Designing Streets for Safety
Sharing the Road with All Users

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Presented June 21, 2011 at Brownsville Recreation Center
Presentation Outline

• NYC Complete Streets Background

• Design for Safety
  • Brownsville Streets
  • Bicycle Treatments
  • Pedestrian Treatments
  • Other Traffic Calming Treatments

• Education & Outreach

• Questions?
NYC Complete Streets Background

- 250 miles of bicycle routes installed (2006-2010)
- Over 8 acres of public plaza space installed (2006-2010)
- 6.4% decrease in all road users injuries/fatalities (2006-2009)
Street Design Goals

BEFORE

AFTER

Metropolitan & Bushwick Avenues, Brooklyn
One-way Streets
Narrower width, less traffic
Street Design: Types of Streets

Two-way Streets
Narrower width, more traffic
Street Design: Types of Streets

One-way Streets
Wider width, less traffic

Powell Street (between Pitkin & Livonia), Brooklyn
Street Design: Types of Streets

Two-way Streets
Wider width, varying traffic

Mother Gaston Blvd (between Sutter & Livonia), Brooklyn
Pedestrian Improvements: Design and Benefits
Shared Lanes: Design and Benefits

Calms speeding vehicle traffic

Alerts drivers and cyclists of shared space

25% decrease in pedestrian injuries (2006-2010)

*Streets with shared lane facilities installed in 2007 (Before: 2003-2006 average; After: 2007-2010 average)
Shared Lanes: Design and Benefits

West 10th Street, Manhattan

BEFORE
One-way streets between 24’ and 29’ in width

One-Way SHARED LANE
24’ Minimum Width

16’ Combined Moving/Parking Lane

8’ Parking Lane

24’

West 10th Street, Manhattan
Shared Lanes: Design and Benefits

Two-way streets between 42’ and 44’ wide

Two-Way SHARED LANE
42’ Minimum Width

8’ Parking Lane
13’
13’
8’ Parking Lane

West Sidewalk

42’

East Sidewalk

9th St, Brooklyn
Dedicated Bicycle Lanes: Design and Benefits

Narrower lanes calms speeding vehicle traffic
Organizes street for different road users

34% reduction in all road user injuries (2006-2010)

Before: Apr 2002 - Apr 2008 average; After Jun 2008 - Oct 2010 average
**Before: Mar 2009; After: Sep 2009 (Vanderbilt Ave)**
Dedicated Bicycle Lanes: Design and Benefits

AFTER

West 10th St, Manhattan
Dedicated Bicycle Lanes: Design and Benefits

One-way streets more than 30’ in width

DEDICATED LANE
30’ Minimum Width

West 10th St, Manhattan
One-way streets more than 34’ in width

One-way BUFFERED BIKE LANE
34’ Minimum Width
Two-way streets more than 46’ in width

Two-Way DEDICATED LANE
46’ Minimum Width

- Sidewalk
- Parking Lane (8’)
- Moving Lane (5’)
- Moving Lane (10’)
- Moving Lane (10’)
- Parking Lane (5’)
- Parking Lane (8’)

Clarendon Road, Brooklyn
On-Street Bicycle Paths: Design and Benefits

Physical separation between bikes and motor vehicles

47% reduction in injuries overall (9th Ave*)

61% reduction in sidewalk riding (9th Ave**)


**Before: July 2007 (9th Ave); After: 2010 average

9th Avenue, Manhattan
On-Street Bicycle Paths: Design and Benefits
On-Street Bicycle Paths: Design and Benefits

One-way streets more than 60’ in width

One-Way
PROTECTED PATH
60’ Minimum Width

West Sidewalk
11’ Parking/AM Peak Moving Lane
10’ Moving Lane
10’ Moving Lane
10’ Moving Lane
8’ Floating Parking Lane
5’ Buffer
6’ East Sidewalk

Columbus Ave, Manhattan
Bicycle Parking

Very few bicycle racks in Brownsville
Bicycle Parking

Lock Your Bike Right

Lock your bike to designated racks where available.

Lock your bike with a U-lock or heavy chain.

Lock all "quick release" parts.

Lock your wheels to your frame.

Bicycle Shelters

Hoop Rack

Bedford Ave, Brooklyn

Schermerhorn St, Brooklyn

On-Street Bike Parking
Street Safety: Other Traffic Safety Measures
NYC Cycling Map & Bike Smart Brochure

New York City Cyclists Must:

1. Yield to pedestrians
   Cede el paso a los peatones

2. Stop at red lights and stop signs
   Deténgase en las luces rojas del semáforo y las señales de pare
   在號誌轉為紅燈後和STOP標題前停下

3. Ride in the direction of traffic
   Circule en el sentido del tránsito cuando ande en bicicleta
   朝交通方向駕乘

4. Stay off the sidewalk (unless you're under 1.3)
   No use las aceras (a menos que tenga menos de 1.3 años de edad)
   留開人行道（除非您是1.3歲以下）

5. Use a white front light and red tail light at night
   Use una luz delantera blanca y una luz trasera roja durante la noche
   晚上使用白色頭燈和紅色尾燈

Over 2 Million Maps Distributed

www.nyc.gov/biksmart

Bike Smart
The Official Guide to Cycling in New York City
Contact Us

• Call CB 16: (718) 385 - 0323

• Fill out an online form at: www.nyc.gov/dot

• Mail your comments to:

Office of the Brooklyn Borough Commissioner
NYC Department of Transportation
16 Court Street
Brooklyn, NY 11241
Questions?

Thank You
Dedicated bicycle lanes can be used on wider, calmer streets.
Dedicated bicycle lanes with buffers can be used on very wide streets.