Sliver Line SL3	0	0	N/A	12	47	26%
Total	1,841	3,929	47%	1,900	4,783	40%

N/A = not available.

Of the rapid transit stations that had bicycle racks in the previous inventory (2012–13), the Green Line E Branch had the greatest percentage increase in bicycle parking spaces with 38 percent. The Red Line had the greatest increase in total bicycle parking spaces, with an increase in 322 additional bicycle parking spaces. This can be attributed to the installation and reconfiguration of bicycle cages at several stations along the Red Line since the 2012–13 inventory. The number of bicycle parking spaces on the Blue, Red, and Orange lines increased by 25 percent, 21 percent, and 14 percent, respectively. Zero stations were at 100 percent of their capacity during the 2017–18 inventory, compared to four rapid transit stations that were at capacity during the 2012–13 inventory.

The Red Line had the greatest number of bicycles parked at bicycle racks in both the 2012–13 and 2017–18 inventories. This is due in part to the high number of

bicycles parked at racks at Alewife and Davis stations, and to a lesser extent at Central Square and Kendall/MIT. Alewife and Davis stations both have many bicycle parking spaces to accommodate demand, and both stations are located on shared-use paths that are heavily traveled by people walking and bicycling. The Red Line, Blue Line, Orange Line, and the C branch and subway sections of the Green Line all experienced increases in the number of bicycles parked since the 2012–13 inventory. However, the Mattapan Line, the Green Line’s B, D, and E branches, and the Silver Line’s Washington Street and Waterfront all had fewer parked bicycles since the 2012–13 inventory. The Blue Line experienced the highest overall increase in the number of parked bicycles, with an additional 62 bicycles parked in the 2017–18 inventory, compared to the 2012–13 inventory.

Bicycles parked at non-bicycle rack locations declined 49 percent near rapid transit stations. Much of the decline occurred on the B branch of the Green Line, which decreased from 181 bicycle to 24 bicycles. This decline is attributed to the day-to-day variation of bicycles parked along the B branch, as this branch passes through both the Boston College and Boston University campuses and attendees of these universities can have dramatically different schedules on different days in which the racks were inventoried.

The Red Line was the only line observed during the 2017–18 inventory to have more than 100 bicycles parked in areas other than the bicycle racks provided at the time of observation, with 45 of these bicycles parked near Alewife. A secondary survey could determine the destinations to which people are bicycling, specifically whether people are traveling to MBTA services or nearby commercial establishments. This survey would help determine who would be responsible for installing additional racks.

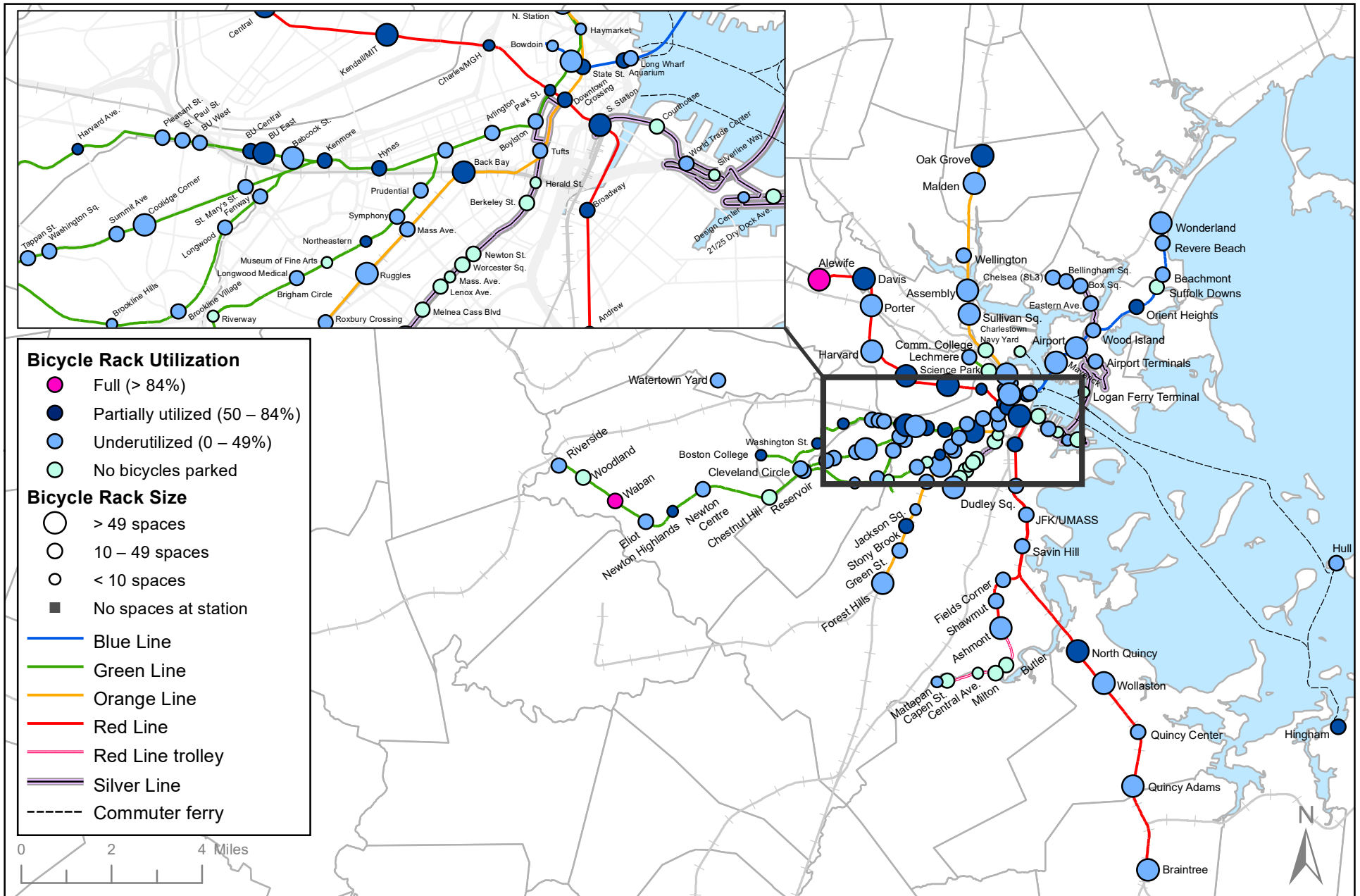
Twenty-seven of the 143 rapid transit stations observed in the most recent inventory did not have bicycle racks. Those stations are listed below:

- **Mattapan High-Speed Line**
 - Cedar Grove
 - Valley Road
- **Orange Line**
 - Chinatown
- **Green Line B Branch**
 - South Street
 - Chestnut Hill Avenue
 - Chiswick Road
 - Sutherland Road
 - Warren Street
 - Allston Street

- Griggs Street
- Packards Corner
- Babcock Street
- **Green Line C Branch**
 - Englewood Avenue
 - Dean Road
 - Fairbanks Street
 - Brandon Hall
 - St. Paul Street
 - Kent Street
 - Hawes Street
- **Green Line D Branch**
 - Beaconsfield
- **Green Line E Branch**
 - Heath Street
 - Back of the Hill
 - Mission Park
 - Fenwood Road
- **Silver Line Washington Street (SL4 and SL5)**
 - Union Park Street
 - Chinatown
- **Silver Line Waterfront**
 - Tide Street/Northern Avenue

Eighty percent of the 143 stations in the rapid transit system had bicycle racks when the 2017–18 survey was conducted. See Table A1.1 in Appendix A for rapid transit, station-specific data on bicycle parking and utilization. Table A1.1 also indicates the number of bicycles attached to objects other than bicycle racks (such as poles, trees, and railings) at each station.

Figures 2 and 3 show the 2017–18 utilization and the change in utilization between the 2012–13 and 2017–18 inventories on rapid transit stations, respectively. During the peak period, both the Alewife (Red Line) and the Waban (Green Line D) stations had over 85 percent bicycle rack utilization. Additionally, Harvard Avenue (Green Line B) and State Street (Orange Line) stations experienced an increase in bicycle rack usage of more than 50 percent since the 2012–13 inventory.

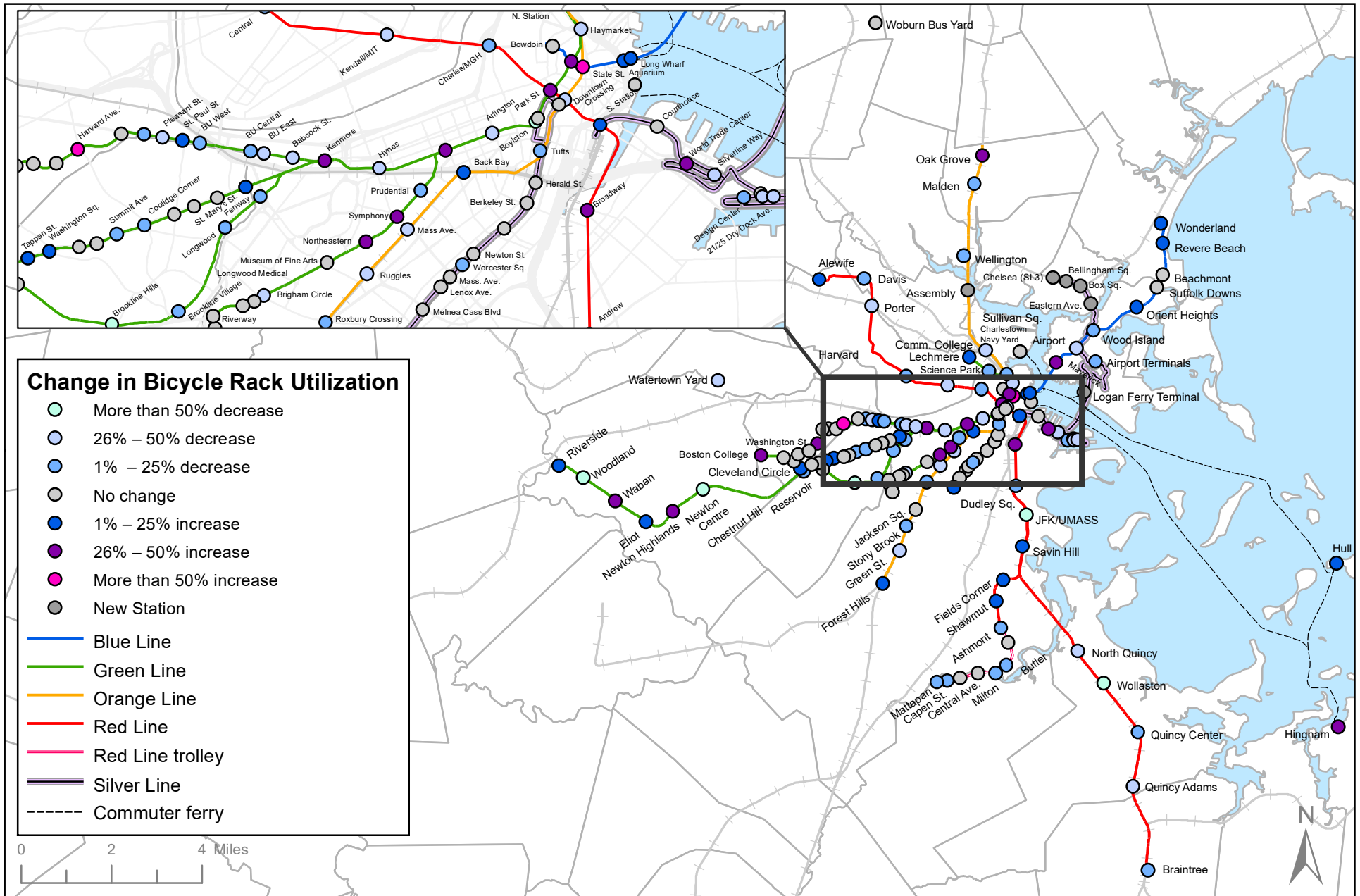


BOSTON
REGION
MPO

Bicycle Parking Capacity and Utilization for Rapid Transit Stations, Express Bus Stops, and Ferry Terminals, 2017–18 Inventory

Figure 2

*Congestion
Management
Process*



BOSTON
REGION
MPO

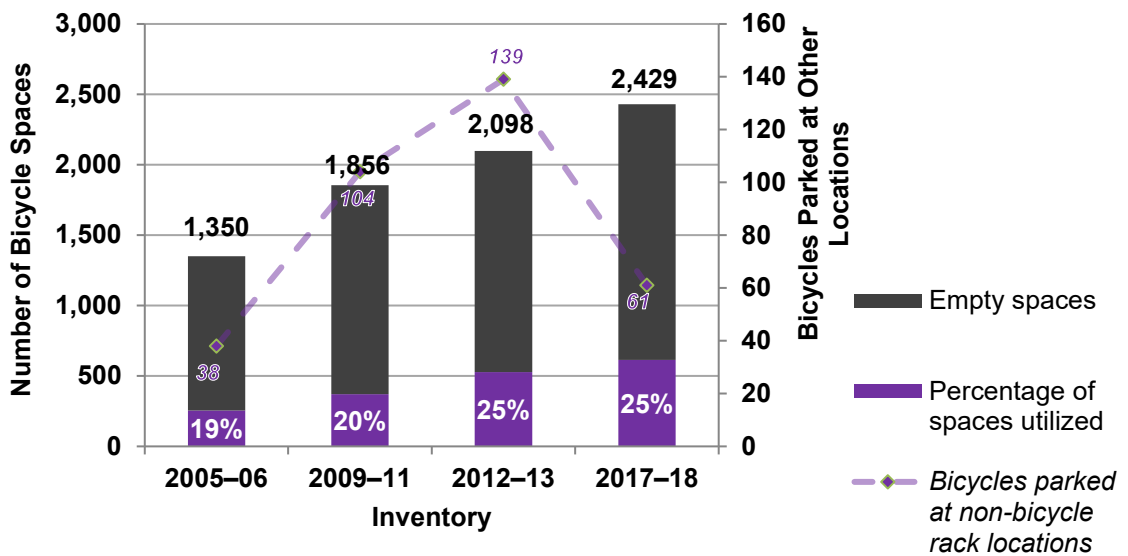
Figure 3
Change in Bicycle Rack Utilization for Rapid Transit Stations, Express Bus Stops, and Ferry Terminals,
2012–13 Inventory and 2017–18 Inventory

*Congestion
Management
Process*

5.2 Commuter Rail

Figure 4 shows that while the total number of bicycle parking spaces in the commuter rail system increased by 17 percent from the 2012–13 inventory to the 2017–18 inventory, the utilization rate remained unchanged at 25 percent. Table 2 shows the number of bicycle parking spaces in the commuter rail system, the number of bicycles parked, and the percentage of bicycle parking space utilization by line for the two inventory periods.

Figure 4
MBTA Commuter Rail Bicycle Parking Utilization:
2005–06, 2009–10, 2012–13 and 2017–18 Inventories



MBTA = Massachusetts Bay Transportation Authority.

Table 2
Bicycle Parking Inventory and Percentage of Spaces Utilized: Commuter Rail Stations

Commuter Rail Line	2012–13 Bicycles Parked	2012–13 Parking Spaces	2012–13 Percent Utilization	2017–18 Bicycles Parked	2017–18 Parking Spaces	2017–18 Percent Utilization
<i>North Side</i>						
Newburyport/Rockport Line	90	272	33%	112	383	29%
Haverhill Line	36	244	15%	43	216	20%
Lowell Line	61	137	45%	48	161	30%
Fitchburg Line	90	260	35%	86	383	22%
Framingham/Worcester Line	74	272	27%	74	247	30%
<i>North Side total</i>	351	1185	30%	363	1390	26%
<i>South Side</i>						
Needham Line	16	104	15%	18	91	20%
Franklin Line	25	162	15%	37	162	23%
Fairmount Line	1	84	1%	2	143	1%
Providence/Stoughton Line	81	309	26%	150	348	43%
Middleborough/Lakeville Line	12	81	15%	9	147	6%
Kingston/Plymouth Line	19	84	23%	16	98	16%
Greenbush Line	25	109	23%	20	98	20%
<i>South Side total</i>	176	891	20%	250	1,039	24%
Grand Total	527	2,076	25%	613	2,429	25%

Ninety-three percent of the stations in the commuter rail system have bicycle racks. Six new stations were added to the 2017–18 inventory that were not surveyed previously: Boston Landing, Wachusett, Talbot Ave, Four Corners/Geneva, Newmarket and Foxborough. See Table A2.1 in Appendix A for commuter rail station-specific data on bicycle parking and utilization. Table A2.1 also indicates the number of bicycles locked to objects other than bicycle racks (for example, poles, trees, or railings) at each station.

The number of bicycle parking spaces counted during the 2017–18 inventory was greater than the number from the 2012–13 inventory on every commuter rail line, except for the Haverhill, Framingham/Worcester, Needham, Franklin, and Greenbush lines. The Providence/Stoughton line had both the highest number of parked bicycles (with 150 bicycles parked), and the highest utilization (at 43 percent). The Fairmount Line had the lowest bicycle rack utilization with one percent. Twenty-seven out of 129 commuter rail stations that had racks were observed to have no parked bicycles.

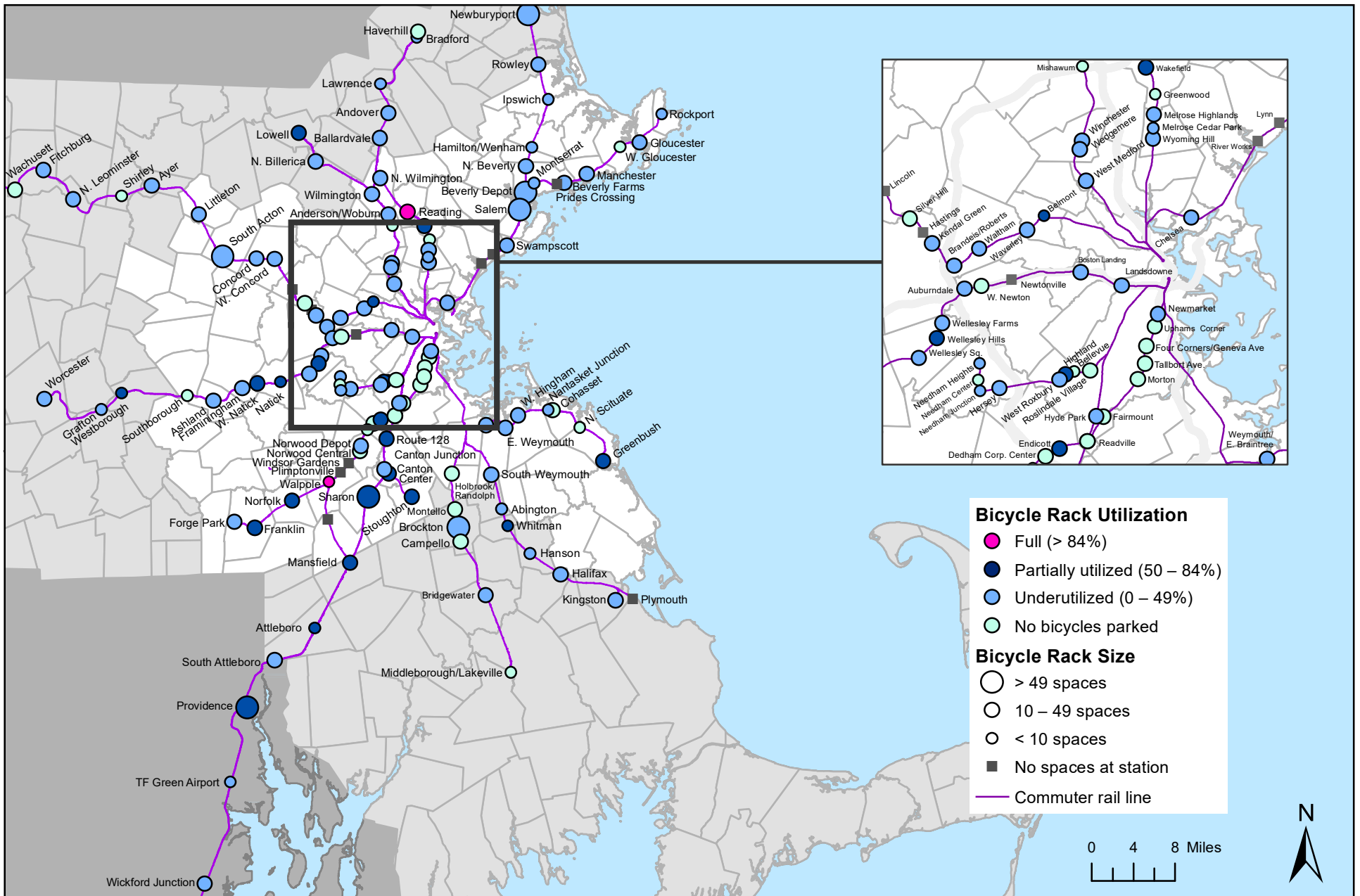
The number of bicycles parked at non-bicycle rack locations decreased 44 percent since the 2012–13 inventory was collected. Most notably, the

Newburyport/Rockport line experienced the biggest decrease, decreasing from 51 bicycles to 13 bicycles. The cause of this decrease was likely due to several stations either adding bicycle racks or improving the visibility of the existing bicycle racks. Additionally, the overall utilization of the bicycle racks near the Newburyport/Rockport line decreased, so it logically follows that bicycles locked to objects other than bicycle racks would decrease as well.

In the most recent inventory (2017–18), nine of the 129 commuter rail stations observed did not have bicycle racks. These stations include:

- Lynn and Prides Crossing on the Newburyport/Rockport line
- Hastings and Lincoln on the Fitchburg Line
- Newtonville on the Framingham/Worcester Line
- Plimptonville and Windsor Gardens on the Franklin Line
- Plymouth on the Kingston/Plymouth Line
- Foxborough on the Framingham Secondary Line (Station service is only available during certain events.)

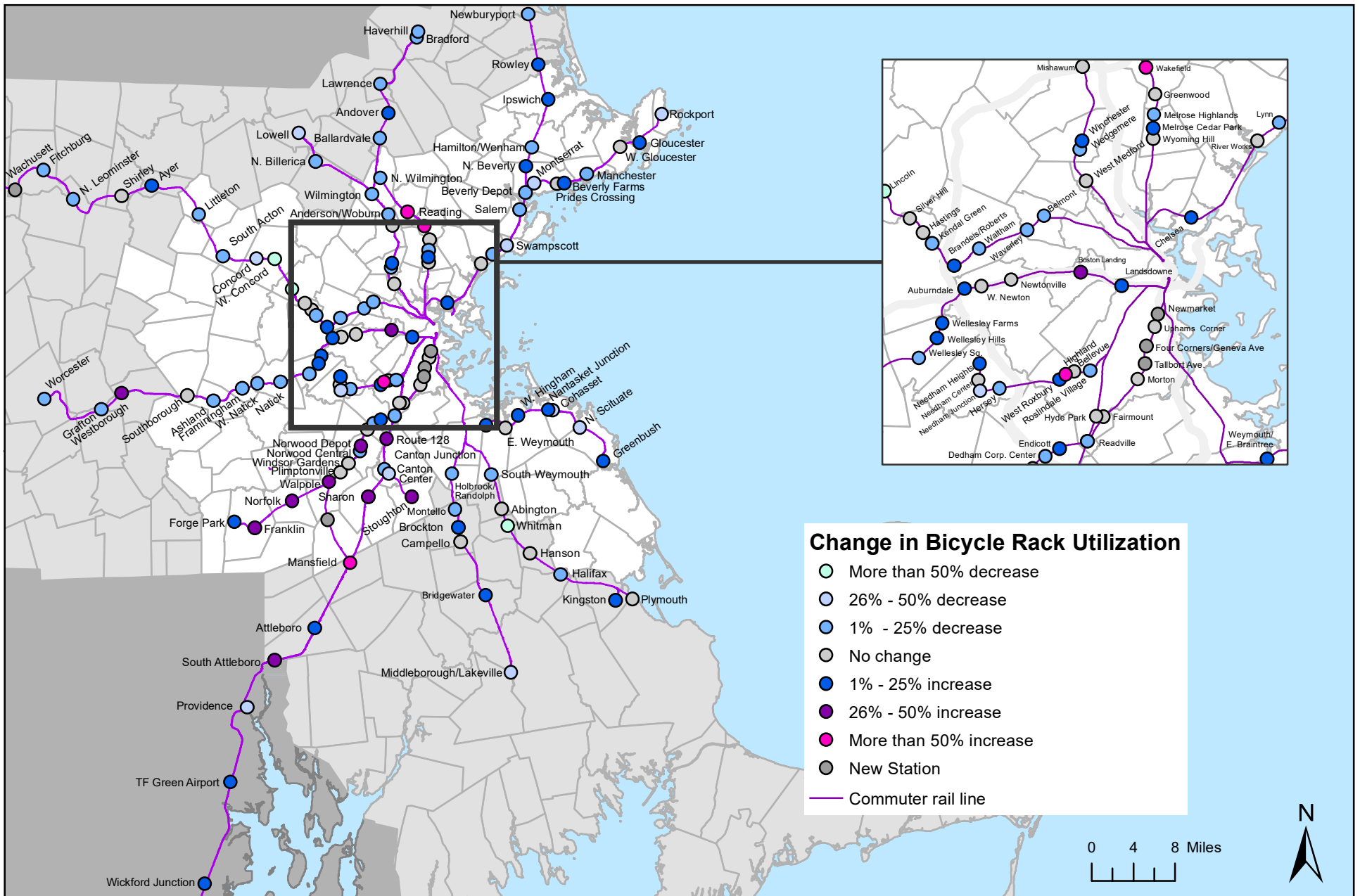
During the 2017–18 inventory, staff observed 61 bicycles locked to objects other than bicycle racks provided at the commuter rail stations. Figures 5 and 6 show the 2017–18 utilization and the change in utilization between the 2012–13 and 2017–18 inventories on commuter rail stations, respectively. Of the commuter rail stations that were monitored, Reading and Walpole had bicycle racks that were more than 85 percent utilized. Additionally, Reading, Mansfield, Wakefield, and Highland stations all experienced increases in utilization of more than 50 percent since the 2012–13 inventory.



BOSTON
REGION
MPO

Figure 5
Bicycle Parking Capacity and Utilization for Commuter Rail Stations,
2017–18 Inventory

Congestion
Management
Process



BOSTON
REGION
MPO

Figure 6
Change in Bicycle Rack Utilization for Commuter Rail Stations,
2012-13 Inventory and 2017-18 Inventory

Congestion
Management
Process

5.3 Commuter Boat and Bus

In the time that passed between the 2012–13 and 2017–18 inventories, the MBTA ceased service to the Quincy Fore River Ferry Terminal; the Logan Airport Ferry Terminal was monitored for the first time. These changes are reflected in the 2017–18 inventory. The Logan Airport Ferry Terminal was in operation during the collection of previous inventories but was not previously surveyed.

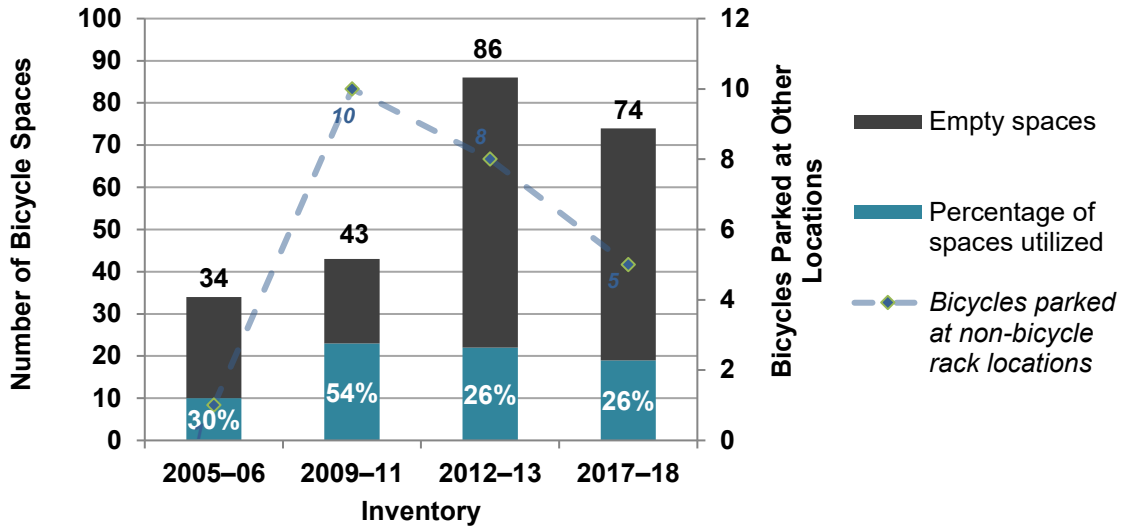
All seven of the MBTA's commuter boat facilities that are currently open were monitored in the 2017–18 inventory. Figure 7 shows that the overall bicycle parking utilization at these locations in the 2017–18 inventory was 29 percent. The utilization at the Hingham Ferry Terminal increased from 38 percent to 79 percent between the 2012–13 and 2017–18 inventories. The removal of 10 of 24 bicycle parking spaces from the terminal after the 2012–13 inventory contributed to this 41 percent increase in utilization. Table 3 shows the number of bicycles parked, the number of bicycle parking spaces, and the percentage of bicycle parking space utilization at the commuter boat terminals and major bus stops for the two most recent inventory periods. Table A3.1, in Appendix A, includes more detailed information about these locations.

The Hingham commuter boat terminal has racks that can accommodate 14 bicycles. Eleven out of 14 spaces were utilized at the time of observation for the 2017–18 inventory. Twenty-two bicycle spaces were removed from the Charlestown Navy Yard since the 2012–13 inventory, reducing the number of bicycle spaces from 28 to six spaces. There were no bicycles parked at the Charlestown Navy Yard in the 2017–18 inventory. Bicycles are allowed on MBTA commuter boats at all times, making it a viable option for people bicycling to bring bicycles on the boat, and then lock or ride them upon arrival at their destination.

At the time of the 2017–18 inventory, Rowes Wharf did not have any bicycle parking; however, new bicycle racks, consisting of 27 bicycle spaces, have been installed on Long Wharf, which is near Rowes Wharf. Long Wharf was revisited and during the observation, there were six bicycles parked. The bicycles parked and the number of bicycle spaces at Long Wharf are included in the 2017–18 inventory.

The Watertown Yard and Woburn park-and-ride lots were the only major bus stops monitored in the 2017–18 inventory. The utilization of bicycle racks at selected major bus stops decreased from 75 percent during the 2012–13 inventory to eight percent in the 2017–18 inventory. Watertown Yard had 12 bicycle spaces with four bicycles parked at the time of observation. There were no parking spaces at the Woburn park-and-ride lot, nor were any bicycles parked in the area.

Figure 7
MBTA Commuter Boat Bicycle Parking Utilization:
2005–06, 2009–10, 2012–13 and 2017–18 Inventories



MBTA = Massachusetts Bay Transportation Authority.

Table 3
Bicycle Parking Inventory and Percentage of Spaces Utilized:
Commuter Boat Terminals and Major Bus Stops

Transit Mode	2012–13 Bicycles Parked	2012–13 Parking Spaces	2012–13 Percent Utilization	2017–18 Bicycles Parked	2017–18 Parking Spaces	2017–18 Percent Utilization
Commuter boat	10	70	14	18	62	29
Major bus stops	12	16	75	1	12	8

Source: Central Transportation Planning Staff

6 INVENTORY OF AMENITIES AND OTHER CHARACTERISTICS

As part of the 2017–18 inventory, staff recorded information about station amenities, station surroundings, and other characteristics that would be pertinent to people bicycling. These include the types of bicycle racks at a station, whether the racks were sheltered, if there was a shared-use path or trail nearby, and whether there were bus routes that connect to the station. In addition, staff recorded data on bicycle lanes on the roadways that connect to MBTA stations. These data are available in Appendix A1.2, A2.2, and A3.2, and discussed below.

6.1 Types of Bicycle Racks

Tables A1.2, A2.2, and A3.2 (in Appendix A) list the amenities at each station. Some styles of bicycle racks are better than others. The inverted-U-style and post-and-loop style racks support a bicycle in two places, keeping the bicycle from falling and being damaged. These racks also make it easy to lock the bicycle frame and the front or rear wheel to the rack to prevent theft. Other rack styles, such as dish-rack or the ribbon and triangle, support bicycles in only one place, making it more likely for the bicycle to fall. Furthermore, locking both the bicycle frame and wheel to the dish-rack and ribbon-style racks can also be difficult.

At the stations inventoried, the inverted-U, ribbon, and triangle rack styles were the most common types of bicycle racks. While the post-and-loop is also a commonly used style, it was only observed on sidewalks in the proximity of stations, and rarely used at the stations themselves. Many bicycle racks consist of inverted-U-style racks.

6.2 Sheltered Bicycle Racks

People who bicycle may be deterred from bicycling to a transit station due to inclement weather conditions in part because of a lack of covered bicycle parking. Sheltered bicycle racks protect bicycles from the elements and provide a sense of security, but it is not feasible to install them at all stations. Of the 143 rapid transit stations, only 41 stations provide at least some covered bicycle parking—two of those stations are South Station and Back Bay Station. These major stations have commuter rail, rapid transit, and bus connections. Tables A1.2, A2.2, and A3.2 (in Appendix A) provide detailed information on all MBTA stations observed.

Between the 2012–13 inventory and the 2017–18 inventory, the number of commuter rail stations that had covered bicycle parking increased from 34 to 39 stations. The South Acton commuter rail station had individual bicycle lockers for rent, in addition to unsheltered bicycle racks. These bicycle lockers are operated by the Town of Acton.

The American Recovery and Reinvestment Act, enacted in 2009, has provided the MBTA with \$4.8 million for a variety of programs to expand MBTA bicycle parking facilities. This act allowed the MBTA to receive a federal grant that enabled collaboration with MassBikes to design and install pedal and park

bicycle cages and bicycle racks throughout the MBTA system.⁵ As a result, 12 rapid transit stations and two commuter rail stations had pedal and park facilities at the time that the bicycle inventory was conducted.

6.3 Shared-Use Paths and Trails

Shared-use paths located near transit stations provide safe and convenient access to transit for people bicycling. Many stations are located near a shared-use path, and most of those stations were observed to have many parked bicycles. There are several shared-use paths in Boston and its surrounding municipalities, including the Dr. Paul Dudley White Charles River Bike Path, which runs along the Charles River between Boston and Watertown, and the Pierre Lallement Southwest Corridor Bike Path, which runs along the Orange Line between Forest Hills Station and Back Bay Station.

6.4 Connecting Bus Routes

The MBTA bus system covers a large portion of the Boston region. Many of the rapid transit and commuter rail stations that were inventoried have bus connections. As the MBTA outfits its buses with bicycle racks, bus connectivity is becoming an important factor for people bicycling and using transit. To meet the needs of people who bicycle and use transit, the MBTA equipped all non-electric buses with bicycle racks.

6.5 Bicycle Lanes

Several MBTA stations include bicycle lanes on roads leading to the stations, making them accessible to people bicycling. On the Red Line, Porter, Harvard, Central, and Kendall stations are all served by bicycle lanes on Main Street and portions of Massachusetts Avenue in Cambridge.

6.6 Bluebikes

Bluebikes is a bikesharing program that currently operates more than 300 docking stations and more than 3,000 bicycles in the Boston region. At the time of the 2012–13 inventory, the system had 100 docking stations. This bikesharing program was implemented in the Boston region in 2011 as Hubway, which was a collaboration between the City of Boston and the Metropolitan Area Planning Council. In 2018, a rebranding occurred with Blue Cross Blue Shield becoming the official sponsor of the bikesharing program. Of the MBTA stations that were monitored in the 2017–18 inventory, 116 rapid transit stations, 13 commuter rail

⁵ Pedal and park facilities are secure enclosed structures that provide bicycle parking. Pedal and park facilities typically have a capacity of 50 to 150 bicycle parking spaces and have controlled access.

stations, four ferry terminals, and one bus stop were in close proximity (one-half mile) to a Bluebikes' station.

7 CONCLUSIONS

Bicycle racks promote bicycle access to MBTA stations by providing a safe and convenient place to lock a bicycle. Between the 2012–13 inventory and 2017–18 inventory, there was a 20 percent increase in the number of bicycle parking spaces throughout the entire MBTA system; 83 MBTA stations (including new stations) that did not have bicycle parking during the 2005–06 inventory had acquired bicycle racks by the time of the 2017–18 inventory. There was also a 163 percent increase in the number of bicycles parked at racks. The increase in the number of spaces, coupled with the larger increase in usage, indicates that there was an overall increase in the percentage of utilization since the 2005–06 inventory was conducted.

Many MBTA rail stations—26 rapid transit stations, 22 commuter rail stations and one commuter ferry terminal—were at 50 percent capacity or higher, including two rapid transit stations and two commuter rail stations that reached 85 percent capacity during the 2017–18 inventory.

7.1 Rapid Transit

More than 800 bicycle parking spaces were added to rapid transit stations since the 2012–13 inventory. Eighty percent of the 143 stations in the rapid transit system had bicycle racks when the 2017–18 inventory was conducted. The change in the number of bicycles parked on rapid transit lines varied from line to line between the 2012–13 and 2017–18 inventories. Some lines had decreases in the number of parked bicycles, while others had increases. No stations were at 100 percent capacity during the 2017–18 inventory, compared to four rapid transit stations being completely filled during the 2012–13 inventory.

7.2 Commuter Rail

More than 350 bicycle parking spaces were added to commuter rail stations since the 2012–13 inventory. Only nine commuter rail stations did not have bicycle racks nearby. The total number of bicycle parking spaces in the commuter rail system increased by 17 percent since the 2012–13 inventory and the utilization rate remained unchanged at 25 percent. Of the 129 observed commuter rail stations, 27 stations had parked bicycles at the time of observation. The Lowell Line experienced the biggest drop in utilization at 15 percent. The Fitchburg line also experienced the second largest drop in utilization at 13 percent.

7.3 Ferries and Major Bus Stops

The commuter ferry lost eight parking spaces since the 2012–13 inventory. As a result, the bicycle parking utilization on the commuter ferry increased from 14 percent to 29 percent. The utilization of bicycle racks at selected major bus stops decreased from 75 percent during the 2012–13 inventory to eight percent in the 2017–18 inventory. The utilization change is likely caused by the decrease in bus ridership.

7.4 Other General Conclusions

In addition to the conclusions listed above, there are several trends that can be drawn from the 2017–18 MBTA bicycle parking survey regarding bicycle parking and station access. These trends do not reflect bicycle utilization, but these factors can indirectly influence utilization over time.

- Bicycles were parked at locations other than bicycle facilities at 59 rapid transit stations, 31 commuter rail stations, two ferry terminals, and one major bus stop (see Appendix A4.1 for station-specific data on bicycles locked to objects other than bicycle racks).
- Bicycles not parked in bicycle facilities declined 49 percent near rapid transit stations and 44 percent near commuter rail stations since the 2012–13 inventory. This could be an indication that visibility and signage is helpful in finding bicycle racks.
- Inverted U-racks, which are present at 105 stations, were the most common racks. This is followed by ribbon racks, which were present at 85 stations, and triangle racks, which were present at 62 stations.
- Currently, only 41 rapid transit stations offer at least some covered bicycle parking. This is a drastic improvement from the 2012–13 inventory, when there were only 14 stations that offered at least some covered parking. However, efforts must be made to continue to increase the availability of covered bicycle parking in the MBTA system.
- Out of 280 MBTA stations, trails are currently present near 33 MBTA stations and bicycle lanes are currently present near 71 MBTA stations.

8 RECOMMENDATIONS

Table A4.1 (in Appendix A) lists the MBTA stations where parked bicycles were observed in locations other than bicycle facilities. It identifies the locations of those bicycles, the number of bicycle spaces provided by the station's racks, and the number of bicycles parked in them. It also presents recommendations for each station based on the locations and utilization of bicycle racks, the locations of the bicycles parked in other areas, and station characteristics.

The key recommendations include

- installing additional bicycle racks or covered bicycle racks;
- installing additional secure facilities (bicycles cages);
- installing signage directing users to bicycle racks;
- relocating existing bicycle racks within a station where appropriate;
- removing vandalized bicycles; and
- replacing or repairing existing bicycle racks.

9 NEXT STEPS

9.1 Park-and-Ride Dashboard

The results of the 2017–18 MBTA bicycle parking inventory are displayed publicly on the park-and-ride dashboard, which is available on the Boston Region MPO’s website.⁶ The dashboard includes both automobile parking and bicycle parking information at every MBTA station. The bicycle parking data included on the dashboard are the number of bicycles parked, bicycle parking capacity, bicycle rack types, and bicycle infrastructure located near MBTA stations. Park-and-ride and bicycle parking data are available for download from the dashboard in Excel format so that users can conduct their own analysis of the data, if desired.

9.2 Outreach

The results of this memorandum will be shared with local stakeholders, such as municipalities and transportation agencies. This study will help these entities make planning and programming decisions to provide better experiences for commuters who park their bicycles at MBTA stations. Additionally, these results will be presented to the Boston Region MPO Board and shared publicly on the Boston Region MPO’s website.

Appendix A: Bicycle Parking Utilization Capacity and Amenities: Comprehensive Results of 2017–18 Inventory

Appendix B: 2017–18 Bicycle Parking Survey Form

⁶ Boston Region MPO, “Park-and-Ride Data Dashboard.” Available online at <https://www.ctps.org/maploc/www/apps/pnr-dashboard/index.html> (accessed April 16, 2020).

The Boston Region Metropolitan Planning Organization (MPO) operates its programs, services, and activities in compliance with federal nondiscrimination laws including Title VI of the Civil Rights Act of 1964 (Title VI), the Civil Rights Restoration Act of 1987, and related statutes and regulations. Title VI prohibits discrimination in federally assisted programs and requires that no person in the United States of America shall, on the grounds of race, color, or national origin (including limited English proficiency), be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination under any program or activity that receives federal assistance. Related federal nondiscrimination laws administered by the Federal Highway Administration, Federal Transit Administration, or both, prohibit discrimination on the basis of age, sex, and disability. The Boston Region MPO considers these protected populations in its Title VI Programs, consistent with federal interpretation and administration. In addition, the Boston Region MPO provides meaningful access to its programs, services, and activities to individuals with limited English proficiency, in compliance with U.S. Department of Transportation policy and guidance on federal Executive Order 13166.

The Boston Region MPO also complies with the Massachusetts Public Accommodation Law, M.G.L. c 272 sections 92a, 98, 98a, which prohibits making any distinction, discrimination, or restriction in admission to, or treatment in a place of public accommodation based on race, color, religious creed, national origin, sex, sexual orientation, disability, or ancestry. Likewise, the Boston Region MPO complies with the Governor's Executive Order 526, section 4, which requires that all programs, activities, and services provided, performed, licensed, chartered, funded, regulated, or contracted for by the state shall be conducted without unlawful discrimination based on race, color, age, gender, ethnicity, sexual orientation, gender identity or expression, religion, creed, ancestry, national origin, disability, veteran's status (including Vietnam-era veterans), or background.

A complaint form and additional information can be obtained by contacting the MPO or at http://www.bostonmpo.org/mpo_non_discrimination.

To request this information in a different language or in an accessible format, please contact

Title VI Specialist
Boston Region MPO
10 Park Plaza, Suite 2150
Boston, MA 02116
civilrights@ctps.org

By Telephone:

857.702.3702 (voice)

For people with hearing or speaking difficulties, connect through the state MassRelay service:

- **Relay Using TTY or Hearing Carry-over:** 800.439.2370
- **Relay Using Voice Carry-over:** 866.887.6619
- **Relay Using Text to Speech:** 866.645.9870

For more information, including numbers for Spanish speakers, visit <https://www.mass.gov/massrelay>

APPENDIX A
BICYCLE PARKING UTILIZATION CAPACITY AND AMENITIES: COMPREHENSIVE
RESULTS OF 2017-18 INVENTORY

Station by Line	Bicycles Parked 2005-06	Bicycles Parked 2009-11	Bicycles Parked 2012	Bicycles Parked 2017-18	Bicycles Parked Percentage Change	Bicycle Rack Spaces 2005-06	Bicycle Rack Spaces 2009-11	Bicycle Rack Spaces 2012	Bicycle Rack Spaces 2017-18	Bicycle Rack Spaces Percentage Change	Percent Bicycle Rack Spaces Utilized 2005-06	Percent Bicycle Rack Spaces Utilized 2009-11	Percent Bicycle Rack Spaces Utilized 2012	Percent Bicycle Rack Spaces Utilized 2017-18	Bicycles Parked in Other Areas in 2012	Bicycles Parked in Other Areas in 2017-18
Green Line C Branch																
Cleveland Circle	0	0	1	3	200	20	22	22	30	36	0	0	5	10	1	0
Englewood Avenue	0	0	N/A	N/A	N/A	0	0	0	0	N/A	N/A	N/A	N/A	N/A	2	1
Dean Road	0	0	N/A	N/A	N/A	0	0	0	0	N/A	N/A	N/A	N/A	N/A	1	0
Taggan Street	0	0	1	2	100	0	10	10	12	20	N/A	0	10	17	0	5
Washington Square	2	0	1	2	100	20	22	22	26	18	10	0	5	8	0	1
Fairbanks Street	0	0	N/A	N/A	N/A	0	0	0	0	N/A	N/A	N/A	N/A	N/A	1	0
Brandon Hall	0	0	N/A	N/A	N/A	0	0	0	0	N/A	N/A	N/A	N/A	N/A	3	2
Summit Avenue	0	1	4	2	-50	0	4	12	12	0	N/A	25	33	17	4	1
Coolidge Corner	4	13	25	18	-28	20	52	82	74	-10	20	25	30	24	6	10
Saint Paul Street	0	0	N/A	0	N/A	0	0	0	0	N/A	N/A	N/A	N/A	N/A	4	2
Kent Street	0	0	N/A	0	N/A	0	0	0	0	N/A	N/A	N/A	N/A	N/A	3	1
Hawes Street	0	0	N/A	0	N/A	0	0	0	0	N/A	N/A	N/A	N/A	N/A	9	4
Saint Mary's Street	0	6	2	10	400	10	27	39	43	10	0	22	5	23	3	6
Green Line C Branch Summary	6	20	34	37	9%	70	137	187	197	5%	9%	15%	18%	19%	37	33
Green Line D Branch																
Riverside	6	8	9	10	N/A	48	35	36	36	0	13	23	25	N/A	2	0
Woodland	1	3	6	0	-100	14	16	9	13	44	7	19	67	0	4	0
Waban	4	2	5	11	120	10	11	11	12	9	40	18	45	92	1	0
Eliot	1	0	1	4	300	8	9	9	33	267	13	0	11	12	10	0
Newton Highlands	0	4	2	5	150	0	7	7	7	0	N/A	57	29	71	0	3
Newton Center	9	17	16	6	-63	16	18	18	18	0	56	94	89	33	12	1
Chestnut Hill	5	7	9	0	-100	8	9	9	12	33	63	78	100	0	1	0
Reservoir	6	8	4	6	50	11	19	19	31	63	55	42	21	19	1	0
Beaconsfield	2	0	N/A	0	N/A	8	0	0	0	N/A	25	N/A	N/A	N/A	1	0
Brookline Hills	2	5	8	3	-63	8	9	9	9	0	25	56	89	33	0	0
Brookline Village	3	15	15	12	-20	6	32	26	25	-4	50	47	58	48	1	3
Longwood	1	2	7	1	-86	19	26	26	26	0	5	8	27	4	0	0
Ferway	1	0	13	9	-31	26	0	28	28	0	4	N/A	46	32	0	0
Green Line D Branch Summary	41	71	95	67	-29%	182	191	207	250	21%	23%	37%	46%	27%	33	7
Green Line E Branch																
Heath	0	0	N/A	N/A	N/A	0	0	0	0	N/A	N/A	N/A	N/A	N/A	0	0
Back of the Hill	0	0	N/A	N/A	N/A	0	0	0	0	N/A	N/A	N/A	N/A	N/A	0	0
Riverway	0	0	N/A	0	N/A	0	0	0	5	NEW	N/A	N/A	N/A	N/A	2	0
Mission Park	0	0	N/A	N/A	N/A	0	0	0	0	N/A	N/A	N/A	N/A	N/A	0	0
Ferwood Road	0	0	N/A	N/A	N/A	0	0	0	0	N/A	N/A	N/A	N/A	N/A	0	0
Brigham Circle	0	3	4	N/A	N/A	0	11	11	0	-100	N/A	27	36	N/A	2	0
Longwood Medical Area	0	2	12	6	-50	0	14	14	47	236	N/A	14	86	13	3	0
Museum of Fine Arts	0	0	0	0	N/A	0	8	8	6	-25	N/A	0	0	0	1	0
Northeastern	0	7	1	2	100	0	18	12	4	-67	N/A	39	8	50	2	1
Green Line E Branch Summary	0	12	17	8	-53%	0	51	45	62	38%	N/A	24%	38%	13%	10	1
Silver Line Washington Street																
Dudley Square	0	0	0	5	N/A	0	0	0	60	NEW	N/A	N/A	N/A	8	0	1
Melnea Cass Boulevard	0	0	0	0	N/A	4	10	10	10	0	0	0	0	0	0	0
Lenox Street	0	1	0	0	N/A	4	10	10	10	0	0	10	0	0	0	0
Massachusetts Avenue	0	1	0	0	N/A	4	10	5	5	0	0	10	0	0	0	0
Worcester Square	0	1	1	0	-100	4	10	10	10	0	0	10	10	0	1	0
Newton Street	0	0	0	0	N/A	4	10	10	10	0	0	0	0	0	0	0
Union Park Street	0	0	0	N/A	N/A	4	10	10	0	-100	0	0	0	N/A	0	0
East Berkeley Street	0	0	0	0	N/A	4	10	10	10	0	0	0	0	0	0	1
Herald Street	0	0	0	0	N/A	4	10	10	5	-50	0	0	0	0	0	0
Tufts Medical Center	2	4	3	2	-33	15	8	10	22	120	13	50	30	9	0	1
Chinatown	0	2	4	0	-100	4	4	4	0	-100	0	50	100	N/A	2	6
Downtown Crossing	5	10	7	11	57	22	12	8	20	150	23	83	88	55	2	2
Boylston	9	6	22	8	-64	16	14	28	32	14	50	43	79	25	5	1
Silver Line Washington St. Summary	16	25	37	26	-30%	91	118	125	194	55%	18%	21%	30%	13%	10	12
Silver Line Waterfront																
Airport Terminals (SL1)	0	2	7	3	-57	0	24	28	14	-50	N/A	8	25	21	2	0
Design Center	N/A	N/A	4	3	-25	0	0	7	7	0	N/A	N/A	57	43	1	0
21/25 Dry Dock Avenue	N/A	N/A	14	0	-100	0	0	39	23	-41	N/A	N/A	36	0	10	0
Tide Street/Northern Avenue	N/A	0	0	0	N/A	0	4	4	0	-100	N/A	0	0	N/A	0	0
Silver Line Way	0	2	3	0	-100	8	7	7	6	-14	0	29	43	0	1	0
World Trade Center	0	0	1	17	1600	0	0	6	36	500	N/A	N/A	17	47	1	0
Courthouse	0	0	0	0	N/A	0	0	0	22	NEW	N/A	N/A	N/A	0	0	0
South Station	12	24	48	48	0	45	80	139	94	-32	27	30	35	51	6	7
Silver Line Waterfront Summary	12	28	77	71	-8%	53	115	230	202	-12%	23%	24%	33%	35%	21	7
Silver Line SL3																
Chelsea (New)	N/A	N/A	N/A	1	N/A	N/A	N/A	N/A	10	N/A	N/A	N/A	N/A	10	0	0
Bellingham Square (New)	N/A	N/A	N/A	1	N/A	N/A	N/A	N/A	10	N/A	N/A	N/A	N/A	10	0	0
Box District (New)	N/A	N/A	N/A	3	N/A	N/A	N/A	N/A	10	N/A	N/A	N/A	N/A	30	0	0
Eastern Avenue (New)	N/A	N/A	N/A	7	N/A	N/A	N/A	N/A	17	N/A	N/A	N/A	N/A	41	0	0
Silver Line SL3 Summary	N/A	N/A	N/A	12	N/A	N/A	N/A	N/A	47	N/A	N/A	N/A	N/A	26	0	0
Grand Total	675	1,223	1,841	1,900	3%	1,999	2,830	3,929	4,783	22%	34%	43%	47%	40%	526	256

Note: Percentage change refers to the change from the 2012 survey to the 2017-18 survey. New refers to new bicycle capacity as of the 2017-18 survey.

JFK = John Fitzgerald Kennedy, MBTA = Massachusetts Bay Transportation Authority, MGH = Massachusetts General Hospital, MIT = Massachusetts Institute of Technology, N/A = not applicable, SL1 = Silver Line 1, SL3 = Silver Line 3, UMASS = University of Massachusetts.

Source: 2017-18 Boston Region MPO MBTA Bicycle Parking Inventory.

**Table A1.2
Bicycle Space Amenities:
Rapid Transit Stations, 2017-18**

Rapid Transit Line	Station Name	Type of	Covered	Condition of			
		Bicycle Rack	Bicycle Rack	Bicycle Trail/Path	Bicycle Trail/Path	Connecting Bus Routes	P&P or BP Proposed or Installed
Blue Line	Wonderland	H,	All	Yes	Good	Yes	P&P
Blue Line	Wood Island	U,	Some	Yes	Good	Yes	BP
Blue Line	Orient Heights	U,	All	No	N/A	Yes	BP
Blue Line	Beachmont	R,	All	No	N/A	Yes	N/A
Blue Line	Aquarium	R,	None	No	N/A	No	N/A
Blue Line	Airport	R,H,	None	No	N/A	No	N/A
Blue Line	Revere Beach	R,	None	No	N/A	No	N/A
Blue Line	State	SD,R,	None	No	N/A	No	N/A
Blue Line	Maverick	U,SL,	None	No	N/A	Yes	BP
Blue Line	Suffolk Downs	R,U,	Some	No	N/A	No	BP
Blue Line	Government Center	SD,SL,H,	Some	No	N/A	Yes	N/A
Blue Line	Bowdoin	U,	None	No	N/A	Yes	N/A
Green Line	Lechmere	SL,	None	No	N/A	Yes	N/A
Green Line	Science Park	DL,	None	Yes	N/A	No	N/A
Green Line	Kenmore	U,SL,	None	No	N/A	Yes	N/A
Green Line	Hynes Convention Center	SL,	None	No	N/A	Yes	N/A
Green Line	Copley	SL,	None	No	N/A	Yes	N/A
Green Line	Arlington	U,SL,	None	No	Good	Yes	N/A
Green Line	Government Center	SD,SL,H,	Some	No	N/A	Yes	N/A
Green Line	Boylston	U,SL,	None	Yes	Good	Yes	N/A
Green Line	Haymarket	SL,	None	No	Good	Yes	N/A
Green Line	Park Street	U,	None	No	N/A	Yes	N/A
Green Line	North Station	SD,R,H,	None	Yes	Good	Yes	N/A
Green Line B	BU Central	U,	None	No	N/A	Yes	N/A
Green Line B	BU West	U,H,	None	No	N/A	Yes	N/A
Green Line B	Saint Paul Street	H,	None	No	N/A	Yes	N/A
Green Line B	Pleasant Street	K,	None	No	N/A	Yes	N/A
Green Line B	Babcock Street	None	None	No	N/A	Yes	N/A
Green Line B	Harvard Avenue	K,	None	No	N/A	Yes	N/A
Green Line B	BU East	U,H,	None	No	N/A	Yes	N/A
Green Line B	Blandford Street	H,	None	No	N/A	Yes	N/A
Green Line B	Chestnut Hill Avenue	None	None	No	N/A	Yes	N/A
Green Line B	South Street	None	None	Yes	Fair	No	N/A
Green Line B	Boston College	R,	None	No	N/A	No	N/A
Green Line B	Chiswick Road	None	None	No	N/A	No	N/A
Green Line B	Sutherland Road	None	None	No	N/A	No	N/A
Green Line B	Washington Street	K,	None	No	N/A	Yes	N/A
Green Line B	Warren Street	None	None	No	N/A	No	N/A
Green Line B	Griggs Street	None	None	No	N/A	No	N/A
Green Line B	Allston Street	None	None	No	N/A	No	N/A
Green Line B	Packards Corner	None	None	No	N/A	Yes	N/A
Green Line C	Saint Mary's Street	R,U,	None	No	N/A	Yes	N/A
Green Line C	Kent Street	None	None	No	N/A	No	N/A
Green Line C	Saint Paul Street	None	None	No	N/A	No	N/A
Green Line C	Coolidge Corner	R,U,SL,	None	No	N/A	Yes	N/A
Green Line C	Summit Avenue/Winchester Street	U,SL,	None	No	N/A	No	N/A
Green Line C	Brandon Hall	None	None	No	N/A	No	N/A
Green Line C	Fairbanks Street	None	None	No	N/A	No	N/A
Green Line C	Washington Square	R,U,	None	No	N/A	Yes	N/A
Green Line C	Tappan Street	SL,	None	No	N/A	No	N/A
Green Line C	Dean Road	None	None	No	N/A	No	N/A
Green Line C	Englewood Avenue	None	None	No	N/A	No	N/A
Green Line C	Cleveland Circle	R,SL,	None	Yes	Fair	Yes	N/A
Green Line C	Hawes Street	None	None	Yes	N/A	No	N/A
Green Line D	Beaconsfield	None	None	No	N/A	No	N/A
Green Line D	Brookline Hills	R,	None	No	N/A	Yes	N/A
Green Line D	Brookline Village	R,U,	Some	No	N/A	Yes	BP
Green Line D	Longwood	R,	None	Yes	Good	No	N/A
Green Line D	Fenway	R,	Some	Yes	Fair	Yes	N/A
Green Line D	Riverside	R,U,	Some	No	N/A	Yes	BP
Green Line D	Newtown Center	R,	None	No	N/A	Yes	N/A
Green Line D	Reservoir	R,U,	Some	Yes	Fair	Yes	BP
Green Line D	Newton Highlands	R,	All	No	N/A	Yes	BP
Green Line D	Waban	U,	None	No	N/A	No	BP
Green Line D	Eliot	R,U,	All	No	N/A	No	BP
Green Line D	Chestnut Hill	U,	All	No	N/A	No	BP
Green Line D	Woodland	R,	None	No	N/A	No	N/A
Green Line E	Symphony	DD,SL,H,	None	Yes	Good	Yes	N/A
Green Line E	Prudential	R,	None	Yes	Good	Yes	N/A
Green Line E	Heath Street	None	None	No	N/A	Yes	N/A
Green Line E	Back of the Hill	None	None	No	N/A	Yes	N/A
Green Line E	Riverway	SD,	None	Yes	Poor	Yes	N/A
Green Line E	Mission Park	None	None	No	N/A	Yes	N/A
Green Line E	Fenwood Road	None	None	No	N/A	Yes	N/A
Green Line E	Brigham Circle	None	None	No	N/A	Yes	N/A
Green Line E	Longwood Medical Area	SD,U,H,	None	No	N/A	Yes	N/A
Green Line E	Museum of Fine Arts	U,	None	No	N/A	Yes	N/A
Green Line E	Northeastern	U,	None	No	N/A	Yes	N/A
Orange Line	Stony Brook	U,	All	Yes	Good	No	BP
Orange Line	Jackson Square	R,	All	Yes	Good	Yes	N/A
Orange Line	Roxbury Crossing	R,U,	Some	No	N/A	No	BP

**Table A1.2
Bicycle Space Amenities:
Rapid Transit Stations, 2017–18**

Rapid Transit Line	Station Name	Type of	Covered	Condition of				P&P or BP Proposed or Installed
		Bicycle Rack	Bicycle Rack	Bicycle Trail/Path	Bicycle Trail/Path	Connecting Bus Routes		
Orange Line	Forest Hills	SD,R,U,	Some	No	N/A	Yes	P&P, BP	
Orange Line	Green Street	U,H,	Some	Yes	Good	Yes	BP	
Orange Line	Ruggles	SD,R,	None	Yes	Good	Yes	N/A	
Orange Line	Massachusetts Avenue	R,SL,	None	No	N/A	Yes	N/A	
Orange Line	Back Bay	R,U,	Some	Yes	Good	Yes	P&P	
Orange Line	Tufts Medical Center	SL,H,	Some	No	N/A	Yes	N/A	
Orange Line	Chinatown	None	None	No	N/A	Yes	N/A	
Orange Line	Community College	H,	None	No	N/A	No	N/A	
Orange Line	Sullivan Square	R,U,H,	Some	No	N/A	Yes	N/A	
Orange Line	Malden Center	R,U,	Some	No	N/A	Yes	P&P	
Orange Line	Assembly	U,	Some	Yes	Good	Yes	N/A	
Orange Line	Wellington	R,U,	Some	No	N/A	No	BP	
Orange Line	Oak Grove	R,	Some	No	N/A	Yes	P&P	
Orange Line	Haymarket	SL,	None	No	Good	Yes	N/A	
Orange Line	State	SD,U,SL,	None	No	N/A	No	N/A	
Orange Line	Downtown Crossing	U,SL,	None	No	N/A	Yes	N/A	
Orange Line	North Station	SD,R,H,	None	Yes	Good	Yes	N/A	
Red Line	Quincy Center	U,H,	None	No	N/A	Yes	N/A	
Red Line	Ashmont	None	All	No	N/A	Yes	P&P	
Red Line	Shawmut	R,	None	No	N/A	No	N/A	
Red Line	Broadway	SL,	None	No	N/A	Yes	N/A	
Red Line	South Station	SL,	Some	Yes	Good	Yes	P&P	
Red Line	Davis	R,U,H,	Some	Yes	Good	Yes	P&P, BP	
Red Line	Alewife (under construction)	U,H,	Some	Yes	Good	Yes	P&P	
Red Line	Porter Square	K,H,	None	No	N/A	Yes	N/A	
Red Line	Harvard Square	K,	None	No	N/A	Yes	N/A	
Red Line	Central	K,U,	None	No	N/A	No	N/A	
Red Line	Kendal Square/MIT	K,	None	No	N/A	Yes	N/A	
Red Line	Charles/MGH	K,	None	No	N/A	No	N/A	
Red Line	Park Street	U,	None	No	N/A	Yes	N/A	
Red Line	Andrew	SL,H,	Some	No	N/A	Yes	N/A	
Red Line	JFK/UMASS	U,H,	All	No	N/A	Yes	BP	
Red Line	Savin Hill	H,	None	No	N/A	Yes	N/A	
Red Line	Fields Corner	R,U,H,	Some	No	N/A	Yes	BP	
Red Line	North Quincy	R,U,H,	Some	No	N/A	Yes	BP	
Red Line	Wollaston	None	All	No	N/A	Yes	P&P	
Red Line	Quincy Adams	U,	All	No	N/A	Yes	N/A	
Red Line	Braintree	U,	All	No	N/A	Yes	P&P	
Red Line	Downtown Crossing	U,SL,	None	No	N/A	Yes	N/A	
SL1	Airport Terminal A	U,	None	No	N/A	No	N/A	
SL1/SL2	Silver Line Way	U,	None	No	N/A	No	N/A	
SL1/SL2	World Trade Center	None	None	No	N/A	No	N/A	
SL1/SL2	Court House	U,	All	No	N/A	No	N/A	
SL2	Design Center	R,	None	No	N/A	No	N/A	
SL2	88 Black Falcon	None	None	No	N/A	No	N/A	
SL2	25 Dry Dock Avenue	SD,	None	No	N/A	No	N/A	
SL2	21 Dry Dock Avenue	None	None	No	N/A	No	N/A	
SL2	Northern Avenue At Tide Street	None	None	No	N/A	No	N/A	
SL2	Northern Avenue At Harbor Street	None	None	No	N/A	No	N/A	
SL3	Eastern Avenue	R,U,	None	Yes	Good	No	N/A	
SL3	Chelsea SL3	U,	All	No	N/A	No	BP	
SL3	Bellingham Square	U,	All	No	N/A	No	BP	
SL3	Box District	U,	All	Yes	Good	No	BP	
SL4/SL5	Lenox Street	DD,	None	No	N/A	No	N/A	
SL4/SL5	Massachusetts Avenue	R,	None	No	N/A	No	N/A	
SL4/SL5	Worcester Square	R,	None	No	N/A	No	N/A	
SL4/SL5	Newton Street	R,	None	No	N/A	No	N/A	
SL4/SL5	East Berkeley Street	R,	None	No	N/A	No	N/A	
SL4/SL5	Herald Street	R,	None	No	N/A	No	N/A	
SL4/SL5	Melnea Cass Boulevard	R,	None	No	N/A	No	N/A	
SL4/SL5	Dudley Square	None	All	No	N/A	No	P&P	
Mattapan High Speed	Cedar Grove	None	None	No	N/A	No	N/A	
Mattapan High Speed	Butler	H,	None	Yes	Good	No	N/A	
Mattapan High Speed	Central Avenue	U,	None	Yes	Good	Yes	N/A	
Mattapan High Speed	Capan Street	H,	None	No	N/A	No	N/A	
Mattapan High Speed	Valley Road	None	None	No	N/A	No	N/A	
Mattapan High Speed	Milton	R,H,	None	Yes	Good	No	N/A	
Mattapan High Speed	Mattapan	U,	None	No	N/A	Yes	N/A	

BP = bicycle port. BU = Boston University. D = disk rack. H = hanger. JFK = John Fitzgerald Kennedy. MBTA = Massachusetts Bay Transportation Authority. MGH = Massachusetts General Hospital. MIT = Massachusetts Institute of Technology. N/A = not applicable. P = post (double or single). P&P = petal & park (bicycle cage). R = ribbon. SD = single dish. SL1 = Sliver Line 1. SL2 = Sliver Line 2. SL3 = Sliver Line 3. SL4 = Sliver Line 4. SL5 = Sliver Line 5. U = inverted U. UMASS = University of Massachusetts Lowell. Source: 2017–18 Boston Region MPO MBTA Bicycle Parking Inventory.

Table A2.1
Bicycle Space Capacity and Utilization:
Commuter Rail Stations

Station by Line	Bicycles Parked 2005-06	Bicycles Parked 2009-11	Bicycles Parked 2012	Bicycles Parked 2017-18	Bicycles Parked Percentage Change	Bicycle Rack Spaces 2005-06	Bicycle Rack Spaces 2009-11	Bicycle Rack Spaces 2012	Bicycle Rack Spaces 2017-18	Bicycle Rack Spaces Percentage Change	Percent Bicycle Rack Spaces Utilized 2005-06	Percent Bicycle Rack Spaces Utilized 2009-11	Percent Bicycle Rack Spaces Utilized 2012	Percent Bicycle Rack Spaces Utilized 2017-18	Bicycles Parked in Other Areas in 2012	Bicycles Parked in Other Areas in 2017-18
Newburyport/Rockport Line																
Rockport (under construction)	1	3	5	1	-80	8	9	9	9	0	13	33	56	11	0	1
Gloicester	0	0	3	4	-33	12	5	12	12	0	0	0	25	33	0	2
West Gloucester	0	0	0	0	N/A	8	8	8	9	13	0	0	0	0	0	0
Manchester	1	0	4	9	125	8	0	8	20	150	13	N/A	50	45	1	1
Beverly Farms (under construction)	0	1	1	2	100	16	16	16	10	-38	0	6	6	20	0	0
Prides Crossing	0	0	0	0	N/A	0	16	16	0	-100	N/A	0	0	N/A	0	0
Montserrat	0	2	7	4	-43	8	9	9	9	0	0	22	78	44	0	0
Newburyport	6	5	9	8	-11	36	39	39	52	33	17	13	23	15	22	2
Rowley	1	0	2	4	100	12	13	13	13	0	8	0	15	31	0	0
Ipswich	0	9	2	4	100	16	9	9	9	0	0	100	22	44	1	1
Hamilton/Wenham	3	5	4	3	-25	6	7	7	7	0	50	71	57	43	11	5
North Beverly	2	0	0	2	N/A	16	15	16	10	-38	13	0	0	20	0	0
Beverly Depot	2	2	5	14	180	16	12	12	64	433	13	17	42	22	3	0
Salem	8	13	38	50	32	20	26	58	113	95	40	50	66	44	3	0
Swampscott	0	1	7	6	-14	16	16	10	20	100	0	6	70	30	10	1
Lynn	7	2	3	0	-100	14	14	14	0	-100	50	14	21	N/A	0	0
Chelsea	0	0	0	1	N/A	0	16	16	26	63	N/A	0	0	4	0	0
Newburyport/Rockport Line Summary	31	43	90	112	24%	212	230	272	383	41%	15%	19%	33%	29%	51	13
Haverhill Line																
Haverhill (under construction)	2	1	2	0	-100	16	19	30	39	30	13	5	7	0	0	0
Bradford	2	1	3	1	-67	12	16	17	7	-59	17	6	18	14	0	1
Lawrence	6	7	3	1	-67	12	10	18	8	-56	50	70	17	13	0	0
Andover	6	13	9	9	0	6	49	49	33	-33	100	27	18	27	0	0
Ballardvale	0	1	3	1	-67	0	32	32	36	13	N/A	3	9	3	0	0
North Wilmington	0	2	4	1	-75	0	16	16	18	13	N/A	13	25	6	0	0
Reading	4	6	5	16	220	13	12	12	17	42	31	50	42	94	0	0
Wakefield	0	4	2	9	350	6	21	23	15	-35	0	19	9	60	0	0
Greenwood	0	0	0	0	N/A	6	7	7	7	0	0	0	0	0	0	0
Metrose Highlands	1	2	3	2	-33	18	10	10	10	0	6	20	30	20	0	0
Metrose/Cedar Park	0	0	1	1	N/A	0	18	8	4	-50	N/A	0	0	25	0	0
Wilmington	0	1	2	2	0	0	22	22	22	0	N/A	5	9	0	0	0
Haverhill Line Summary	21	38	36	43	19%	89	232	244	216	-11%	24%	16%	15%	20%	0	1
Lowell Line																
Lowell	13	22	19	15	-21	24	24	24	28	17	54	92	79	54	0	0
North Billerica	2	5	9	5	-44	16	28	21	21	0	13	18	43	24	0	0
Wilmington	2	8	13	7	-46	24	24	26	26	0	8	33	50	27	0	1
Anderson RTC	6	4	4	2	-50	14	14	14	14	0	43	29	29	14	0	0
Mishawam	N/A	N/A	0	0	N/A	N/A	N/A	0	9	NEW	N/A	N/A	N/A	0	0	0
Winchester Center	4	5	5	8	60	30	27	24	27	13	13	19	21	30	0	0
Wedgemere	0	2	7	3	-57	0	18	18	16	-11	N/A	11	39	19	0	0
West Medford	0	2	4	8	100	16	18	10	20	100	0	11	40	40	0	0
Lowell Line Summary	27	48	61	48	-21%	124	153	137	161	18%	22%	31%	45%	30%	0	1
Fitchburg Line																
Wachusett (New)	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	20	NEW	N/A	N/A	N/A	0	0	0
Fitchburg	1	1	4	3	-25	24	8	20	40	100	4	13	20	8	0	0
North Leominster	0	4	4	1	-75	0	16	16	16	0	N/A	25	25	6	0	1
Shirley	0	0	0	0	N/A	0	8	8	8	0	N/A	0	0	0	0	0
Ayer	0	2	3	6	100	12	28	34	26	-24	0	7	9	23	0	1
Littleton/495	2	4	4	6	50	12	13	12	30	150	17	31	33	20	0	0
South Acton	18	8	22	34	55	44	44	44	130	195	41	18	50	26	0	0
West Concord	1	3	5	4	-20	18	10	10	20	100	6	30	50	20	5	0
Concord	6	7	11	4	-64	12	10	12	10	-17	50	70	92	40	4	2
Lincoln	5	4	6	0	-100	8	7	9	0	-100	63	57	67	N/A	0	0
Silver Hill	0	0	0	0	N/A	0	8	8	10	25	N/A	0	0	0	0	0
Hastings	0	0	0	0	N/A	0	0	0	0	N/A	N/A	N/A	N/A	N/A	0	0
Kendall Green	0	3	4	4	9	0	8	8	10	25	N/A	38	50	40	0	0
Brandeis/Roberts	0	0	0	2	N/A	24	16	24	10	-58	0	0	0	20	0	0
Walham	4	7	17	10	-41	8	8	34	24	-29	50	88	50	42	1	0
Waverly	1	6	5	8	60	10	12	12	21	75	10	50	42	38	0	0
Belmont Center	1	0	5	4	-20	8	9	9	8	-11	13	0	56	50	0	0
Fitchburg Line Summary	39	49	90	86	-4%	180	205	260	383	47%	22%	24%	35%	22%	10	4
Framingham/Worcester Line																
Worcester	2	2	8	3	-63	15	23	30	12	-60	13	9	27	25	1	0
Grafton	0	3	2	1	-50	8	8	8	8	0	0	38	25	13	0	0
Westborough	1	3	6	4	-33	8	24	20	6	-70	13	13	30	67	4	0
Southborough	0	1	0	0	N/A	8	8	8	8	0	0	13	0	0	2	0
Ashland	0	6	5	5	0	16	16	14	18	29	0	38	36	28	0	0
Framingham	14	8	15	12	-20	28	18	45	37	-18	50	44	37	32	0	0
West Natick	8	4	12	16	33	16	23	23	32	39	50	17	52	50	0	3
Natick	4	0	12	7	-42	9	0	12	9	-25	44	N/A	100	78	14	5
Wellesley Square	7	0	6	4	-33	48	16	12	12	0	15	0	50	33	2	0
Wellesley Hills	0	2	5	6	20	0	16	12	12	0	N/A	13	42	50	0	0
Wellesley Farms	0	6	3	4	33	33	24	24	25	4	0	25	13	16	0	0
Auburndale	0	0	0	1	N/A	0	16	16	16	0	N/A	0	0	6	0	0
West Newton	0	0	0	0	N/A	0	0	16	16	0	N/A	N/A	0	0	1	0
Newtonville	0	0	0	0	N/A	0	16	16	0	-100	N/A	0	0	N/A	0	0
Boston Landing (New)	N/A	N/A	N/A	9	N/A	N/A	N/A	N/A	26	NEW	N/A	N/A	N/A	35	0	0
Linsdowne	0	0	0	2	N/A	0	16	16	10	-38	N/A	0	0	20	0	1
Framingham/Worcester Line Summary	36	35	74	74	0%	189	224	272	247	-9%	19%	16%	27%	30%	24	9
Needham Line																
Needham Heights	0	3	0	1	N/A	6	7	7	7	0	0	43	0	14	0	0
Needham Center	2	4	0	0	N/A	6	7	7	7	0	33	57	0	0	1	0
Needham Junction	0	1	5	3	-40	6	7	7	7	0	0	14	71	43	1	0
Hersey	4	11	8	5	-38	12	26	26	27	4	33	42	31	19	0	0
West Roxbury	1	0	1	2	100	8	9	12	12	0	13	0	8	17	0	0
Highland	0	1	1	7	600	0	20	20	12	-40	N/A	5	5	58	0	2
Bellevue	0	0	0	0	N/A	8	9	9	9	0	0	0	0	0	0	0
Roslindale Village	0	0	1	0	-100	0	16	16	10	-38	N/A	0	6	0	0	0
Needham Line Summary	7	20	16	18	13%	46	101	104	91	-13%	15%	20%	15%	20%	2	2
Franklin Line																
Forge Park/495	0	0	1	1	0	17	7	14	12	-14	0	0	7	8	4	0
Franklin	0	0	5	11	120	7	16	18	20	11	0	0	28	55	0	3
Norfolk	0	10	4	8	100	8	15	15	15	0	0	67	27	53	0	0
Walpole	3	7	4	6	50	6	7	7	7	0	50	100	57	86	1	0
Plymptonville	0	0	0	0	N/A	0	16	0	0	N/A	N/A	0	N/A	N/A	0	0
Windsor Gardens	0	0	0	0	N/A	0	0	0	0	N/A	N/A	N/A	N/A	N/A	1	0
Norwood Central	2	2	1	0	-100	20	12	11	20	82	10	17	9	0	1	1
Norwood Depot	0	0	1	4	300	0	16	14	10	-29	N/A	0	7	40	3	1
Islington	0	0	0	0	N/A	0	14	8	4	-50	N/A	0	0	0	0	0
Dedham Corporate Center	0	1	1	0	-100	0	14	16	16	0	N/A	7	6	0	0	0
Endicott	0	0	5	5	0	0	0	17	10	-41	N/A	N/A	29	50	6	0
Readville	2	1	1	0	-100	12	36	32	38	19	17	3	3	0	0	0
Hyde Park	0	0	2	2	0	10	10	10	10	0	0	0	20	20	0	0
Franklin Line Summary	7	21	25	37	48%	80	163	162	162	0%	9%	13%	15%	23%	16	5

Station by Line	Bicycles Parked 2005-06	Bicycles Parked 2009-11	Bicycles Parked 2012	Bicycles Parked 2017-18	Bicycles Parked Percentage Change	Bicycle Rack Spaces 2005-06	Bicycle Rack Spaces 2009-11	Bicycle Rack Spaces 2012	Bicycle Rack Spaces 2017-18	Bicycle Rack Spaces Percentage Change	Percent Bicycle Rack Spaces Utilized 2005-06	Percent Bicycle Rack Spaces Utilized 2009-11	Percent Bicycle Rack Spaces Utilized 2012	Percent Bicycle Rack Spaces Utilized 2017-18	Bicycles Parked in Other Areas in 2012	Bicycles Parked in Other Areas in 2017-18
Fairmount Line																
Readville	2	1	1	0	-100	12	36	32	38	19	17	3	3	0	0	0
Fairmount	1	0	0	0	N/A	20	10	22	23	5	5	0	0	0	0	0
Morton Street	N/A	0	0	0	0	N/A	N/A	20	20	0	N/A	0	0	0	0	0
Talbot Avenue (New)	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	20	NEW	N/A	N/A	N/A	0	0	0
Four Corners/Geneva (New)	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	12	NEW	N/A	N/A	N/A	0	0	0
Uphams Corner	N/A	2	0	0	N/A	N/A	10	10	10	0	N/A	20	0	0	0	0
Newmarket (New)	N/A	N/A	N/A	2	N/A	N/A	N/A	N/A	20	NEW	N/A	N/A	N/A	10	0	0
Fairmount Line Summary	3	3	1	2	100%	32	76	84	143	79%	9%	4%	1%	1%	0	0
Providence/Stoughton Line																
Wickford Junction	N/A	N/A	1	3	200	N/A	N/A	22	22	0	N/A	N/A	5	14	0	0
T.F. Green Airport	N/A	2	2	3	50	N/A	10	8	8	0	N/A	20	25	38	0	0
Providence	28	26	26	56	115	28	26	26	106	308	100	100	100	53	16	0
South Attleboro	0	0	1	6	500	10	16	26	19	-27	0	0	4	32	0	4
Attleboro	4	3	9	5	-44	15	16	17	9	-47	27	19	53	56	6	3
Mansfield (under construction)	3	20	4	7	76	9	25	33	10	-70	33	80	12	70	3	2
Sharon	14	8	17	44	159	35	48	64	81	27	40	17	27	54	0	2
Stoughton	3	7	3	9	200	16	15	15	15	0	19	47	20	60	0	0
Canton Center	4	5	4	5	25	6	6	5	10	100	67	83	80	50	0	0
Canton Junction	3	0	7	1	-86	48	64	57	42	-26	6	0	12	2	2	0
Route 128	4	0	6	9	50	63	60	48	16	-67	6	0	13	56	0	0
Hyde Park	0	0	2	2	0	10	10	10	10	0	0	0	20	20	0	0
Providence/Stoughton Line Summary	63	71	82	150	83%	240	296	331	348	5%	26%	24%	25%	43%	27	11
Middleborough/Lakeville Line																
Middleborough/Lakeville	0	3	4	0	-100	12	8	9	8	-11	0	38	44	0	0	0
Bridgewater	6	6	4	6	50	24	27	26	24	-8	25	22	15	25	0	2
Campello	0	1	0	0	N/A	8	8	9	14	56	0	13	0	0	1	1
Brookton	2	0	0	3	N/A	16	4	9	60	567	13	0	0	5	5	1
Montello	1	1	2	0	-100	18	16	19	23	21	6	6	11	0	0	1
Holbrook/Randolph	1	6	2	0	-100	12	16	9	18	100	8	38	22	0	1	0
Middleborough/Lakeville Line Summary	10	17	12	9	-25%	90	79	81	147	81%	11%	22%	15%	6%	7	5
Kingston/Plymouth Line																
Plymouth (under construction)	0	0	0	0	N/A	16	0	0	0	N/A	0	N/A	N/A	N/A	0	0
Kingston	1	0	2	3	50	36	32	32	32	0	N/A	0	6	9	0	1
Halifax	3	3	3	2	-33	20	8	18	18	0	15	38	17	11	0	0
Hanson	2	1	2	2	0	16	8	8	8	0	13	13	25	25	0	0
Whitman	2	0	8	4	-50	12	8	8	8	0	17	0	100	50	0	4
Ablington	3	3	3	3	0	12	5	8	8	0	25	60	38	38	0	4
South Weymouth	2	1	1	2	100	14	14	10	24	140	14	7	10	8	0	1
Kingston/Plymouth Line Summary	13	8	19	16	-16%	90	79	84	98	17%	14%	10%	23%	16%	0	10
Greenbush Line																
Greenbush	N/A	2	7	8	14	N/A	15	17	16	-6	N/A	13	41	50	0	0
North Scituate	N/A	3	3	0	-100	N/A	7	7	7	0	N/A	43	43	0	2	0
Cohasset	N/A	2	6	0	-100	N/A	7	17	17	0	N/A	29	35	0	0	0
Nantasket Junction (under construction)	N/A	2	1	1	0	N/A	7	17	7	-59	N/A	29	6	14	0	0
West Hingham	N/A	5	4	5	25	N/A	7	17	17	0	N/A	71	24	29	0	0
East Weymouth	N/A	1	2	2	0	N/A	7	17	17	0	N/A	14	12	12	0	0
Weymouth Landing/East Braintree	N/A	3	2	4	100	N/A	7	17	17	0	N/A	43	12	24	0	0
Greenbush Line Summary	N/A	18	25	20	-20%	N/A	57	109	98	-10%	N/A	32%	23%	20%	2	0
Foxboro/Boston Line																
Foxboro Station (New)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0
Foxboro Line Summary	0	0	0	0	N/A	0	0	0	0	N/A	N/A	N/A	N/A	N/A	0	0
Grand Total	255	370	528	613	16%	1,350	1,849	2,098	2,429	16%	19%	20%	25%	25%	139	61

Note: Percentage change refers to the change from the 2012 survey to the 2017-18 survey. New refers to new bicycle capacity as of the 2017-18 survey.

MBTA = Massachusetts Bay Transportation Authority. N/A = not applicable. RTC = Regional Transportation Center. T.F. = Theodore Francis.

Source: 2017-18 Boston Region MPO MBTA Bicycle Parking Inventory.

**Table A2.2
Bicycle Space Amenities:
Commuter Rail Stations, 2017–18**

Commuter Rail Line	Station Name	Type of	Covered	Condition of			P&P or BP Proposed or Installed
		Bicycle Rack	Bicycle Rack	Bicycle Trail/Path	Bicycle Trail/Path	Connecting Bus Routes	
Fairmount	Fairmount	R, U,	Some	No	N/A	Yes	BP
Fairmount	Morton Street	U,	Some	No	N/A	Yes	BP
Fairmount	Newmarket	H,	Some	No	N/A	Yes	N/A
Fairmount	Uphams Corner	U,	All	No	N/A	Yes	N/A
Fairmount	Four Corners/Geneva	U, H,	Some	No	N/A	Yes	N/A
Fairmount	Talbot Avenue	H,	None	No	N/A	Yes	N/A
Fitchburg	Ayer	U,	None	Yes	Good	No	N/A
Fitchburg	South Acton	R,	Some	No	N/A	No	N/A
Fitchburg	Lincoln	None	None	No	N/A	No	N/A
Fitchburg	Littleton	H,	None	No	N/A	Yes	N/A
Fitchburg	Waverley	SD, U,	All	No	N/A	No	BP
Fitchburg	West Concord	U, H,	None	No	N/A	No	N/A
Fitchburg	Concord	U,	None	No	N/A	No	N/A
Fitchburg	Belmont	U,	None	No	N/A	Yes	N/A
Fitchburg	Silver Hill	H,	None	No	N/A	No	N/A
Fitchburg	Wachusett	H,	None	No	N/A	Yes	N/A
Fitchburg	Kendal Green	H,	All	No	N/A	No	N/A
Fitchburg	Hastings	None	None	No	N/A	No	N/A
Fitchburg	Brandies/Roberts	U,	None	No	N/A	Yes	N/A
Fitchburg	Waltham	U,	Some	No	N/A	Yes	BP
Fitchburg	Shirley	SD,	Some	No	N/A	Yes	N/A
Fitchburg	North Leominster	SD,	None	No	N/A	Yes	N/A
Fitchburg	Fitchburg	SD,	Some	No	N/A	Yes	N/A
Framingham/Worcester	Ashland	U, H,	None	No	N/A	No	N/A
Framingham/Worcester	Grafton	U,	None	No	N/A	Yes	N/A
Framingham/Worcester	Worcester	U,	All	No	N/A	Yes	BP
Framingham/Worcester	Southborough	U,	None	No	N/A	Yes	N/A
Framingham/Worcester	Westborough	U,	None	No	N/A	Yes	N/A
Framingham/Worcester	West Newton	DD,	None	No	N/A	Yes	N/A
Framingham/Worcester	Wellesley Square	U,	All	No	N/A	No	BP
Framingham/Worcester	West Natick	SD, U, H,	None	No	N/A	Yes	N/A
Framingham/Worcester	Newtonville	None	None	No	N/A	Yes	N/A
Framingham/Worcester	Auburndale	DD,	None	No	N/A	Yes	N/A
Framingham/Worcester	Wellesley Farms	DD,	Some	No	N/A	No	N/A
Framingham/Worcester	Wellesley Hills	U,	All	No	N/A	Yes	BP
Framingham/Worcester	Yawkey	R,	None	No	N/A	No	N/A
Framingham/Worcester	Boston Landing	R,	All	No	N/A	No	BP
Framingham/Worcester	Framingham	SD, R, H,	Some	No	N/A	Yes	N/A
Framingham/Worcester	Natick	U, SL,	None	No	N/A	Yes	N/A
Franklin	Forge Park	U,	None	No	N/A	No	N/A
Franklin	Franklin	U, H,	None	No	N/A	No	N/A
Franklin	Walpole	H,	Some	No	N/A	No	N/A
Franklin	Endicott	H,	None	No	N/A	No	N/A
Franklin	Norwood Central	U,	None	No	N/A	Yes	N/A
Franklin	Norwood Depot	H,	None	No	N/A	No	N/A
Franklin	Windsor Gardens	None	None	No	N/A	No	N/A
Franklin	Readville	U,	None	No	N/A	Yes	N/A
Franklin	Dedham Corp Center	SD,	None	No	N/A	No	N/A
Franklin	Plimptonville	None	None	No	N/A	No	N/A
Franklin	Islington	U,	Some	No	N/A	No	N/A
Franklin	Norfolk	R, U,	None	No	N/A	No	N/A
Greenbush	East Weymouth	R, H,	None	No	N/A	No	N/A
Greenbush	West Hingham	R, U,	Some	No	N/A	No	N/A
Greenbush	Nantasket junction (under construction)	R,	None	No	N/A	No	N/A
Greenbush	Cohasset	R, H,	None	No	N/A	No	N/A
Greenbush	Weymouth Landing/East Braintree	U,	None	No	N/A	No	N/A
Greenbush	Greenbush	R, H,	None	No	N/A	No	N/A
Greenbush	North Scituate	R,	None	No	N/A	No	N/A
Haverhill	Haverhill (under construction)	R, U,	Some	No	N/A	Yes	BP
Haverhill	Melrose Highlands	H,	None	No	N/A	Yes	N/A
Haverhill	Greenwood	R,	None	No	N/A	Yes	N/A
Haverhill	Bradford	R,	None	No	N/A	Yes	N/A
Haverhill	Wakefield	SD, R,	None	No	N/A	Yes	N/A
Haverhill	Wyoming Hill	U, H,	Some	No	N/A	No	BP
Haverhill	Reading	SD, H,	None	No	N/A	No	N/A
Haverhill	Lawrence	DL,	None	No	N/A	No	N/A
Haverhill	North Wilmington	SD,	None	No	N/A	No	N/A
Haverhill	Melrose/Cedar Park	SD,	None	No	N/A	No	N/A
Haverhill	Ballardvale	SD,	None	No	N/A	No	N/A
Haverhill	Andover	R, U,	Some	No	N/A	No	BP

**Table A2.2
Bicycle Space Amenities:
Commuter Rail Stations, 2017–18**

Commuter Rail Line	Station Name	Type of	Covered	Condition of			
		Bicycle Rack	Bicycle Rack	Bicycle Trail/Path	Bicycle Trail/Path	Connecting Bus Routes	P&P or BP Proposed or Installed
Kingston/Plymouth	Halifax	U, H,	None	No	N/A	No	N/A
Kingston/Plymouth	Kingston	SD,	All	No	N/A	No	N/A
Kingston/Plymouth	Plymouth (under construction)	None	None	No	N/A	No	N/A
Kingston/Plymouth	Whitman	U,	All	No	N/A	No	N/A
Kingston/Plymouth	Hanson	U,	None	No	N/A	No	N/A
Kingston/Plymouth	Abington	U,	None	No	N/A	No	N/A
Kingston/Plymouth	South Weymouth	U,	Some	No	N/A	No	BP
Lowell	Anderson/Woburn	U,	All	No	N/A	Yes	N/A
Lowell	Mishawum	SD,	None	No	N/A	No	N/A
Lowell	Lowell	SD, R,	All	No	N/A	Yes	N/A
Lowell	West Medford	H,	None	No	N/A	No	N/A
Lowell	Wedgemere	SD,	All	Yes	Good	No	N/A
Lowell	Winchester Center	SD,	Some	Yes	Good	Yes	N/A
Lowell	Wilmington	R,	None	No	N/A	No	N/A
Lowell	North Billerica	R, U,	Some	No	N/A	No	BP
Middleborough/Lakeville	Campello	R, U,	None	No	N/A	No	N/A
Middleborough/Lakeville	Bridgewater	U,	None	No	N/A	No	N/A
Middleborough/Lakeville	Holbrook/Randolph	U,	Some	No	N/A	Yes	BP
Middleborough/Lakeville	Montello	U,	Some	No	N/A	Yes	BP
Middleborough/Lakeville	Brockton	U, DL, SL,	Some	No	N/A	Yes	N/A
Middleborough/Lakeville	Middleborough/Lakeville	U,	None	No	N/A	No	N/A
Needham	West Roxbury	U,	All	No	N/A	Yes	BP
Needham	Highland	U,	All	No	N/A	Yes	BP
Needham	Bellevue	R,	None	No	N/A	Yes	N/A
Needham	Needham Junction	R,	None	Yes	N/A	Yes	N/A
Needham	Hersey	SD, R, U,	Some	No	N/A	No	BP
Needham	Needham Heights	R,	All	No	N/A	Yes	N/A
Needham	Needham Center	R,	None	No	N/A	Yes	N/A
Needham	Roslindale Village	H,	None	No	N/A	Yes	N/A
Newburyport/Rockport	Rowley	R,	None	No	N/A	Yes	N/A
Newburyport/Rockport	Manchester	H,	None	No	N/A	No	N/A
Newburyport/Rockport	Salem	R, H,	Some	No	N/A	Yes	BP
Newburyport/Rockport	Beverly Depot	SD,	All	No	N/A	No	P&P
Newburyport/Rockport	Rockport (under construction)	R,	None	No	N/A	Yes	N/A
Newburyport/Rockport	Gloucester	U,	None	No	N/A	Yes	N/A
Newburyport/Rockport	West Gloucester	R,	None	No	N/A	Yes	N/A
Newburyport/Rockport	Hamilton/Wenham	R,	None	No	N/A	Yes	N/A
Newburyport/Rockport	Newburyport	R, H,	None	No	N/A	Yes	N/A
Newburyport/Rockport	Montserrat	R,	None	No	N/A	No	N/A
Newburyport/Rockport	Prides Crossing	None	None	No	N/A	No	N/A
Newburyport/Rockport	Lynn	None	None	No	N/A	Yes	N/A
Newburyport/Rockport	Beverly Farms (under construction)	H,	None	No	N/A	No	N/A
Newburyport/Rockport	North Beverly	H,	None	No	N/A	Yes	N/A
Newburyport/Rockport	Chelsea	DD, H,	None	No	N/A	No	N/A
Newburyport/Rockport	Ipswich	R,	None	No	N/A	No	N/A
Newburyport/Rockport	Swampscott	H,	None	No	N/A	No	N/A
Providence Spur	Foxboro (Special Event)	None	None	No	N/A	No	N/A
Providence/Stoughton	Sharon	SD, R, U, H,	Some	No	N/A	No	N/A
Providence/Stoughton	Hyde Park	U,	None	No	N/A	Yes	N/A
Providence/Stoughton	Canton Center	H,	None	No	N/A	No	N/A
Providence/Stoughton	Canton Junction	SD, H,	All	No	N/A	No	N/A
Providence/Stoughton	Route 128	DD,	All	No	N/A	No	N/A
Providence/Stoughton	TF Green Airport	DD,	All	No	N/A	No	N/A
Providence/Stoughton	Wickford Junction	U,	All	No	N/A	No	N/A
Providence/Stoughton	Stoughton	SD, U,	All	No	N/A	No	N/A
Providence/Stoughton	Attleboro	R,	All	No	N/A	No	N/A
Providence/Stoughton	South Attleboro	SD,	None	No	N/A	No	N/A
Providence/Stoughton	Providence	SL,	None	No	N/A	Yes	N/A
Providence/Stoughton	Mansfield (under construction)	H,	None	No	N/A	No	N/A

BP = bicycle port. DD = double disk rack. H = hanger. MBTA = Massachusetts Bay Transportation Authority. N/A = not applicable. P = post (double or single). P&P = petal & park (bicycle cage). R = ribbon. SD = single dish. T.F. = Theodore Francis. U = inverted U.
Source: 2017–18 Boston Region MPO MBTA Bicycle Parking Inventory.

**Table A3.1
Bicycle Space Capacity and Utilization:
Commuter Boat and Bus Facilities, 2017–18**

Station by Line	Bicycles Parked 2005–06	Bicycles Parked 2009–11	Bicycles Parked 2012	Bicycles Parked 2017–18	Bicycles Parked Percentage Change	Bicycle Rack Spaces 2005–06	Bicycle Rack Spaces 2009–11	Bicycle Rack Spaces 2012	Bicycle Rack Spaces 2017–18	Bicycle Rack Spaces Percentage Change	Percent Bicycle Rack Spaces Utilized 2005–06	Percent Bicycle Rack Spaces Utilized 2009–11	Percent Bicycle Rack Spaces Utilized 2012	Percent Bicycle Rack Spaces Utilized 2017–18	Bicycles Parked in Other Areas in 2012	Bicycles Parked in Other Areas in 2017–18
Commuter Boat Totals																
Hull	0	2	0	1	N/A	N/A	8	10	10	0	N/A	25	0	10	0	0
Hingham	4	9	9	11	22	20	16	24	14	-42	20	56	38	79	0	0
Quincy/Fore River	0	0	1	N/A	N/A	N/A	N/A	8	N/A	N/A	N/A	N/A	13	N/A	0	0
Charlestown Navy Yard	0	0	0	0	N/A	N/A	2	28	6	-79	N/A	0	0	0	0	1
Rowes Wharf	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0
Long Wharf	N/A	N/A	N/A	6	N/A	N/A	N/A	N/A	27	NEW	N/A	N/A	N/A	22	0	1
Logan Ferry Terminal (New)	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	5	NEW	N/A	N/A	N/A	0	0	0
Commuter Boat Totals	4	11	10	18	80%	20	26	70	62	-11%	20%	42%	14%	29%	0	2
Bus Facilities Totals																
Watertown Square	6	11	10	N/A	-9	10	12	12	N/A	0	0	60	60	N/A	1	0
Watertown Yard	0	1	2	1	100	4	5	4	12	-20	0	0	0	8	7	5
Woburn Yard	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	N/A	0	0
Bus Facilities Totals	6	12	12	1	-92%	14	17	16	12	-25%	43%	71%	75%	8%	8	5

Note: Percentage change refers to the change from the 2012 survey to the 2017–18 survey. New refers to new bicycle capacity as of the 2017–18 survey.

MBTA = Massachusetts Bay Transportation Authority. N/A = not applicable.

Source: 2017–18 Boston Region MPO MBTA Bicycle Parking Inventory.

**Table A3.2
Bicycle Space Amenities:
Commuter Boat and Bus Facilities, 2017–18**

Facility	Station Name	Type of Bicycle Rack	Covered Bicycle Rack	Bicycle Trail/Path	Condition of Bicycle Trail/Path	Connecting Bus Routes	P&P or BP Proposed or Installed
354 Bus line	Watertown Yard	R, H,	None	Yes	N/A	Yes	N/A
52, 57, 59, 502, 504 Bus lines	Woburn Yard	None	None	No	N/A	Yes	N/A
F4 Ferry	Charlestown Navy Yard	SL,	None	No	N/A	No	N/A
F1 Ferry	Hingham	U,	None	No	N/A	Yes	N/A
F1 Ferry	Long Wharf	R,	None	No	N/A	No	N/A
F2 Ferry	Hull	U,	None	Yes	Good	No	N/A
F2 Ferry	Logan Ferry Terminal	SD,	None	No	N/A	No	N/A

BP = bicycle port. DD = double disk rack. H = hanger. MBTA = Massachusetts Bay Transportation Authority. N/A = not applicable. P = post (double or single). P&P = petal & park (bicycle cage). R = ribbon. SD = single dish. U = inverted U.
Source: 2017–18 Boston Region MPO MBTA Bicycle Parking Inventory.

**Table A4-1
Bicycle Parked at Locations Other than at Bicycle Racks, and Recommended Improvements:
All Modes and Lines, 2017–18**

Station	Line	Bicycles Not Parked at Racks	Bicycles Parked at Racks	Total of Bicycles Parked at Racks and Bicycles at or near Station	Bicycle Parking Spaces	Utilization if All Bicycles Where Parked at Racks	Locations of Bicycles not parked at racks	Recommended Improvement
Alewife	Red	45	474	519	494	105%	Railing, street sign	Install additional racks (over capacity), install signage directing riders to bike racks, remove vandalized bicycles
Davis	Red	7	171	178	311	57%	Street sign	No recommendation
Porter	Red	0	36	36	101	36%		Repair concrete surface near bike rack
Harvard	Red	10	4	14	58	24%	Street sign, tree	No recommendation
Central	Red	9	63	72	106	68%	Street sign	Install additional racks (near capacity)
Kendall/MIT	Red	2	61	63	94	67%	Street sign	Install additional racks (near capacity)
Charles/MGH	Red	1	5	6	8	75%	Street sign	Install additional racks (near capacity)
Park Street	Red	1	5	6	8	75%	Fence	Install additional racks (near capacity), post signage at northbound entrance directing riders to bike riders to rack
Downtown Crossing	Red	2	11	13	20	65%	Street sign	Install additional bicycle racks on the corner of Washington Street and Temple Place
South Station	Red	7	48	55	94	59%	Street sign	Add signage directing bicyclists to Pedal & Park facility, install bicycle racks near recurring non-rack parking, remove vandalized bicycles
Broadway	Red	2	5	7	10	70%	Street sign	Install additional racks (near capacity)
Andrew	Red	0	3	3	14	21%		Consider installing Pedal & Park facility instead of bicycle ports (high theft rate in previous inventory)
North Quincy	Red	1	39	40	78	51%	Street sign	Install additional racks (near capacity)
Wollaston	Red	1	41	42	92	46%	Street sign	No recommendation
Quincy Center	Red	9	14	23	40	58%	Tree, railing, fence	Install additional racks (near capacity), remove vandalized bicycles
Quincy Adams	Red	3	8	11	64	17%	Fence	No recommendation
Brintree	Red	5	16	21	111	19%	Entrance	Install signage directing bicyclists to bicycle cage, remove vandalized bicycles
Savin Hill	Red	0	1	1	10	10%		Install additional bike rack on Sidney Street entrance
Wonderland	Blue	3	29	32	145	22%	Street sign	Install signage directing bicyclists to parking
Orient Heights	Blue	0	21	21	34	62%		Install sheltered bicycle racks on Bennington Street side of station
Maverick	Blue	4	22	26	66	39%	Street sign	Install signage directing bicyclists to bicycle racks, remove vandalized bicycles
Aquarium	Blue	0	18	18	36	50%		Install additional bicycle racks (near capacity)
State	Blue	4	12	16	15	107%	Street sign	Install additional bicycle racks (over capacity), remove vandalized bicycles
Government Center	Blue	4	22	26	52	50%	Street sign	No recommendation
Bowdoin	Blue	2	1	3	4	75%	Parking meter	Install additional bicycle racks (near capacity)
Revere Beach	Blue	0	3	3	20	15%		Remove vandalized bicycles
Oak Grove	Orange	3	125	128	148	86%	Fence	Install additional bicycle racks (near capacity)
Malden	Orange	10	49	59	206	29%	Railing	Install signage directing users to existing racks or install new bicycle racks at the bus connection, remove vandalized bicycles
Assembly	Orange	11	8	19	102	19%	Parking meter	No recommendation
Sullivan Square	Orange	1	17	18	62	29%	Not specified	No recommendation
Community College	Orange	5	0	5	20	25%	Not specified	No recommendation
North Station	Orange	1	10	11	70	16%	Between buildings	No recommendation
State	Orange	4	12	16	15	107%	Street sign	Install additional racks (over capacity)
Downtown Crossing	Orange	2	11	13	20	65%	Street sign	Install additional bicycle racks (near capacity)
Chinatown	Orange	6	0	6	0	NP	Street sign, street light	Install bicycle racks (no bicycle parking)
Tufts Medical Center	Orange	1	2	3	22	14%	Street light	Remove vandalized bicycles
Back Bay	Orange	2	56	58	85	68%	Street light	Install additional bicycle racks (near capacity), remove vandalized bicycles
Ruggles	Orange	0	28	28	72	39%		Install signage directing users to existing racks
Roxbury Crossing	Orange	0	2	2	25	8%		Repair existing bicycle racks, remove vandalized bicycles
Jackson Square	Orange	0	3	3	9	33%		Install or move bike racks to station entrance
Stony Brook	Orange	0	6	6	12	50%		Install additional bicycle racks (near capacity)
Massachusetts Avenue	Orange	0	2	2	29	7%		Remove vandalized bicycles
Wellington	Orange	0	9	9	21	43%		Remove vandalized bicycles
Lechmere	Green Subway	11	8	19	30	63%	Fence	Install additional bicycle racks (near capacity)
North Station	Green Subway	1	10	11	70	16%	Between buildings	Remove vandalized bicycles
Government Center	Green Subway	4	22	26	52	50%	Street sign	No recommendation
Park Street	Green Subway	1	5	6	8	75%	Fence	Install additional racks (near capacity), remove vandalized bicycles
Boylston	Green Subway	1	8	9	32	28%	Street sign	Repair existing bicycle racks
Arlington	Green Subway	2	11	13	28	46%	Street sign, street light	No recommendation
Copley	Green Subway	6	8	14	18	78%	Street sign, street light	Install additional racks (near capacity), remove vandalized bicycles
Hynes Convention Center	Green Subway	2	12	14	18	78%	Street sign	Install bicycle racks on the northeast corner of Boylston St and Massachusetts Ave (near capacity)
Kenmore	Green Subway	5	18	23	28	82%	Street sign	Install additional racks (near capacity)
Symphony	Green Subway	0	6	6	19	32%		Install signage directing users to existing racks
Boston College	Green B	0	4	4	7	57%		Install additional racks (near capacity)
Chestnut Hill Avenue	Green B	0	0	0	0	NP		Install bicycle racks on each side of the station (no bicycle parking)
Chiswick Road	Green B	0	0	0	0	NP		Install bicycle racks on the north and south sides of Commonwealth Ave (no bicycle parking)
Sutherland Road	Green B	0	0	0	0	NP		Install bicycle racks in front of Beacon Hill Athletic Club (no bicycle parking)
Washington Street	Green B	0	2	2	4	50%		Install additional bicycle racks (over capacity)
Warren Street	Green B	0	0	0	0	NP		Install bicycles racks on each intersection corner (no bicycle parking)
Allston Street	Green B	3	0	3	0	NP	Street sign	Install bicycle racks on southern median near station (no bicycle parking)
Griggs Street	Green B	0	0	0	0	NP		Install bicycle racks on southern median near station (no bicycle parking)
Harvard Avenue	Green B	1	3	4	4	100%	Street sign	Install bicycle racks on each intersection corner and in parking area (over capacity)
Packards Corner	Green B	3	0	3	0	NP	Not specified	Install bicycle racks on each side of the station (no bicycle parking)
Babcock Street	Green B	2	0	2	0	NP	Not specified	Install bicycle racks on each side of the station (no bicycle parking)
Pleasant Street	Green B	0	3	3	14	21%		Repair existing bicycle racks, remove vandalized bicycles

**Table A4-1
Bicycle Parked at Locations Other than at Bicycle Racks, and Recommended Improvements:
All Modes and Lines, 2017–18**

Station	Line	Bicycles Not Parked at Racks	Bicycles Parked at Racks	Total of Bicycles Parked at Racks and Bicycles Not Parked at Racks	Bicycle Parking Spaces at or near Station	Utilization if All Bicycles Parked at Racks	Locations of Bicycles not parked at racks	Recommended Improvement
Saint Paul Street	Green B	1	4	5	10	50%	Parking meter	Install additional racks (near capacity), remove vandalized bicycles
Boston University West	Green B	1	8	9	28	32%	Parking meter	No recommendation
Boston University Central	Green B	5	20	25	24	104%	Not specified	Install additional bicycle racks close to station entrances (over capacity)
Boston University East	Green B	8	36	44	68	65%	Street sign	Install additional racks (near capacity), remove vandalized bicycles
Englewood Avenue	Green C	1	0	1	0	NP	Street sign	Install bicycle racks near shelter (no bicycle parking)
Dean Road	Green C	0	0	0	0	NP		Install bicycle racks near shelter (no bicycle parking)
Tappan Street	Green C	5	2	7	12	58%	Street sign, trees	Install additional racks (near capacity)
Washington Square	Green C	1	2	3	26	12%	Street sign	No recommendation
Brandon Hall	Green C	2	0	2	0	NP	Street sign	Install bicycle racks near shelter (no bicycle parking)
Summit Avenue	Green C	1	2	3	12	25%	Street sign	No recommendation
Coolidge Corner	Green C	10	18	28	74	38%	Street sign, trees, parking meter	Replace or repair existing bicycle racks
Saint Paul Street	Green C	2	0	2	0	NP	Parking meter	Install bicycle racks near shelter (no bicycle parking)
Kent Street	Green C	1	0	1	0	NP	Parking meter	Install bicycle racks near shelter (no bicycle parking)
Hawes Street	Green C	4	0	4	0	NP	Street sign	Install bicycle racks near shelter (no bicycle parking)
Saint Mary's Street	Green C	6	10	16	43	37%	Street sign, parking meter, benches	Repair or replace existing racks
Woodland	Green D	0	0	0	13	0%		Move existing bicycle racks closer to the platform or install additional racks closer to platform
Waban	Green D	0	11	11	12	92%		Install additional racks (near capacity)
Eliot	Green D	0	4	4	33	12%		Move existing bicycle racks closer to the platform or install a new rack on the inbound side of platform
Newton Highlands	Green D	3	5	8	7	114%	Street sign	Install additional bicycle racks (over capacity)
Newton Center	Green D	1	6	7	18	39%	Not specified	Replace or repair existing bicycle racks, remove vandalized bicycles
Reservoir	Green D	0	6	6	31	19%		Replace or repair existing bicycle racks, remove vandalized bicycles
Brookline Village	Green D	3	12	15	25	60%	Street sign	Install additional bicycle racks (near capacity)
Northeastern	Green E	1	2	3	4	75%	Fence	Install additional bicycle racks (near capacity), remove vandalized bicycles
Dudley Square	Silver Washington Street	1	5	6	60	10%	Street sign	No recommendation
East Berkeley Street	Silver Washington Street	1	0	1	10	10%	Parking meter	No recommendation
Tufts Medical Center	Silver Washington Street	1	2	3	22	14%	Street light	No recommendation
Chinatown	Silver Washington Street	6	0	6	0	NP	Street light	Install additional bicycle racks (over capacity)
Downtown Crossing	Silver Washington Street	2	11	13	20	65%	Street sign	Install additional bicycle racks (near capacity)
Boylston	Silver Washington Street	1	8	9	32	28%	Street sign	Install signage directing riders to bicycle racks
Airport Terminals (SL1)	Silver Waterfront	0	3	3	14	21%		Install signage directing riders to bicycle racks
South Station	Silver Waterfront	7	48	55	94	59%	Street sign	Install signage directing bicyclists to Pedal & Park facility, install bicycle racks near recurring non-rack parking
Rockport	Newburyport/Rockport	1	1	2	9	22%	Platform	No recommendation
Gloucester	Newburyport/Rockport	2	4	6	12	50%	Fences	Install additional bicycle racks (near capacity)
Manchester	Newburyport/Rockport	1	9	10	20	50%	Street sign	Install additional bicycle racks (near capacity), install sheltered bicycle racks
Newburyport	Newburyport/Rockport	2	8	10	52	19%	Platform	Move existing racks closer to platform or install signage encouraging riders to utilize existing racks
Ipswich	Newburyport/Rockport	1	4	5	9	56%	Street sign	Install additional bicycle racks (near capacity)
Hamilton/Wenham	Newburyport/Rockport	5	3	8	7	114%	Fences	Move existing bicycle racks closer to platform, install additional bicycle racks (over capacity)
Swampscott	Newburyport/Rockport	1	6	7	20	35%	Platform	No recommendation
Bradford	Haverhill	1	1	2	7	29%	Platform	No recommendation
Reading	Haverhill	0	16	16	17	94%		Install sheltered bicycle racks (near capacity)
Wakefield	Haverhill	0	9	9	15	60%		Install sheltered bicycle racks (near capacity)
Lowell	Lowell	0	15	15	28	54%		Install sheltered bicycle racks (near capacity)
Wilmington	Lowell	1	7	8	26	31%	Street sign	No recommendation
Winchester Center	Lowell	0	8	8	27	30%		Repair or replace bicycle racks
North Leominster	Fitchburg	1	1	2	16	13%	Railing	No recommendation
Ayer	Fitchburg	1	6	7	26	27%	Street sign	No recommendation
Concord	Fitchburg	2	4	6	10	60%	Platform	Install sheltered bicycle racks (near capacity)
Belmont Center	Fitchburg	0	4	4	8	50%		Install sheltered bicycle racks (near capacity)
Worcester	Framingham/Worcester	0	3	3	12	25%		Install signage directing riders to bicycle racks
Grafton	Framingham/Worcester	0	1	1	8	13%		replace or reconfigure bicycle racks (racks are difficult to use)
Westborough	Framingham/Worcester	0	4	4	6	67%		Install sheltered bicycle racks on outbound side, replace or repair existing bicycle racks
West Natick	Framingham/Worcester	3	16	19	32	59%	Fence, street sign	Install sheltered bicycle racks (near capacity)
Natick	Framingham/Worcester	5	7	12	9	133%	Fence, street light	Install additional bicycle racks on Main Street (preferably sheltered), make sure racks are visible
Wellesley Square	Framingham/Worcester	0	4	4	12	33%		Install signage directing riders to bicycle racks
Wellesley Hills	Framingham/Worcester	0	6	6	12	50%		Install sheltered bicycle racks (near capacity)
Auburndale	Framingham/Worcester	0	1	1	16	6%		Install signage directing riders to bicycle racks
Boston Landing	Framingham/Worcester	0	9	9	26	35%		Install racks on Everett Street, remove vandalized bicycles
Lansdowne	Framingham/Worcester	1	2	3	10	30%	Railing	Remove vandalized bicycles
Highland	Needham	2	7	9	12	75%	Not specified	Install sheltered bicycle racks (near capacity)
Franklin	Franklin	3	11	14	20	70%	Street sign	Install additional bicycle racks (near capacity)
Norfolk	Franklin	0	8	8	15	53%		Install additional bicycle racks (near capacity)
Walpole	Franklin	0	6	6	7	86%		Install additional bicycle racks (near capacity)
Norwood Central	Franklin	1	0	1	20	5%	Fence	Remove vandalized bicycles
Norwood Depot	Franklin	1	4	5	10	50%	Platform	Repair or replace bicycle racks
Endicott	Franklin	0	5	5	10	50%		Install bicycle rack (preferably sheltered)

**Table A4-1
Bicycle Parked at Locations Other than at Bicycle Racks, and Recommended Improvements:
All Modes and Lines, 2017–18**

Station	Line	Bicycles Not Parked at Racks	Bicycles Parked at Racks	Total of Bicycles Parked at Racks and Bicycles Not Parked at Racks	Bicycle Parking Spaces at or near Station	Utilization if All Bicycles Where Parked at Racks	Locations of Bicycles not parked at racks	Recommended Improvement
Wickford Junction	Providence/Stoughton	0	3	3	22	14%		Install signage directing riders to bicycle racks
T.F Green Airport	Providence/Stoughton	0	3	3	8	38%		Install signage directing riders to bicycle racks
Providence	Providence/Stoughton	0	56	56	106	53%		Install additional sheltered bicycle racks or bicycle cage, if possible (near capacity)
South Attleboro	Providence/Stoughton	4	6	10	19	53%	Platform	Install additional sheltered bicycle racks or bicycle cage, if possible (near capacity)
Attleboro	Providence/Stoughton	3	5	8	9	89%	Fence	Install bicycle racks at all locations, install signage to direct riders to racks
Mansfield	Providence/Stoughton	2	7	9	10	90%	Street sign	Install new bicycle racks at the Winthrop parking lot before crosswalk to station
Sharon	Providence/Stoughton	2	44	46	81	57%	Street sign	Install additional bicycle racks (near capacity)
Stoughton	Providence/Stoughton	0	9	9	15	60%		Install additional bicycle racks (near capacity)
Canton Center	Providence/Stoughton	0	5	5	10	50%		Install additional bicycle racks (near capacity)
Route 128	Providence/Stoughton	0	9	9	16	56%		Install additional bicycle racks (near capacity), remove vandalized bicycles
Bridgewater	Middleborough/Lakeville	2	6	8	24	33%	Platform	No recommendation
Campello	Middleborough/Lakeville	1	0	1	14	7%	Platform	No recommendation
Brockton	Middleborough/Lakeville	1	3	4	60	7%	Street sign	No recommendation
Montello	Middleborough/Lakeville	1	0	1	23	4%	Platform	No recommendation
Kingston	Kingston/Plymouth	1	3	4	32	13%	Platform	No recommendation
Whitman	Kingston/Plymouth	4	4	8	8	100%	Street sign	Install additional sheltered bicycle racks (over capacity)
Abington	Kingston/Plymouth	4	3	7	8	88%	Platform	Install additional sheltered bicycle racks (over capacity)
South Weymouth	Kingston/Plymouth	1	2	3	24	13%	Platform	No recommendation
Greenbush	Greenbush	0	8	8	16	50%		Install additional sheltered bicycle racks (over capacity)

MBTA = Massachusetts Bay Transportation Authority, MGH = Massachusetts General Hospital, MIT = Massachusetts Institute of Technology, NP = no bicycle parking, SL1 = Silver Line 1, T.F. = Theodore Francis.
Source: 2017–18 Boston Region MPO MBTA Bicycle Parking Inventory.

Appendix B
2017-18 Bicycle Parking Survey Form

Bike Rack Inventory: 2017/2018

Station Name: _____ Rail Line: _____
Data Collector's Name: _____ Date: _____ Day of the Week: _____
Time of Day: _____ Is station attended? _____
Address/Directions to Station _____
Weather: _____

Information to Collect:

Is there a bike rack?	<i>Yes</i>	<i>No</i>	If multiple bike racks exist, please specify how many on the back of this form.		
What type of bike rack is it?	<i>Please see back of this form for options</i>				
How many bicycles are parked there?	_____				
Are there bikes parked at locations other than the bike rack? Where?	_____	How many?	_____		
Are there any bike trails/paths leading to the station? Name of path?	_____				
What condition is the bike trail in?	<i>Good</i>	<i>Fair</i>	<i>Poor</i>		
Do the streets around the station have a designated bike lane? If so, which streets?	_____				
Are there what appears to be abandoned and/or vandalized bicycles at the racks or around the station? If so, how many?	_____				
Does there appear to be any safety concerns (such as lack of lighting) at or around the bike racks and station?	_____				
Are the bike racks in a visible and convenient place to users of the station? If not, are there signs directing users to the bike racks?	_____				
Are the bike racks installed in such a way that they are difficult to use? (I.E. installed upside down or too close to a building) If so please describe why here.	_____				
Are the racks covered from the rain?	<i>Yes</i>	<i>No</i>	<i>Some</i>		
Are there sidewalks leading to the station?	<i>Yes</i>	<i>No</i>	Are there crosswalks leading to the station?	<i>Yes</i>	<i>No</i>
What condition are the sidewalks in?	<i>Good</i>	<i>Fair</i>	<i>Poor</i>	What condition are the crosswalks in?	<i>Good</i> <i>Fair</i> <i>Poor</i>
At what locations are sidewalks missing?	_____				
At what locations are crosswalks missing?	_____				
Is there any place where handicap ramps for curbs are missing? If so, where?	_____				
Are there signalized intersections that pedestrians use to access the station?	<i>Yes</i>	<i>No</i>			
Do these signals have working pedestrian indications? If there is more than one signal please use the space below to indicate which signals have working indications or not.	<i>Yes</i>	<i>No</i>			
Which number bus routes, if any, connect to this station?	_____				
Are there Hubway Stations nearby?	_____				

Additional Comments: _____

Use other side of form for bike rack details and additional comments.

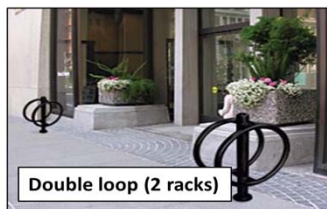
Bike Rack Inventory: 2017/2018

Indicate the # of each type of bicycle rack observed. If there are multiple bike racks, please use workspace below to write details about each rack. Also, please indicate anything odd about any of the racks.

# of racks	Type of Rack	Features	Condition			Visibility & Security		
	Single Dish Rack	# of thin spaces: _____	Good	Fair	Poor	Good	Fair	Poor
	Double Dish Rack	# of thin spaces: _____	Good	Fair	Poor	Good	Fair	Poor
	Ribbon Racks	# of humps: _____	Good	Fair	Poor	Good	Fair	Poor
	Key Rack	# of racks: _____	Good	Fair	Poor	Good	Fair	Poor
	Inverted-U Racks	# of racks: _____	Good	Fair	Poor	Good	Fair	Poor
	Triangle Style Racks	# of triangles: _____	Good	Fair	Poor	Good	Fair	Poor
	Double Loop	# of racks: _____	Good	Fair	Poor	Good	Fair	Poor
	Single/Double Bike Post	# of posts: _____	Good	Fair	Poor	Good	Fair	Poor
	Bike Port	# of spaces: _____	Good	Fair	Poor	Good	Fair	Poor
	Bike Cage	# of spaces: _____	Good	Fair	Poor	Good	Fair	Poor
	Other	Please Specify: _____	Good	Fair	Poor	Good	Fair	Poor

Examples of bike-racks & capacity:

Workspace and/or Notes:



Rack 1:

Rack 2:

Rack 3:

Note: Spaces at ribbon rack = (# of humps * 2) + 1
 Spaces at Triangle rack = # of triangles + 3

Total numbers of Parked Bicycles: _____

Total number of Bicycle Spaces: _____

Additional Comments: _____