A Guide to BICYCLE PARKING

As a form of transportation, bicycling gets people to and from work, school, shopping and recreation without adding to the area’s traffic problems. But the lack of secure, convenient parking is consistently cited by bicyclists as a primary reason they don’t use bicycles for more trips of this nature. Providing proper bicycle parking facilities could spur greater use of this transportation system asset.
Why provide racks?

Bicyclists, like motorists, look for convenient and secure parking places near their destinations. Often, bicyclists have few choices and will simply lock bicycles to nearby stationary objects. As anyone knows who has walked past bicycles locked to signs, railings and parking meters on a busy downtown sidewalk, this isn't ideal. Such an unstructured approach to bike parking inconveniences pedestrians and promotes the feeling that bicycles don't belong. Well-designed, attractive and well-placed racks make it obvious that bicycles are an important part of the transportation system.

What kind of bicycle rack is best?

The inverted "U" bicycle rack is recommended by the DRCOG pedestrian and bicycle committee.

Simple, functional and durable, the inverted "U" rack allows the user to lock a bicycle frame and wheel(s) with either a standard U-shaped lock or a chain/cable and lock. The rack has no edges, seams or hardware to pose a hazard or become unsightly. A properly finished rack will not mar a bicycle frame. The inverted "U" design can complement most streetscape and architectural environments to provide bicycle parking without interfering with sidewalk or storefront space. Because "U" racks are single free-standing units, there is flexibility in the number provided and their placement.

Other types of racks may satisfy bicycle parking concerns, but the advantages of the inverted "U" should make it the first choice for a regionally standard rack. The inverted "U" signifies bike parking as clearly as a parking meter indicates car parking. This design should become less expensive as it becomes a standard item available from several suppliers.

Why provide bike lockers? Aren't racks enough?

Unlike a car, a bicycle doesn't provide its own barrier to weather, vandalism and theft. When a bicycle is to be parked most of the day, or overnight, even the most secure rack and lock does little to protect it from expensive, disabling damage. Bicycle storage lockers can solve this problem by making parking as secure for the bicyclist as for the motorist.

Bicycle storage lockers should be considered wherever bicyclists will need to park for more than just a few hours. Any place where parking structures and lots have been provided for long-term car parking is an obvious place to locate bike lockers. Lockers are in high demand at transit facilities and destinations where security is a significant concern. Ideally, an employer who provides space or money for car parking would also provide bicycle lockers.

What local governments can do is work with developers at the start of a project to integrate bicycles into the project's final transportation and parking goals. In many cases, bicycle lockers may be seen as an attractive asset to the overall project.

What bicycle storage locker to buy?

A typical bicycle storage locker provides a secure space large enough to accommodate the user's bicycle and associated items. Rectangular models usually include lockable doors at each end with a vertical-diagonal partition, separating the space for two bicycles. Free-standing, wedge-shaped lockers are also available. Most models of either type permit various assembly configurations to suit the preference of the locker purchaser. The DRCOG pedestrian and bicycle committee recommends bicycle storage lockers that are:

- Fully enclosed and weather-tight.
- Made of durable materials that resist theft and vandalism.
- Accessible only to user and owner by key lock.
- Installed on a concrete surface with fasteners that can't be removed by standard tools.
Several locker manufacturers are meeting these criteria. Models vary widely in price, appearance, quality and materials. Because the concerns of parties purchasing bike lockers may differ, no one model is recommended for all purposes.

When purchasing a bicycle locker, it's important to include the shipping and installation costs and the products and floor space needed for the locker(s)' final assembly. Buyers should work with the supplier to ensure that all pieces needed for the desired configuration are included. Discussing this matter with someone who has gone through the process of purchasing and installing lockers can save money, time and aggravation.

DRCOG RideArrangers (458-POOL) is a resource for anyone interested in purchasing bicycle lockers. RideArrangers has coordinated joint locker purchases that allowed the Regional Transportation District, government agencies and private employers to realize significant cost savings by buying lockers in large quantities. The information and experience provided by this program can help bicycle locker buyers select the right models to meet their needs and budgets.

### Locating your bicycle parking

When selecting locations of racks or lockers, keep in mind that security and convenience are the two major concerns of bicyclists.

#### Security

Unobstructed parking, with clear views from inside buildings and located adjacent to heavily traveled streets and sidewalks, will deter theft and vandalism. Parking space with good lighting and some shelter from weather is also desirable, particularly for long-term parking. If lockers are located within sight of a building front or parking garage entrance, the security risk is minimized. Put lockers in a garage corner or around back by the dumpsters and thieves and vandals have been given a relaxed work environment.

#### Convenience

As with car parking, the bicyclist will want to park as close as possible to the final destination. Unlike car parking, the cost to park a bicycle and its size are not limiting factors. For this reason, a bicyclist is likely to lock the bicycle to any secure object near the destination.

Although this may seem obvious, examples of poorly located racks are everywhere. A bicyclist who has a choice between locking a bike to the brand-new rack behind your building or the ornamental railing at the front window will give you an unused rack and a misused railing. The inverted "U" rack is easily and attractively integrated into the public space curbside or near building fronts, providing an obvious and appealing parking space that will not interfere with pedestrian traffic.
Whereas parking for cars is regulated and enforced by local governments, bicycle parking is not addressed in many communities and developments. Most local governments specify automobile parking through a code that considers factors such as zoning/location, land use and the size of the development. This method is appropriate for car parking because of the high costs and large amount of land associated with parking motor vehicles.

Because of the comparatively low cost and small space requirements, bicycle parking regulations need not be as rigorous. The DRCOG bicycle committee recommends that parking be provided for bicycles, by racks and lockers, which is no less than 5 percent of the parking spaces provided for cars. Requiring the developer to provide one inverted "U" bicycle rack for every 40 automobile parking spaces fulfills this suggested minimum for bicycle parking. This recommended formula is based on review of bicycle parking ordinances of local governments throughout the United States and Canada. Some communities with bicycle parking ordinances allow some reduction in car parking spaces when additional bicycle parking is supplied, providing an economic incentive to the developer/property owner to supply ample bicycle parking. The City and County of Denver allows a reduction of one auto parking place for every six bicycle spaces provided.

Although an ordinance based on the "5 percent formula" may not render the right amount of bike parking in every case, it accomplishes the fundamental goal of ensuring that bicycle parking will be provided.

For more information

The DRCOG pedestrian and bicycle committee includes members from throughout the Denver area who are at the forefront of the field of bicycle and pedestrian transportation. Their knowledge and experience is invaluable for anyone in the Denver area concerned with planning and promoting a transportation system that includes walking and bicycling. Call DRCOG at 455-1000. We have the information you need and can put you in touch with people who have the expertise you seek.

Specifications for the recommended bicycle rack:

- **Type:** Bicycle racks shall be of inverted "U" design. This inverted "U" shall be composed of a single tube (as opposed to straight sections joined by elbow connectors), bent to a single arc which smoothly flows into the straight post sections of the inverted "U."

- **Height:** 36" minimum from base to top of inverted "U."

- **Width:** 18" minimum between outside walls of parallel tube sections

- **Tubing diameter:** 1.9" outside diameter minimum. 2" OD recommended.

- **Exterior coating:** The exterior surface of the rack shall be non-abrasive, non-marring and durable. The coating durability implies that routine maintenance (painting, sanding) is unnecessary. Galvanized or stainless steel is not acceptable.

- **Fastening** Three-bolt fasteners used to attach the rack to the mounting surface shall be vandal-resistant -- unable to be removed by common tools or foreseeable forces upon the fastener or the rack itself.