Bicycle Parking Zoning Ordinance

Cambridge City Council
Ordinance Committee
April 3, 2013

Community Development
Department
City of Cambridge
Why is Bicycling Important?

- Environment
- Public Health
- Economic Development
The two major facilities needed for the bicycle are a system of protected rights-of-way and secure storage spaces ...

Commercial districts, public buildings, most MBTA stations, and most employers in Cambridge offer very little in the way of bicycle parking facilities.

Climate Protection Plan (2002)

Install more bicycle lanes and parking facilities; create and improve off-road paths including railroad rights-of-way; expand efforts to retrofit streets and intersections to better accommodate bicycles and pedestrians.

Growth Policy (1993 + 2007)

The two major facilities needed for the bicycle are a system of protected rights-of-way and secure storage spaces ...

Commercial districts, public buildings, most MBTA stations, and most employers in Cambridge offer very little in the way of bicycle parking facilities.
Updating the zoning requirements

Current bicycle parking requirements date to 1981

What needs to be updated?

**Quantity**  
Support City’s goal of 10% of all trips made by bicycle

**Design**  
Apply best standards used in cities across the country

**Consistency**  
Ensure that all new projects have clear requirements for providing bicycle parking
Dramatic increase in bicycling

Cambridge Bicycle Counts 2002-2012

Bicycling has **tripled** in the past 10 years in Cambridge.

Numbers represent combined AM and PM peak hour cyclist counts at 16 locations on a fall weekday under similar weather conditions.
City Goal:
• 10% (or more) of all trips made by bicycle
• 20% for colleges and universities

Porter Square Customer Intercept Survey
September, 2012 - Mode of Travel

Cambridge Residents Journey-to-Work
American Community Survey 2006-2010

How many people bike
Bicycle Ownership in Cambridge

- 0 bikes: 33%
- 1 bike: 17%
- 2 bikes: 20%
- 3 bikes: 12%
- 4 bikes: 8%
- 5 or more bikes: 10%

About 67% of households own bikes.

About 75% of households owning bikes own two or more bikes.

Average is already more than one bicycle owned per household (and increasing).

Data source: Cambridge CitySmart transportation surveys, 2009-2011
More cyclists = higher demand for bike parking
What happens when there is not enough bike parking

Bikes parked to anything – and everything!

Bike theft is made easier
When bicycle parking isn’t done right …

… not as many bikes can be parked …

… storage/removal becomes awkward …

… and bikes end up where they don’t belong
Design, Layout and Location Requirements

- Convenient storage/extraction
- Protection from damage/theft
- Accessible to all users
- Wide range of bicycle types
- Facility installation & maintenance

Association of Pedestrian and Bicycle Professionals (APBP):
Officials from around the country with experience in bicycle facilities planning (including Cambridge!)
Short-term and long-term bicycle parking

**Short-term**
Direct access for trips of short duration/visitors
e.g. post office, coffee shop

**Long-term**
Enclosed, secure parking
e.g., residential, office
Bike Parking for all users and all bikes
I. Create a New Section 6.100 – Bicycle Parking

II. Modify the Definition of Parking and Create a Definition for Bicycle Parking in Article 2.000

III. Modify the Definition of Gross Floor Area in Article 2.000

IV. Modify the Definition of Private Open Space in Article 2.000

V. Modify the Yard Standards in Article 5.000

VI. Modifications to Ensure Consistency between Existing and Proposed Zoning
6.101 – Purpose

In order to support the ongoing viability of bicycle travel as a transportation option that mitigates the impacts of automobile use, the following regulations are provided to ensure that secure, conveniently accessible bicycle parking is provided in adequate quantity to serve new development and land uses throughout the city.
6.102 – General Terms and Standards

Long-Term
• secure
• enclosed
• for authorized users (employees, residents)

Short-Term
• available to the public
• convenient to entrances
• for everyone (customers, visitors)
Bicycle parking is required under same circumstances as auto parking, except *not on lots with ≤ 2 units*

- New construction
- Increase of 15% or more in *intensity of use*

### Parking Requirements

<table>
<thead>
<tr>
<th>Car Parking</th>
<th>Bicycle Parking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in intensity</td>
<td></td>
</tr>
<tr>
<td>≥15%</td>
<td></td>
</tr>
<tr>
<td>Existing use intensity</td>
<td></td>
</tr>
</tbody>
</table>
Zoning Petition Overview

6.104 – Location

Long-Term

Within same building, or …

Separate structure within 200’ walking distance

Short-Term

Within 50’ of entrance, or …

Contribute to public bicycle parking fund
Zoning Petition Overview

6.105 – Design and Layout

Bicycle Racks

Bicycle Lockers
6.106 – Access

Primary access:
• 5’ aisle width
• 5% ramp (or 8% with landings)
• Elevator @ 80” by 54”

Secondary access:
• Garage ramps
• Stairway channels

What’s wrong with this?
## Zoning Petition Overview

### 6.107 – Quantity

<table>
<thead>
<tr>
<th>Use Type</th>
<th>Long-Term (Minimum)</th>
<th>Short-Term (Minimum)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Residential</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Dwellings (at least 4 units)</td>
<td>1.00 space per dwelling unit for first 20 units&lt;br&gt;1.05 spaces per dwelling unit for additional units</td>
<td>0.10 space per dwelling unit</td>
</tr>
<tr>
<td>Elderly or Group Housing</td>
<td>0.50 per living unit/bed</td>
<td>0.05 space per living unit/bed</td>
</tr>
<tr>
<td>Hotel/Motel</td>
<td>0.02 per sleeping room</td>
<td>0.05 space per sleeping room</td>
</tr>
<tr>
<td><strong>Non-Residential</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial Uses</td>
<td>Range: 0.10 – 0.30 space per 1,000 SF (based on approx. 10% of expected employees)</td>
<td>Range: 0.06 – 1.00 space per 1,000 SF (based on approx. 10% of expected visitors)</td>
</tr>
<tr>
<td>College/University</td>
<td>0.20 space per 1,000 SF</td>
<td>0.40 space per 1,000 SF academic/administrative&lt;br&gt;1.00 space per 1,000 SF student activities</td>
</tr>
<tr>
<td>K-12 School</td>
<td>0.30 space per classroom or 0.015 space per auditorium seat (greater of)</td>
<td>1.70 spaces per classroom or 0.085 space per auditorium seat (greater of)</td>
</tr>
</tbody>
</table>

Note: Can shift some required long-term spaces to short-term (e.g., for small businesses)
6.108 – Modifications by Special Permit

Why allow modifications?

New technologies/ideas

Area-wide master planning

Testing, monitoring may be needed

Pooled bicycle parking strategies may be better in campus areas
Modify Definitions in Article 2.000

Current Zoning Definitions

Proposed Zoning Definitions
Gross Floor Area (Article 2.000)
Private Open Space (Article 2.000)
Yards (Article 5.000)

Resolve impediments:
• Covered/indoor bicycle parking – exempt from FAR (including access aisles)
• Allow bicycle parking to occupy required private open space
• Allow bicycle parking in front, side, rear yards
Other Article 6.000 Modifications

- Remove/modify language that is inconsistent with new Section 6.100
- Revise plan submission requirements

Where’s the bike parking? Does it conform?
Zoning Petition Overview

Questions and Discussion