

Bicycle Parking Zoning Ordinance



Cambridge City Council
Ordinance Committee
April 3, 2013



*Community Development
Department
City of Cambridge*

Why is Bicycling Important?



Environment

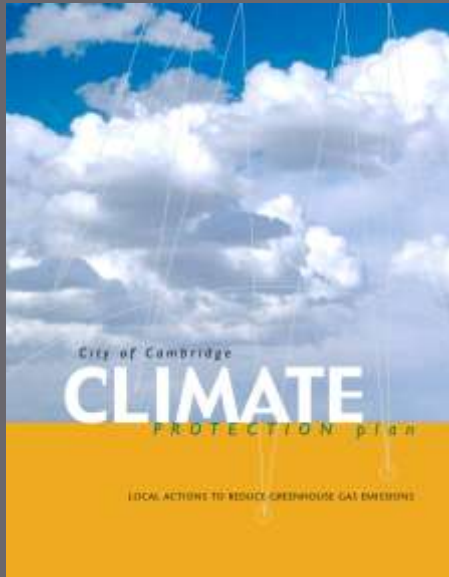


Public Health



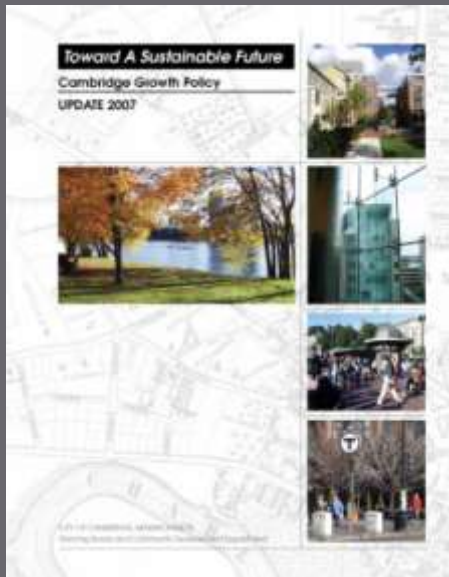
Economic Development

City Goals



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

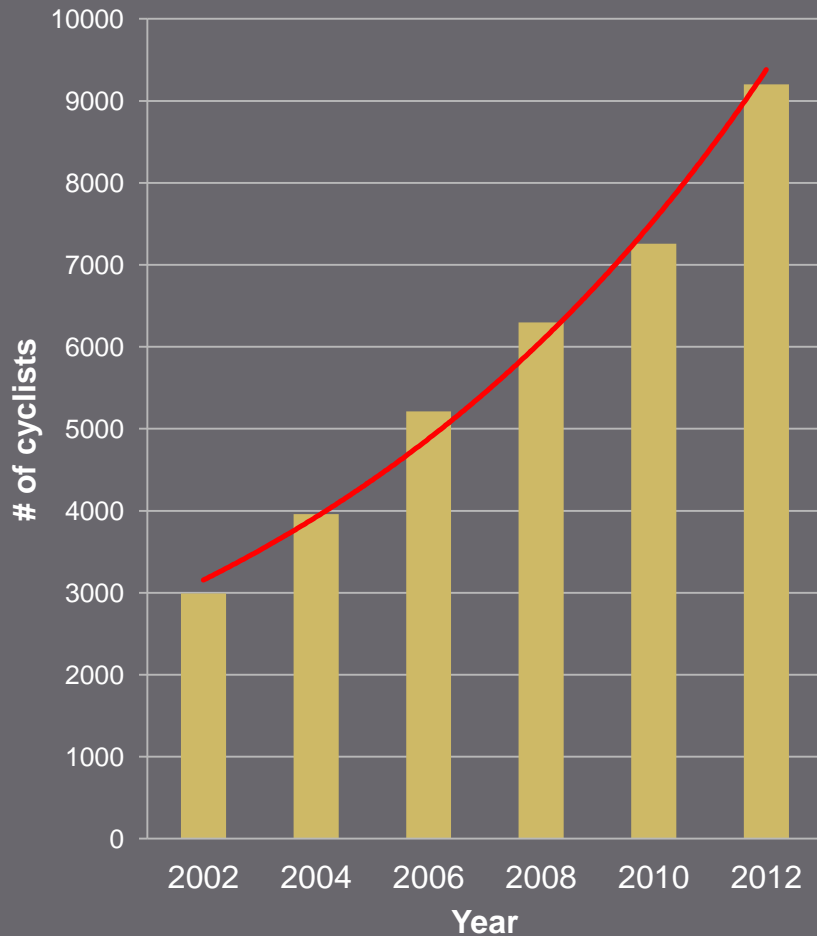
Apply **best standards** used in cities across the country

Consistency

Ensure that all new projects have clear requirements for providing bicycle parking

Dramatic increase in bicycling

Cambridge Bicycle Counts 2002-2012

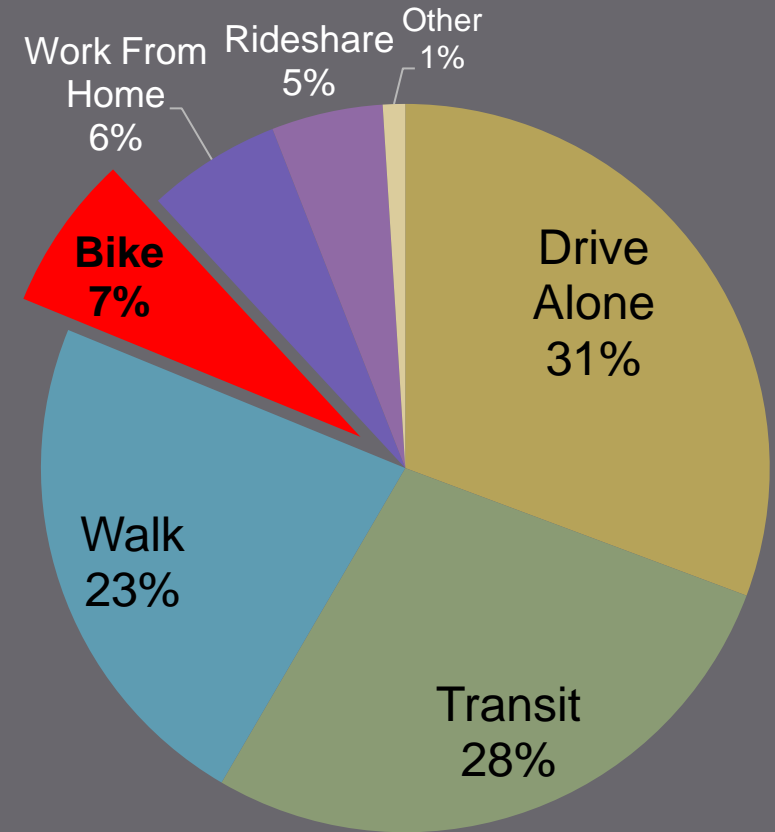
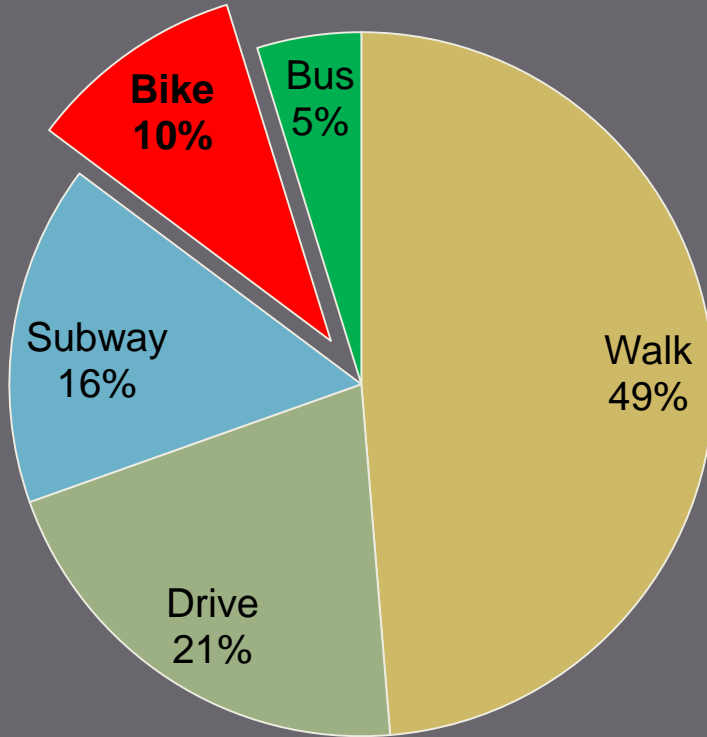


Bicycling has **tripled** in the past 10 years in Cambridge.

Numbers represent combined AM and PM peak hour cyclist counts at 16 locations on a fall weekday under similar weather conditions.

How many people bike

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

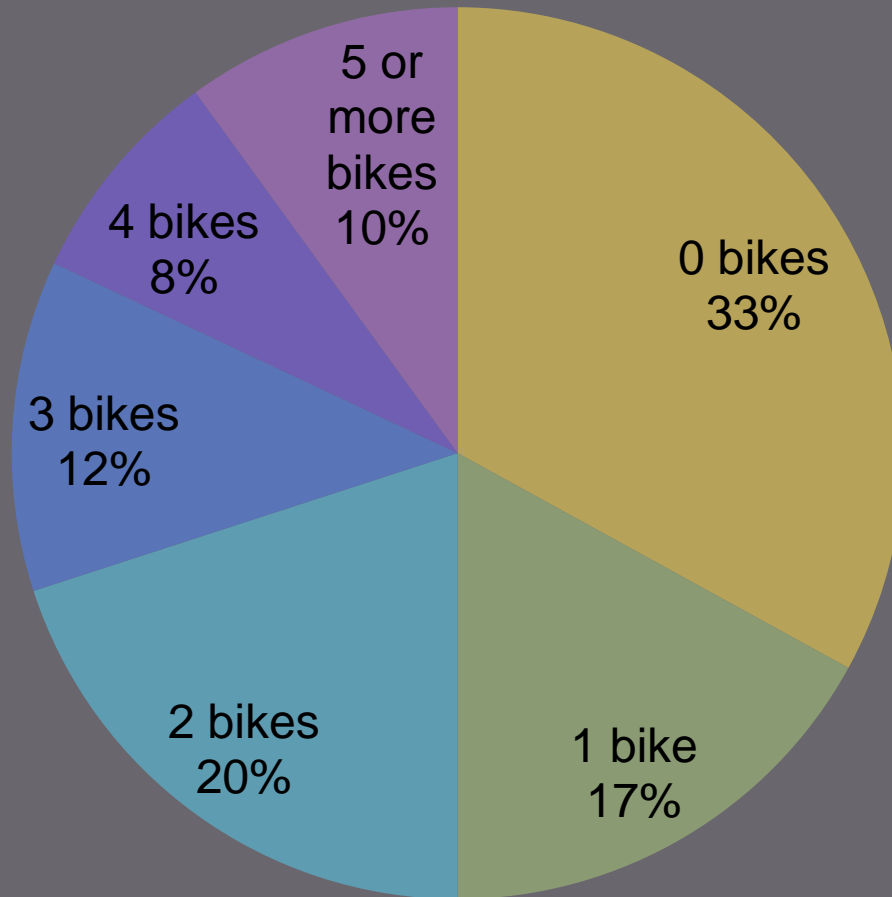


Cambridge Residents Journey-to-Work
American Community Survey 2006-2010

City Goal:

- 10% (or more) of all trips made by bicycle
- 20% for colleges and universities

Bicycle Ownership in Cambridge



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



Why is Design Important?

When bicycle parking isn't done right ...



... not as many bikes can be parked ...

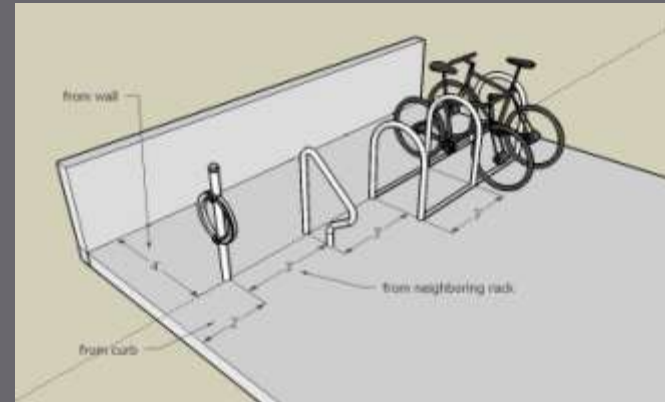
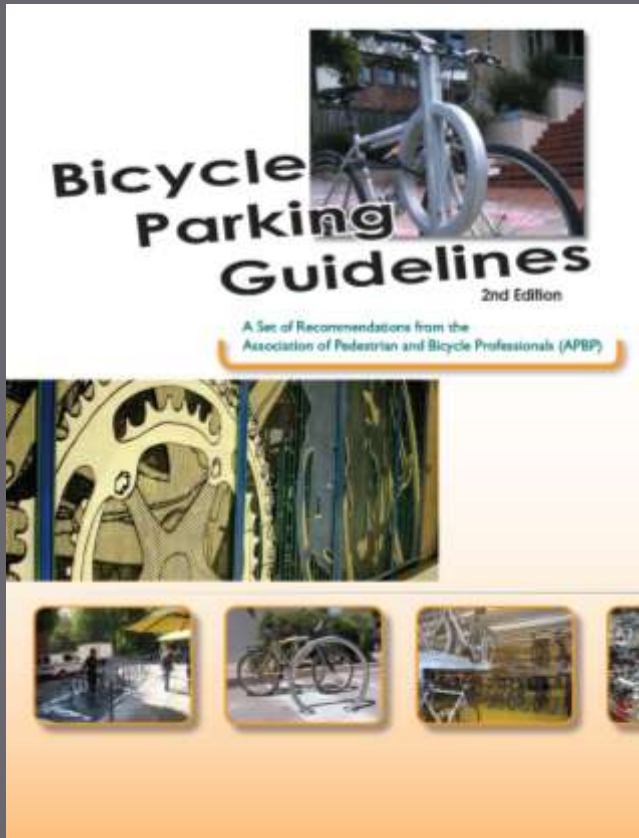


... storage/removal becomes awkward ...



... 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



Zoning Petition Overview

- 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

Zoning Petition Overview

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.

Zoning Petition Overview

6.102 – General Terms and Standards



Long-Term

- secure
- enclosed
- for authorized users
(employees, residents)



Short-Term

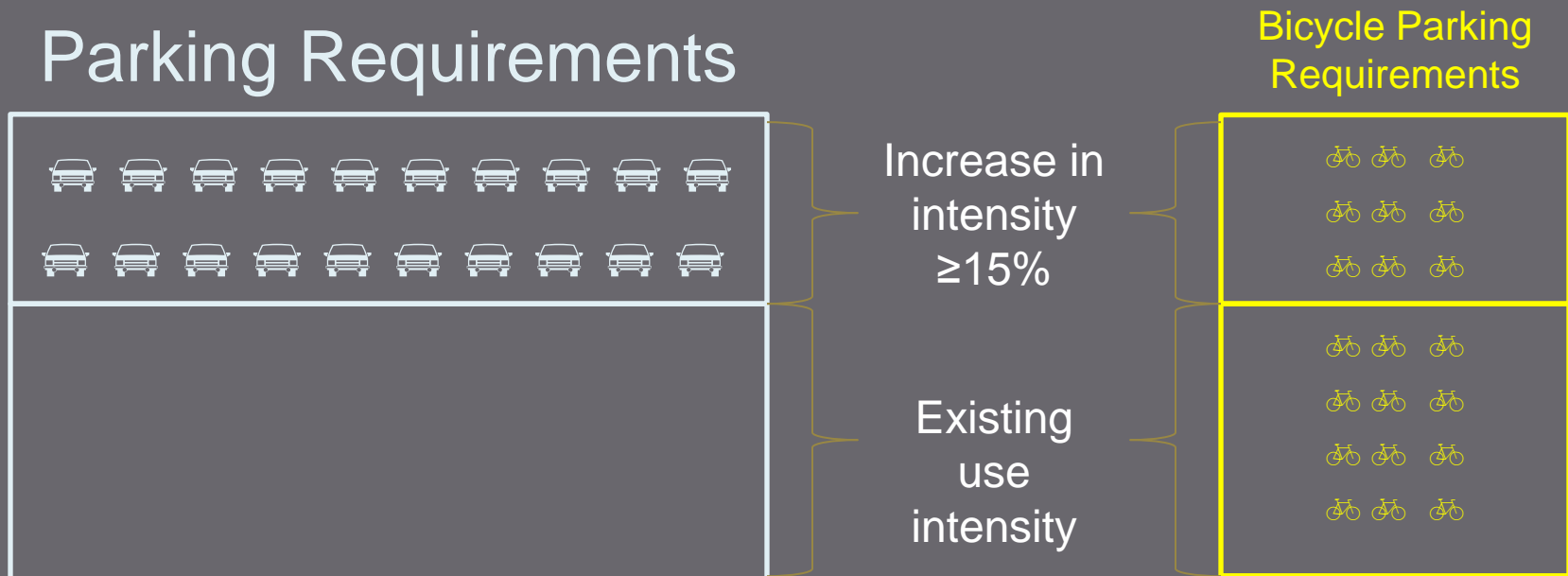
- available to the public
- convenient to entrances
- for everyone
(customers, visitors)

Zoning Petition Overview

6.103 – Applicability

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*



Zoning Petition Overview

6.104 – Location

Long-Term



Within same building, or ...



Separate structure within 200'
walking distance

Short-Term



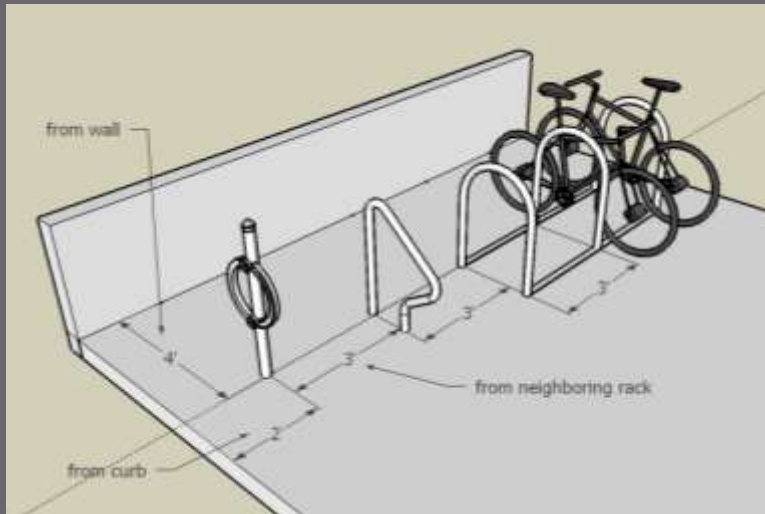
Within 50' of entrance, or ...



Contribute to public bicycle parking
fund

Zoning Petition Overview

6.105 – Design and Layout



Bicycle Racks



Bicycle Lockers

Zoning Petition Overview

6.106 – Access

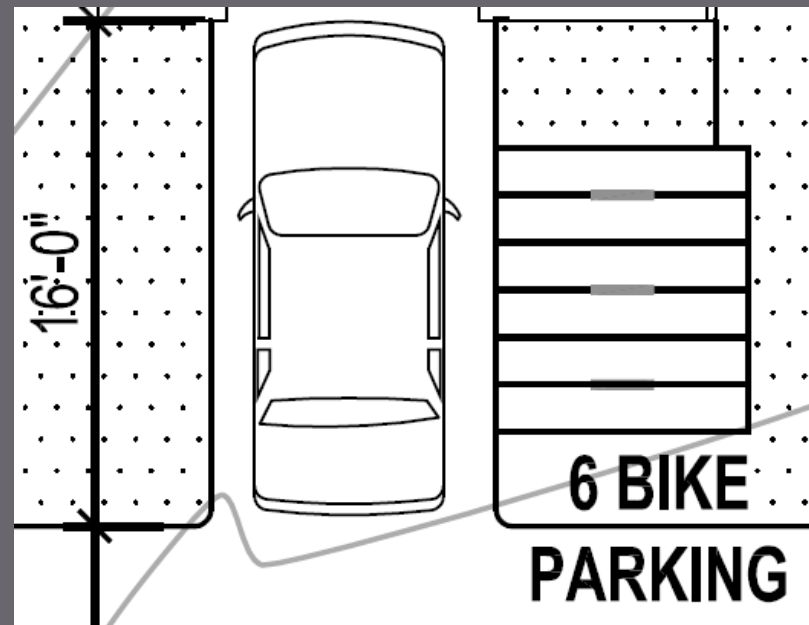
Primary access:

- 5' aisle width
- 5% ramp
(or 8% with landings)
- Elevator @ 80" by 54"

Secondary access:

- Garage ramps
- Stairway channels

NO OBSTRUCTIONS



What's wrong with this?

Zoning Petition Overview

6.107 – Quantity

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

Note: Can shift some required long-term spaces to short-term (e.g., for small businesses)

Zoning Petition Overview

6.108 – Modifications by Special Permit

Why allow modifications?

New technologies/ideas



Testing, monitoring may be needed

Area-wide master planning



Pooled bicycle parking strategies may be better in campus areas

Zoning Petition Overview

Modify Definitions in Article 2.000

Current Zoning Definitions



Proposed Zoning Definitions



Zoning Petition Overview

Gross Floor Area (Article 2.000)

Private Open Space (Article 2.000)

Yards (Article 5.000)



Resolve impediments:

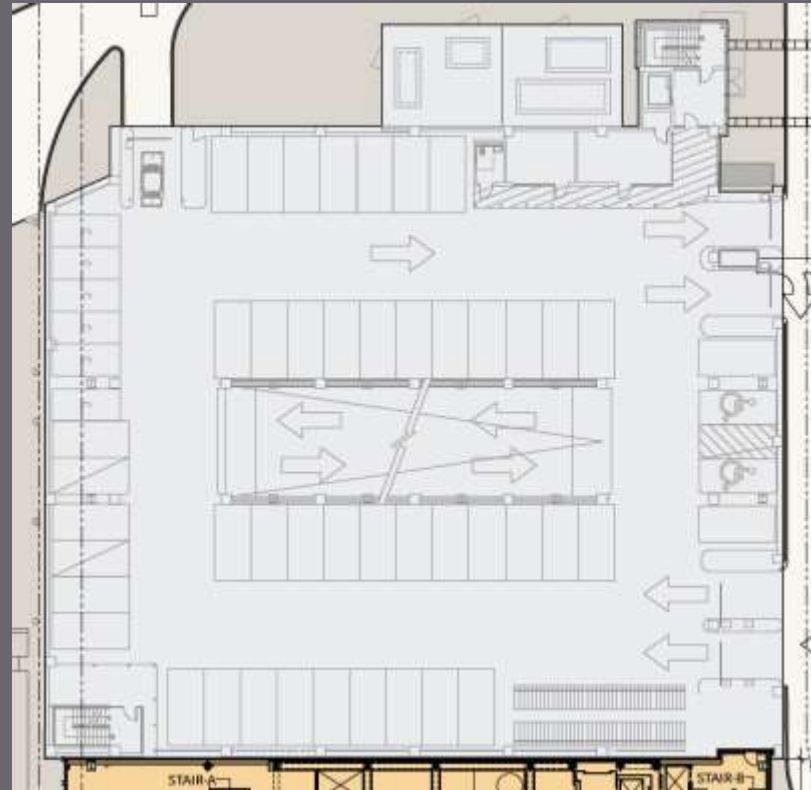
- Covered/indoor bicycle parking – exempt from FAR (including access aisles)
- Allow bicycle parking to occupy required private open space
- Allow bicycle parking in front, side, rear yards

Zoning Petition Overview

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*