

TO: The Mayor and Ames City Council

FROM: Department of Planning and Housing

DATE: March 1, 2019

SUBJECT: Bicycle Parking Standards

The following information was originally provided to City Council at their request in September 2017. The City Council then requested on August 28, 2018 that staff resend the memo for their review prior to determining if the issue should be placed on an agenda for discussion. On January 22, 2019, the City Council asked that this item be placed on a future City Council agenda. This memo includes an overview of general bicycle parking considerations and examples from other Midwestern communities.

Bicycle parking requirements are intended to help meet the day-to-day mobility needs of residents, employees, and visitors. Bicycle parking ordinances help to expand mobility choices by providing a greater expectation that secure parking will be available near destinations for those who may choose to cycle, rather than drive. Lack of bicycle parking at a destination may deter bicycle ridership or result in use of unintended site features, e.g trees, signs, to secure bikes.

Bicycle parking includes two separate types of user needs. **Long term secured parking for a bicycle is most commonly used for residential and employee related needs.** Secured parking often takes the form of a bike locker. Some cities also address needs for locker rooms with long term bike parking requirements. **Unsecured bicycle parking spaces are for short term use and commonly available for customers or visitors to a site.** Short term parking for bicycles is consists of bicycle racks where an individual secures their bicycle to the apparatus. Bicycle parking ordinances commonly address the mix of long and short term parking facilities, location of facilities, and dimensions of bicycle parking facilities.

Bicycle parking can be mandatory, incentivized as an allowable substitute for vehicle parking, or a combination approach of both mandatory and allowing for substitutions. Parking requirements can be based upon the number of required vehicle parking spaces, square footage of the use, or expected occupant levels. One common approach is to require a minimum number of bicycle parking spaces (2 to 5 spaces) and scale up to approximately 5%-10% of the vehicle parking on a site. Cities with a high share of bicycle ridership may have higher standards to meet community needs.

Substitutions can be based upon the amount of space needed for bicycle parking or the percentage of bicycle spaces provided on a site. Depending on the type of rack design and its placement, each “loop”

can serve two bicycles. One example would be for substitution of one vehicle parking space for every 5 bicycle parking spaces with a cap on the total amount of parking space substitutions.

There are a larger variety of cities with bicycle parking ordinances. Staff identified a short list of cities from the Midwest as examples below. Attached to this memo is the Des Moines 2017 proposed bicycle parking standards.

1) Bicycle Parking Minimum Standards:

Dubuque,
Iowa City,
Des Moines,*
Champaign (IL),
Columbia (MO),
Lawrence (KS),
Minneapolis (MN)

2) Bicycle Parking Substitution:

Minneapolis (MN)
Cedar Rapids,
Des Moines*

* denotes proposed ordinance

Cedar Rapids Substitution example:

A reduction in parking shall be granted at a rate of one (1) space for each five (5) rack bike stand. Required bicycle parking must be within fifty-feet (50') of a principal entrance and shall permit the locking of the bicycle frame and one (1) wheel to the rack frame.

Des Moines Draft Standards (August 3, 2017)

135-4.5 Bicycle Parking³

4.5.1 MINIMUM BIKE PARKING RATIOS

Long-term (Class A) and short-term (Class B) bicycle parking spaces must be provided in accordance with the minimum ratios established in [Table 4.5-1](#). Uses for which no bicycle parking ratio is established in [Table 4.5-1](#) are not required to provide off-street bicycle parking.

TABLE 4.5-1. BICYCLE PARKING RATIOS		
USE CATEGORY	Minimum Spaces Required	
Use Subcategory	Class A Bicycle Spaces	Class B Bicycle Spaces
Specific Use Type		
RESIDENTIAL		
Household Living		
Buildings with 6 or fewer dwelling units	None	None
Buildings with 7 or more dwelling units	1 per dwelling unit for first 50 units, then 1 space per each additional 2 dwelling units	1 per 15 dwelling units; minimum 2 spaces
Group Living	0.33 per staff	1 per beds; minimum 2 spaces
PUBLIC, CIVIC AND INSTITUTIONAL		

³ Entire section is new.

TABLE 4.5-1. BICYCLE PARKING RATIOS		
USE CATEGORY	Minimum Spaces Required	
Use Subcategory	Class A Bicycle Spaces	Class B Bicycle Spaces
Specific Use Type		
College or University	Established in accordance with 135-4.3.7 .	
Fraternal Organization	0.125 per 1,000 sq. ft.	0.25 per 1,000 sq. ft.
Hospital	0.067 per 1,000 square feet (1/15,000 sq. ft.)	0.033 per 1,000 square feet (1/30,000 sq. ft.)
Library or Cultural Exhibit	0.125 per 1,000 sq. ft.	0.5 per 1,000 sq. ft.
Parks & Recreation	Established in accordance with 135-4.3.7 .	
Religious Assembly	None	1 per 200 seats; minimum 2 spaces
School	0.25 per classroom	1 per classroom
COMMERCIAL		
Adult Entertainment	0.125 per 1,000 sq. ft.	0.25 per 1,000 sq. ft.
Broadcast or Recording Studio	0.125 per 1,000 sq. ft.	0.02 per 1,000 sq. ft.
Business or Trade School	0.1 per classroom	1 per classroom
Commercial Service	Capacity of more than 500 = 4 spaces plus 1 space per 500-person capacity	0.25 per 1,000 sq. ft.
Eating & Drinking Places	0.125 per 1,000 sq. ft.	0.25 per 1,000 sq. ft.
Entertain. & Spectator Events	500 seats or less = 4 spaces More than 500 seats = 10 spaces	500 seats or less = 1 space per 125 seats More than 500 seats = 4 spaces plus 1 space per 250 seats
Financial Service	0.125 per 1,000 sq. ft.	0.25 per 1,000 sq. ft.
Lodging	1 per 40 rooms	1 per 40 rooms; minimum 2 spaces
Office	0.125 per 1,000 sq. ft.	0.02 per 1,000 sq. ft.
Parking, Non-Accessory	None	1 per 25 motor vehicle spaces
Retail Sales	0.125 per 1,000 sq. ft.	0.25 per 1,000 sq. ft.
Sports and Rec., Participant		

4.5.2 FLOOR AREA USED FOR BICYCLE PARKING

Areas within a building that are used to provide bicycle parking that complies with the bicycle parking design and location requirements of this section will not be counted as floor area for the purpose of calculating motor vehicle parking requirements.

4.5.3 GENERAL BICYCLE PARKING DESIGN AND LOCATION REQUIREMENTS

All bicycle parking spaces are subject to the following general design and location requirements.

- A.** Bicycle parking spaces must be illuminated if accessible to users after dark.
- B.** Bicycle parking spaces must be located to be readily visible by the public or by building users, except in the case of Class A parking spaces located in secure areas accessible only to employees, staff or residents;
- C.** Bicycle parking spaces must be accessible without climbing stairs, going up or down a slope of more than 12%, and via a route on the property that is designed to minimize conflicts with motor vehicles and pedestrians.
- D.** All bike racks must be located at least 2 feet in all directions from any obstruction, including other bike racks, walls, doors, posts, or columns.
- E.** Nonresidential uses may use up to 2 required automobile parking spaces as space for providing bicycle parking.
- F.** All required bicycle parking spaces must have minimum dimensions of 2 feet in width by 6 feet in length, with a minimum overhead vertical clearance of 7 feet.

4.5.4 DESIGN AND LOCATION OF CLASS A BICYCLE PARKING SPACES

In addition to the general bicycle parking design and location requirements of [135-4.5.3](#), all required Class A bicycle parking must meet the following requirements:

- A.** Class A bicycle parking spaces may not be in dwelling units or on dwelling unit balconies.
- B.** Unless clearly visible from the main building entrance, a sign indicating the location of all Class A bicycle parking spaces must be prominently displayed near the main entrance to the building or facility, and additional signs must be provided as necessary to ensure easy way-finding. A "bicycle parking" sign must also be displayed on or adjacent to any indoor room or area designated for bicycle parking.
- C.** Class A bicycle parking spaces must protect the entire bicycle, its components and accessories against theft and inclement weather, including wind-driven rain and snow. Acceptable forms of protection include (i) individual bicycle lockers, (ii) attended parking areas, (iii) monitored parking areas, (iv) restricted-access parking areas, or (v)

other comparable arrangements approved by the community development director.

- D.** Except in the case of bicycle lockers with a separate access door for each bike or attended facilities, all Class A bicycle parking spaces must be designed to allow bicycles to be securely locked to a bicycle rack.

4.5.5 DESIGN AND LOCATION OF CLASS B BICYCLE PARKING SPACES

In addition to the general bicycle parking design and location requirements of [135-4.5.3](#), all required Class B bicycle parking must meet the following requirements:

- A.** Class B bicycle parking must be visible from the main public building entrance and be at least as conveniently located as the most convenient non-disabled motor vehicle parking space serving the subject use. If no motor vehicle parking is provided, Class B bicycle parking spaces must be located within 75 feet of a building entrance.
 - B.** Class B bicycle parking spaces must be located on private property unless the city engineer approves a location within the public right-of-way.
 - C.** Class B bicycle parking spaces must be provided in the form of bike racks that comply with the city's "Bike Rack Policy."
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