APBP Bicycle Parking Guidelines

ACTIA
Oakland, 2009

Eric Anderson
APBP Board of Directors
Please note: this presentation provides draft recommendations and dimensions from the upcoming 2009 APBP Bicycle Parking Guide Update. This draft is still under development and differs from APBP’s “official” guidelines. Please see the APBP website for the current bike parking guide:

http://www.apbp.org/?page=Publications
Why is Bike Parking Important?

• Encourages people to bike
• Is good for business
• Designated parking
  – is more orderly for buildings
  – prevents damage to trees and street furniture
  – prevents bikes from blocking the sidewalk
  – Helps legitimize cycling as transportation
• “I’d ride my bike to work if I had a secure place to lock it up”
APBP Bike Parking Guide - Update Outline

• Chapter 1: Introduction – Core Concepts
• Chapter 2: Facilities
  – How to select a good rack
  – How to select a good locker
  – Site planning
    • Sidewalks
    • In-street parking
    • Transit stations
    • Indoor bike rooms
    • Bikestation™
    • Temporary Events
    • Sheltered Parking
  – Maintenance
• Chapter 3: Policies and Codes
  – How much bike parking?
  – Land use requirements
Introduction – Core Concepts

• Short-term Bicycle Parking
  – Less than 2 hours
  – Simple racks (typical)
  – Not usually secured/sheltered
  – Typical land uses:
    • Commercial/Retail
    • Medical/healthcare
Introduction – Core Concepts

• Long-term Bicycle Parking
  – More than 2 hours
  – Racks/lockers/two-tiered racks
  – Secured/enclosed
  – Sheltered or indoors
  – Typical land uses:
    • Residential
    • Workplace
    • Transit
Facilities – Racks

- What makes a good rack?
  - **Cost:** Low.
  - **Maintenance:** Moving parts, durable finish?
  - **Materials:** Secure?
  - **Aesthetics:** Fits in with street or site
  - **Security:** Allows locking of frame and wheels
  - **Usability:**
    - supports bike in at least two places
    - fits bikes with baskets and large or raised handlebars
  - **Capacity:** Actually holds number of bikes claimed
Facilities – Lockers

• What makes a good locker?
  – Maintenance
    • Moving parts
    • Lock (keyed or electronic)
    • Graffiti removal
  – Materials:
    • Steel (solid or perforated)
    • Reinforced Fiberglass
    • Polyethylene (flammable, weak)
  – Security:
    • Vandalproof hardware
    • Impact-resistant panels
    • Pry-proof door
Facilities - Lockers
Facilities - Lockers
Facilities - Lockers
Facilities - Lockers
Facilities – Site Planning

• Short-term Parking:
  – Convenient to destination (50ft. from door)
  – Visible from adjacent bikeways
  – “Passive surveillance”/Eyes on the Street
Facilities – Site Planning

• Long-term Parking:
  – Easy access/guide signage
  – Controlled access
    • Leased (keyed or smartcard) lockers
    • On-demand (self-lock or smartcard) lockers
    • Keycard/code access garage cage or bike room
  – Weather protection
    • Shelter
    • Indoor cage or room
  – Lockers/showers
Facilities – Site Layouts

- Avoid handlebar conflicts
- Think about baskets and racks
- Allow clearance for users to lock up
- Aisle spacing: Entry/Exit, flow of users
- Consider access from all sides
Facilities - Spacing

DRAFT
Short-term Rack Layout – Min. 10’ Sidewalk width

- Distance from nearest upright element of rack to curb: 2’
- Distance between racks: 6’
- Distance to other street furniture and obstructions: 4’
- Recommended pedestrian clearance: 8’
- Minimum distance from entrance building: 50’
Short-term Rack Layout – Sidewalk 10’ + width

- Distance from racks to curb: 3’
- Spacing between racks: 4’ (3’ minimum)
- Distance to street furniture and obstructions: 4’
- Recommended pedestrian clearance: 8’
- Minimum distance from entrance building: 50’
Short-term Rack Layout – “Parking Lot” (bike room, transit)

- Spacing between racks: 4' (3' minimum)
- Aisles: 5'
- Distance to obstructions: 4'
- Distance to pedestrian aisle: 4'

Draft
Long-term Locker Layout

• Aisle spacing: 7'
• Distance to obstructions from front of locker: 7'
• Suggested pedestrian clearance: 8' (or 7' of clearance to nearest locker door)
In-Street Bike Parking
Case Study #1 – Berkeley, CA

Parallel Parking: In-street bike parking delineated by heavy-duty architectural bollards on concrete pad

Diagonal Parking: In-street bike parking delineated by pavement markings or rubber curbing on asphalt
Case Study #1 – Berkeley, CA

• Began installation in late 90’s
  – Two locations installed in downtown – cafe & library
  – Third location installed later at Farmer’s Market
• All existing installations:
  – In red zone areas - no parking removed
  – Locations were high volume of bike parking demand
  – Little to no coordination with adjacent properties
Case Study #1 – Berkeley, CA

• Fourth and fifth locations are under design
  – Sensitive retail storefront areas with active business associations
  – Will need to do outreach to the businesses to communicate the benefits
  – Location #1: One parking space will be removed and blue zone (disabled parking) relocated (“Bike Corral”)
  – Location #2: Will require curb extensions (“Bike Oasis”)
Case Study #2 – Portland, OR

Two facility types of grouped parking in Portland:

- Bike Corral
- Bike Oasis

In-street bike parking delineated by pavement markings or rubber curbing

Covered bike parking located on a purpose built curb extension
Case Study #2 – Portland, OR

• 50+ requests to remove on-street auto parking by businesses across the city
• Portland has installed 14 on-street bike corrals; triple this by the end of 2009.
• Locations are identified through consultation with business association (when feasible) and approval by business owner
• Maintenance agreement signed between business and City to ensure corrals are debris free
Case Study #2 – Portland, OR
Case Study #2 – Portland, OR
Case Study #2 – Portland, OR
Design – Best Practices

• Safety of users
  – Setback from travel lanes (max width: 8’ parking lane)
  – Low roadway speed limit
  – Low truck or bus traffic
  – Low parking turnover
  – Easy circulation/access

• Parallel or Diagonal Space Parking OK

• Layouts (rack placement)
  – Perpendicular OK for wide travel or curb lanes
  – Angled racks better for narrow travel lanes
Design – Best Practices

• Consider Adjacent land use (sidewalk café?)
• Basic bike racks OK (example: inverted U)
• Demarcate area
  – Minimum $: Paint striping and two soft bollards
  – More $$: Rubber curb, reflectors, multiple bollards, temporary planters
  – Highest $$$: Expensive bollards, concrete pad, permanent planters
• Costs vary widely
  – Low end “Corral”: $1,000
  – High end “Oasis”: $50,000
Short-term Rack Layout – On-street Parking (Portland, OR)

30' - 33' racks for 20-24 bicycles

5' - 6'

38' - 44'

Area designated for planters, etc.
Short-term Rack Layout – On-street Parking (8ft. Wide)

- Racks perpendicular to curb:
  - Distance from racks to sidewalk curb: 2.5'
  - Spacing between racks: 3'
  - Distance of bollards/temp curbs from sidewalk curb: 8'
- Length of parking area: 20' (or standard stall length)
Short-term Rack Layout –
On-street Parking (6.5 ft. Wide)

• Racks at angle (55 deg) to curb:
  – Distance from racks to sidewalk curb: 2'
  – Spacing between racks: 3'
  – Distance of bollards/temp curbs from sidewalk curb: 6.5'
  – Length of parking area: 20' (or standard stall length)
Implementation – How to Make It Happen

• Adopt design guidelines (Best Practices)
• Create City policies (maintenance and liability)
• Business community outreach - identify locations
• Identify funding
• Pilot locations which will succeed
• Document success/failure
  – Getting used? How much? (bike counts)
  – Survey cyclists
  – Survey patrons of business district
  – Survey business owners
Montreal
Arlington, Virginia
Baltimore, Maryland
Chico, California
Columbia, Missouri

Ninth and Cherry – cost $1000 – 12 spaces
Fort Collins, Colorado

New Belgium Bike Rack in Front Trail Head Bar
Palo Alto, CA - Hamilton Ave

http://www.bicyclesolutions.com/BikeRacksOnStreet/PaloAlto_HamiltonAve.jpg
Seattle, Washington
Seattle, Washington
Santa Cruz, Pacific Ave

http://www.bicyclesolutions.com/BikeRacksOnStreet/SantaCruz_PacificAv_OnStRacks01.JPG
St Petersburg, Florida
Warrington, UK
Brussels, Belgium
Copenhagen
Thank you!

- APBP Bicycle Parking Task Force
- Pamela Kolis (Graphic Design)
- Sarah Figliozzi, City of Portland

Comments/Feedback:
Eric Anderson
eanderson@berkeley.ci.ca.us