



## CITY of NOVI CITY COUNCIL

**Agenda Item 2**  
**July 8, 2013**

**SUBJECT:** Approval of Zoning Ordinance Text Amendment 18.267 to amend the City of Novi Zoning Ordinance at Article 25, "General Provision", to add Section 2526 "Bicycle Parking Facilities Requirements" to provide bicycle parking requirements and bicycle parking area layout standards. **FIRST READING**

**SUBMITTING DEPARTMENT:** Department of Community Development, Planning Division *Bailey*

**CITY MANAGER APPROVAL:** *[Signature]*

**BACKGROUND INFORMATION:**

The City of Novi promotes bicycling as a healthy, environmentally-friendly alternative for getting around the community. The City's adopted Non-Motorized Master Plan recognizes the importance of providing bicycle parking to encourage the use of bicycles for transportation.

The Plan recommends updating the City's ordinances to include bicycle parking requirements and design standards, a natural progression from the emphasis and interest in the pathways to insuring that there is a place to park. The lack of secure bicycle parking keeps people from using bikes for transportation because leaving a bike unattended and unsecured can easily result in damage or theft. When bicycle parking is not secure or convenient, the parking will not be used. Conversely, providing bicycle parking at various destinations encourages and provides the option for people to use their bicycles for transportation. In addition, providing a designated area for bicycle parking can provide a more orderly appearance to a building, and will discourage bicyclists from locking bikes to unacceptable fixtures, such as trees, sign posts, benches or railings.

In order to develop a well-balanced comprehensive bicycle parking ordinance, Planning Staff reviewed many sets of bicycle parking standards and requirements. The review included bicycle parking ordinances from communities in Michigan (Ann Arbor, East Lansing, Grand Rapids, Houghton, Kalamazoo, Meridian Township), and from across the country (Naperville, Illinois; Salt Lake City, Santa Monica, California; and Orlando, Florida).

Staff also reviewed bicycle parking recommendations made in the City's Non-Motorized Master Plan (attached), and the following additional sources:

- The recommendations listed in the Association of Pedestrian and Bicycle Professionals' publication, "Bicycle Parking Guidelines" (attached),
- The Institute of Transportation Engineers' publication, "Promoting Sustainable Transportation Through Site Design" (excerpt attached), and
- The information posted on the Pedestrian and Bicycle Information Center's web page.

Staff then worked with the City Attorney and prepared a set of proposed bicycle parking requirements and standards to include in the Zoning Ordinance.

### Ordinance Amendment

The proposed ordinance changes consider many factors to help the City of Novi ensure that new and reworked developments provide adequate, quality bicycle parking facilities that will encourage more people to bicycle to their destination. The factors considered include the following:

- **Bicycle Parking Demand:** The proposed Ordinance amendment requires almost all land uses to provide some basic bicycle parking spaces. Published standards, other ordinances and the Non-Motorized Master Plan were consulted to formulate the bicycle parking space requirements. Many communities, including Naperville, Salt Lake City and Santa Monica, use 5% of the required automobile parking spaces as the minimum number of required bicycle parking spaces. Many college communities including Ann Arbor, Grand Rapids, Houghton and Meridian Township use 10% of automobile parking spaces as their minimum.

The proposed ordinance uses 5% of required automobile parking spaces as its base but, the minimum number required also varies by use, taking into account potential bicyclists, i.e. shoppers, students, employees, recreation facility users, etc. Uses with a higher potential will be required to provide a greater number of bicycle parking spaces. Public and quasi-public uses such as recreation facilities, libraries and museums that have a very high potential of patrons, especially families, arriving by bicycle, will be required to provide a minimum of 10% of required automobile parking spaces. Uses where guests are unlikely to arrive by bicycle but employees may arrive by bicycle will provide fewer spaces such as warehouse stores which will only be required to provide a total of four bicycle parking spaces.

Facilities that incorporate bicycle parking spaces will be able to reduce their automobile parking space requirements by one space for every ten uncovered and five covered bicycle parking spaces up to 10% of the required automobile parking spaces. (Section 2526.4)

- **Layout Design:** The Ordinance will require bicycle parking to be located along the primary entrance route to the site to be easily spotted and placed in a location visible from the entrance to discourage theft and vandalism. The location of bicycle parking will be placed so they do not block pedestrian routes. The recommended "Inverted U Shape" bike rack will not include protruding bars or be so low as to be a hazards to pedestrians. Bicycle parking and automobile parking will be separated by a landscape area



Covered bike parking under roof overhang with bike lockers

to help prevent vehicles from damaging parked bicycles. Bicycle parking areas will be well-illuminated to provide theft protection, personal security and reduce accidents. (Section 2526.6)

- Weather Protected:** Larger developments that require 10 or more bicycle parking spaces, will be required to provide 50% of the required bicycle parking spaces as covered bicycle parking to further encourage bicycle use. As an example, a 45,000 square foot general office building that is required to provide 203 automobile parking spaces will be required to provide 10 bicycle parking spaces, and one-half, or 5, of the spaces will be required to be covered. Covered parking could be in a building, under a canopy or under an overhang. (Section 2526.1.c.). See pictures provided to illustrate possible covered parking.



Stand Alone Covered Bike Parking

- Landbanking:** The proposed Ordinance includes a landbanking provision to allow a property owner to defer installing a portion of the required bicycle parking spaces when the applicant can adequately demonstrate that the required number of bicycle parking spaces are not needed to serve the actual proposed use. (Section 2526.3)
- Costs:** According to the Pedestrian and Bicycle Information Center, the cost to install a typical bike rack for two bikes is \$150 to \$300. The cost to provide covered parking spaces adjacent to buildings designed with overhangs will be the same. If bicycle lockers are preferred by the property owner (but are not required by the ordinance), they can be installed for a price ranging from \$1,000 to \$4,000 each (each locker parks two bikes, see example above). The cost for free-standing canopies or awnings attached to buildings could fall somewhere between. In comparison, an average automobile parking space costs approximately \$2,200 and can be constructed for about \$12,000 per space in a parking garage.

The Walkable Novi Committee has endorsed a bicycle parking ordinance as part of implementing the City's Non-Motorized Master Plan (excerpts attached). The Committee reviewed the proposed bicycle parking ordinance and provided positive comments. The Planning Commission held a public hearing on the proposed amendment and recommended approval of the ordinance amendment. City Council is asked to consider the proposed ordinance amendments for approval of a First Reading. The draft amendment is attached.

**RECOMMENDED ACTION: APPROVAL OF FIRST READING** of Zoning Ordinance Text Amendment 18.267 to amend the City of Novi Zoning Ordinance at Article 25, "General Provision", to add Section 2526 "Bicycle Parking Facilities Requirements" to provide bicycle parking requirements and bicycle parking area layout standards.

	1	2	Y	N
Mayor Gatt				
Mayor Pro Tem Staudt				
Council Member Casey				
Council Member Fischer				

	1	2	Y	N
Council Member Margolis				
Council Member Mutch				
Council Member Wrobel				

**Proposed Bicycle Parking Facility Requirements  
Zoning Ordinance Amendment**

**Clean Version**

STATE OF MICHIGAN  
COUNTY OF OAKLAND  
CITY OF NOVI

ORDINANCE NO. 13- 18 – 267

AN ORDINANCE TO AMEND ORDINANCE NO. 97-18 AS AMENDED, THE CITY OF NOVI ZONING ORDINANCE, AMENDING ARTICLE 25, GENERAL PROVISIONS, ADD NEW SECTION 2526, TO PROVIDE BICYCLE PARKING REQUIREMENTS AND TO PROVIDE BICYCLE PARKING AREA LAYOUT STANDARDS.

THE CITY OF NOVI ORDAINS:

**Part I.** That Ordinance No. 97-18, the City of Novi Zoning Ordinance, as amended, Article 25, General Provisions, is hereby amended to add a new Section 2526 to read as follows:

**Sec. 2526. - Bicycle Parking Facility Requirements.**

The bicycle parking requirements of this section are intended to facilitate the use of bicycles as a means of transportation in the City of Novi consistent with the City of Novi Non-Motorized Master Plan, by requiring bicycle parking facilities to be provided for certain uses as specified in this section.

1. As used in this section, the following terms have the meanings indicated.
  - a. Bicycle Parking Space. An area meeting the parking space depth and width requirements in subsection 6 immediately adjacent to a bicycle rack that allows for the parking and locking of a bicycle to the rack in a secure manner.
  - b. Bicycle Parking Facility. An area of bicycle parking spaces and related maneuvering lane(s).
  - c. Covered Bicycle Parking Space. A bicycle parking space that is located under a roof, or an overhang or awning adjacent to a wall, or that is located entirely within a building.
  - d. Maneuvering lane. A four (4) feet wide area adjacent to bicycle parking spaces for maneuvering bicycles into a bicycle parking space.
  - e. Public Bicycle Route. A signed bicycle route, a bicycle lane on a public street, a pathway designed to accommodate bicycles, or in the absence of any of those, the closest public street adjacent to a use that may be lawfully used by a bicyclist travelling to or from that use.

2. Bicycle Parking Facilities General Requirements

At the time of erection of any new principal building or new parking lot, the enlargement of any principal building by ten percent (10%) or more of the existing gross floor area, or the enlargement of any automobile parking lot by ten percent (10%) or more of the number of existing parking spaces, a bicycle parking facility shall be required and be provided for as part of site plan review under section 2516 in accordance with the following requirements:

- a. Provide the minimum number of bicycle parking spaces by type of use as determined in accordance with the following Bicycle Parking Space Requirement Table. For those uses not specifically mentioned, the requirements for bicycle parking spaces shall be in accord with a use which the approving body considers is similar in type. When the number of required bicycle parking spaces results in a fractional space, any fraction up to and including one-half (1/2) shall be disregarded and fractions over one-half (1/2) shall require one (1) bicycle parking space.

**Bicycle Parking Space Requirement Table.**

Land Use	Minimum Number of Bicycle Parking Spaces
Auto wash (self-service or coin-operated), essential services, one-family residential, two-family residential, mobile home sites, shared elderly housing, and accessory buildings that do not add to the automobile parking requirements	None
Multiple-family residential, and housing for elderly (except shared elderly housing)	One (1) covered bicycle parking space for each five (5) dwelling units- four (4) covered spaces minimum
K-12 public and private schools	Three (3) spaces per classroom, ten (10) spaces minimum
Retail (except as listed elsewhere in table), personal services, laundromats, restaurants (except fast food), microbreweries, brewpubs, billiard parlors, banks, business offices,	Five percent (5%) of required automobile spaces, minimum two (2) spaces

Land Use	Minimum Number of Bicycle Parking Spaces
industrial, research and development, and warehouses	
Shopping centers, places of assembly (theaters, auditoriums, stadiums, arenas), indoor or outdoor recreation facilities (unless specifically listed), colleges and business schools, and places of worship	Five percent (5%) of required automobile spaces, minimum eight (8) spaces
Community centers, libraries, museums, public swimming pools, private recreation facilities accessory to a residential development, and public parks	Ten percent (10%) of required or provided automobile parking spaces, minimum eight (8) spaces
Pet boarding, mini warehouse, mortuary, fueling station, nursery, greenhouse, day care centers, automatic car wash, recreational or motor vehicle sales, recreational or motor vehicle service centers, motels, furniture stores, appliance stores, household equipment repair shops, and showrooms of a plumber, decorator, electrician, or similar trade	Two (2) spaces
Warehouse, lumber and building material stores with over 75,000 square feet, golf courses, private clubs, banquet halls, conference centers, exposition facilities, fast food restaurants, and hotels	Four (4) spaces
Medical offices, hospitals, congregate elderly housing, assisted living convallescent care, and nursing homes	One (1) space for each 20 employees on the maximum shift, minimum two (2) spaces

- b. Off-street bicycle parking facilities may be located in any yard subject to meeting the parking setback requirements of Section 2400, the

Schedule of Regulations, including the pertaining footnotes. The site plan approval may allow bicycle parking facilities in the required front yard parking setback when the location is between a public bicycle route and the principal building, and no waiver of any landscape requirement in Section 2509 will be required.

- c. Bicycle parking facilities shall be located on the parcel that the bicycle parking serves, and if all non-zoning ordinance City permits and approvals are obtained, may be approved within the road right-of-way adjacent to the principal building(s) in a location that would be similar to the location of street trees, street furniture or pedestrian amenities, and located so pedestrian and bicycle travel on non-motorized facilities in the road right-of-way would not be compromised.
- d. Bicycle parking facilities shall be located along the principal building entrance approach line and be clearly visible and easily accessible from the approach and building entrance being served.
- e. Bicycle parking facilities shall be no greater than 120 feet from the entrance being served or the nearest automobile parking space to that entrance.
- f. When four (4) or more bicycle parking spaces are required for a building with multiple public entrances served by automobile parking, the site plan approval may require the spaces in increments of two (2) to be provided in multiple bicycle parking facilities to serve more than one (1) of those entrances.
- g. Minimum required bicycle parking spaces shall not be replaced by any other use unless and until equal facilities are provided elsewhere.

3. Deferrals/Landbanking.

Upon the written request and satisfactory showing by the applicant that complying with the bicycle parking requirements in this section is not necessary to serve actual bicycle parking needs for the proposed use, or in the case of covered spaces, is not practical, the site plan approval for the activity requiring the provision of bicycle parking spaces may allow deferral of actual installation of some of the required bicycle parking facility by including on the site plan an area designated as landbanked bicycle parking facilities(s) for future



construction in accordance with the requirements at the time of site plan approval subject to the following requirements:

a. Deferral of actual construction by landbanking shall only be allowed for the number of required spaces in excess of two (2).

b. An area approved for landbanked bicycle parking facilities shall be maintained in compliance with the approved site plan and may not be used for any other purposes.

c. Upon any change in use or occupancy of a site where a landbanked bicycle parking facility has been approved, and no more than once per year, the Community Development Department may conduct a review to determine if installation of a landbanked bicycle parking facility is necessary to serve actual bicycle parking needs at the site. Upon determining such a necessity, the Department shall notify the property owner of the determination and basis for it, and of a time within which the installation is to be completed.

d. A property owner may install some or all of a landbanked bicycle parking facility at any time after providing written notice to the Community Development Department and obtaining all required permits.

4. Automobile Parking Space Reduction Bonus.

When the required number of automobile parking spaces exceeds twenty (20) spaces, the number of required automobile parking spaces may be reduced by one (1) space for every ten (10) uncovered bicycle parking spaces provided and by one (1) space for every five (5) covered bicycle parking spaces provided, up to a maximum of ten percent (10%) of the required automobile parking spaces.

5. Covered Bicycle Parking Space Requirement.

When the required number of bicycle parking spaces exceeds ten (ten) parking spaces, fifty percent (50%) of the bicycle parking spaces shall be covered bicycle parking spaces.

6. Bicycle Parking Facility Layout Standards.

Bicycle parking area(s) shall be laid out, constructed and maintained in accordance with the following standards and regulations:

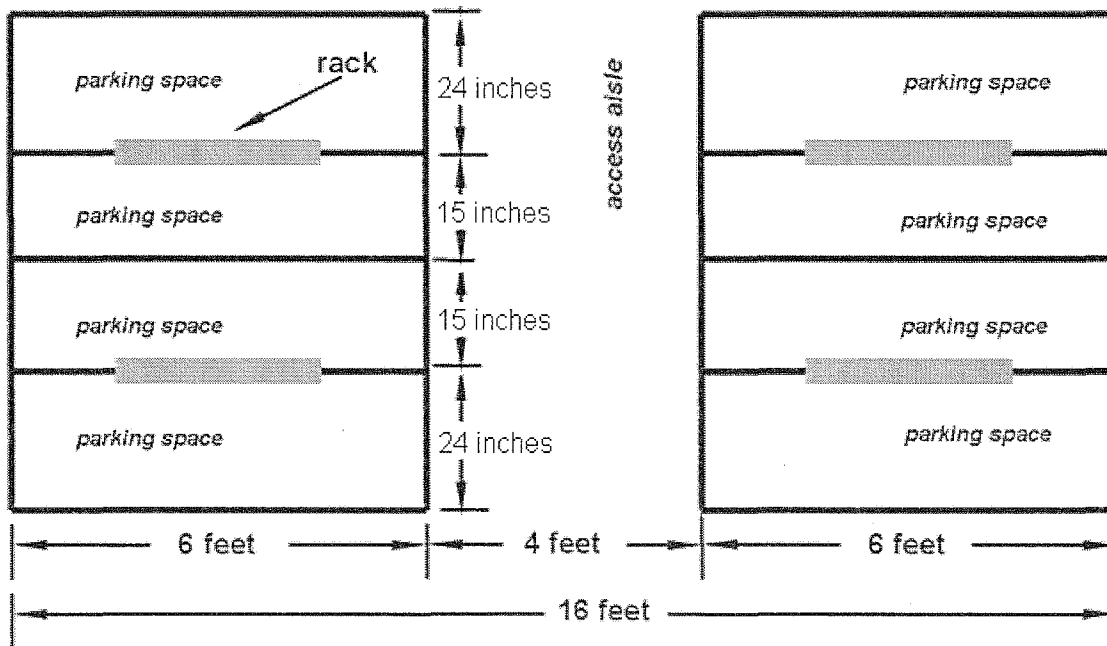
- a. Plans for the layout of bicycle parking facilities shall be in accord with the following minimum requirements:

Bicycle Parking	Maneuvering Lane Width	Parking Space depth	Parking Space width	Total Width Of One Tier Of Spaces Plus Maneuvering Lane	Total Width Of Two Tiers Of Spaces Plus Maneuvering Lane
0° (parallel) to 90°	Four (4) feet	Two (2) feet single 2.5 feet double	Six (6) feet	Ten (10) feet	Sixteen (16) feet

- b. All bicycle parking spaces shall be paved and adjacent to a bicycle rack of the inverted "U" design, that is solid, cannot be easily removed with common tools, provides at least two contact points for a bicycle, is at least three (3) feet in height, and permits the locking of a bicycle through the frame and one wheel with a standard U-Lock or cable in an upright position. The rack shall be securely anchored in concrete or asphalt. Alternative installations and designs may be considered if the proposed rack design functions similar to the inverted "U" design.
- c. All bicycle parking facilities shall be accessible from adjacent street(s) and pathway(s) via a paved route that has a minimum width of six (6) feet.
- d. All bicycle parking facilities shall be separated from automobile parking spaces and access aisles by a raised curb, landscape area, sidewalk, or other method that complies with all city ordinances.
- e. Upon the written request of an applicant, the site plan approval for an activity requiring the provision of bicycle parking spaces may allow a waiver or modification of the bicycle parking layout, location, and design requirements in this section, and/or the landscaping requirements in Section 2509 upon a satisfactory showing by the applicant that an alternative layout, location and design is necessary due to site constraints and will adequately serve the needs of the site to service the bicycling public.

7. Bicycle Parking Lot Layout Illustration.

## Bicycle Parking Layout Illustration



### PART II.

**Severability.** Should any section, subdivision, clause, or phrase of this Ordinance be declared by the courts to be invalid, the validity of the Ordinance as a whole, or in part, shall not be affected other than the part invalidated.

### PART III.

**Savings Clause.** The amendment of the Novi Code of Ordinances set forth in this Ordinance does not affect or impair any act done, offense committed, or right accruing, accrued, or acquired or liability, penalty, forfeiture or punishment, pending or incurred prior to the amendment of the Novi Code of Ordinances set forth in this Ordinance.

### PART IV.

**Repealer.** All other Ordinance or parts of Ordinance in conflict herewith are hereby repealed only to the extent necessary to give this Ordinance full force and effect.

**PART V.**

**Effective Date: Publication.** Public hearing having been held hereon pursuant to the provisions of Section 103 of Act 110 of the Public Acts of 2006, as amended, the provisions of this Ordinance shall be published within fifteen (15) days of its adoption by publication of a brief notice in a newspaper circulated in the City of Novi stating the date of enactment and effective date, a brief statement as to its regulatory effect and that a complete copy of the Ordinance is available for public purchase, use and inspection at the office of the City Clerk during the hours of 8:00 A.M. to 5:00 P.M., Local Time. The provisions of this Ordinance shall become effective seven (7) days after its publication.

MADE, PASSED, AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF NOVI,  
OAKLAND COUNTY, MICHIGAN, ON THE \_\_\_ DAY OF \_\_\_\_\_, 2013.

\_\_\_\_\_  
Robert J. GATT, MAYOR

\_\_\_\_\_  
MARYANNE CORNELIUS, CITY CLERK

Ayes:  
Nays:  
Abstentions:  
Absent:

MEMO FROM  
OFF-WEEK PACKET  
JUNE 27, 2013



## MEMORANDUM

**TO:** CLAY PEARSON, CITY MANAGER  
**THROUGH:** BARBARA MCBETH, DEPUTY DIRECTOR COMMUNITY DEVELOPMENT  
**FROM:** MARK SPENCER, AICP, PLANNER *Mark*  
**SUBJECT:** BICYCLE PARKING ORDINANCE  
**DATE:** JUNE 26, 2013

*6/27/13  
Timmy [unclear]  
Coral [unclear]  
For upcoming  
consideration.*

The City of Novi promotes bicycling as a healthy, environmentally-friendly way of getting around the City of Novi. The City's adopted Non-Motorized Master Plan recognizes the importance of providing bicycle parking to encourage the use of bicycles for transportation.

The Plan recommends updating the City's ordinances to include bicycle parking requirements and design standards. The lack of secure bicycle parking keep people from using bikes for transportation because leaving a bike unattended and unsecured can easily result in damage or theft. When bicycle parking is not secure or convenient, it will not be used. Conversely, providing bicycle parking at various destinations encourages and provides the option for people to use their bicycles for transportation. In addition, providing a designated area for bicycle parking can provide a more orderly appearance to a building, and will discourage bicyclists from locking bikes to unacceptable fixtures, such as trees, sign posts, benches or railings.

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### Ordinance Amendment

The proposed ordinance changes consider many factors to help the City of Novi ensure that new and reworked developments provide adequate, quality bicycle parking facilities that will encourage more people to bicycle to their destination. The factors considered include the following:

- **Bicycle Parking Demand:** The proposed Ordinance amendment requires almost all land uses to provide some basic bicycle parking spaces. Published standards, other ordinances and the Non-Motorized Master Plan were consulted to formulate the bicycle parking space requirements. Many communities, including Naperville, Salt Lake City and Santa Monica, use 5% of the required automobile parking spaces as the minimum number of required bicycle parking spaces. Many college communities including Ann Arbor, Grand Rapids, Houghton and Meridian Township use 10% of automobile parking spaces as their minimum.

The proposed ordinance uses 5% of required automobile parking spaces as its base but, the minimum number required also varies by use, taking into account potential bicyclists, i.e. shoppers, students, employees, recreation facility users, etc. Uses with a higher potential will be required to provide a greater number of bicycle parking spaces. Public and quasi-public uses such as recreation facilities, libraries and museums that have a very high potential of patrons, especially families, arriving by bicycle, will be required to provide a minimum of 10% of required automobile parking spaces. Uses where guests are unlikely to arrive by bicycle but employees may arrive by bicycle will provide fewer spaces such as warehouse stores which will only be required to provide a total of four bicycle parking spaces.

Facilities that incorporate bicycle parking spaces will be able to reduce their automobile parking space requirements by one space for every ten uncovered and five covered bicycle parking spaces up to 10% of the required automobile parking spaces. (Section 2526.4)

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Covered bike parking under roof overhang with bike lockers

pedestrians. Bicycle parking and automobile parking will be separated by a landscape area to help prevent vehicles from damaging parked bicycles. Bicycle parking areas will be well illuminated to provide theft protection, personal security and reduce accidents. (Section 2526.6)

- **Weather Protected:** Larger developments that require 10 or more bicycle parking spaces, will be required to provide 50% of the required bicycle parking spaces as covered bicycle parking to further encourage bicycle use.



Stand Alone Covered Bike Parking

As an example, a 45,000 square foot general office building that is required to provide 203 automobile parking spaces will be required to provide 10 bicycle parking spaces, and one-half, or 5, of the spaces will be required to be covered. Covered parking could be in a building, under a canopy or under an overhang. (Section 2526.1.c.). See pictures provided to illustrate possible covered parking.

- **Landbanking:** The proposed Ordinance includes a landbanking provision to allow a property owner to defer installing a portion of the required bicycle parking spaces when the applicant can adequately demonstrate that the required number of bicycle parking spaces are not needed to serve the actual proposed use. (Section 2526.3)
- **Costs:** According to the Pedestrian and Bicycle Information Center, the cost to install a typical bike rack for two bikes is \$150 to \$300. The cost to provide covered parking spaces adjacent to buildings designed with overhangs will be the same. If bicycle lockers are preferred by the property owner (but are not required by the ordinance), they can be installed for a price ranging from \$1,000 to \$4,000 each (each locker parks two bikes, see example above). The cost for free-standing canopies or awnings attached to buildings could fall somewhere between. In comparison, an average automobile parking space costs approximately \$2,200 and can be constructed for about \$12,000 per space in a parking garage.

The Walkable Novi Committee has endorsed a bicycle parking ordinance as part of implementing the City's Non-Motorized Master Plan (excerpts attached). The Committee reviewed the proposed bicycle parking ordinance and provided positive comments. The Planning Commission held a public hearing on the proposed amendment and recommended approval of the ordinance amendment. City Council will be asked to consider the proposed ordinance amendments at an upcoming meeting. The draft amendment is attached.



MEMO TO  
PLANNING COMMISSION  
MAY 8, 2013

## MEMORANDUM



**TO:** PLANNING COMMISSION  
**FROM:** MARK SPENCER, AICP, PLANNER *Mark Spencer*  
**SUBJECT:** PROPOSED BICYCLE PARKING FACILITY REQUIREMENTS  
ZONING ORDINANCE AMENDMENT  
**DATE:** MAY 8, 2013

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On February 13, 2013, the Planning Commission held a public hearing and reviewed a proposed Zoning Ordinance amendment to add bicycle parking requirements and bicycle parking area layout standards to Section 2505, Off-Street Parking Requirements. At this meeting, the Planning Commission postponed action on the matter and asked staff and the City Attorney to review and refine the language of the amendment, and to bring it back to the Planning Commission for a recommendation to City Council.

Since that meeting, staff and the City Attorney reviewed and redrafted the bicycle parking amendment as a new stand-alone Section 2526, Bicycle Parking Facility Requirements. The redrafted amendment generally contains the same standards and requirements that were included in the previous proposed amendment. The most significant change is a new Bicycle Parking Space Requirement Table. Instead of including the bicycle parking space requirements with the automobile parking space requirement table in Section 2505, a new shorter table was developed grouping uses that have similar bicycle parking space requirements. The attached Table for Discussing Bicycle Parking Space Requirements highlights the categories used to develop the proposed Bicycle Parking Space Requirement Table included in the proposed amendment. A copy of my February 6, 2013 memo to the Planning Commission that outlines the scope of the proposed amendment is included with this packet.

Since, the proposed amendment is now a new section to the Zoning Ordinance, therefore, another public hearing was scheduled. At this time, the Planning Commission is asked to hold a public hearing on May 15, 2013 and forward a recommendation to the City Council.

If you have any questions or comments on this matter, please feel free to contact Mark Spencer in the Community Development Department at 248-347-0475 or [mspencer@cityofnovi.org](mailto:mspencer@cityofnovi.org).

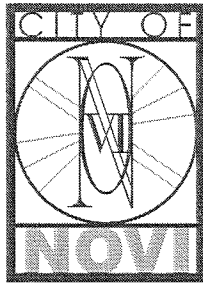
## Bicycle Parking Comparison of Spaces Required

**Bicycle Parking - Comparison of Spaces Required**

**Mark Spencer June 12, 2013**

<b>Use</b>	<b>Ann Arbor</b>	<b>Naperville</b>	<b>Kalamazoo</b>	<b>Meridian Twp.</b>	<b>East Lansing</b>	<b>Grand Rapids</b>	<b>Houghton</b>	<b>Proposed Novi</b>
Office (general)	10%	5% min. 3	1 per 1000 sq. ft. plus 1 per 5 employees max 25	10% min. 2 max 50	10% for first 50 auto spaces , & 5% for next 50 & 2.5% after	10% min 3	10%	5% 2 min.
Office (medical)	14%	5% min. 3	1 per 1000 sq. ft. plus 1 per 5 employees max 25	10% min. 2 max 50	1 per 5 spaces first 50, & 1 per 10 next 50 & 1 per 25 after	10% min 3	10%	1 per 20 employees (5% of employees none for customers) 2 min.
Financial Institution	10%	5% min. 3	1 per 1000 sq. ft. 1 per 1000 sq. ft. plus 1 per 5 employees max 25	10% min. 2 max 50	1 per 5 spaces first 50, & 1 per 10 next 50 & 1 per 25 after	10% min 3	10%	5% 2 min.
Research and Development	10%	5% min. 3	1 per 5 employees Max 30	10% min. 2 max 50	1 per 5 spaces first 50, & 1 per 10 next 50 & 1 per 25 after	10% min 3	10%	5% 2 min.

PLANNING COMMISSION  
MINUTES  
JUNE 12, 2013



cityofnovi.org

# PLANNING COMMISSION MINUTES

CITY OF NOVI

Regular Meeting

June 12, 2013 7:00 PM

Council Chambers | Novi Civic Center | 45175 W. Ten Mile  
(248) 347-0475

## CALL TO ORDER

The meeting was called to order at or about 7:00 PM.

## ROLL CALL

**Present:** Member Greco, Member Lynch, Chair Pehrson, Member Zuchlewski

**Absent:** Member Anthony, Member Gutman, Member Prince

**Also Present:** Barbara McBeth, Deputy Director of Community Development; Mark Spencer, Planner; Gary Dovre, City Attorney.

## PUBLIC HEARINGS

### 1. ZONING ORDINANCE TEXT AMENDMENT 18.266, BIKE PARKING

Public hearing for the Planning Commission's recommendation to the City Council for an Ordinance to amend the City of Novi Zoning Ordinance at Article 25, General Provision, adding the new Section 2526, to provide Bicycle Parking Requirements and to provide Bicycle Parking layout standards.

Planner Mark Spencer said on February 13<sup>th</sup>, the Planning Commission's held a public hearing and reviewed a proposed bicycle parking zoning ordinance amendment and provided staff with favorable comments. At the recommendation of the City Attorney, the Planning Commission postponed action on the amendment so staff and the City Attorney could further review and refine the language of the amendment before the Planning Commission makes a recommendation to Council. Since the revised amendment proposes a new stand-alone bicycle parking section in the Zoning Ordinance, Section 2526, a new public hearing is being held on the amendment.

The redrafted amendment separates the bicycle and automobile parking requirements to add clarity. The proposed amendment generally contains the same standards and requirements that were included in the previous proposed amendment. It includes requirements for the number of bicycle parking spaces, space size, space location, rack type and also includes provisions for granting a reduction in the number of required automobile parking spaces when larger numbers of bicycle parking spaces are provided.

The most significant change in the draft amendment presented tonight is a new simplified Bicycle Parking Space Requirement Table which provides formulas for calculating the required number of parking spaces by use. Instead of including the bicycle parking space requirements with the automobile parking space requirement table in Section 2505, a new shorter table was developed grouping uses that have similar bicycle parking space requirements.

The proposed ordinance will require almost all uses to provide bicycle parking spaces. Bicycle parking space demand was developed using recommendations made in the City's Non-Motorized Master Plan, standards from the Association of Pedestrian and Bicycle Professionals and a review of bicycle parking requirements and standards in other communities. For each type of land use, the number of spaces required was reviewed and adjusted after taking into account potential bicyclists to each type of use. Uses with a higher potential of having bicyclist visit their site are required to provide a greater number of bicycle parking spaces. Although the number of bicycle parking spaces required seems high, it is about half the number required by many Michigan college town cities that require bicycle parking including Ann Arbor, East Lansing, Grand Rapids and Houghton.

Another significant improvement is the inclusion of a land banking provision to defer building bicycle parking spaces when the applicant can adequately demonstrate that the required number of bicycle parking spaces is not needed to serve the actual use proposed. Space on the site would be set aside to

install the bicycle parking in the future if the use or the parking space demand changes.

For many years, the City of Novi has promoted bicycling as a healthy and environmentally friendly method of transportation and the City has built miles of bicycle infrastructure to connect people to destinations. Safe secure bicycle parking will help encourage more people to bicycle to their destinations. The cost of \$75 to \$150 per space to install a bike rack and the fact that bicycle shelters with racks can be installed for as little \$500 per space makes the cost of providing bicycle parking areas a very small percentage of the cost of providing automobile parking areas.

Tonight, Planning Staff is asking the Planning Commission to make a recommendation to City Council on the proposed bicycle parking requirements and design standards Zoning Ordinance amendment.

Chair Pehrson indicated this is a public hearing and asked if anyone in the audience wished to speak. Seeing no one, he asked if there is any correspondence.

Member Greco read the correspondence sent by Matthew Sosin of Northern Equities. The letter asked why the City is legislating behavior. Creating incentives is one thing, but adding costs is another. The letter says that there is no way that there will ever be 12 bikes at a building like Adams South. A tenant installed four bike lockers at another building in another City for LEED points only and they have been used a grand total of zero times. The letter asked if bikes really need to be covered, and stated 31 pages of ordinance for a bike rack is a problem. The letter asked if the ordinance shouldn't be framed for incentives; if I want to install bike racks, I get discounts on review fees or have to plant less landscaping. These costs add up and make us very uncompetitive. It is a tax on the developers and business owners. If the community thinks that bike racks are a good idea, then why not use public funds for that. If required at Adams South, would cost \$10,000 to \$15,000 for the concrete, cover, racks, curbs, etc. Why not a \$500 powdered coated bike rack like they have in Ann Arbor. Also, note that one shower costs approximately \$12,000. If Ryder wanted a bike rack at the building there is nothing stopping them from doing so and there never has been. Some tenants will want and some will not, but that choice is always there and always has been. The letter asks, what if you required a note on the site plan that bike racks are allowed or that the city will encourage bike use and give tax discounts to companies? Putting the racks in place does not affect behavior, creating incentives does.

As there was no further correspondence, Chair Pehrson closed the public hearing.

Member Greco asked about the cost estimate of putting in these bike racks because it seems vastly different from what Mr. Sosin was presenting.

Planner Spencer said research that he's done indicates that the estimate for a bike rack is provided per space. The bike rack required in this ordinance would park two bicycles so it would be half the total cost and they estimated \$150 to \$300 each installed. Bicycle racks themselves are as available as low as \$98 for one, but if you bought better quality, it went up in value. Bike racks are basically attached one of two ways; either with leg bolts into an existing concrete or asphalt pad or they have a foot on them that you pour around them so they're in the concrete as they're poured. The same website estimated to provide an automobile parking space is \$2200. The webpage also provided the cost of installing bike lockers which is more than being covered. Covered bike parking spaces could be under a roof or overhang or a shelter type structure. Planner Spencer said he's seen some cost as low as \$1500 for a structure that would park eight bikes, not counting the bike racks that would go inside of it. Bike lockers range from \$500 to about \$1500. Installing bike lockers in a location is estimated between \$1000 to \$4000 but again a bike locker or something we're not asking for would cost more. Bike lockers could be appropriate in a place such as Providence Hospital for example where the doctors want to bicycle in with their \$4000 bicycle, they might want it secured in a locker.

Member Greco said also what the ordinance proposes is that an applicant may indicate or present to the city that bike rack requirements are not necessary, and may ask to defer bike parking or land bank it. That means the property will at least have the space set aside but the applicant doesn't have to install the bike parking spaces immediately, but it may be required in the future or if things change, correct?

Planner Spencer said that's correct or if the use changed on the site.

Attorney Gary Dovre said there is one correction. Under the land banking option the applicant must initially provide a minimum of two spaces. All of the required spaces cannot be land banked.

Member Greco said, in his opinion, the way that it's written, we're giving the developer the option through land banking to present a reduction in the number of spaces through land banking as a viable means. If they're building a facility that we have not yet addressed sufficient bike paths or sidewalks to get to, they have a way out until the City is able to provide that methodology to allow their employees to get there from point A to point B. Member Greco disagrees with Mr. Sosin's letter in his estimate of the cost. Member Greco has also done some research and the costs are more in line with Mr. Spencer's estimates. Member Greco doesn't look at this as a tax on the building, this is providing an amenity to the employees that are there or others that are just going to be riding from point A to point B. Member Greco is in favor of this ordinance as it's written.

Member Lynch concurred with Member Greco's comments.

Moved by Member Lynch and seconded by Member Greco:

**ROLL CALL VOTE ON BICYCLE PARKING AMENDMENT RECOMMENDATION FOR APPROVAL MOTION MADE BY MEMBER LYNCH AND SECONDED BY MEMBER GRECO:**

**Motion to recommend approval to the City Council. Motion carried 4-0.**



**PLANNING COMMISSION  
MINUTES  
FEBRUARY 13, 2013**



## PLANNING COMMISSION MINUTES EXCERPTS

CITY OF NOVI

Regular Meeting

**February 13, 2013 7:00 PM**

Council Chambers | Novi Civic Center | 45175 W. Ten Mile  
(248) 347-0475

**Present:** Member Greco, Member Lynch, Member Finice (arrived at 7:11), Member Guimari, Member Zuchlewski

**Absent:** Member Anthony, Chair Pehrson

**Also Present:** Barbara McBeth, Deputy Director of Community Development; Gary Dove, City Attorney; Kristen Kapelanski, Planner; Mark Spencer, Planner; David Beschke, Landscape Architect; Adam Wayne, Engineer; Doug Necci, Façade Consultant; Rod Arroyo, Traffic Consultant

#### **4. ZONING ORDINANCE TEXT AMENDMENT 18.262 TO PROVIDE BICYCLE PARKING LAYOUT STANDARDS**

Public hearing for Planning Commission's recommendation to the City Council for an Ordinance to Amend the City of Novi Zoning Ordinance, Article 25, General Provisions, Section 2505, to provide Bicycle Parking Requirements and to clarify Automobile Parking Requirements; and Section 2506, to provide Bicycle Parking layout standards.

Planner Spencer said for many years the City of Novi has promoted bicycling as a healthy and environmentally friendly method of transportation and the City has built miles of bicycle infrastructure to connect people to destinations. Now that people can bicycle to these many destinations, they often don't find a good place to park their bike. Studies have shown that the lack of secure and convenient bicycle parking often keeps people from biking to their destination. The City has an adopted set of bicycle parking policies both in the Master Plan for Land Use and in the Non-motorized Master Plan. Both documents recommend adopting ordinance amendments to include bicycle parking requirements and design standards in City Ordinances. In order to act on these policies, the planning staff reviewed recommendations from the Association of Pedestrian and Bicycle Professionals and several bicycle parking ordinances from other communities. Based on this review, staff prepared a proposed Zoning Ordinance amendment that includes bicycle parking requirements and standards.

The proposed amendment will require almost all uses to provide bicycle parking spaces that can be used for short-term and long-term bicycle parking. Bicycle parking demand was developed using a base forecast of about 5% of all trips in the City will be non-motorized trips in the future. This is similar to the base used by the communities review. For each use, the number of spaces required was then adjusted after taking into account potential bicyclist to each type of use. As an example, shoppers, students, employees and recreational facility users have different habits of attending places potentially on bicycles. Uses with a higher potential of having bicycles visiting a site are required to provide a greater number of bicycle spaces in this proposed amendment. The proposed amendment would also require bicycle parking to be located along the primary entrance route to the site, be easily spotted, and be visible from the entrance and illuminated to increase safety.

Planner Spencer stated the proposed amendment will set standards for bike racks to permit bikes to be securely fastened to a rack without falling down and it would also establish bicycle parking space layout standards to provide adequate bicycle maneuvering room. The proposed amendment also requires bicycle parking and automobile parking to be separated to prevent motor vehicles from damaging parked bicycles and to make it harder for thieves to just drive up and take bicycles. The proposed amendment would require larger developments to provide 50% of the required bicycle parking spaces as covered bicycle parking spaces to attract more bicycle users. Requiring enclosed secure bicycle parking as was mentioned in the Non-Motorized Master Plan was not included in this proposal at this time because it would only apply to a few situations. Developments that provide extra bicycle parking spaces could reduce the number of required automobile parking spaces when they provide ten or more bicycle parking spaces according to this proposal.

Planner Spencer concluded noting in order to provide more flexibility, staff is proposing two additional subsections to the draft that was included in the Planning Commission packets and those are subsections 2505.19 and 2506.16. A copy of the proposed language was distributed. This language would give the approving body the authority to grant variances and waivers to reduce the required bicycle parking spaces and to permit alternative bicycle parking locations, designs and layouts with a recommendation from the Planning Director or staff designated by the Planning Director. Tonight, staff would like to ask the Planning Commission to hold this public hearing on the proposed Zoning Ordinance amendment and make a positive recommendation to the City Council.

Member Lynch said staff has done a marvelous job and his recommendation is to move forward with Planner Spencer's recommendations.

City Attorney Dove made a suggestion for the amendment to Section 2506.16. There's a missing sentence at the end of that section. That should also have language that says any such waiver or modification shall be valid for a period of three years; the same language as the language that appears above. So there's a limitation when relief is given in the event that situations change. Any time I see a proposal like this, which is a new concept and pretty exciting, I never know what the reaction is going to be, from the public or the Planning Commission. If there is time to check on the exact language before it goes to City Council. I would ask for the Planning Commission to take a look at it at their next meeting.

Deputy Director Barb McBeth said this has been under discussion for quite some time and various drafts have been shared around. In this case, staff didn't bring this forward first to set the public hearing, it was just brought forward for the public hearing. There's been some discussion behind the scenes back and forth with the exact language that may go forward. The City Attorney is suggesting that maybe we'd make a few more modifications to the language and bring it back to the Planning Commission just to have those reviewed again and endorsed before it's sent on to the City Council. That would not be a separate public hearing.

City Attorney Dove said he is not talking about any substantive changes, just making sure the procedural concerns and issues are addressed and making sure that this language is appropriate in terms of opportunities to ask for relief from the ordinance.

Member Gutman confirmed staff is asking that the Planning Commission bring this back under the Matters for Consideration on a subsequent agenda.

Member Prince said I think City Attorney Dove's recommendation to the Planning Commission is well placed given that this is a new concept. We do want to be careful and look at the language so it can be well understood by developers that don't encounter this in other communities.

Moved by Member Lynch and seconded by Member Greco:

**ROLL CALL VOTE TO TEXT AMENDMENT POSTPONEMENT MOTION MADE BY MEMBER LYNCH AND SECONDED BY MEMBER GRECO:**

**Motion to postpone consideration of Text Amendment 18.262 to a future Planning Commission meeting to allow for refinement of and thorough review of the proposed language. Motion carried 5-0.**

**Excerpt 2010 City of Novi Master Plan for Land Use**

## Goals, Objectives and Implementation

**Objective:** Identify long-term funding sources for community infrastructure.

**Implementation Strategy:** Work with area legislators and other communities to generate support for legislation that would allow communities to use tools such as impact fees, recapture agreements, and adequate public facilities ordinances.

**GOAL: Make certain that various land uses have no negative impact, physical or fiscal, on community infrastructure**

**Objective:** Encourage developers to upgrade infrastructure impacted by their developments.

**Implementation Strategy:** Offer incentives such as density bonuses, streamlined review procedures, or setback allowances, in exchange for needed infrastructure improvements.

**Objective:** Encourage developments that reduce the number of vehicle trips on local thoroughfares.

**Implementation Strategy:** Adopt regulations and incentives to promote mixed-use developments.

**Implementation Strategy:** Utilize access management techniques (e.g. marginal access or frontage roads, rear access roads, shared driveways, etc.) to minimize traffic conflicts and maintain road capacity.

**GOAL: Promote interconnectivity between neighborhoods to reduce vehicle trips on main roads**

**Objective:** Educate developers and residents on the benefits of interconnections.

**Implementation Strategy:** Take advantage of opportunities that are available for interconnecting existing and future residential neighborhoods.

**Implementation Strategy:** Utilize pre-application meetings to inform the developers on the benefits of interconnection.

**GOAL: Interconnect the City's pedestrian and bicycle paths**

**Objective:** Expedite completion of path connections in a prioritized and timely manner.

**Implementation Strategy:** Adopt the Pedestrian & Bicycle Pathway Phasing Plan.

**Implementation Strategy:** Seek grant money whenever possible to complete pathways.

**Implementation Strategy:** Continue to enforce the Pathway Master Plan with new developments.

**Implementation Strategy:** Incorporate pathways into plans for road improvements.

**GOAL: Continue to promote active living and healthy lifestyles in the City of Novi and continue to achieve a high level of recognition under the State of Michigan's "Promoting Active Communities Program."**

**Objective:** Continue to strive toward making the City of Novi a more "Bikeable" and a more "Walkable" community

**Implementation Strategy:** Work with neighboring communities, other agencies, and organizations to plan and build bicycle and pedestrian facilities that connect residential areas with civic, school, worship, park and retail destinations throughout the City including one or more connections across I-96 and with regional destinations in



## Goals, Objectives and Implementation

neighboring communities.

**Implementation Strategy:** Plan and build recreational trail facilities that can accommodate bicycles and pedestrians.

**Implementation Strategy:** Provide recreation trails within all new parks and connect all new parks with recreation trails to the City's pathway and sidewalk system.

**Implementation Strategy:** Plan and build way-finding signage for bicycle and pedestrian routes.

**Implementation Strategy:** Establish ordinance requirements to require bicycle and pedestrian connectivity and bicycle parking facilities for new developments.

**Implementation Strategy:** Establish design standards for bicycle lanes for various road designs and recreation bicycle trails that meet national safety standards.

**Implementation Strategy:** Review and update if necessary, City design standards for pedestrian facilities to meet national safety and Americans with Disabilities Act (ADA) accessibility standards.

**Implementation Strategy:** Retrofit existing bicycle and pedestrian facilities to current national safety standards when feasible.

**Implementation Strategy:** Encourage the retrofitting of existing developments and destinations to provide bicycle and pedestrian access and bicycle parking.

**Implementation Strategy:** Review, update and develop maintenance requirements for public and private bicycle and pedestrian facilities through the use of maintenance standards and ordinances.

**Implementation Strategy:** Implement an adopt a trail type program to help maintain City bicycle and pedestrian facilities.

**Implementation Strategy:** Actively pursue public and private grants to plan, build and/or rebuild bicycle and pedestrian facilities.

**Implementation Strategy:** Where practical, encourage the Road Commission of Oakland County and the Michigan Department of Transportation to incorporate bicycle and pedestrian facilities with all major road projects.

**Implementation Strategy:** Implement a trail or route naming program to help obtain funds for the construction and maintenance of bicycle and pedestrian facilities.

**Implementation Strategy:** Continue to complete sidewalk and pathway gaps throughout the City and accelerate the rate of completion if funding permits.

**Objective:** Continue to develop public awareness of the City's existing and planned bicycle and pedestrian facilities and their benefits to the citizens of Novi.

**Implementation Strategy:** Produce maps of pedestrian and bicycle facilities for public distribution.

**Implementation Strategy:** Promote and organize various types of bicycle and pedestrian events.

**Implementation Strategy:** Produce a Bicycle and Pedestrian Master Plan with non-motorized transportation and recreation components.

**Implementation Strategy:** Develop a program to educate residents and businesses of their responsibilities for sidewalk and pathway maintenance and snow and ice removal.

**Excerpt City of Novi Non-Motorized Transportation Plan**

## 4.4 Bike Parking

The lack of a secure parking space discourages many people from using their bikes for basic transportation. When sufficient bike parking is not provided, theft becomes a concern and it leads to bikes being locked up to sign post, benches and other street furniture. When bicycles are parked in these spaces, they often disrupt pedestrian flow because the bikes impede the walkway. Bicycles also get impounded by local enforcement when parked in these areas causing an even greater deterrent to bicycle use. Bicycle parking needs to be visible, accessible, plentiful and convenient. If any of these criteria are not met, there is a good chance cyclist will not use the facilities and will park their bike wherever they feel it will be safest.

**Definition of a Bicycle Parking Space-** A bicycle parking space is an area two feet by six feet or the area occupied by a bicycle when using a bicycle parking device as designed.

**Short-Term Bicycle Parking -** Short-term bicycle parking is defined as a rack to which the frame and at least one wheel can be secured with a user-provided U-lock or padlock and cable. This type of parking is appropriate for short term parking at locations such as shopping areas, libraries, restaurants and other places where typical parking duration is less than two hours.

**Long-Term Bicycle Parking-** A long-term bicycle parking space is defined as protecting the entire bicycle and its components from inclement weather and theft or vandalism. It is to be located where it will serve the needs of cyclist who need to leave their bicycles unattended for extended periods of time, such as employees, tenants or residents.

### Uncovered Bicycle Racks

Uncovered Bicycle Racks are the primary bike parking approach for areas where people are expected to park their bikes for only a few hours.

**Design-**Generally, bicycle racks of the inverted “U” design are considered the best models. Alternative designs may be considered for special situations, although they should function similar to the inverted “U” design, providing at least two contact points for a bicycle and be a shape and size that would permit locking of a bicycle through the frame and one wheel with a standard U-Lock or cable.



**Location-** Bicycle racks should be located on every city block where there is retail within a commercial district. The hoops should be placed on a hard surface with ample lighting and high visibility (e.g. in front of a store window) to discourage theft and vandalism. Racks should be placed to avoid conflicts with pedestrians, usually installed near the curb and away from building entrances and crosswalks. When racks are installed in public spaces there needs to be at least 5 feet of clear sidewalk space in order to allow for pedestrian flow.

### Covered Bicycle Parking

Covered Bike Parking is desirable for both long-term and short-term bicycle storage. Basic bicycle racks should be placed under an overhang whenever possible, and specific covered bicycle parking should be created when needed. Covered Bicycle Parking should be available in areas where bikes are kept for an extended period of time, such as apartment buildings or at large commercial centers where employees and customers will utilize the covered spaces.



**Design-** The covering for bicycle parking will vary depending on the location. In addition to a roof, complete or partial side enclosures should be provided to minimize exposure to windblown rain and snow. The design of the racks is the same as for the basic uncovered bicycle hoops. When creating covered parking, there is also the opportunity to incorporate a green roof or solar panels into the rooftop to add to the functionality of the structure.



**Location-** Covered Bike Parking should be incorporated whenever there is opportunity to do so. Long-term covered bike parking should be located within 400 feet of the building it is intended to serve. Centralized locations further than 400 feet are also acceptable.

### **Enclosed and Secured Bicycle Parking**

Enclosed and Secured Bicycle Parking is best for areas where bikes are kept for extended periods of time, such as apartment buildings and near places of employment. These types of facilities are usually placed within existing parking structures and come with extra bicycle parking amenities.

**Design-** Enclosed and Secured Bicycle Parking generally consists of an enclosed room or fenced off-area where access is controlled through a doorway. The configuration of the bike racks will vary based on the space, but in general they are designed to maximize the number of bicycles that may be fit in the space. Double tier bike racks and hanging bike racks are used to provide the majority of the bike storage. A few standard inverted "U" hoops should be provided and reserved for atypical bicycle designs that may not be accommodated by the other racks.

When bike racks are located within a parking decks there should be a safe means of egress to the parking area. If bicycles must access the space via a gate controlled access point, care should be taken to minimize conflicts with the gate arm. The gate arm should be shortened to allow a 4' wide pathway for bicycles. The end of the gate arm should be rounded and covered with foam. The pathway for bicycles should be clearly marked on the pavement. This pathway should be 3' wide and be located at least one foot from the end of the gate. Users of enclosed secured bike parking that is accessed via gate control should be provided instruction on how to safely navigate around the gate.

**Access Control-** Is by identification badge reader and for a specific location only.

**Location-** Generally within parking decks, but individual facilities may be established.

**Amenities-** Will vary by site. Ideally these include compressed air, lockers, a bench and a vending machine that dispenses basic bicycle supplies such as tubes and repair kits.

**User Costs-** Generally \$60 to \$80 per year rental plus \$20 account set-up fee.

In Novi, Enclosed and Secured Bicycle Parking would work best at areas with high concentrations of people, such as at Hospitals or Regional Shopping Centers where the facilities are targeted toward employees.

**Bike Station**

Bike Stations are premium secured bike parking and maintenance facilities intended for transit stations located in high density areas. They are intended primarily to serve transit riders who will disembark and then retrieve their bike and continue onto their final destination. They will also serve as a centralized bike parking solution for bicyclists who are not using the transit station but whose final destination is near the bike station. The bike station has an attendant that assist with the bicycle storage and the day-to-day operations of the facility.

**Amount of Parking-** Based on the expected number of transit users and a survey of potential users.

**Design-** The bike parking and maintenance areas are restricted to bike station employees only.

**Access Control-** The bike station is opened and attended while the transit station is open.

**Location-** Generally within parking decks.

**Amenities-** Compressed air, lockers, benches, changing room, showers and bicycle repair shop. The changing room and showers may be omitted if most of the users are expected to arrive via transit.

**User Costs-** Generally \$60 to \$80 per year rental plus \$20 account set-up fee or an hourly charge for parking. Repair cost at market rate.

At this point the City of Novi does not have the density to support a Bike Station in the City.

**Bike Lockers**

Bike Lockers are individual premium bike parking solution intended for remote and lower density areas where enclosed and secured bike parking is not available or feasible. Given the cost, appearance and space requirements of bike lockers they are only appropriate for limited locations.

**Design-** There is substantial variability in the designs of the bike lockers. Typically, individual bike lockers have an interior diagonal divider and doors on either end such that they may accommodate two bicycles. Bike Lockers may be arranged in row, in a circular pattern and stacked.



**Access Control-** Typically via a key.

**User Costs-** Generally around \$60 per year rental plus a \$20 key deposit.



**On-Street Bicycle Parking**

On-Street Bicycle Parking consists of movable bike racks that take the place of on-street motor vehicle parking. These racks are temporary and can be experimented with and moved as needed. They can also be used on a seasonal basis and can be removed during the winter.

**Design-** On-Street Bicycle Parking Racks are the size of a standard vehicle parking space and hold about 12 bicycles. These Racks are bolted into the pavement and can be removed when needed.

**Location-** These racks should be placed in active areas where it is difficult to accommodate sidewalk bicycle parking due to the competing demand for café tables and pedestrian walking space within the sidewalk area. Urban public spaces where there is on-street parking, such as Main Street would be a good location to test these facilities once non-motorized facilities are provided to this area.

### **Bicycle Parking Requirements**

Currently the City of Novi does not have any bicycle parking requirements in the City Code. The code should be revised and updated as necessary to address the following issues:

- Require a minimum of 4 bicycle parking spaces at each commercial development or multi-family dwelling.
- For each multi-family dwelling require half of the bicycle parking spaces to be covered if the site is required to have 16 or more spaces based on the existing code description.
- Incentives should be provided to commercial and multi-family dwellings for providing covered and secured bicycle parking (e.g. reduction of vehicular parking and/or density bonus could be offered).
- Incentives should be provided to commercial and multi-family dwellings for providing covered bicycle parking over uncovered bicycle parking when not required to by code (e.g. reduction of vehicular parking and/or density bonus could be offered).
- Explore the idea of required bicycle parking facilities being credited toward provision of motor vehicle parking. Each ten required bicycle parking spaces, or fraction thereof, may be substituted for one code required motor vehicle parking space.
- Provide or reference graphical design guidelines with information on the specifics of bicycle rack design and placement. The Association of Pedestrian and Bicycle Professionals recently published the 2<sup>nd</sup> Edition of Bicycle Parking Guidelines; these serve as a good model or may be referenced. The report may be found at [http://www.apbp.org/resource/resmgr/publications/bicycle\\_parking\\_guidelines.pdf](http://www.apbp.org/resource/resmgr/publications/bicycle_parking_guidelines.pdf)
- Require hoops on every block with retail in a downtown/commercial zone.

### **Policy Recommendations for Bicycle Parking:**

#### **Within One Year:**

- Update the City code to include bicycle parking requirements and design standards.

#### **Within Three Years:**

- Implement the bicycle parking requirements and design standards.

**Bicycle Parking Guidelines**  
**Adopted by the Association of Pedestrian and Bicycle Professionals**

# BICYCLE PARKING



# GUIDELINES

*A set of recommendations from the Association of Pedestrian and Bicycle Professionals [apbp]*



"I would ride to work if there was a safe place to lock my bike"

# INTRODUCTION

The lack of a secure parking space keeps many people from using their bikes for basic transportation. Leaving a bicycle unattended, even for short periods, can easily result in damage or theft. Finding a bike rack that doesn't work or isn't conveniently located makes for a frustrating experience.

The purpose of this document is to assist with the selection and placement of appropriate bicycle racks for short-term parking. Four major components will be discussed.

1. The rack element. This device supports the bicycle.
2. The rack. It is important to understand how bikes interact with each other when rack elements are assembled together.
3. Combining of multiple racks into a bicycle parking lot.
4. Locating the rack, and the relationship of the rack to the building entrance it serves and the cyclists' approach to that entrance.

The discussion will focus on outdoor installations. The racks are intended to accommodate conventional, upright, single-rider bicycles. It is assumed the cyclist will use a solid, U-shaped lock, or a cable lock, or a combination of the two.

The abpp Task Force that developed this guide is also developing recommendations for other important bicycle parking-related issues including:



- a. Assessing the appropriate number of bicycle parking spaces for different buildings and land uses, including the use of bicycle parking ordinances.
- b. Long-term bicycle storage facilities such as lockers and bicycle parking garages.
- c. Indoor bicycle parking and the carriage of bicycles in transit vehicles.

# 1. THE RACK ELEMENT

**Definition** the rack element is the part of the bike rack that supports one bicycle.

The rack element should:

- Support the bicycle upright by its frame in two places
- Prevent the wheel of the bicycle from tipping over
- Enable the frame and one or both wheels to be secured
- Support bicycles without a diamond-shaped frame with a horizontal top tube (e.g. a mixte frame)
- Allow front-in parking: a U-lock should be able to lock the front wheel and the down tube of an upright bicycle
- Allow back-in parking: a U-lock should be able to lock the rear wheel and seat tube of the bicycle



Comb, toast, school-yard, and other wheel-bending racks that provide no support for the bicycle frame are NOT recommended.

The rack element should resist being cut or detached using common hand tools, especially those that can be concealed in a backpack. Such tools include bolt cutters, pipe cutters, wrenches, and pry bars.



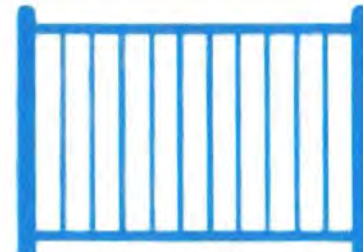
**INVERTED "U"**  
One rack element supports two bikes.



**"A"**  
One rack element supports two bikes.



**POST AND LOOP**  
One rack element supports two bikes.



**COMB**  
One rack element is a vertical segment of the rack



**WAVE**  
One rack element is a vertical segment of the rack.



**TOAST**  
One rack element holds one wheel of a bike.

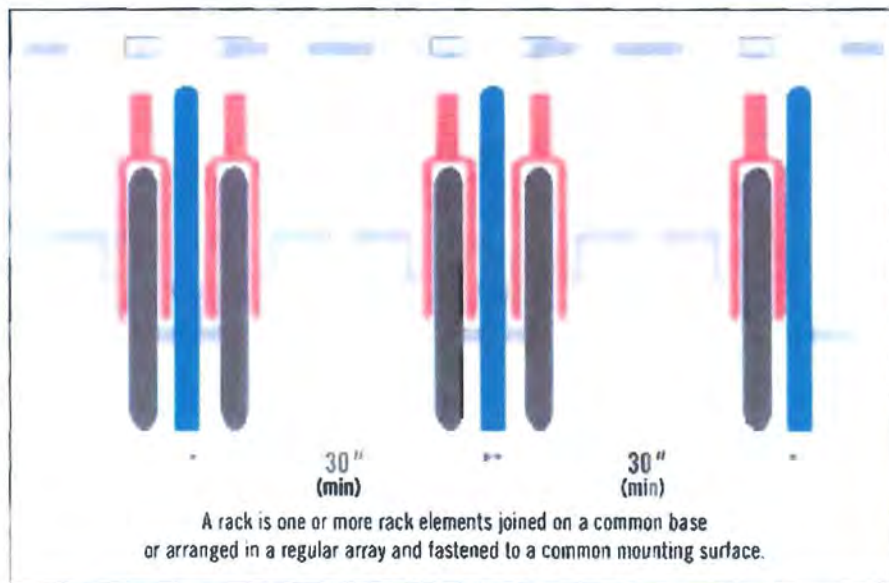
## 2. THE RACK

**Definition:** a rack is one or more rack elements joined on any common base or arranged in a regular array and fastened to a common mounting surface.

The rack should consist of a grouping of rack element. The rack elements may be attached to a single frame or remain single elements mounted within close proximity to each other. The rack elements should not be easily detachable from the rack frame or easily removed from the mounting surface. The rack should be anchored so that it cannot be stolen with the bikes attached—vandal-resistant fasteners can

be used to anchor a rack in the ground. An exception is a rack that is so large and heavy that it cannot be easily moved or lifted with the bicycles attached.

The rack should provide easy, independent bike access. Inverted “U” rack elements mounted in a row should be placed on 30” centers. This allows enough room for two bicycles to be secured to each rack element. Normally, the handlebar and seat heights will allow two bicycles to line up side-by-side if one of them is reversed. When there is a conflict, the bikes can be placed slightly offset from one another as shown. If the elements are placed too close together, it becomes difficult to attach two bikes to the same element. If it is too inconvenient and time consuming to squeeze the bikes into the space and attach a lock, cyclists will look for an alternative place to park or use one rack element per bike and reduce the projected parking capacity by 50 percent.



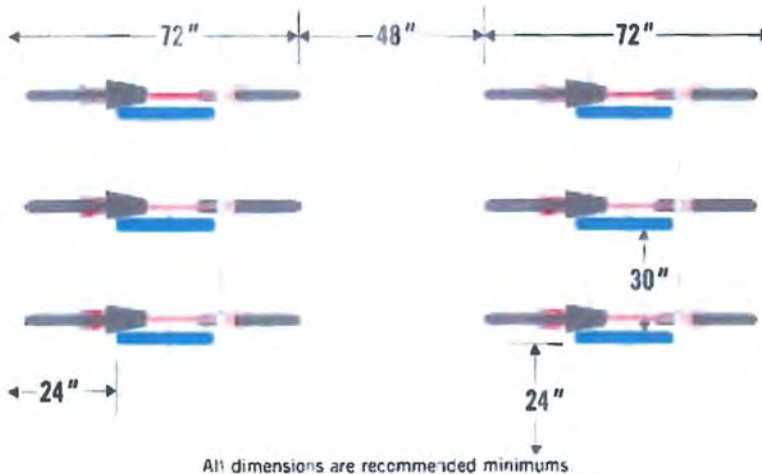
Wave style racks are not recommended. Bicyclists commonly use a “wave” rack as if it were a single inverted “U.” This limits the actual capacity of the rack to two bikes regardless of the potential or stated capacity. Bicycles parked perpendicular to a wave rack (as intended by the manufacturer) are not supported in two places and are more likely to fall over in the rack. The advertised capacity of a wave rack is usually much higher than the practical capacity.

An empty rack should not create a tripping hazard for visually impaired individuals.



### 3. THE RACK AREA

Definition: **the rack area is a bicycle parking lot where racks are separated by aisles.**



The rack area is a bicycle parking lot where racks are separated by aisles.

A rack area or "bicycle parking lot" is an area where more than one rack is installed. Aisles separate the racks. The aisle is measured from tip to tip of bike tires across the space between racks. The minimum separation between aisles should be 48 inches. This provides enough space for one person to walk one bike. In high traffic areas where many users park or retrieve bikes at the same time, such as a college classroom, the recommended minimum aisle width is 72 inches.

72 inches (six feet) of depth should be allowed for each row of parked bicycles. Conventional upright bicycles are just less than 72 inches long and can easily be accommodated in that space. Some rack types will allow the racks to be mounted closer to the wall. This will not change the space required by the bicycles or the aisles.

Large rack areas with a high turnover rate should have more than one entrance. This will help facilitate the arriving and departing of cyclists and pedestrians.

If possible, the rack area should be protected from the elements. Racks along building walls can be sheltered by an awning. Even though cyclists are exposed to sun, rain, and snow while en route, covering the rack area keeps the cyclist more comfortable while parking, locking the bike, and loading or unloading cargo. An awning will also help keep the bicycle dry, especially the saddle.

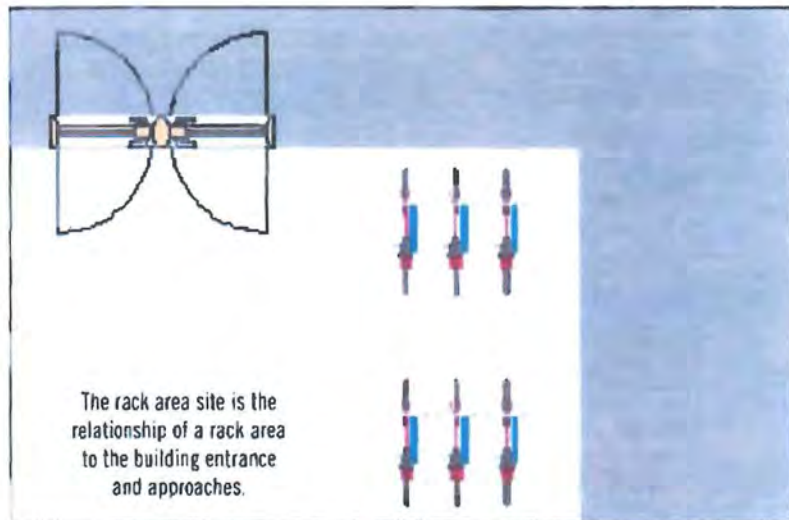


## 4. THE RACK AREA SITE

**Definition:** the rack area site is the relationship of the rack area to a building entrance and approach.

The location of a rack area in relationship to the building it serves is very important. The best location for a rack area is immediately adjacent to the entrance it serves. Racks should not be placed so that they block the entrance or inhibit pedestrian flow in or out of the building. Racks that are far from the entrance, hard to find, or perceived to be vulnerable to vandalism will not be used by most cyclists.

It is important to understand the transition a cyclist makes from vehicle to pedestrian. The cyclist approaches the building mounted on the bicycle. At some point, the cyclist stops, dismounts, and walks the bike to a rack. The bicycle is attached to the rack and any cargo is removed. The cyclist now walks into the building carrying the cargo. Adequate space must be provided to allow for this transition.



The rack area should be located along a major building approach line and clearly visible from the approach. The rack area should be no more than a 30-second walk (120 feet) from the entrance it serves and should preferably be within 50 feet.

A rack area should be as close or closer than the nearest car parking space. A rack area should be clearly visible from the entrance it serves. A rack area should be provided near each actively used entrance. In general, multiple buildings should not be served with a combined, distant rack area. It is preferred to place smaller rack areas in locations that are more convenient.

## 5. CREATIVE DESIGNS



The recommended practices above are not intended to stifle creativity. There are many creative, three-dimensional bicycle parking racks that work very well. Whether the rack is a type of "hanger", "helix" or another

configuration, the critical issue is that the rack element supports the bike in two places and allows the bicycle to be securely locked.

Creative designs should carefully balance form with function. For example, the distinctive "croquet

set" rack shown here likely has a smaller effective capacity than might be immediately apparent because one or more of the rack elements is not accessible. Similarly, the "hanger" racks shown below must be carefully manufactured and maintained to prevent weaknesses at the joints of the hanger and rack—such weakness might compromise the security of bicycles locked to the rack. In addition, the "coat hanger" elements should be spaced at least 30" apart.

## CONCLUSION

More information about bicycle parking is available from a wide variety of sources. Visit [www.bicyclinginfo.org](http://www.bicyclinginfo.org) to access many of those sources, and to find a list of bicycle parking manufacturers.

More information about the Association of Pedestrian and Bicycle Professionals is available at [www.apbp.org](http://www.apbp.org).



Promoting Sustainable Transportation Through Site Design, ITE  
Excerpts



### 3.4.7 Bicycle Parking

**OBJECTIVE** To provide sufficient bicycle parking in an area that is convenient and secure for cyclists and their equipment, and protects them from the elements.

**GUIDELINES** Parking Supply

- Calculate the amount of bicycle parking based on the number of people in the building and not as a function of total motor vehicle parking stalls. Bicycle parking requirements vary by location, type of land use and user characteristics. If bicycle parking requirements are not specified in a local by-law or ordinance, the number of spaces should be at least 5-10 percent of the maximum number of visitors and employees forecast to be on site at any one time. Typical minimum parking supply standards are provided in Table 3-2.

Table 3-2. Typical Minimum Parking Supply Standards

Type of Establishment	Minimum Number of Bicycle Parking Spaces
Primary or secondary school	10 percent of the number of students, plus 3 percent of the number of employees.
College or university classrooms	6 percent of the number of students, plus 3 percent of the number of employees.
Commercial—retail or office	One space per 250-300 sq. m of commercial space.
Sport and recreation centre	10-20 percent of the "design capacity" of number of visitors and employees (depending on the type of sport).
Movie theatre or restaurant	5-10 percent of the number of seats plus employees.
Industrial	5-10 percent of the number of employees.
Multi-unit housing	1 space per 1-2 apartments.
Public transit stations	Varies, depending on usage.

Source: Adapted from Litman, T., Online TDM Encyclopedia, *Bike Parking and various other sources.*

- Do not establish a "cap" on bicycle parking requirements as bicycle parking will increase proportionally with size of development.

#### Location and Access for Long Duration Parking (Class I—Employee)

- Locate long-term bicycle parking indoors or in a weather-protected area. These areas should be easily accessible to cyclists.
- Place bicycle parking in underground or indoor parking areas. These areas should be:
  - Well-signed and well-lit, as cyclists will leave their bicycles for a longer period of time and may have greater concerns regarding possible theft;
  - Ideally located in a separate room with a secure locking system;
  - Accessible by clearly identified and textured bicycle access ramps to avoid collisions; and
  - Located as close as possible to elevators or the attendants' kiosk to provide added security.
- Provide hooks for hanging bicycles inside an office building as an alternative to centrally located bicycle racks. These hooks can be located within individual offices or adjacent to the reception area. Supplement "in-office" parking with bicycle racks for heavy snow/salt days or in case "in-office" parking is eliminated at some future time.

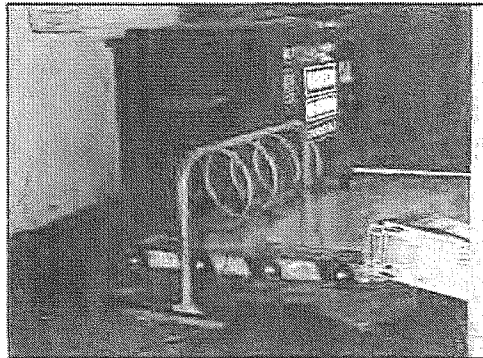


Figure 3-20. Bicycle parking located in undesirable areas will not be used.

Source: IBI Group

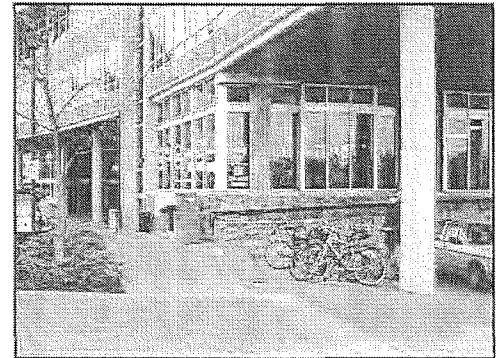


Figure 3-21. Building overhangs can provide weather protection for bicycle parking.

Source: Richard James, Richard James and Associates

- Locate bicycle racks in weather-protected and highly visible areas where there is no underground parking and “in-office” bicycle parking is not feasible.
- Secure bicycle racks to the ground or wall and incorporate vandal-resistant features.

#### Location and Access for Short Duration Parking (Class II—Retail/Entertainment)

- Provide bicycle parking at each building entrance. The Association of Pedestrian and Bicycle Professionals (APBP) suggests that bicycle racks should be located no more than 35 m from the entrance and preferably within 15 m to allow for direct and convenient access to the building.
- Locate bicycle racks underneath building overhangs or canopies to protect cyclists and their equipment from the elements. Where an overhang is not available, provide a kiosk over the bicycle parking. Alternately, limited parking can usually be provided inside and adjacent to the building doors without obstructing the exit. This last solution provides greater security and comfort.
- Locate bicycle parking and accesses in well-lit and visible locations to maximize personal security and minimize the risk of theft.
- Provide signing to denote bicycle parking locations and guide cyclists from the street if signs are not directly visible.
- Secure bicycle racks to the ground and incorporate vandal-resistant features.

#### RELATED TOPICS

Building Entrances (3.3.2), Internal Transportation Network Configuration (3.4.1), Pedestrian and Cyclist Routes (3.4.3), Bicycle Racks and Storage (3.6.2), Showers, Change Rooms and Lockers (3.6.3)

#### RELATED RESOURCES

- Association of Pedestrian and Bicycle Professionals. *Bicycle Parking Guidelines*. APBP, 2003. [www.bicyclinginfo.org/pdf/bikepark.pdf](http://www.bicyclinginfo.org/pdf/bikepark.pdf)
- Institute of Transportation Engineers. *Innovative Bicycle Treatments*. Washington, DC: ITE, 2002. [www.ite.org](http://www.ite.org)
- Victoria Transport Policy Institute. *TDM Encyclopedia, Bicycle Parking*. 2003. [www.vtpi.org/tdm/tdm85.htm](http://www.vtpi.org/tdm/tdm85.htm)
- National Centre for Bicycling and Walking. *Bicycle Facilities Reference Guide*. 2003. [www.bikewalk.org/bicycling/bike\\_design\\_guide\\_intro.htm](http://www.bikewalk.org/bicycling/bike_design_guide_intro.htm)

Bicycle Parking  
Pedestrian and Bicycle Information Center



Home > Engineer Bicycle Facilities > Bicycle Parking

# Bicycle Parking

More than 1.5 million bicycles are reported stolen every year in the United States, and fear of bicycle theft is recognized as a significant deterrent to bicycle use. The availability of safe and convenient parking is as critical to bicyclists as it is for motorists and yet it is frequently overlooked in the design and operation of shops, offices, schools, and other buildings.

However, providing good quality bicycle parking that is going to be used and useful is not quite as easy as leaving a "fence" or "grid" style rack out by the back fence of the shopping plaza or school yard and expecting cyclists to find and use it. Indeed, many agencies are now adopting quite specific bicycle parking design, location, and installation requirements.



On-street bicycle parking featuring inverted U type racks.

## The basics

### 1. Planning

Bicycle parking needs to be visible, accessible, easy to use, convenient, and plentiful. Racks need to support the whole bike (not just one wheel) and enable the user to lock the frame and wheels of the bike with a cable or U-shaped lock. Parking should preferably be covered, well lit, and in plain view without being in the way of pedestrians or motor vehicles. And if any of these criteria aren't met, there's a good chance cyclists won't use what is provided and will park wherever they think their bike will be safe.

The International Bicycle Fund has created a two-page fact sheet on bicycle parking criteria that discusses these many factors in more detail and further advice on planning for bicycle parking can be found related specifically to shopping , or commuting . Many agencies work closely with their local bicycle user groups to identify potential high-demand locations, either through postcard and e-mail request forms or more formal consultative procedures.

### 2. Finding a good location

Racks need to be sited and installed appropriately for them to be well used. Racks that are too close to the wall, or which don't have enough room between them, will end up sitting empty while nearby



railings, trees and light poles continue to be used by bicyclists. Racks need to be clearly visible and accessible, yet shouldn't interfere with pedestrians or other street furniture. For example, the City of Seattle specifies that:

- Racks are installed in public space within the Seattle City limits, usually on a wide sidewalk with five or more feet of clear sidewalk space remaining.
- Racks are placed to avoid conflicts with pedestrians. They are usually installed near the curb and away from building entrances and crosswalks.
- Racks can be installed in bus stops or loading zones only if they do not interfere with boarding or loading patterns and there are no alternative sites.

The City of Chicago's [Guide for Establishing Bike Parking](#) notes that they will provide racks only on sidewalks ten feet wide or more, and they can't be installed on the city's heated, vaulted, or architectural sidewalks for a variety of technical reasons. The city will only install bike racks in concrete, as they cannot be securely anchored in asphalt. Racks must be four feet from fire hydrants, curb ramps, building entrances etc.

The [Denver](#), [Portland](#), and [Madison](#) parking guides all provide detailed information on the precise location details of racks to ensure these problems don't occur.

Local businesses can have bike racks or lockers installed to encourage employees to commute to work. For more on promoting bicycle use, see [Strategies to Promote Bicycling](#).

### 3. Choosing the type of rack

The City of Denver's regulations specify that the Inverted U type bike rack is the required bicycle parking rack, although other racks may be proposed provided that they meet certain performance requirements. Every other current publication on bicycle parking follows pretty much the same approach. Racks should:

- support the frame of the bicycle and not just one wheel
- allow the frame and one wheel to be locked to the rack when both wheels are left on the bike
- allow the frame and both wheels to be locked to the rack if the front wheel is removed
- allow the use of either a cable or U-shaped lock
- be securely anchored
- be usable by bikes with no kickstand
- be usable by bikes with water bottle cages
- be usable by a wide variety of sizes and types of bicycle

The [City of Madison, WI](#) bicycle coordinator developed a six-page guide to rack selection that describes acceptable and unacceptable racks based on the kind of criteria listed above. The guide also details how racks that are supposed to park two bicycles (one on each side) should be chosen and installed.

#### 4. Short-term bicycle parking

Bicycle parking facilities are sometimes classified into Class 1 and Class 2 facilities; Class One being lockers or racks in enclosed areas (providing protection from theft), and Class Two being stands or racks in unsupervised areas. The [Santa Cruz bicycle parking ordinance](#), for example, uses this system.

However, most communities divide parking facilities into those that provide acceptable long-term or short-term parking. Short-term bicycle parking is usually defined as being two hours or less, such as might be necessary outside a store, or for visitors to an office building, park, or Government service center. Both Portland and Denver recommend racks be within 50 feet of the main entrance to the building, or entrances that are frequently used by cyclists. The Palo Alto bicycle parking ordinance actually requires the furthest bicycle parking rack to be no further away from an office entrance than the nearest car parking space! Other critical factors for short-term parking are that it be:

- well distributed (i.e., it's likely better to have four or five racks spread out along one city block rather than a group of four or five racks mid-block)
- visible to the cyclist
- in areas of high pedestrian activity, to discourage would-be thieves

#### 5. Long-term parking

Long term parking usually suggests that the bicyclist is leaving the bike all day, or overnight, or for an even longer duration. Obviously the level of security and protection from the elements needs to be greater, but the immediate convenience of the parking facility may not be as important. For secure, all-day or overnight parking, for instance, the Portland guide assumes that riders will be willing to walk a short distance (e.g. 750 feet) to or from their destination.

Long-term parking options include:

- Lockers, individual lockers for one or two bicycles
- Racks in an enclosed, lockable room
- Racks in an area that is monitored by security cameras or guards (within 100 feet)
- Racks or lockers in an area always visible to employees

A growing number of communities are supporting the development of centrally-located secure bicycle parking garages that also offer bike rentals and repairs, easy links to transit, showers and lockers, and a variety of other services. There are three [Bikestations](#) in California and similar facilities under development in Fort Collins, and Denver, Colorado, Seattle, Pittsburgh and Chicago.

#### 6. Covered bicycle parking

Wherever possible, bicycle parking should be covered to protect the bike from rain, snow and other elements. Covered parking areas should have at least six or seven feet of clearance, but not so high as to allow rain and snow to easily blow under the roof.

## 7. Bicycle Parking Signs

Having provided bicycle parking, it makes sense to ensure that people know it is there! The Manual on Uniform Traffic Control Devices specifies a bicycle parking guide sign (D4-3) which can be used to inform bicyclists of parking areas.

## 8. Amount of parking

An increasing number of communities are adopting bicycle parking ordinances that specify a minimum level of bicycle parking for different building types and land uses. While these usually relate to new developments, the level of provision required can be used as a guide to retrofit communities also.

A collection of bicycle parking ordinances can be [found here](#). This Web site, sponsored by the Massachusetts Bicycle Coalition ( [MassBike](#)), also contains a table comparing nine municipal ordinances from across the US.

## Costs

- Cost to purchase and install bike racks: \$150 to 300 each (parks two bikes)
- Cost to purchase and install bike lockers: \$1000 to \$4000 each (parks two bikes)
- Cost to provide car parking space: \$2200 surface lot, \$12,500 garage
- Number of bike spaces in one car space: 10–12

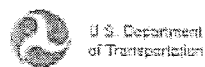
How much do agencies charge to rent bicycle lockers? A survey of local bicycle program managers in 2000 revealed the following range of costs that agencies charge people to rent bicycle lockers.

- **University of California, Davis:** \$20 per quarter (10-12 weeks), \$20 key deposit, \$10 per quarter for those commuting 10 miles or more (one way).
- **Portland, OR:** \$10/month, \$25/3 months, \$45/6 months, \$25 key deposit. Rate structure assumed to cover locker costs over 10-year period.
- **San Francisco, CA:** \$25/3 months, \$45/6 months, \$75/1 year, \$25 refundable key deposit.
- **Albuquerque, NM:** Free lockers for downtown employees.
- **Madison, WI:** \$75/1 year.
- **Cincinnati, OH:** Has 10 lockers in downtown. \$40/6 months. Recent increase in key deposit to cover lock replacements.
- **Caltrain:** \$5/month six months in advance, \$25 refundable key deposit.
- **Maryland Mass Transit Admin:** \$25/3 months, \$70/ year, \$25 refundable key deposit.
- **Washington DC Metro:** \$45/6 months, \$70/year, \$10 key deposit
- **Tucson, AZ:** 54 lockers (108 spaces) in downtown, 54 lockers (108 spaces) at select transit stops, \$2/month, \$7.50 refundable key deposit.
- **Santa Cruz, CA:** \$5 per month, \$10 refundable key deposit (plus \$3 bicycle license).
- **Los Angeles, CA** has contracted out the management of bike lockers in several locations in the city. The local bicycle user group administers the program.

## APBP Bicycle Parking Guidelines

Installing bicycle parking might seem like a pretty straightforward exercise, but how do you know what type of rack is preferred by cyclists, and how many times have you seen bikes chained to trees or parking meters within a few feet of a bike rack?! The Association of Pedestrian and Bicycle Professionals (APBP) pulled together a task force to develop recommendations on [bicycle parking guidelines](#), including bicycle rack selection, location and placement that answers these questions and will ensure quality bicycle parking.

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MEMO TO  
PLANNING COMMISSION  
FEBRUARY 6, 2013

## MEMORANDUM



TO: PLANNING COMMISSION  
FROM: MARK SPENCER, AICP, PLANNER  
SUBJECT: BICYCLE PARKING ORDINANCE  
DATE: FEBRUARY 6, 2013

*Mark Spencer*

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The City of Novi promotes bicycling as a healthy, environmentally-friendly way of getting around the City of Novi. The City's recently adopted Non-Motorized Master Plan recognizes the importance of providing bicycle parking to encourage the use of bicycles for transportation. The Plan recommends updating the City's ordinances to include bicycle parking requirements and design standards.

The lack of a secure parking space at their destination keeps many people from using bikes for transportation because leaving the bike unattended, even for short periods, can easily result in damage or theft. When bicycle parking is not secure or convenient, it will not be used. Thus, providing bicycle parking at various destinations encourages people to use their bicycles for transportation. In addition, providing a designated area for bicycle parking can provide a more orderly appearance to a building and it will discourage bicyclists from locking their bikes to unacceptable fixtures, such as trees, sign posts, benches, or railings.

The Planning Staff reviewed several bicycle parking ordinances from other communities and reviewed the recommendations made in the City's Non-Motorized Master Plan. Staff also reviewed the bicycle parking recommendations listed in the Association of Pedestrian and Bicycle Professionals' publication, "Bicycle Parking Guidelines," the Institute of Transportation Engineers' publication, "Promoting Sustainable Transportation Through Site Design," and on the Pedestrian and Bicycle Information Center's web page. Staff then prepared a set of proposed bicycle parking requirements and standards to include in the Zoning Ordinance.

The proposed ordinance changes consider many factors to help the City of Novi ensure that new and reworked developments provide adequate, quality bicycle parking facilities that will encourage more people to bicycle to their destination. The factors considered include the following:

- **Short-Term and Long-Term Parking:** Almost all land uses would be required to provide bicycle parking spaces that could be used for short-term and long-term bicycle parking. Since the Non-Motorized Master Plan stated that enclosed secure long term bicycle parking facilities would work best in Novi at hospitals and regional shopping centers only and due to the higher cost for this type of

parking spaces, requiring enclosed secure bicycle parking was not proposed at this time.

- **Weather Protected:** Since covered parking could attract more bicycle users, larger developments would be required to provide 50% of the required bicycle parking spaces as covered bicycle parking. Most likely these spaces would be the preferred parking spaces for long term bicycle parking.
- **Visibility and Security:** Bicycle parking shall be located along the primary entrance route to the site to be easily spotted and in a location visible from the entrance to discourage theft and vandalism.
- **Lighting:** Bicycle parking areas shall be well illuminated to provide theft protection, personal security and accident prevention.
- **Avoid Conflict with Pedestrians:** The location of bicycle parking shall not block the pedestrian routes and the recommended "Inverted U Shape" bike rack would not include protruding bars or be so low as to be a hazard to pedestrians.
- **Avoid Conflict with Automobiles:** Bicycle parking and auto parking shall be separated by a landscape area that prevents motor vehicles from damaging parked bicycles and keeps some thieves at a distance from the bicycle parking.
- **Bicycle Parking Demand:** Published standards, other ordinances and the Non-Motorized Master Plan were consulted to formulate the bicycle parking space requirements. The Non-Motorized Master Plan forecasts 5% of all trips will be by non-motorized means in the future. This number is used as the base. The number of proposed spaces required varies by use, taking into account potential bicyclists, i.e. shoppers, students, employees, recreation facility users, etc. Uses with a higher potential shall provide a greater number of bicycle parking spaces.

On January 14, 2013, the Walkable Novi Committee members present at their meeting, reviewed the proposed ordinance amendment and made positive comments. At this time, the Planning Commission is asked to hold a public hearing on February 13, 2013 and forward a recommendation to the City Council.

If you have any questions or comments on this matter, please feel free to contact Mark Spencer in the Community Development Department at 248-347-0475 or [mspencer@cityofnovi.org](mailto:mspencer@cityofnovi.org).