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

- 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

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

Class 2 Bicycle Parking
• Less Secure than Class 1
• Usually outdoors, open
• Best suited to short-term use
• For shoppers, customers, messengers, visitors
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
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**
- Total area: 270 sq ft
- Space per bike: 13.5 sq ft

**Large Bike Room – 40 bikes**
- Total area: 540 sq ft
- Space per bike: 13.5 sq ft

**Small Bike Room – 10 bikes**
- Total area: 97.5 sq ft
- Space per bike: 9.75 sq ft

- U rack
- Vertical

*all layouts include a 5’ wide aisle*
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
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
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)
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
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
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)
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

<table>
<thead>
<tr>
<th>Use</th>
<th>Required Bicycle Parking</th>
<th>Permitted Bicycle Parking (maximum excluded from floor area)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Spaces</td>
<td>Waivers</td>
</tr>
<tr>
<td>Residential Uses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1- and 2-Family</td>
<td>No requirement</td>
<td>n/a</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>1 per 2 units</td>
<td>Waived for buildings with ≤ 10 units</td>
</tr>
<tr>
<td>Commercial Uses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office</td>
<td>1 space per 7,500 SF floor area</td>
<td>Up to 3 spaces may be waived (less than 26,250 SF)</td>
</tr>
<tr>
<td>Retail, hotels, &amp; most other commercial</td>
<td>1 space per 10,000 SF floor area</td>
<td>Up to 3 spaces may be waived (less than 35,000 SF)</td>
</tr>
<tr>
<td>Large entertainment facilities</td>
<td>1 space per 20,000 SF floor area</td>
<td>Up to 3 spaces may be waived (less than 70,000 SF)</td>
</tr>
<tr>
<td>Public parking garages</td>
<td>1 space per 10 vehicle spaces</td>
<td>Up to 3 spaces may be waived (less than 35 vehicle spaces)</td>
</tr>
<tr>
<td>Public service &amp; wholesale establishments; semi-industrial</td>
<td>No requirement</td>
<td>n/a</td>
</tr>
<tr>
<td>Community Facility Uses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Universities and Colleges</td>
<td>1 space per 5,000 SF floor area; up to half of the required spaces can be outdoor</td>
<td>Requirements of up to 3 indoor spaces may be waived (less than 35,000 SF)</td>
</tr>
<tr>
<td>Dormitories</td>
<td>1 space per 5 beds</td>
<td>Up to 5 spaces may be waived</td>
</tr>
<tr>
<td>Hospitals</td>
<td>1 space per 10,000 SF</td>
<td>Up to 3 spaces may be waived (less than 35,000 SF)</td>
</tr>
<tr>
<td>Houses of Worship</td>
<td>No requirement</td>
<td>n/a</td>
</tr>
<tr>
<td>Other</td>
<td>1 space per 10,000 SF</td>
<td>Up to 3 spaces may be waived (less than 35,000 SF)</td>
</tr>
<tr>
<td>Manufacturing Uses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>No requirement</td>
<td>n/a</td>
</tr>
</tbody>
</table>

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.