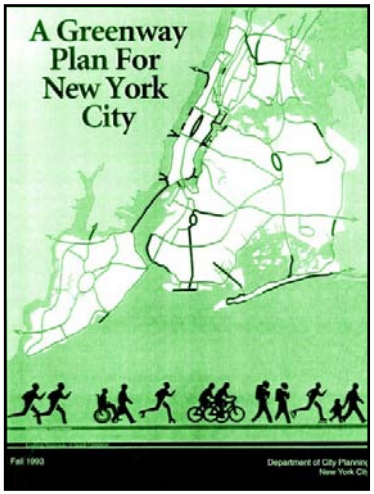
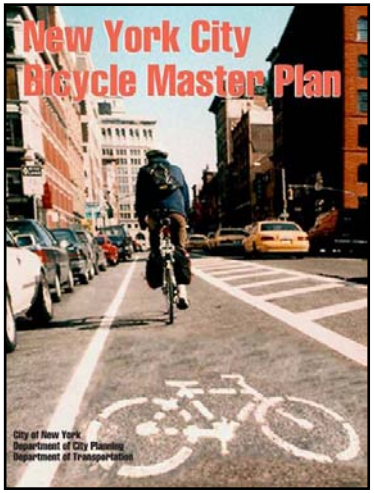
ZONING for BICYCLE PARKING

NYC Dept of City Planning
Transportation Division
November 17, 2008

Background – Federal Legislation and Bicycle Planning in New York City

1991 Intermodal Surface Transportation Efficiency Act (ISTEA)
Congestion Mitigation Air Quality (CMAQ)





- Improve Air Quality
- Reduce Energy Costs
- Reduce Congestion
- Lower Transportation Costs

- 350 Mile Network of Greenways (1993)
- Comprehensive 909 Mile Bicycle Network (1997)
- Implement Network of Bicycle Facilities
- Improve Safety
- Provide Bicycle Parking and Support Facilities
- Improve Bicycle Access on Bridges and Mass Transit
- Institutionalize

Background – Bicycle Planning in New York City

This project is part of a multi-pronged, multi-agency effort to support bicycle use in the city:

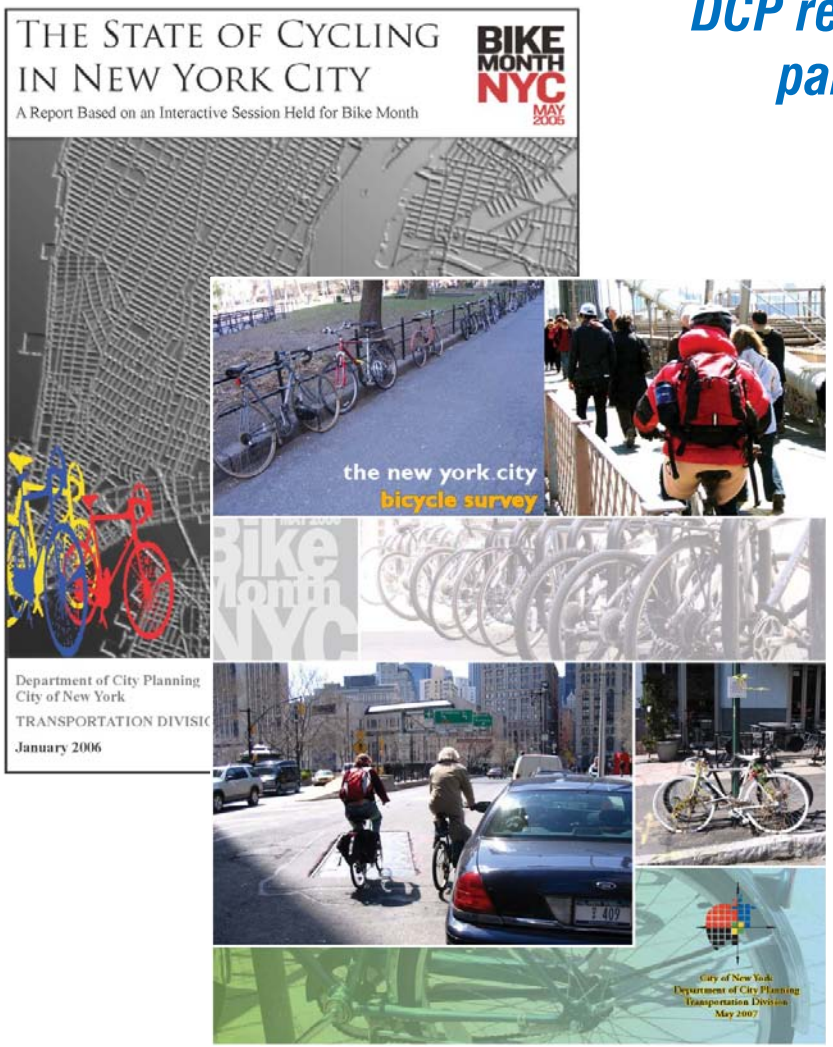
Bicycling in PlaNYC

1. The bicycle network
    a) Full build-out Bicycle Master Plan
    b) 200 New Miles of Bike Lanes by 2009
2. Parking
3. Promotion
4. Education and Enforcement
5. Mainstreaming

Bicycling in DOT Strategic Plan

1. Double Commuting by 2015
2. Triple Commuting by 2020
3. Install 5,000 Outdoor Bike Racks by 2009
4. Bike Rack Design Competition

Background – City Planning Reports



DCP research shows a need for secure bicycle parking facilities at home and at work:

- New Yorkers use bicycles for recreation, exercise, shopping and commuting

- Bicycle ownership generally requires secure indoor home storage

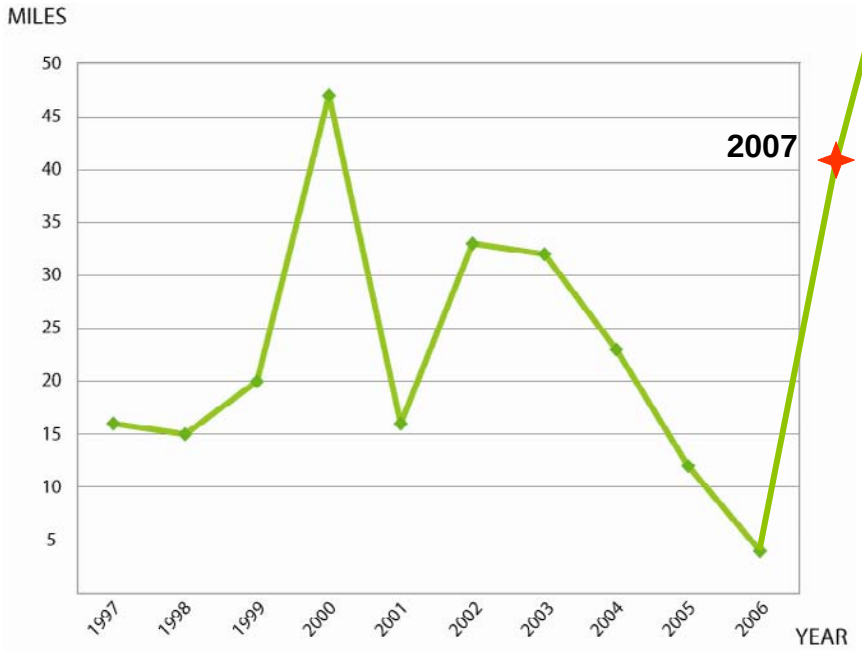
- Cyclists considering commuting place a high priority on indoor bike parking

- Top 2 Reasons non-commuting cyclists do not commute by bike:
  1) driver behavior/traffic
  2) lack of safe storage at work

Background – Trends

Cycling is on the rise in New York City:

Miles of New Bicycle Facilities 1997 - 2006



DOT Annual Count of Bicycles Entering Manhattan Core 1985 - 2006

2009

2008

2007

Current Annual count: More than doubled (116%) from 2000 – 2008;

35% increase from 2007 to 2008.

Background – Types of Bicycle Parking

Class 1 Bicycle Parking

- Secure
- Covered and usually indoors
- Weather protected
- Long-term (more than a few hours)
- For residents, employees, students


Midtown

Class 2 Bicycle Parking

- Less Secure than Class 1
- Usually outdoors, open
- Best suited to short-term use
- For shoppers, customers, messengers, visitors

Williamsburg

Background – Types of Bicycle Parking

Types of Bicycle Parking

Class 1: Indoor, secure, longer-term parking

Class 2: Outdoor, less secure, short-term parking

This project focuses on secure, longer-term bicycle parking.

Bicycle Parking Text Amendment – Goals

In new or significantly enlarged buildings, and conversions to residential uses, require facilities for secure parking and long-term storage of bicycles:

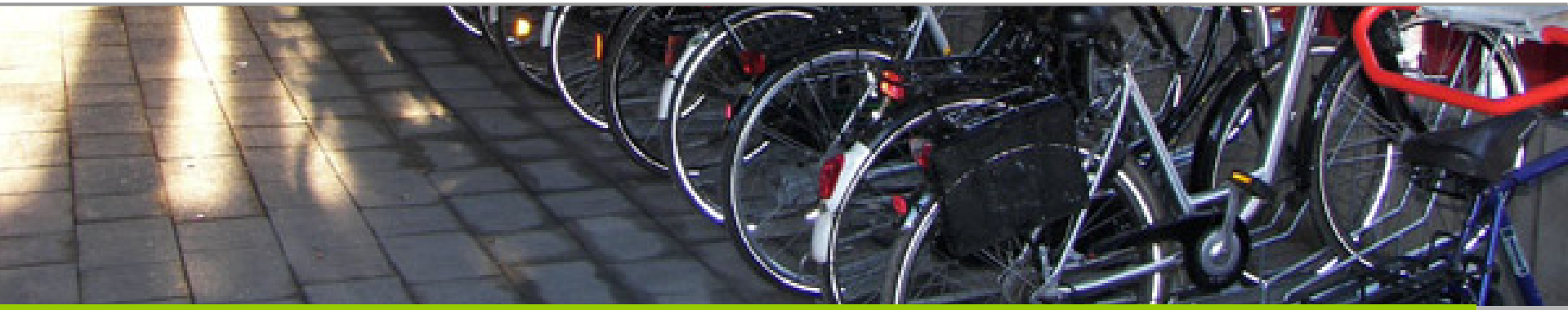
Multifamily Residential: provide parking where bicycles are stored most of the time.

Commercial and community facilities: provide parking for employees to support bicycle commutation.

Public parking garages: support bicycles as a transportation mode.

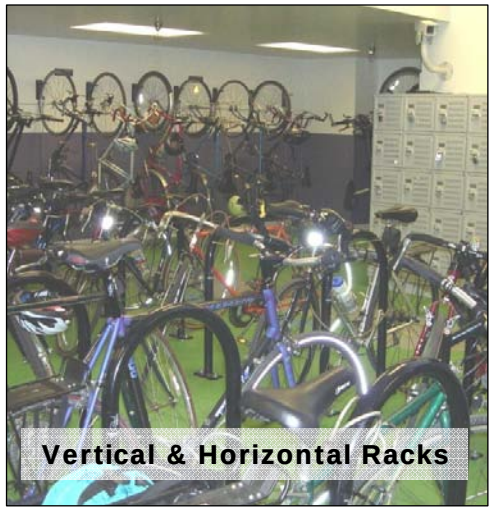
Balance bicycle parking with the needs of new development:

- allow a range of parking solutions and flexibility in meeting requirements
- do not count required facilities toward floor area
- allow waiver of requirements for small buildings and other unusual conditions



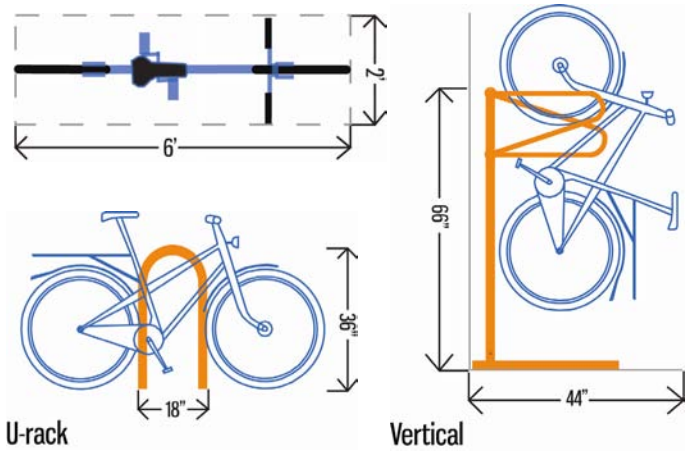
Bicycle Parking Text Amendment – Parking Systems

A variety of technologies exist from simple to space-saving:

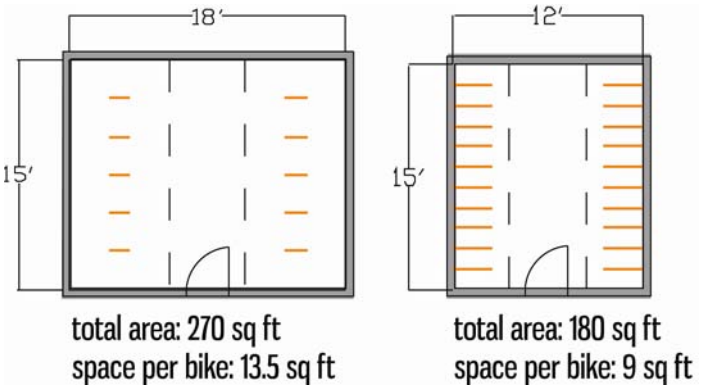


Bicycle Parking Text Amendment – Size of Spaces

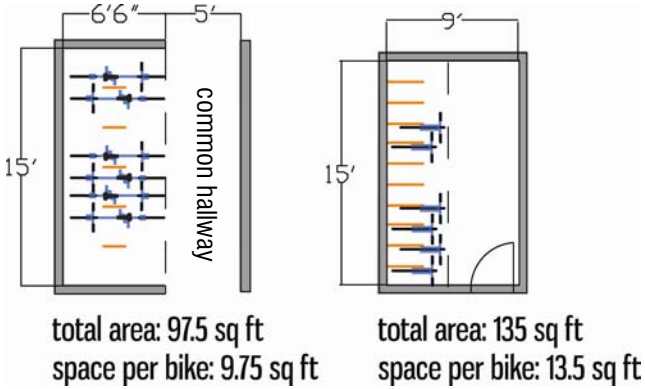
Bicycle parking can be accommodated in 15 square feet per space or less:



Medium Bike Room – 20 bikes

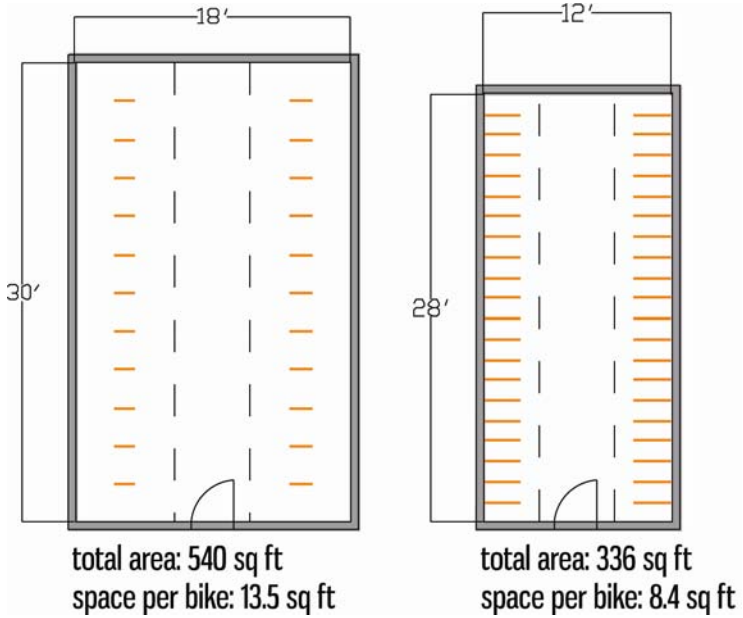


Small Bike Room – 10 bikes



U rack —
vertical —
* all layouts include a 5' wide aisle

Large Bike Room – 40 bikes



Bicycle Parking Text Amendment – Flexibility in Location

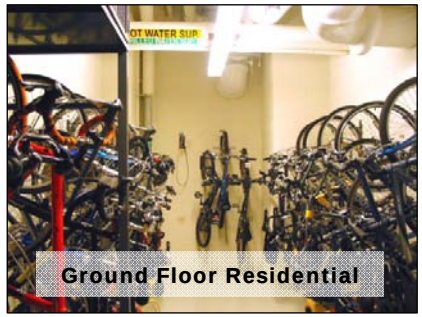
There are many ways that new buildings can be configured to provide accessible bicycle parking and storage:

Residential buildings
- in cellar
- on ground floor
- in rear yard
- in parking garage
- along wall niche in common area

Commercial and other buildings
- in cellar
- on loading dock
- in parking garage
- on ground floor

Access
- through service entrance
- through lobby
- through parking garage
- through courtyards
- through loading dock

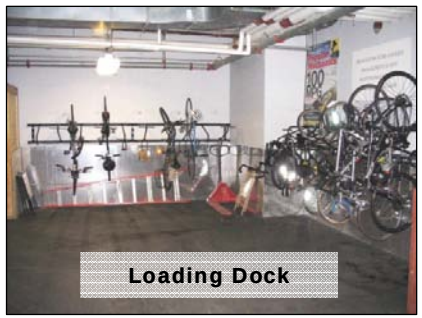

Accessory Garage


Ground Floor Residential


Residential Cellar


Public Parking


Separate Entrance


Loading Dock

Proposal – General Requirements

- 15 square feet per bicycle parking space
- Space can be reduced to 6 square feet with efficient parking systems
- Requirements apply to new buildings, enlargements of 50% or more, conversions to residential use
- Parking must be enclosed, secure, and accessible to designated user
- Bicycle parking does not count as floor area (up to maximum amount requirement)
- Allow enclosed bicycle parking as permitted obstruction in rear yards

Proposal – Residential

Purpose:

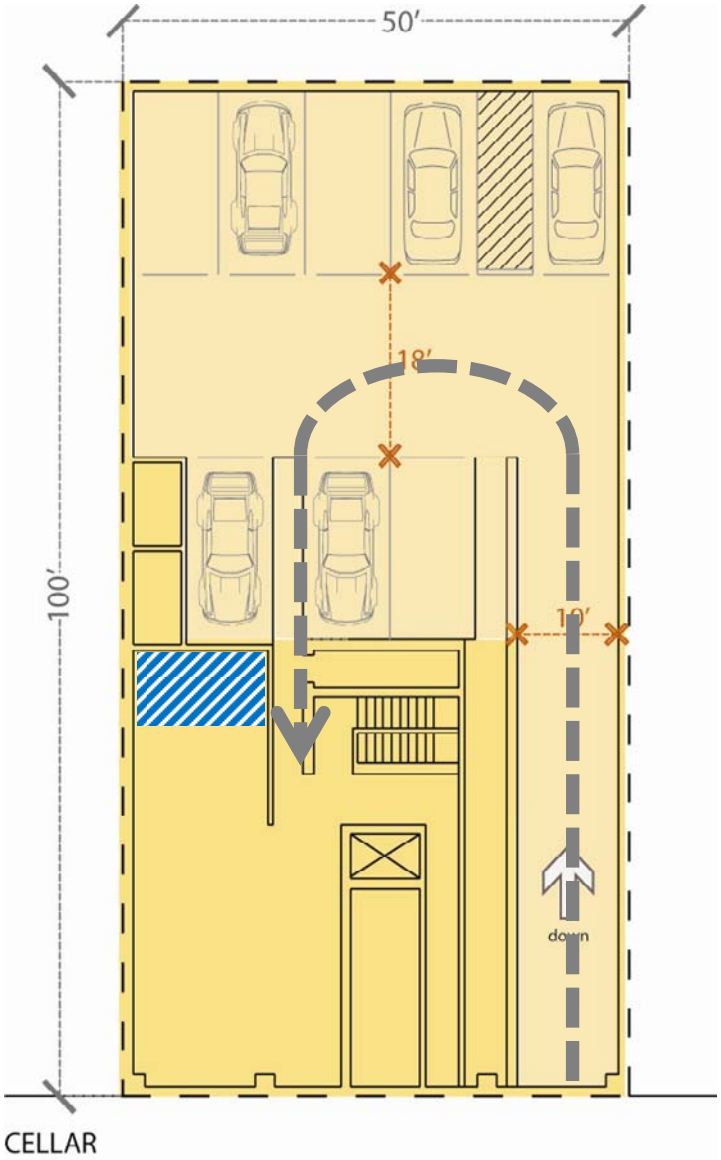
Provide for secure, long-term parking where bicycles are stored most of the time.

Requirement:

- **1 space per 2 dwelling units**

Example:

- 16-unit building in R6 district
- 8 bicycle spaces required (48 – 120 square feet)



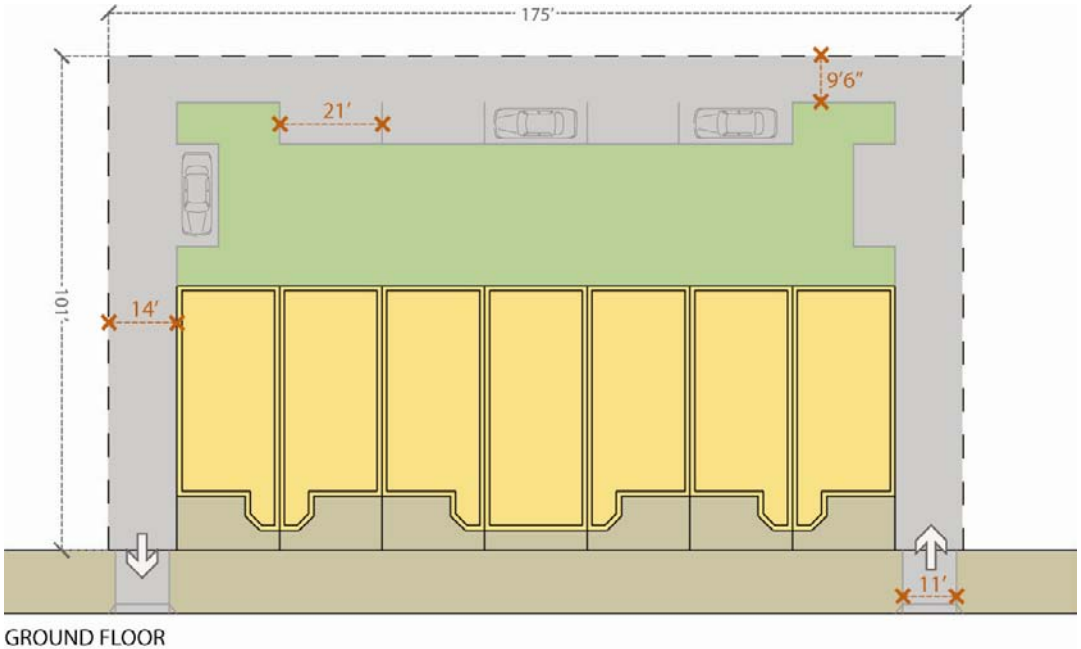
Proposal – Residential waiver

Waiver:

- waive requirement for buildings with 10 or fewer units
- calculate requirement by individual building segment (e.g., rowhouse) rather than zoning lot

Example:

- Rowhouses on a single zoning lot (21 units in a R7 district)
- Requirement waived (each building is less than 10 units)



Proposal – Commercial Office

Purpose:

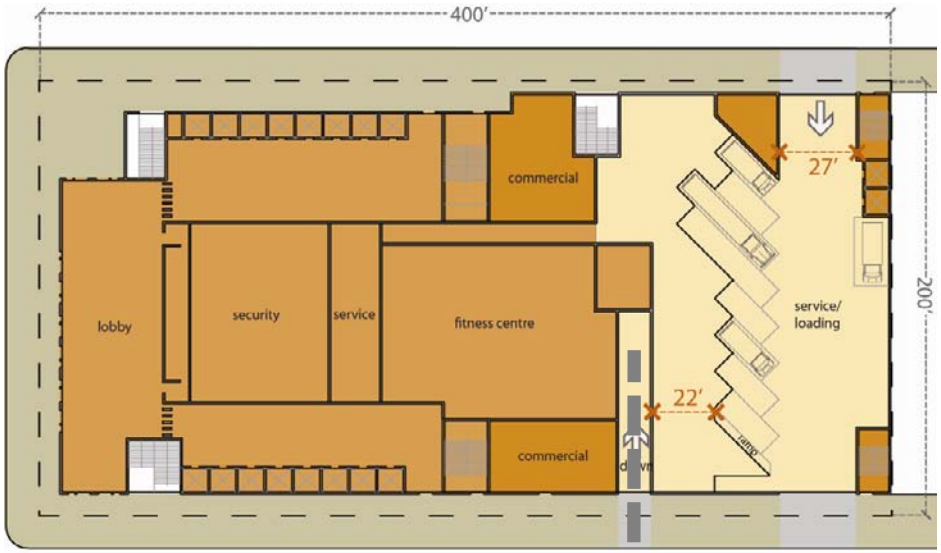
Provide bicycle parking for employees to support bicycle commutation.

Requirement:

- **1 space per 7,500 square feet of floor area**
- **Provides parking for approximately 3% of workers**

Example:

- 1.7 million square feet commercial office tower in C6-6 district
- 227 bicycle spaces required (1,362 – 3,405 square feet)



Proposal – Commercial Office waiver

Waiver:

• Waive up to 3 bicycle parking spaces ~ less than 26,250 square feet of floor area used for office

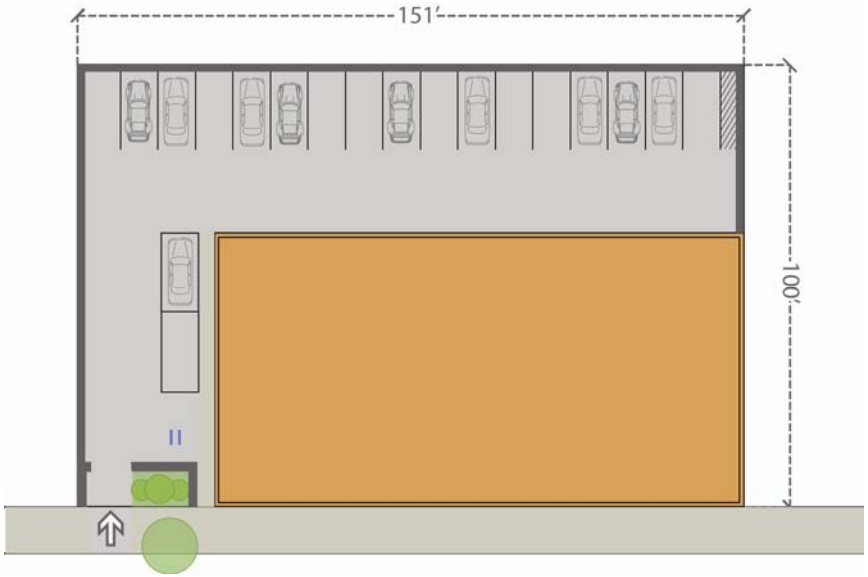
Example:

• Small commercial office building

• Requirement of 3 spaces is waived (building is approximately 22,500 square feet)

• 3 bicycle spaces permitted (18 – 45 square feet)

• 2 short-term, outdoor bicycle spaces required under existing commercial parking lot regulations



GROUND FLOOR

Proposal – Retail and most commercial uses

Purpose:

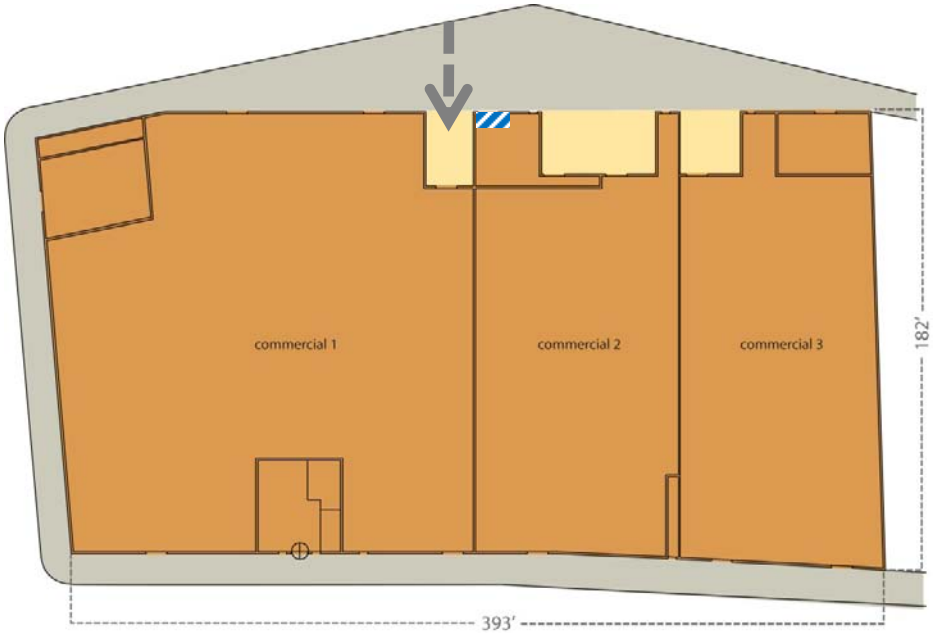
Provide bicycle parking for employees to support bicycle commutation.

Requirement:

- **1 space per 10,000 square feet of floor area**
- **Provides parking for approximately 3% of workers**
- **For certain commercial uses with lower employment densities, such as large entertainment facilities, 1 space per 20,000 square feet of floor area; up to 3 spaces may be waived**

Example:

- 73,500 square feet of commercial retail in C4-4 district
- 7 bicycle spaces required (42 – 105 square feet)



GROUND FLOOR

maximum bike area required → access

Proposal – Retail and most commercial uses waiver

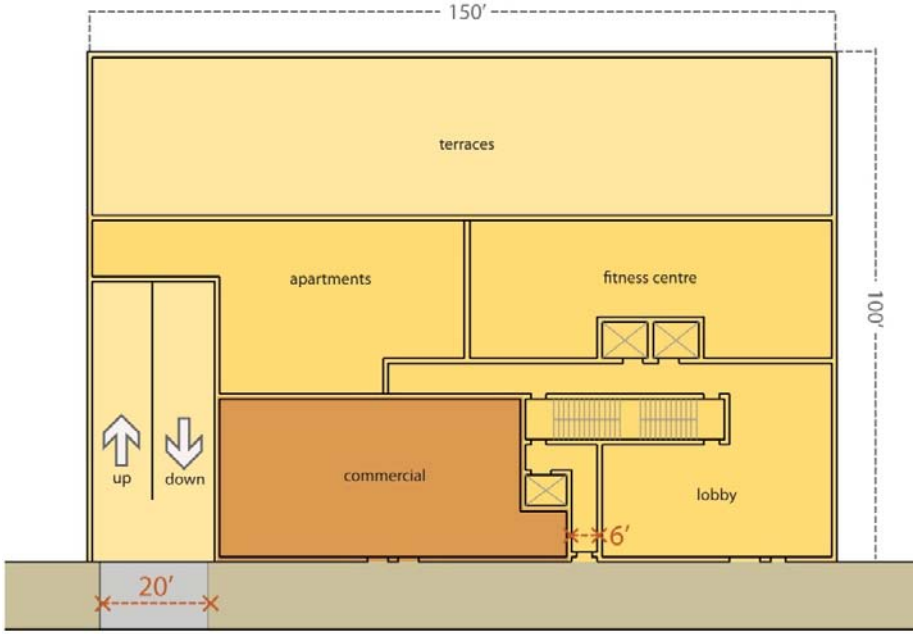
Waiver:

- Waive up to 3 bicycle parking spaces ~ less than 35,000 square feet of commercial floor area

Example:

- Mixed-use building in C6-3A district with 3,000 square feet of commercial retail

- Bicycle parking requirement waived for retail



GROUND FLOOR

Proposal – Public Parking Garages

Purpose:

Support bicycling as a transportation mode.

Requirement:

- **1 space per 10 vehicle spaces**

Example:

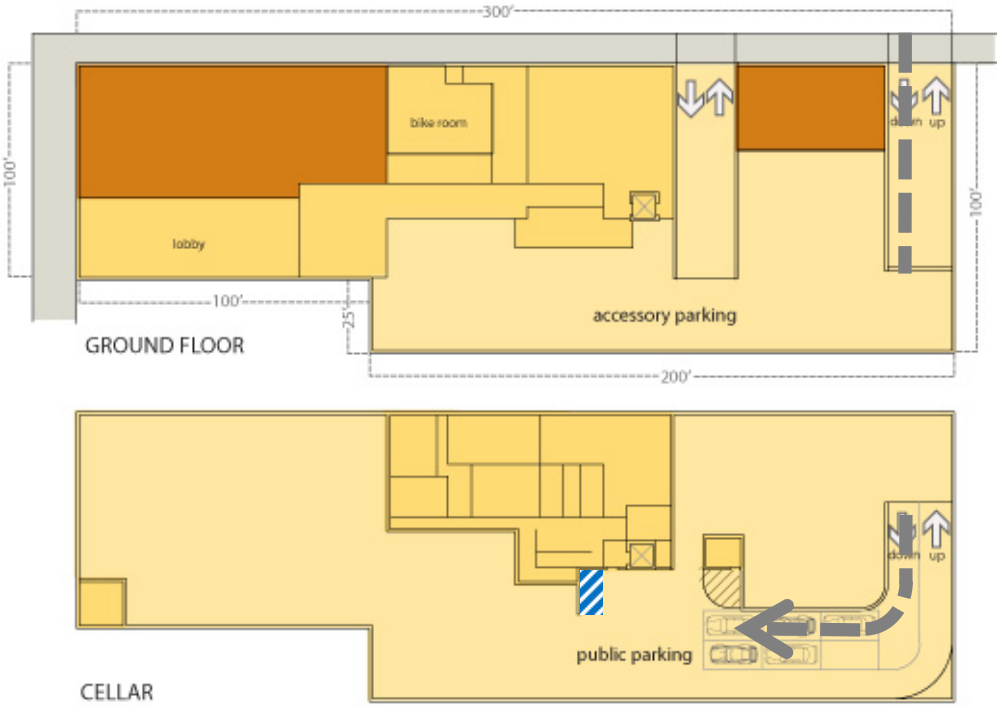
- Mixed-use building in C6-4 district with 4,500 square feet of retail space and 365 residential units

- 108 vehicle parking spaces

- 11 bicycle spaces required (66 – 165 square feet)

Waiver:

- Waive up to 3 spaces ~ garages with less than 35 vehicle spaces



maximum bike area required access

Proposal – Community Facilities

Purpose:

Provide parking for employees to support bicycle commutation.

Requirement:

- **For most community facilities 1 space per 10,000 square feet. Up to 3 spaces may be waived (less than 35,000 square feet of floor area).**

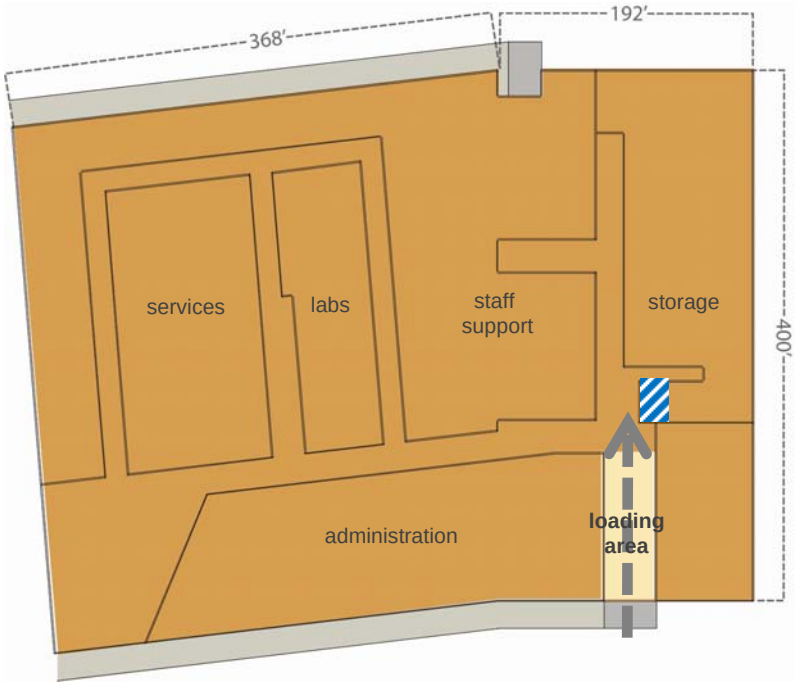
- **Universities and Colleges ~ 1 space per 5,000 square feet of floor area. Up to half of the required spaces may be outdoors. Requirements of up to 3 indoor spaces may be waived (less than 35,000 square feet of floor area).**

- **Dormitories ~ 1 space per 5 beds. Up to 5 spaces may be waived.**

Example:

- 400,000 square feet hospital

- 40 bicycle spaces required (240 – 600 square feet)



Proposal – Manufacturing and Semi-Industrial

Purpose:

Accommodate bicycle parking where possible in various uses with varying employment characteristics and space demands.

Permitted:

- 1 space per 10,000 square feet of floor area

- Permitted bicycle parking does not count as floor area provided that it meets zoning standards

Proposal – Accessory Parking Garages

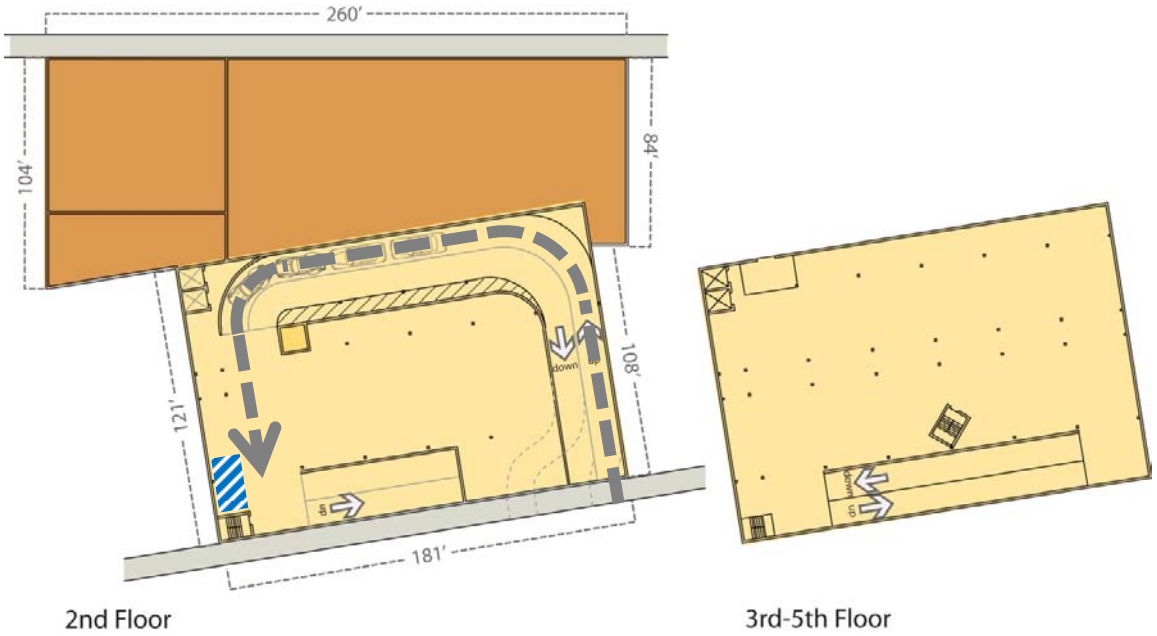
For All Uses when an Accessory Parking Garage is Provided:

- Apply the requirement for the use, or
- 1 per 10 vehicle parking spaces

~ whichever is greater ~

Example

- 47,000 square feet commercial retail building with 280 space accessory parking garage
- Retail bicycle parking requirement: 5 spaces
- Accessory parking garage bicycle parking requirement: 28 spaces (168 – 375 square feet)
- 28 bicycle parking spaces required



Proposal – Authorization for Waiver or Reduction

Purpose:

Accommodate special conditions where bicycle parking may not be feasible.

Waiver or Reduction:

• the CPC may authorize a reduction or waiver of bicycle parking spaces when subsurface or below-ground infrastructure conditions or other site planning constraints make bicycle parking difficult or infeasible

Proposal – Summary Chart of Requirements

Use	Required Bicycle Parking		Permitted Bicycle Parking (maximum excluded from floor area)
	Number of Spaces	Waivers	Number of Spaces
Residential Uses			
1- and 2-Family	No requirement	n/a	n/a
Multi-Family	1 per 2 units	Waived for buildings with ≤ 10 units	1 per 2 units
Commercial Uses			
Office	1 space per 7,500 SF floor area	Up to 3 spaces may be waived (less than 26,250 SF)	1 space per 7,500 SF
Retail, hotels, & most other commercial	1 space per 10,000 SF floor area	Up to 3 spaces may be waived (less than 35,000 SF)	1 space per 10,000 SF
Large entertainment facilities	1 space per 20,000 SF floor area	Up to 3 spaces may be waived (less than 70,000 SF)	1 space per 10,000 SF
Public parking garages	1 space per 10 vehicle spaces	Up to 3 spaces may be waived (less than 35 vehicle spaces)	1 space per 10 vehicle spaces
Public service & wholesale establishments; semi-industrial	No requirement	n/a	1 space per 10,000 SF
Community Facility Uses			
Universities and Colleges	1 space per 5,000 SF floor area; up to half of the required spaces can be outdoor	Requirements of up to 3 indoor spaces may be waived (less than 35,000 SF)	1 space per 5,000 SF
Dormitories	1 space per 5 beds	Up to 5 spaces may be waived	1 space per 5 beds
Hospitals	1 space per 10,000 SF	Up to 3 spaces may be waived (less than 35,000 SF)	1 space per 5,000 SF
Houses of Worship	No requirement	n/a	1 space per 10,000 SF
Other	1 space per 10,000 SF	Up to 3 spaces may be waived (less than 35,000 SF)	1 space per 10,000 SF
Manufacturing Uses			
All	No requirement	n/a	1 space per 10,000 SF
Note: for all uses, if an accessory parking garage is provided, the parking requirement is either the applicable requirement for the use or 1 bicycle space per 10 vehicle spaces, whichever is greater.			

New York City Department of City Planning

Zoning for Bicycle Parking

2008