



## Bicycle Parking Update Stakeholder Meeting #2

### MEETING NOTES

July 7, 2016

Members present: Todd Boulanger, Bicycle Transportation Alliance; Clint Culpepper, Portland State University; Kathryn Doherty-Chapman, Go Lloyd; Jeffrey Mitchem, Bureau of Development Services; Mauricio Leclerc (alternate), Bureau of Transportation; Ian Stude (alternate), Bicycle Advisory Committee; Phil Nameny, Bureau of Planning & Sustainability; Jeff Owen, TriMet; Chris Smith, Planning and Sustainability Commission; Felicia Williams, Neighbors West-Northwest District Coalition

Members absent: Phillip Beyl, GBD Architects; Tom Kilbane, Urban Renaissance Group; Susan Steward, BOMA; Jean Pierre Veillet, Siteworks Design Build

Staff: Sarah Figliozzi

Group met at PSU Bike Hub, 1818 SW 6th Ave, Portland, OR to visit several examples of different types of bicycle parking configurations and spacing.

The following is a high level summary of issues discussed and the level of member support for recommendations put forward:

Rack requirements:

- Bicycle rack must support the bicycle at two points of contact: majority committee support.
- Bicycle rack must not require lifting of the bicycle more than 12 inches off the ground: majority committee support
- Group discussed value of adding rack material and form requirements such as tube diameter and steel gauge, similar to TRN 10.09

<https://www.portlandoregon.gov/auditor/31911?a=43223> Alternatively details such as these can be recommendations in a handbook similar to [San Francisco's bicycle parking handout](#). [http://sf-planning.org/sites/default/files/ZAB\\_BicycleParking\\_9-7-13.pdf](http://sf-planning.org/sites/default/files/ZAB_BicycleParking_9-7-13.pdf)

#### Locker requirements:

- Bicycle lockers shall provide a minimum depth of 6 feet and a 2 foot wide access door. (To acknowledge that lockers are typically triangle shaped). Majority support.

#### Rack spacing and clearances:

- Missing third dimension of bicycle footprint. Group discussed a range between 40 to 44 inches with a 60 inch maneuvering aisle behind the bicycle. Meeting notes are missing the group recommendation on this point – we will discuss at next meeting.
- Group discussed bicycle footprint (6' by 2') and how the footprint can impact recommended clearances between racks and between wall/curb and racks. Staff will come back with recommended clearances (to replace those figures found in 266-11 Examples of Bicycle Parking Layouts).

#### Vertical racks:

- Group discussed placing a maximum percentage limit on number of required spaces that can be satisfied with vertical racks. Alternatively (or additionally) the group discussed placing a minimum percentage of required bicycle spaces that must be satisfied in racks that lock the bicycle horizontally on the floor or ground (floor-mounted inverted-u racks; the lower row of a double-decker rack).
- The following are some similar examples from other cities:
  - San Francisco, CA – no more than 1/3 of required spaces may be vertical.
  - Arlington, VA – a minimum of 30% required spaces must be horizontal and ground level.
  - Vancouver, BC – a minimum of 50% of required spaces must be horizontal on the floor or ground.
  - Fairfax County, VA – Use the 70/30 rule: A minimum of 30% of the total parking capacity should be allocated to floor mounted inverted “U” racks or an equivalent style rack.
  - Cambridge, MA – NO vertical racks are permitted by code.
- Majority committee members supported a range between 1/3 and 1/2 as a minimum percentage of required spaces to be horizontal. Some discussion around including a minimum horizontal and a maximum vertical though concerns about complexity and inflexibility were raised.
- 16” minimum clearance between racks, with a minimum vertical stagger of 8 inches was supported by the group IF accompanied by a limit to the amount of vertical parking that could be used to satisfy building requirements.
- The following are some similar vertical rack spacing examples from other cities:
  - San Francisco, CA – minimum of 16” between vertical racks
  - Berkeley, CA DRAFT – rack spacing of 16” with vertical stagger of 10”

- Ceiling clearances – discussed by group. Staff to review building requirements and bike rack manufacturer specification recommendations.

#### Double decker racks:

- Double decker bike racks will either have a static upper tray or provide a lift assist tray that drops down. PBOT does not support products that do not provide a lift assist tray as it requires the user to lift the bicycle to the upper level.
- It was agreed that 17" spacing between bikes on the Dero Decker in the PSU facility is feasible, with both the horizontal and vertical stagger.
- The following are guidelines examples for double decker racks from other cities:
  - San Francisco, CA – Double-Decker Lift-Assist Racks allow for a smaller required clearance between bicycles (17"), measured from mid-point of one rack to mid-point of other rack. 80" depth required from wall to start of aisle measurement.
  - Berkeley, CA DRAFT – each unit requires 80" of depth; recommended access aisle of 60", minimum access aisle of 48".

#### Cargo and long tail bikes:

- PBOT recommends a 10' by 3' footprint.
- General support to consider a requirement for buildings above a certain size. For example, multi-family dwellings of 20 units or more.
- The following are some similar cargo bike requirement examples from other cities:
  - Cambridge – Where more than 20 spaces is required, min 5% of required spaces must allow for 2' x 8'.
  - San Francisco – Recommends various space dimensions for different types of bikes.
  - Eugene DRAFT – Apartments: 15% of LT, 1 ST; Retail/office: 10% of LT, 1 ST; Schools: 15% of ST; Parks: 2 ST. All require special signage.
  - Santa Monica, CA – At least 10% of the total bike parking must be provided to accommodate 10-foot long bicycles such as bicycles with trailers, recumbent, and cargo style bicycles. If Senior Housing is provided, bicycle parking areas must accommodate tricycle-style bicycles.

#### Provisions for electric bikes:

- Similar to cargo bikes, general support to consider a requirement for buildings above a certain size. For example, multi-family dwellings of 20 units or more.
- The following are some similar electric bike provision examples from other cities:
  - Vancouver, BC – "each two class A bicycle spaces must have an electrical outlet"

- Fairfax County, VA – “With the growing popularity of electric assist bicycles, special parking areas with access to electrical outlets/charging stations should be evaluated as part of your room design.”
- Santa Monica, CA – At least one electrical outlet shall be available in each long-term bicycle parking area for the use of electrical assisted bicycle charging.

Other:

- Shower and locker requirements: no majority committee support
- Bike repair station: no majority committee support
- Details such as bike room door access width could be included in design recommendations