

CHAPTER 7

BICYCLE PARKING AND PUBLIC BICYCLE REPAIR FACILITIES

OVERVIEW

Bicycle parking facilities are a fundamental element of bicycle transportation infrastructure. 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, which may interfere with walkway accessibility. However, if a bicycle rack appears insecure, does not fit bicycles well, or is in an inconvenient location, people will not use it.

Another element that supports bicycling is the public repair stand, which provides 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.



In the past 20 years the changes that have occurred around biking are nothing short of amazing. Of course, there is safety inherent in simply having more bicyclists on the streets... However, combined with all of the signage/pavement markings and safety outreach programs, bicycling has become such a wonderful way to move about and have fun at the same time! I've been encouraging friends who seem fearful to give it a try!

– Chas Studen, Cambridgeport



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 more whimsical and artistic designs that also meet the standards (see Figure 7.1 - Figure 7.6 for examples of rack types). Most racks are set individually, but occasionally “rail” systems are used where more permanent installations are not feasible (Figure 7.4).

Through the bicycle parking program, public bicycle parking for approximately 3,000 bicycles has been installed throughout the city to date, including at every public building, with high concentrations in business districts. A map of bike parking locations in Cambridge is available [online](#). Individuals or businesses can also request a bicycle rack installation on public property by visiting the [Bicycle Parking Program webpage](#).



Figure 7.1: Curb extensions are sometimes built in order to provide space for added bicycle parking, and the “post and ring” model has a compact footprint.



Figure 7.2: Bike rack designs need to accommodate the diversity of bike shapes and sizes, including cargo bikes and adaptive bikes.



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



Figure 7.4: The “Swerve” rack on a rail system enables racks to be located where it is not feasible to drill into pavement.

ON-STREET BICYCLE CORRALS

Sidewalk space in Cambridge is often limited by competing uses, including space for pedestrians and outdoor seating, especially in dense urban areas. To make room for bicycle parking in these areas, the City seasonally installs temporary bicycle parking stalls in some on-street parking spaces. Each stall fits in one vehicle parking spot and provides parking for 7-14 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 are permitted to 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 7.5: On-street bike corral.



Figure 7.6: “Post and ring” style bicycle parking provided in front of EF Education First Building adjacent to North Point Park.

One of the important ways of maintaining bicycle parking is to remove bicycles locked to racks that have been abandoned. 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 being parked at the bicycle racks, including motorcycles and motorized scooters.

For complete regulations, please visit the [Bicycle Parking Program](#) webpage.

Members of the public can report abandoned bicycles or broken bicycle parking racks using **Commonwealth Connect** (powered by SeeClickFix).

<http://commowealthconnect.io>



PRIVATE BICYCLE PARKING

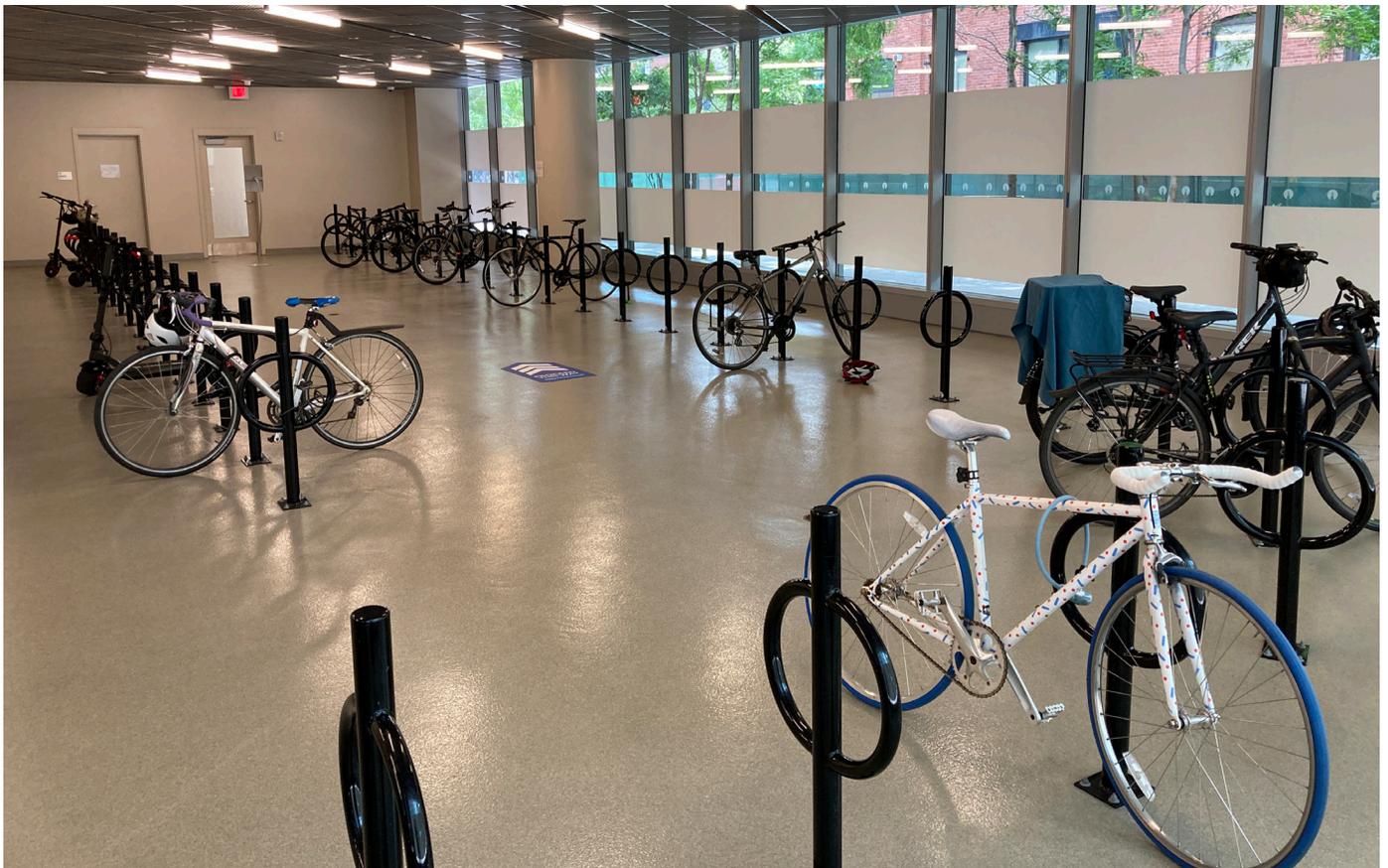
ZONING REGULATIONS FOR BICYCLE PARKING

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 codified the appropriate standards for bicycle parking design, layout and location and established required quantities of bicycle parking to meet the needs and goals for Cambridge.

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.



Indoor bike parking room.

BICYCLE PARKING GUIDE

The **Cambridge Bicycle Parking Guide**⁵, 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 design 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 I.



City of Cambridge Bicycle Parking Guide



Long-term bicycle parking at an MIT Dormitory.

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.



Whimsical racks welcome students at Cambridge Schools.

PUBLIC BICYCLE REPAIR STANDS

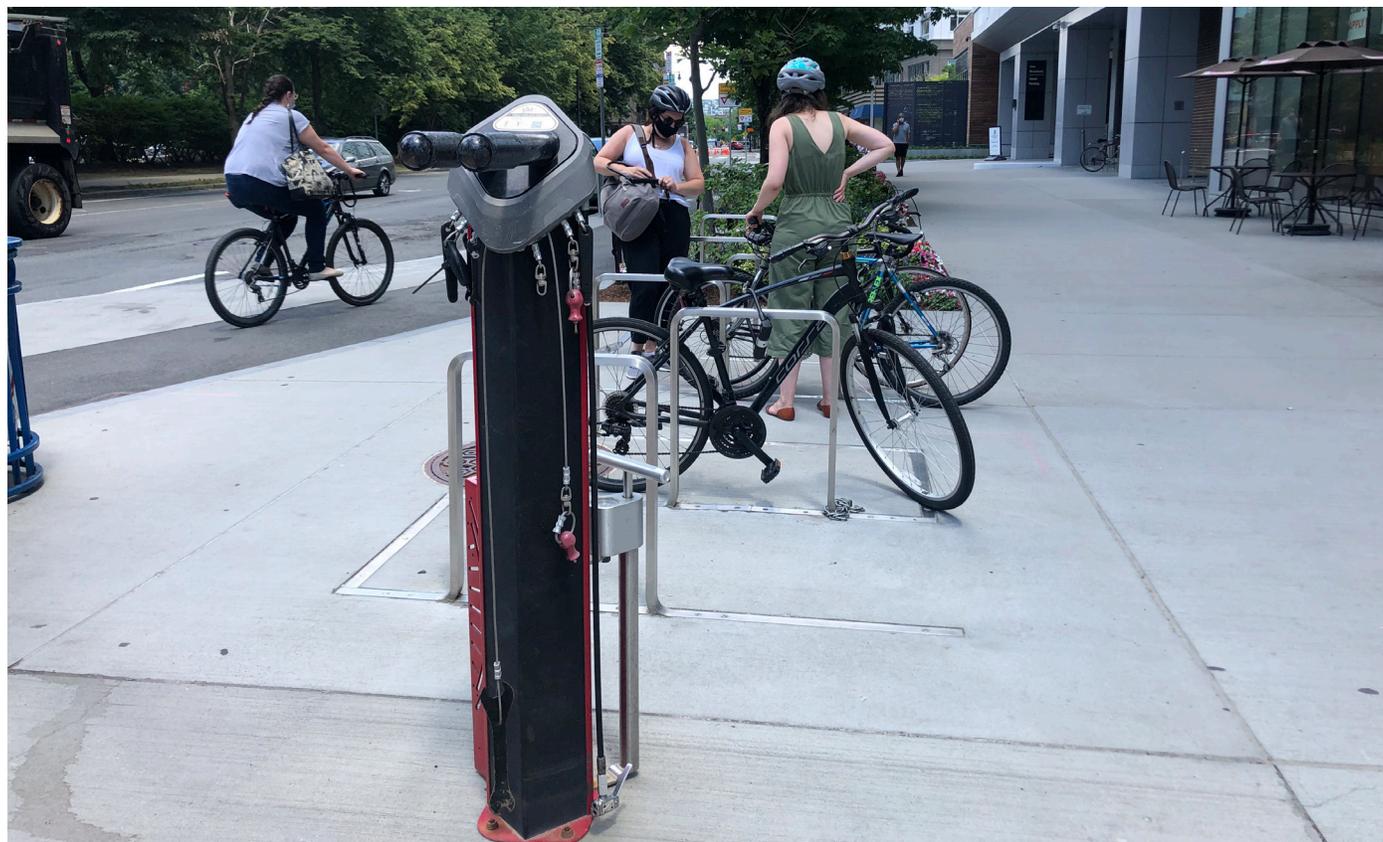
To support people bicycling, the City has installed public bicycle repair stands around Cambridge. These stands have tools to help fix minor maintenance issues, such as adding air to a tire, tightening a loose chain, or adjusting your handlebars.

There are thirteen stands currently in the city, eight of which were funded through the City's 2015-2016 Participatory Budgeting Process. A [map of all public repair stands](#) helps people easily locate stands and any issues with the stands can be reported via the City's [SeeClickFix portal](#). In addition, the universities in the city and several private entities have these facilities available.

For more information, please visit the [Getting Around Cambridge By Bike](#) webpage.



Public bike repair stand in use.



Example of a public repair stand and bike parking located in Kendall Square.