

# CHAPTER 7

## BICYCLE PARKING AND PUBLIC BICYCLE REPAIR FACILITIES

## OVERVIEW

Bicycle parking facilities are a fundamental element of bicycle transportation infrastructure. Providing bicycle parking also encourages people to use their bicycles as transportation; people are more likely to use a bicycle if they are confident that they will find convenient and secure parking at their destination.

Providing a designated area for bicycle parking gives a more orderly appearance to a building and prevents people from locking their bicycles to unacceptable fixtures, such as trees, benches, or railings. However, if a bicycle rack appears insecure, does not fit bicycles well, or is in the wrong location, people will not use it.

Another feature that supports bicycling are public repair stands, which provide tools for basic maintenance. Since many people do not carry tools with them, an unexpected malfunction could leave them stranded. When people have the ability to make on-the-spot fixes or fill up a flat tire, it instills confidence that they will be able to continue to ride even when something unexpected happens.

## PUBLIC BICYCLE PARKING

### RACKS

Cambridge has established standards for bicycle racks for city sidewalks and other public property (parks, schools, etc.). These standards are based on ease of use, size, flexibility of placement, design quality, and cost. The most common model is the “post and ring,” but the “swerve” and “u-rack” models are also used, as are more whimsical and artistic designs that meet the standards (see Figure 7.1 - Figure 7.4 for examples of rack types). Most racks are set individually, but occasionally “rail” systems are used where more permanent installations are not feasible.

**Figure 7.1: “Post and ring” style bicycle parking provided in front of EF Education First Building adjacent to North Point Park.**







Figure 7.2: The “Swerve” rack on a rail system enables racks to be located where it is not feasible to drill into pavement.

Through the bicycle parking program, public bicycle parking for approximately 3,000 bicycles have been installed throughout the city to date, including at every public building, with high concentrations in business districts.<sup>1</sup> Individuals or businesses can also request a bicycle rack installation on public property by visiting the [Bicycle Parking Program](#) webpage.<sup>2</sup>

## ON-STREET BICYCLE CORRALS

Because of limited sidewalk space available for bicycle parking, especially in dense business districts, combined with competing sidewalk uses such as accommodating increased pedestrian travel and sidewalk cafés, Cambridge has a program to seasonally utilize on-street parking spaces for bicycle parking stalls. Each stall fits in one vehicle parking spot and provides parking for 10-14 bicycles. Stalls are put into storage for the winter months to allow for unhampered snow plowing operations.

## REGULATIONS

The City has regulations regarding where people can park their bicycles on the public way. For these purposes, the public way primarily means city sidewalks, but also includes public plazas and parks. The principal intent of these regulations is tri-fold:

1. Provide short-term parking for bicyclists in commercial districts
2. Ensure that bicycles are parked in a safe and secure manner
3. Reserve bicycle racks for bicyclists only and not for motorized vehicles such as scooters and motorcycles.





**Figure 7.3: Curb extensions are sometimes built in order to provide space for added bicycle parking, and the “post and ring” model has a compact footprint.**

One of the important ways of meeting these intentions is to remove abandoned bicycles that are taking up valuable spaces that could be used by other bicyclists. A 72-hour maximum time frame for bicycle parking was instituted for bicycle spaces in designated commercial and retail districts, as these are not intended for long-term storage. This is to ensure that those coming to the districts by bicycle are able to find parking quickly and easily.

The regulations also address the fact that parking a bicycle to some fixtures is not acceptable: trees can be damaged, benches rendered unusable, or hand railings be unavailable to those who need them for accessibility reasons. Bicycles may not be

attached to handicap placard sign posts. Finally, the regulations prohibit motorized vehicles from using the bicycle racks.

For complete regulations, please visit the [Parking..Your.Bicycle](#) webpage.<sup>3</sup>

Members of the public can report abandoned bicycles or broken bicycle parking racks using the iReport app.



[cambridgema.gov/  
iReport](http://cambridgema.gov/iReport)



# PRIVATE BICYCLE PARKING

## ZONING REGULATIONS FOR BICYCLE PARKING

The City of Cambridge, through its Zoning Ordinance, has required bicycle parking as part of new development since 1981. The early adoption of bicycle parking benefitted Cambridge's ability to support increased bicycling over time. These requirements, along with other improvements and investments made by the City, have helped to support bicycling as a preferred transportation option in Cambridge. With the dramatic increase in bicycling in Cambridge over the past decade, demand for bicycle parking has grown significantly.

In June 2013, the requirements for bicycle parking in new development underwent a major revision. The

zoning changes clarify the appropriate standards for bicycle parking design, layout and location, and require quantities of bicycle parking that better meet today's demand as well as the City's future goals for bicycling.

By requiring appropriate types and quantities of bicycle parking, the City is able to more effectively, systematically and efficiently manage the needs of the bicycling population, as well as to support the goal of increasing and promoting sustainable transportation use.

For more information about, please visit the [Bicycle Parking Zoning](#) webpage.<sup>4</sup>

Figure 7.2: Privately provided bicycle parking at One Kendall Square.





## BICYCLE PARKING GUIDE

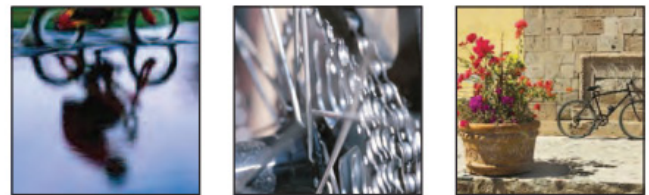
The **Cambridge Bicycle Parking Guide**<sup>5</sup>, released in 2013 to complement the revised zoning regulations, is a resource for developers to ensure compliance with zoning regulations. The guide showcases the City's preferences for types of bicycle racks, spacing between racks, and siting of racks. This is also helpful for property owners who are interested in upgrading existing bicycle parking facilities or supplying additional bicycle parking.

For new buildings and significant renovations, zoning requires that these standards be met, but they should be followed for any new bicycle parking, as they will provide the most useful and effective bicycle parking and will be accessible and visible to people of all ages and abilities.

Full details on bicycle parking layout and zoning requirements are available online and in Appendix E.



### City of Cambridge Bicycle Parking Guide



**Figure 7.3: Weather-protected bicycle parking is desirable where bikes are parked for long periods**





# BICYCLE RACK DESIGN STANDARDS

There are a variety of designs for bicycle racks produced by many manufacturers. Bicycle racks can be purchased as single units, with a capacity of locking 2 bicycles (one on each side), or as multiple units attached together, with a larger capacity. However, not all manufactured bicycle racks meet Cambridge's standards.

Features of an acceptable bicycle rack:

- + Installed on a permanent foundation (e.g., concrete pad) to ensure stability.
- + Securely anchored into or on the foundation with tamper-proof nuts if surface mounted.
- + Support for an upright bicycle by its frame horizontally in two (2) or more places.
- + Keeps both bicycle wheels on the ground.
- + Design that prevents the bicycle from tipping over.
- + Ability to support a variety of bicycle sizes and frame shapes.
- + Space to secure the frame and one or both wheels to the rack with a cable, chain, or u-lock.
- + Diameter of locking pole is no more than 1.5 inches.
- + Galvanized or stainless steel racks are recommended (and required for racks on public property) because they hold up best.

Acceptable racks, like the "Inverted U," "Swerve," and "Post and Ring" racks, have two-point support and fit a variety of bicycle types. Custom designs and "artistic" racks can also be used, provided they meet the performance criteria for bicycle racks.

Figure 7.4: Whimsical racks welcome students at Cambridge Schools.



# PUBLIC BICYCLE REPAIR STANDS

To support people bicycling, the City has put out public bicycle repair stands to assist with minor things that are readily fixed, but that need the proper tools, such a tire that needs air, a loose chain, or a handlebar that needs adjustment.

There are four stands currently in the city (Fresh Pond Reservation, Harvard Square, Cambridge Main Library, and Kendall Square) but through the City's Participatory Budgeting Process, eight (8) additional stands will be established throughout the city in 2015-2016. In addition, the universities in the city and several private entities have these facilities available.

For more information, please visit the **Bikes in Cambridge** webpage.<sup>6</sup>

Figure 7.5: Example of a public repair stand and on-street bike corral located in Kendall Square.





## ENDNOTES

- 1 [on-line map in the works, provide link here – hold space for nos]
- 2 “Bicycle Parking Program.” Cambridge Community Development Department, <http://www.cambridgema.gov/CDD/Transportation/projects/bikeparking>.
- 3 “Parking Your Bicycle.” Cambridge Community Development Department, <http://www.cambridgema.gov/CDD/Transportation/gettingaroundcambridge/bybike/Parking.aspx>
- 4 “Bicycle Parking Zoning Modifications.” Cambridge Community Development Department, <http://www.cambridge-ma.gov/CDD/Projects/Planning/bicycleparkingzoning>
- 5 “Cambridge Bicycle Parking Guide.” Cambridge Community Development Department, [http://www.cambridgema.gov/~media/Files/CDD/Transportation/Bike/Bicycle\\_Parking\\_Guide\\_20130926.ashx](http://www.cambridgema.gov/~media/Files/CDD/Transportation/Bike/Bicycle_Parking_Guide_20130926.ashx)
- 6 “Bikes in Cambridge.” Cambridge Community Development Department, <http://www.cambridgema.gov/CDD/Transportation/bikesincambridge.aspx>