



Bennington County Regional Commission

**BENNINGTON COUNTY  
BICYCLE  
PARKING  
REPORT**



.....JUNE, 2014

## BICYCLE PARKING IN BENNINGTON COUNTY.....



Bicycling is a cheap, healthy and fun form of transportation, which also reduces air pollution, traffic congestion and road-wear. Bennington County has great potential to develop its bicycling facilities; town centers are relatively flat, streets are easily navigable, traffic is moderate, and most destinations are easily accessible by bike. Along with the development and expansion of bicycle pathways and other infrastructure, bicycle parking facilities are needed. As with traveling by car, having a convenient, safe, and practical place to park a bicycle is essential. Providing plentiful and functional bicycle parking will encourage the use and continued growth of this mode of transportation.

“Bicycling is an enjoyable and healthy activity that also is an economically and environmentally sound alternative to the automobile for local transportation. With increasing fuel prices and bicycle designs to meet just about every need, increasing numbers of people can be expected to turn to bicycles and other human-powered vehicles for commuting and for fun.”

***-Transportation Plan Update, 2008***

“The provision of bike racks for storage and security is encouraged particularly in areas that are convenient for bikers.”

***-Bennington County Regional Plan, 2007***



**FIGURE 1: A CYCLIST IN DOWNTOWN BENNINGTON**

## BICYCLING FOR TRANSPORTATION.....



“Bicycling is an extremely efficient transportation option that also is a popular recreational activity for residents and tourists to the area. Any type of human-powered transportation has the added benefits of promoting good health and reducing vehicle congestion and emissions... the town should actively work to ensure that adequate facilities are available to encourage these activities.”

**-Bennington Town Plan, Bennington Planning Commission, 2010**

- Most people in Bennington County live in or near villages and town centers, which have the highest concentration of origin and destination points.
- Trips made by bicycling reduce traffic congestion, minimize the need for expensive road maintenance costs, and do not contribute to greenhouse-gas emissions.
- Over the last ten years, after decades of auto-dependency, Americans are steadily driving fewer miles. Correspondingly, bicycling is gaining popularity in many locations, with trips by bicycle tripling nationwide since 1977 and bike commuters doubling between 2000 and 2009.
- Studies consistently show that supportive environments with well-connected and user friendly bicycle infrastructure, including parking at destinations, encourage and increase the use of bicycling as a means of physical exercise and daily commuting.
- Having safe and convenient facilities for bicycling could save towns and villages in Bennington County significant costs in health care, social services and transportation.

### **Lack of Bike Parking in Bennington County:**

Although cycling has long been a popular activity for many Bennington County residents, many areas within the county lack proper infrastructure to support bicycles; specifically noticeable is a lack of formal bike parking. To encourage the use of bicycling as a means of daily transportation, more and better bike parking is needed. While there are some bicycle racks in the area, many are poorly placed or designed, and cyclists have consistently been seen avoiding these racks rather than risk damaging their bike or leaving it insecurely fastened, and resort to using other more convenient fixtures such as street signs or trees. This can lead to damage of property, both personal and municipal, and be a nuisance to other users and pedestrians.



**FIGURE 2: LACK OF BIKE PARKING IN BENNINGTON**

There is a lack of bike parking at many key destinations in Bennington and throughout Bennington County.

## NEED FOR BIKE PARKING



“Bicycle touring (both road and off-road) is popular among both vacationers and residents of the area. Planning should include consideration of this activity whenever appropriate (e.g., road construction and improvements, trail use designations) to ensure the safety of bicyclists and the environment.”

**- Arlington Town Plan 2008**

“Future public and private investments should be mindful of energy conservation. Facilities that encourage pedestrian and bicycle transportation (e.g., centrally located parking facilities and sidewalks in village areas, and bicycle paths and lanes) should be pursued...”

**- Shaftsbury Town Plan 2009**

Across Bennington County, towns have acknowledged the need to improve bicycle facilities, including bike parking.

Commercial and tourism hubs like Bennington and Manchester would greatly benefit from better bicycling infrastructure. The Vermont Council on Rural Development, with wide citizen involvement and support, reported in its “Manchester 2020” plan becoming a “biking center and destination” as one of its top four priority projects. To become a “biking center,” the report emphasizes the need to “expand bike racks at all destinations.”

As town planning encourages the development of bicycling in towns and villages with improved infrastructure (e.g., lanes, multi-use paths), bicycle parking should also be considered. Popular outdoors and recreational destinations such as Arlington’s Recreation Park, Howard Park in South Shaftsbury, Dana Thompson Recreation Park between Dorset and Manchester, as well as historic buildings and country stores are all popular places for both local and visiting cyclists.



**FIGURE 3: ARLINGTON HIGH SCHOOL**

This rack offers students a place to lock bikes during school, but lacks cover.



**FIGURE 4: MANCHESTER**

This is a good example of bike parking offered in Manchester Center



**FIGURE 5: NORTH BENNINGTON**

This rack, outside the public library in North Bennington, does not adequately meet the demand of cyclists.

## BIKE PARKING CONSIDERATIONS.....



### Short-Term Parking:

Parking spaces to be used for a few hours or less by commuters running errands, customers at restaurants and shops, etc., are considered short-term parking. These spaces should be easy to locate and within 50 feet of the entrance to the building they serve. Examples include racks on side-walks in downtown districts or near entrances to large retail establishments.

### Long-Term Parking:

Parking spaces to be used for many hours or days, such as by students at schools and universities, employees at office buildings, and inhabitants of housing/apartment complexes, etc., are considered long-term parking. These spaces should be covered or indoors, such as a bicycle locker room. Long-term facilities usually have higher capacities and serve multiple buildings/groups.

### Double Support:

Certain types of racks should not be used, whether for short term or long term purposes, as they do not support a bike in two places (preferably by the frame and front wheel). This can lead to damage or theft.

Some examples are pictured below:



**FIGURE 6: BENNINGTON**

A cyclist used this entire rack, located in downtown Bennington, because they wanted double support for their bike.

### Security:

“Chief among the enhancements that should be considered [to promote bicycling] are secure places to park bicycles at trip destinations.”

- *Vermont Agency of Transportation Pedestrian and Bicycle Facility Planning and Design Manual*

The design, location and layout of bike parking facilities will significantly affect their use. In the United States, **more than 1.5 million bicycles are reported stolen every year**. Lack of secure parking facilities is frequently cited as a deterrent to bicycling in urban or village settings. The availability of safe and convenient parking is as critical to bicyclists as it is for motorists, yet it is frequently overlooked in municipal zoning ordinances and development planning.

- **The rack needs to be durable and resistant to damage, by both theft and vandalism and the elements, and be securely mounted to a level ground surface, e.g. bolted to the concrete**
- **The user should be able to lock the frame and wheel to the rack with a standard U-lock or cable lock**
- **The space should be within close proximity to the building’s entrance, be well lit and clearly visible from the building it serves**



# INSTALLATION OF RACKS

Given the layout of Bennington County’s historic downtowns and village centers and the diversity of destinations, smaller racks for short-term parking spread along the main streets are the most needed type of bicycle parking facility.

The most common type of small rack is the U-rack (or hoop rack), which should be installed parallel to the street and sidewalk in the same vicinity as landscaping, street furniture and utilities, and can hold two bikes securely upright by the frame and a wheel without obstructing the pedestrian right-of-way.



**FIGURE 7: TYPICAL U-RACK**  
This image shows a U-Rack that has been properly installed, parallel to the street.

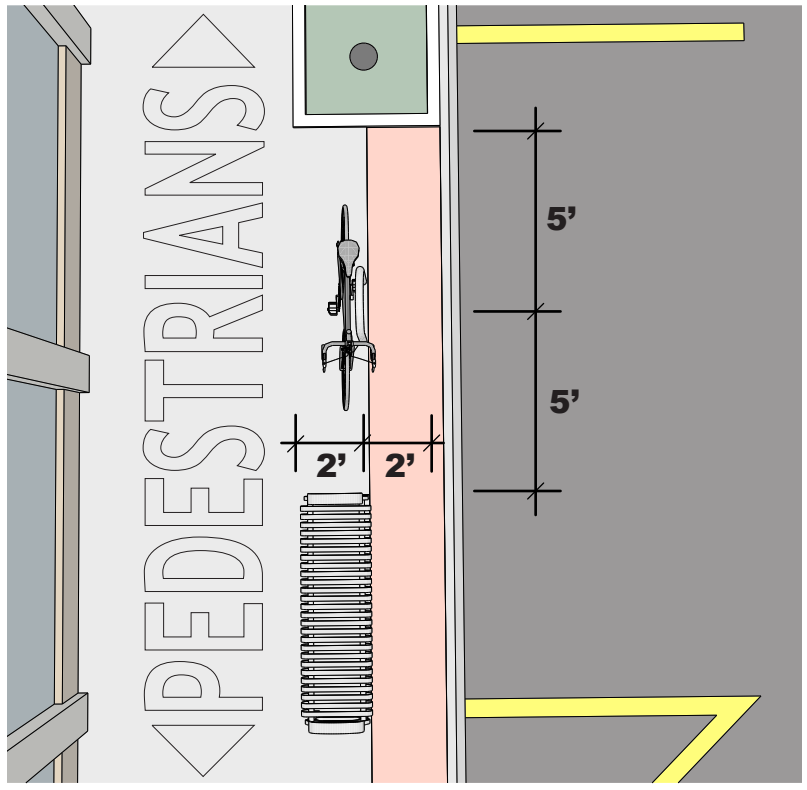


**FIGURE 8: BENNINGTON U-RACK**  
This U-Rack, located in downtown Bennington, is improperly installed and impedes the pedestrian walkway.

## Basic Rack Guidelines:

For a common U or similar (two-bike) rack, proper spatial requirements need to be adhered to. In general:

- The area should be at least four feet wide, with **two feet on each side** of the rack to accommodate the bicycle handlebars protruding out towards the street curb and pedestrian walkway.
- The area should be **six feet long** to accommodate the length of the bicycle plus an additional **two feet on each end** for room to maneuver around it, **ten feet in total**, in which the U-rack should be centered.
- Where on-street car parking is present, the rack should be at least **two feet from the street curb**.
- The area should be at least **six feet from building fronts** to accommodate the pedestrian walkway



**FIGURE 9: U-RACK GUIDELINES**

# ZONING RECOMMENDATIONS



“Multi-family residential (more than 4 units), commercial, industrial, and institutional uses shall also provide adequate area for off-street bicycle parking for use by residents, employees and/or the general public, to include racks for short-term parking and as appropriate, long-term bicycle storage facilities (e.g., lockers or garages).”

–*Town of Bennington Land Use & Development Regulations, Amended June 12, 2006*

“The Board shall consider requiring provision of safe, effective parking facilities for bicycles in locations that are visible, lockable, and which avoid conflicts with pedestrians and motor vehicles.”

–*Town of Manchester, Zoning Ordinance 2009*

While some town zoning ordinances within Bennington County have requirements pertaining to the installation of bicycle parking, they do not give specific requirements. As a result there is a shortage of available bicycle parking, greatly limiting the potential growth of bicycle commuting in the region.

Just as town zoning regulations define the minimum amount of car parking spaces required for different establishments they should specify the requirement for bicycle parking. For example, the Town of Bennington’s Development and Land Use Regulations, similar the rest of the county in this way, mandate strict minimums for vehicular parking but have no mandate for bicycle parking.



**FIGURE 10: BENNINGTON**  
Although minimum vehicular parking requirements in the county are strictly mandated, bike parking is not, leaving cyclists such as this one to fend for themselves in leftover space not claimed by vehicular parking.

## A Comparison:

### Vehicular Parking in Bennington and Bicycle Parking in Burlington

The following table compares the minimum vehicular parking requirements in the Town of Bennington’s Land Use Regulations to the minimum bicycle parking requirements in the City of Burlington’s Comprehensive Development Ordinances. Bicycle parking in Burlington is strictly mandated, and developers who do not meet requirements are required to pay fees which fund the creation of other bicycle parking infrastructure projects.

	Colleges	Public Parks	Offices	Retail
<b>Town of Bennington</b> Car Parking—Minimum Requirement	1 Space per employee & 1 Space per 5 seats	1 Space per 4 Patrons/ each employee at capacity	1 Space per 300 sq. ft.	1 Space per 300 sq. ft.
<b>City of Burlington</b> Bike Parking—Minimum Combined short and long term facility requirements	4 Spaces per 25,000 ft.	1 Space per 10 daily users	2 Spaces per 15,000 sq. ft.	2 Spaces per 25,000 ft.

**FIGURE 11: PARKING COMPARISON TABLE**



## COMMERCIAL PARKING

- Zoning requirements should extend to include all districts. For example, many large developments in Bennington's Planned Commercial District such as Monument Plaza (Price Chopper, Walmart, etc.) offer no bike parking facilities, yet many people bicycle here daily.
- Existing structures undergoing renovations, expansion or changes of use should be required to add bicycle parking. For example, the Bennington Walmart's future expansion should include plentiful bicycle parking.
- If the 112,000 sq. ft. Walmart expansion was required to include 1 bike parking space per 5,000 sq. ft., that would amount to 22 bike parking spaces. Eleven U-racks could hold 22 bikes. This would be roughly equal to the size of two car parking spaces, less than 1% of the minimum land area required for car parking by the current zoning ordinances.
- Such an addition would cost the development very little and would significantly boost the amount of transportation options available.
- Allowing the substitution of car parking for bike parking to meet the mandated zoning minimum should be encouraged as it also saves developers the expense of meeting required minimum car parking.
- Substituting a car parking space to create a bike corral is a cost-effective way to combine parking needs. One car space can accommodate enough racks to hold up to a dozen bikes
- Bike corrals can be installed in large commercial lots or in street-side parking spaces in downtowns.



FIGURE 12: PRICE CHOPPER, BENNINGTON



FIGURE 13: WALMART, BENNINGTON



FIGURE 14: BIKE CORRAL, PORTLAND, OREGON



## ZONING RECOMMENDATIONS.....

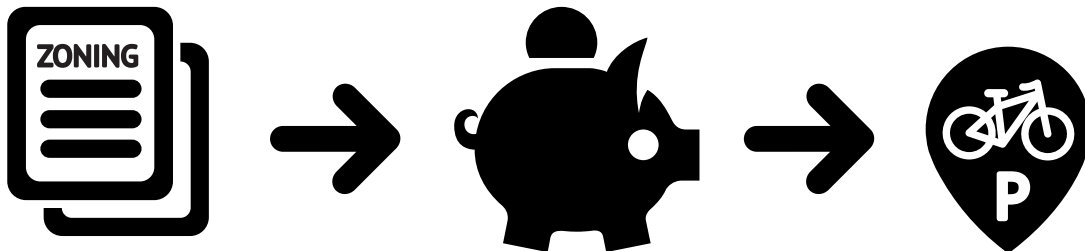


“To further promote bicycling as a means of everyday transportation, bicycle racks should be provided at convenient locations in the downtown area, at shopping centers, and at major employers.”

– *Bennington Town Plan, Bennington Planning Commission, 2010*

Bike racks cost very little, typically \$150-300, whereas a single parking space for a car can cost over \$2,000. Amending zoning requirements to add bicycle parking can provide a funding mechanism for municipalities to install bike parking.

- Towns should create a bike parking fund using a combination of general funds and fees collected from developments that opt out of installing bike parking or for exceeding a percentage of minimum car parking.
- With an established bike rack fund, towns can install more bike parking in public places and assist existing businesses and organizations install racks where there is demand.
- Whether the town pays the full share or through a cost subsidization program, a bike parking request program would encourage businesses to install bike parking.



### Bike Parking Precedents:

Across the nation, cities large and small are successfully implementing bike parking programs. Notable examples include:

- **Northampton, Massachusetts:** The city’s zoning ordinances require new development and redevelopment projects to provide indoor or outdoor bike parking where zoning requires 10 or more car parking spaces. The City’s Department of Public Works has also installed 110 racks and 16 lockers in public places, partially provided by grant funding from its regional transit agency. On-going funding for a rack request program is in the works.
- **Burlington, Vermont:** Employers and business owners of non-residential properties can apply to the City’s Department of Public Works for a basic rack, provided at a reduced cost, contingent on proper installation and maintenance by the business, according to the City’s guidelines. Along with required bike parking in its zoning ordinance, the City requires that a development that reduces or waives its required bike parking must mitigate the reduction through a contribution to a capital fund, equal to the cost of required bicycle parking, to fund installation elsewhere.
- **Portland, Oregon:** The City’s Bicycle Parking Fund is derived of fees collected from private developments that choose not to install bike parking required by the city’s zoning code. With this funding, the City will issue a permit to applicants and will install a basic rack, at no cost, in the public right-of-way (e.g., sidewalks in business districts). In the last twenty years the City has installed over 5,000 bike racks, and over 100 bicycle corrals, replacing more than 150 car parking spaces, since 2004, and the demand continues to grow.

## PROMOTION OPPORTUNITIES.....



Local businesses should be encouraged to install custom art racks to personalize and enhance their aesthetic quality. Partnering with local businesses, the Chamber of Commerce and other organizations, towns could promote street art fundraisers to create unique attractions such as the Moosefest and Catamount Prowl sculptures in the Town of Bennington.



**FIGURE 15: MOOSEFEST**  
A Moose Statue on display as part of Bennington's Moosefest.



**FIGURE 16: MOOSE RACK**  
Like Bennington's Moosefest, bike racks can be artistic and practical. This rack was done by an artist competition in Laramie, Wyoming.

### **Biking is Good for Business:**

Numerous studies, including a 2012 Vermont Agency of Transportation report, have found the economic impact of bicycling and walking facilities, including sufficient parking, to be highly beneficial to towns and businesses alike:

- **Homes in bikeable areas were valued at \$6,500 more than those in car-dependent areas.**
- **Major events related to biking and walking attract more than 60,000 visitors annually to Vermont's hotels, restaurants and shops.**
- **Customers on bikes make more frequent stops, especially at restaurants, bars, cafes and boutique shops.**

### **Partnership Possibilities.....**



Working in **tandem** with schools, colleges and other organizations, communities should raise awareness of bicycling destinations in Bennington County. For example, Bennington College has a bike-share program providing students with a means of transportation off campus. Having more bike parking at nearby destinations could significantly increase students' involvement in the local and regional economy.



**FIGURE 17: BENNINGTON COLLEGE**



## RACK-OMMENDATIONS

By installing bicycle parking facilities towns would provide cyclists better access to destinations for work and leisure, relieve traffic and congestion, and promote a healthy, alternative mode of transportation.

To accomplish this, towns should:

- ① Amend zoning regulations to require adequate bicycle parking be installed for new developments, renovations and changes of use at existing establishments, with specific mandates based on types of development.
- ② Establish a bicycle parking fund, derived from a combination of general funds and specific fees collected from developments that opt out of or fail to meet bicycle parking mandates.
- ③ Establish a bicycle parking cost subsidization and permit program to help existing businesses as well new establishments install bicycle parking.
- ④ Create a bicycle plan, including specific, long-term goals for adding bicycle parking in key locations (e.g., 10 racks in the public right-of-way over the next two years).

### Resources:

**DERO Bike Rack Company:** Widely used commercial bike rack manufacturer, which also provides a parking installation guide.

<http://www.dero.com/bike-parking-guide>

**Madrax:** Another widely used commercial bike rack manufacturer, which also provides a parking installation guide.

[www.madrax.com/Info/BikeParkingGuide](http://www.madrax.com/Info/BikeParkingGuide)

**Association of Pedestrian and Bicycle Professionals:** Advocacy group for improving bicycle and pedestrian policy, which also provides a parking guide.

[www.apbp.org](http://www.apbp.org)

**ChangeLab Solutions:** Nonprofit legal research and consultation group with many resources for developing and improving bicycle and pedestrian friendly policy.

[www.changelabsolutions.org/bike-policies](http://www.changelabsolutions.org/bike-policies)



**FIGURE 18: MIDDLEBURY, VT**

Like many other places in Vermont, Bennington County has great potential for bicycling.



**FIGURE 19: PORTLAND, OR**

The popularity of bicycling, and corresponding need for infrastructure, continues to grow across America.