



Bicycle Parking Guidelines, 2nd Edition: A set of recommendations from the Association of Pedestrian and Bicycle Professionals

Executive Summary

Bicycle Parking Guidelines, 2nd Edition: A set of recommendations from the Association of Pedestrian and Bicycle Professionals is a tool for sustainable transportation. Bicycle parking is a critical strategy for promoting bicycling for transportation and recreation. Convenient, easily used, and secure bicycle parking encourages people to replace some of their car trips with bicycle trips and helps legitimize cycling as a transportation mode by providing parking opportunities equal to motorized modes. APBP encourages communities and professionals to use this document to make informed decisions about planning excellent spaces and facilities for people to park bicycles.

In the spring of 2002, the Association of Pedestrian and Bicycle Professionals published *Bicycle Parking Guidelines*, a basic guide to the selection and placement of bicycle racks specifically for short-term parking. Since then, the rapid growth of bicycling, particularly in urban areas, has led to many innovations in the field of bicycle parking. This second edition of *Bicycle Parking Guidelines* updates the original guide and adds material on long-term and sheltered parking, as well as event parking, in-street bicycle parking, and bicycle transit centers. The new edition is now a comprehensive resource for practitioners and includes (highlighted items are **new to the second edition**):

- General bicycle parking principles and definitions of bicycle parking terms
- Guidance for both short- and **long-term** bicycle parking
- Elements of a good rack or **locker**, including **specific performance criteria**
- **Maintenance best practices**
- **Sample site plans and diagrams to help avoid blunders in rack and locker placement**
- **Sample quantity requirements for bicycle parking to meet need by land use**
- **A worksheet for programming bicycle parking for a building or cluster of buildings**
- **Abundant images and charts to illustrate concepts and conditions**

APBP's 2002 document has been cited and included in many bicycle plans. This edition, *Bicycle Parking Guidelines, 2nd edition*, is appropriate for adoption by local agencies as official bicycle parking policy.

Chapter 1 – Introduction

This chapter introduces the core distinction between short- and long-term parking, differentiating criteria for parking duration, fixture types, weather protection, security and typical land uses.

As the cover of the first edition noted, “I would ride to work if there was a safe place to lock my bike.” One of the most common obstacles for bicyclists is the lack of bicycle parking at their destination. Bicycle parking encourages people to ride, and has specific benefits, even for non-cyclists:

- Bicycle parking is good for business
- Designated, well-designed bicycle parking promotes a more orderly streetscape and preserves the pedestrian right of way
- Bicycle parking helps legitimize cycling as a transportation mode by providing parking opportunities equal to motorized modes.

Chapter 2 - Facilities

This chapter gives typical bicycle dimensions, describes specific performance criteria for bicycle racks and lockers, compares various facilities to the criteria, and provides useful guidance for proactive maintenance of both short- and long-term facilities. (Appendix A includes dimensions for a wide range of non-conventional bicycle types.)

Performance Criteria

The size of the bicycle – its height, length, and width – all matter when selecting appropriate bicycle parking. While schoolyard racks may have functioned reasonably well for small bicycles ridden by children to a neighborhood school, such racks typically miss the mark for adult cyclists seeking secure short- or long-term parking. As described in the first edition of the *Guidelines*, APBP continues to recommend a bicycle rack that:

- Supports the bicycle in at least two places, preventing it from falling over
- Allows locking of the frame and one or both wheels with a U-lock
- Is securely anchored to ground
- Resists cutting, rusting and bending or deformation.

Similar new guidelines are provided for selection of bicycle lockers.

With the explosion of bicycling in North America, new bicycle rack designs come on the market often. *Bicycle Parking Guidelines, 2nd Edition*, defines a number of performance criteria which can be used to evaluate any bicycle rack. Factors to consider include cost and space efficiency (note that even more costly and less efficient bicycle parking technologies fare favorably when compared to the cost and space requirements for motor vehicle parking). Other key factors when comparing several types of racks and lockers are materials, maintenance, aesthetics, security, safety, usability, and capacity. The guide also provides 14 pages of tables that analyze the performance of the most common rack types, categorizing them into three groups: “Recommended”, “Acceptable” and “Other”.

Site Planning

Site planning requirements for bicycle parking differ substantially depending on whether the use is to be short-term or long-term. Aside from the intrinsic difference between short-term and long-term site planning, the kinds of fixtures typically associated with these parking types also have unique site design requirements.

- Short-term parking usually consists of bicycle racks located on the sidewalk or street in front of a building or destination. The site planning focus is on convenience, utility, and the attempt to improve security for the rack and the parked bicycle.
- Long-term parking uses a wider variety of fixture types and site plan layouts. It includes racks in cages and bicycle rooms, as well as lockers located in a variety of different settings, indoors and outdoors. Because long-term parking areas are frequently located in low pedestrian traffic areas or out-of-the-way locations, site design focus is on ensuring the safety of users while maintaining exclusive access to these areas.

Seven distinct diagrams provide dimensions for specific rack and locker site layouts.

Special Cases

- Event bicycle parking: A chart showing types and characteristics of event bicycle parking operations is provided, each type (valet, attended, unattended) is described, and the benefits of providing bicycle parking at events are listed.
- Sheltered bicycle parking: Guidance is given for sheltered bicycle parking (also called a bicycle oasis), including the roof span, setbacks and clearances, local and federal guidelines, lighting and signage, and a sample dimensional footprint diagram.
- In-street bicycle facilities: Removing bicycle racks from the sidewalk and consolidating them into a designated bicycle parking facility on the street (also called a bicycle corral) may provide many community benefits. This section of the guide provides detailed guidance for choosing the right location, developing a design, demarcation, visibility, and steps to develop an in-street parking program. Four sample site layouts are included.
- Bicycle transit centers: The guide briefly describes these facilities, which offer secure and weather-protected bicycle parking typically near major rail or bus hubs.

Chapter 3 – Policies, Requirements and Codes

Bicycle parking policies, requirements and codes should be based on best practices and a city's bicycling potential. Recommended bicycle parking policies or codes should:

- Specify number of bicycle spaces by land use
- Require long-term parking for all workplaces, transit stations and multi-unit residential
- Require adequate short-term parking for other land uses
- Provide site planning requirements
- Provide rack and locker design requirements.

Plan for desired rates of bicycle parking based on unit count, the proportion of building square footage, and building occupancy. Such units of measurement are commonly used during plan check and can be integrated easily into the planning process. With trends toward automobile parking maximums, it is unwise to link bicycle parking to vehicle parking requirements as a reduction in car parking requirements could have a deleterious effect on bicycling parking.

Sample basic parking requirements are provided for residential, civic, commercial, and industrial or manufacturing land uses, both for cities with a current bicycle commute mode share between one and five percent, and for urbanized or high mode share areas. Tables indicate types of activity for each land use (e.g., single or multi-family dwellings) and show both long-term and short-term parking requirements.

Find a collection and comparison of bicycle parking ordinances at:

<http://www.bicyclinginfo.org/engineering/parking.cfm>.

Appendices

Appendix A includes charts showing the dimensions of conventional bicycles and other bicycle types, the implications of bicycle shapes on bicycle rack and locker design, how to maximize bicycle parking density, and clearances.

Appendix B offers guidance in programming a building or cluster

The full text of *Bicycle Parking Guidelines, 2nd Edition*, is available for purchase from the Association of Pedestrian and Bicycle Professionals at www.apbp.org. The guide is priced at \$20 for APBP members, \$45 for non-APBP members.

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