

BIKE PARKING

ESSENTIALS

Bike parking is an **essential element** of a healthy, safe, and convenient active transportation network. The availability and quality of bike parking can help **encourage and promote** biking to work, school, and other key destinations. Providing enough well-designed bike parking to meet demand **helps prevent damage** from locking to trees, signs, handrails, and other street amenities and **helps maintain clear paths** for people walking through public spaces.

With an increasing variety of bike styles and accessories, parking must accommodate a variety of bike shapes and parking lengths. This research brief summarizes the basics and emerging trends in bike parking solutions.



BIKE PARKING BASICS

Organizations such as the [Association of Pedestrian and Bicycle Professionals](#) and the [National Association of Transportation Officials](#) offer useful in-depth guidance and recommendations for successful bike parking. Guidance generally categorizes bike parking as **short-term** or **long-term**. While all parking should accommodate most bikes and attachments, the design and location of parking may vary based on the anticipated length of a stay.

Short-Term

Caters to quick stops generally less than two hours such as shopping, dining, or errands.

Key Characteristics:
Close to destination,
visible, easy to use.

Long-Term

Caters to extended unmonitored storage for employees, public-transit users, or residents.

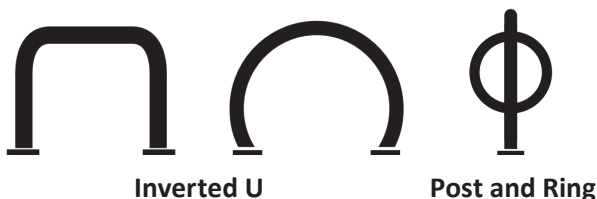
Key Characteristics:
Secure and sheltered.

RACK TYPES

All racks should support the bike without bending, accommodate U-shaped locks reaching the frame and wheel, and accommodate a range of sizes.

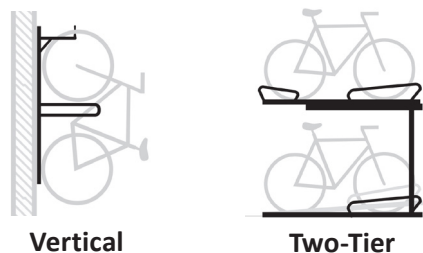
Racks for All Applications

Usually meet all needs and can be used in most applications and locations.



High Density Racks

May not meet all compatibility criteria but appropriate in constrained areas. Provide additional ground-level parking appropriate for bikes longer and/or wider than conventional bikes.



Racks to Avoid

Can pose performance concerns and locking challenges: not recommended for most applications.



Wave
Only supports bike at one location

Schoolyard
Does not allow locking of frame, can bend wheels

Wheel Well

Determining the Number of Parking Spots

Bike parking minimums can be estimated based on number of dwelling units, building square footage, or building occupancy among other factors.

Parking quantity can also be assessed proactively or reactively to adapt to usage.

BIKE PARKING

EMERGING TRENDS

As more people choose to bike on a greater variety of bicycles, bike parking should adapt and anticipate different needs. Planners, developers, businesses, and others anticipating bikes will benefit from following emerging trends in bike technology and usage. This includes new electric bike technology, secure parking solutions, sustainable manufacturing, and city zoning codes.

E-Bikes and Electric Scooters

E-bikes, cargo bikes, and other electric mobility devices pose specific considerations for bike parking.

Size & Weight | E-bikes can weigh 45-80 pounds and 100+ pounds for cargo bikes. Lengths also range between 6.5 and 8.5ft and when locked may extend beyond the length of a standard rack. Provide **on-the-ground** parking options with **long or angled** spots to fit larger bikes.

Electrical | Best accommodate long-term e-bike parking with **multiple outlets** or **outlets built into the rack itself**.

Security | E-bike theft may require **higher security** parking such as enclosed or monitored parking areas.

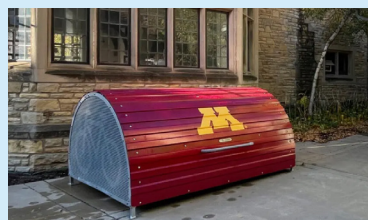
Compatibility | Other electric mobility like scooters and scooter/bike share users may need to use bike racks. Parking should **accommodate multiple modes** to prevent non-compliant parking.

Secure Bike Parking

New secure bike parking options aim to prevent theft: a major barrier to biking, especially for expensive e-bikes and cargo bikes.

More companies now offer **lockers, pods, and hangers** fitting one or more bikes and opened by key or smartphone. These storage areas can be moved and fit within parking spaces, public spaces, or other convenient locations.

[Oonee Bike Parking](#)
Pods coming to
[Minneapolis 2025](#)



[Cyclehoop Bikehangar](#)
pilot at the [University of Minnesota](#)

Sustainable Materials

More bike rack manufacturers are creating, shipping, and marketing bike racks with sustainability in mind. Just as active transportation helps to reduce greenhouse gas emissions, bike racks can also be made to reduce environmental harm.



Racks made of [recycled](#) metal by Landscapeforms

Ask Manufacturers About:

Recycled steel & sustainable sourcing
Manufacturing impact reports

Sustainable material packaging

Zoning and Regulations

More cities are seeking to provide sufficient bike parking using zoning and regulation. These policy updates target new and re-development and concern parking elements like location, rack type, and amount.

Facility Type	Minimum Spaces Required
5+ unit multi-family dwelling	1 space per 2 units
Office	3+ spaces or 1 space per 4,000 sq. ft.
Schools	3 spaces per classroom
Grocery Stores	3+ spaces or 1 space per 2,000 sq. ft.

[City of Minneapolis](#) sample bike parking minimums