

Appendix 9A

Bicycle Parking Design Manual, 2011

Many people refrain from riding their bicycles for basic transportation because of a lack of secure bicycle parking spaces. The purpose of this Bicycle Parking Design Manual is to assist with the selection and installation of bicycle parking.

Description

Convenient, secure bicycle parking is an essential element in Louisville Metro's efforts to increase bike riding. Inadequate facilities and fear of theft are major deterrents to bicycle transportation. If you see bicycles regularly locked to trees and posts, you probably need bicycle parking at that location. Effective bicycle parking requires a properly designed rack in an appropriate location for the type of use.

Type and Location

There are many types of bicycle racks and lockers available. Some are suitable for certain situations but not others, and some designs are unsuitable anywhere. There are two general categories of bicycle parking requirements:

- *Short-term* (Class II) parking is needed where bicycles will be left for short stops. It requires a high degree of convenience (as close to destinations as possible). At least some short-term bicycle parking should be protected from the weather (a portion can be unprotected, since demand tends to increase during dry weather).
- *Long-term* (Class I) parking is needed where bicycles will be left for hours at a time. It requires a high degree of security and weather protection, with well-designed racks in covered areas, lockers, storage rooms, or fenced areas with restricted access.

Visibility

Racks should be highly visible so cyclists can spot them immediately when they arrive from the street. A visible location also discourages theft and vandalism.

Security

Adequate lighting and surveillance is essential for the security of the bicycles and the users. Bicycle racks and lockers must be well anchored to the ground to avoid vandalism and theft.

Weather Protection

A portion of bicycle parking should be protected from the weather (some short-term bicycle parking can be unprotected since bicycle use tends to increase significantly during fair weather). This can use an existing overhang or covered walkway, a special covering, weatherproof outdoor bicycle lockers, or an indoor storage area.

Clearance

Adequate clearance is required around racks to give cyclists room to maneuver, and to prevent conflicts with pedestrians or parked cars. Racks should not block access to building entrances or fire hydrants.

Design and Location Recommendations

Below are detailed suggestions for selecting and locating bicycle parking and storage facilities.

Rack Selection

All bicycle racks are not created equal. There are many styles to choose from, some of which are most appropriate for a particular situation, and some which are unsuitable or even harmful. For detailed recommendations see the Association of Pedestrian and Bicycle Professional's *Bicycle Parking Guidelines* (APBP 2002; at www.apbp.org/resource/resmgr/publications/bicycle_parking_guidelines.pdf).

Bicycle parking may be provided in floor, wall or ceiling mounted racks. They should meet these requirements:

- Holds the bicycle frame, not just a wheel, supported in two places.
- Accommodates a wide range of bicycle frame types (e.g., recumbent, step-through, and foldable frames), sizes, wheel sizes.
- Allows the frame and both wheels to be secured.
- Can be used with a U-shaped shackle lock.
- Is covered with material that will not chip the paint of a bicycle that leans against it.
- Does not have hazards, such as sharp edges.



Finding a Good Location

To ensure your bicycle parking will be used, be sure to choose locations that are easy to find, convenient to use and secure enough to reasonably safeguard against bicycle theft. Facilities can be located where bicycles already park, or where recommended by bicycle advisory groups. If you want to install bicycle parking on a sidewalk in front of your building, will require a permit from Louisville Metro Public Works.

Short-term Parking

Short-term bicycle parking provides shoppers, customers, messengers and other visitors who generally park for two hours or less a convenient and readily accessible place to park bicycles. It should be located within 50 feet of the building entrance that cyclists use. Where there is more than one building on a site, or where a building has more than one main entrance, the parking must be distributed to serve all buildings or main entrances. If more than 10 short-term spaces are required, at least 50% should be covered.

Locate parking in visible and prominent locations - if cyclists are unaware of the parking it won't be used. A bicycle rack that is visually or physically isolated will not be used and is a target for thieves. Only locate bicycle racks on a sidewalk or path where there is adequate clearance for pedestrian traffic. A rail or eyelets secured onto a building wall can sometimes provide a place to

lock a bicycle where it is out of the way of traffic. Consider adequate space to maneuver a bicycle and its gear.

Long-term Parking

Long-term bicycle parking provides employees, students, residents, commuters and others who stay at a site for several hours a **secure** and **weather-protected** place to store their bicycles. Locate on site or within 750 feet of the site - daily bicycle commuters are generally willing to walk a short distance, about three blocks, if they are confident the parking is secure. The following are suitable:

- A location that is only accessible to employees or residents.
- Within view or within 100 feet of an attendant or security guard.
- An area that is monitored by a security camera.

Cyclists are more likely to park where their bicycles are safe and protected from weather. At least 50% of long-term bicycle parking should be covered. Indoor storage is best. It is often possible to find a secure room, or an area in a basement or under stairs. Bicycle parking can often use odd-shaped interior spaces that have few other purposes. Wall-mounted racks are well suited to indoor storage. Locate in well-lit areas - lighting increases security of property and personal safety. In areas where security is in question or where there is limited opportunity to provide weather protection, enclosed bike lockers are a good best solution. In some situations cyclists pay a monthly fee to lease such lockers.



Spacing and Siting Standards

Each bicycle parking space should be easily accessible. Cyclists should be able to securely lock their bicycles without undue inconvenience and their bicycles should be reasonably safeguarded from intentional or accidental damage. Consider the space that a rack full of bicycles will take up, not just the rack itself. Also consider that cyclists require a sufficient pathway in and out of the parking area.



Each parking space must be accessible without moving another bicycle - generally, allow for 2 feet by 6 feet for each bicycle parking space. Provide an aisle at least 5 feet wide behind all bicycle parking to allow room for maneuvering - just as automobile drivers need additional space to maneuver in and out of parking spaces.

Covered Bicycle Parking

Prolonged exposure to rain can rust a bike's metal frame and components and the sun's ultraviolet rays can deteriorate a bike's soft seat and tires. Cyclists who value their bicycles will thank you for providing weather protection by giving you their business. Cover must be permanent - the cover should be designed to protect the bicycle from rainfall and be at least 7 feet above the floor or ground. Take advantage of existing overhangs or awnings - this is a creative, low-cost way of providing some weather protection. If there is no existing opportunity to provide cover, enclosed bicycle lockers may be the best solution.

**For more information or assistance, please contact
Jefferson County Public Works 574-5810.**