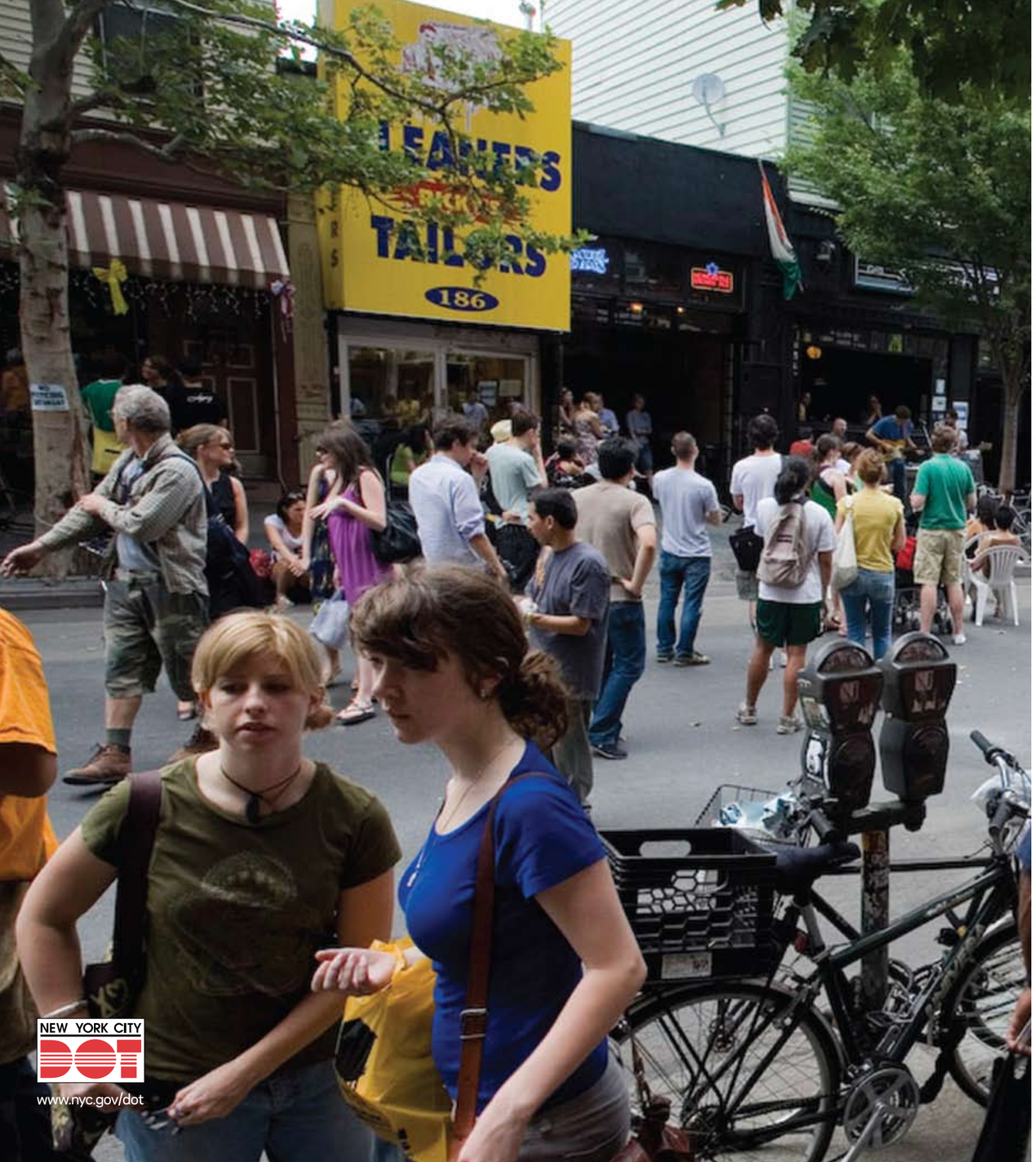

NEW YORK CITY DOT

www.nyc.gov/dot

WORLD CLASS STREETS: REMAKING NEW YORK CITY'S PUBLIC REALM

NEW YORK CITY DEPARTMENT OF TRANSPORTATION

World Class Streets:

Remaking New York City's Public Realm

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LETTER FROM THE MAYOR

Dear Friends:

In 2007, our Administration launched *PlaNYC*, our long term plan to create a greener, greater New York. One of the challenges *PlaNYC* poses to city agencies is to "re-imagine the City's public realm"—to develop an urban environment that transforms our streets and squares into more people-friendly places.

With 6,000 miles of City streets under its management, the Department of Transportation is on the front line of this effort—and it is succeeding in spectacular fashion.

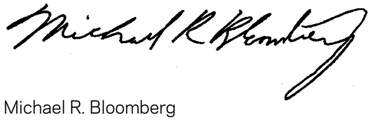
Through new initiatives such as Broadway Boulevard, the Public Plaza Program, Coordinated Street Furniture, and Summer Streets, we are finding creative new ways to make our streets more attractive to pedestrians and cyclists—and those who wish to sit and relax and soak in the City. This report outlines the challenges we face and describes the many programs underway that are designed to bring even more life to our World Class Streets.

The business and environmental cases for improving the quality of our public realm are clear. Streets that help create and strengthen communities and businesses, in addition to connecting neighborhoods to one another, are an essential component of the City's overall sustainability strategy. Quality of life policies will enable the City to continue to grow its economy and retain more residents as they raise families and grow older, and it will even lead New Yorkers to spend more of the leisure time in the city. By attracting and retaining more residents, we will also help fight climate change. Mass transit- and pedestrian-oriented cities like New York help reduce suburban sprawl and the higher levels of carbon emissions that come with it.

Finally, it's no accident that New York City's merchant communities focus heavily on streetscape quality through their local Business Improvement Districts, which we have worked hard to expand and support. For storefront businesses, welcoming, attractive streets can spell the difference between growth and just getting by. Today, our Administration is dramatically extending the streetscape improvements that many organizations have been able to create locally.

New York has the most famous streets in the world. Now, we're working to make them the most attractive streets in the world for walking and cycling—and that other great New York sport, people-watching.

Sincerely,



Michael R. Bloomberg
Mayor

World Class Streets: Remaking New York City's Public Realm

LETTER FROM THE COMMISSIONER

Dear fellow New Yorkers:

Famous images of New York nearly all emphasize the city's skyline—the high rise metropolis seen from a mile distant or 5,000 feet up. Few who attempt to capture the city's uniqueness or character in a single frame seek it from the most basic human point of view—that of the pedestrian walking down the street.

Why is this? In a look at Paris, for instance, the streetscapes of the Champs-Elysees and its central pedestrian precincts will surely be featured. A view of Barcelona will inevitably include a street-level perspective on Las Ramblas and of its new and re-made public squares.

Until now, the City has not embraced a broad strategy for developing and caring for the public realm—the space between buildings—as an important element of public policy. Indeed, despite so much change for the better during the city's renaissance of the past several decades, our streetscape remains broadly utilitarian, with little change in appearance or feel from the 1970s.

World Class Streets amplifies the look at street design in NYCDOT's *Sustainable Streets* strategic plan, and will serve as a companion volume to the new New York City Street Design Manual we will issue in early 2009.

In this report, findings from a Public Space/Public Life Survey conducted by the world-renowned Gehl Architects/Urban Quality Consultants in Fall, 2007 provide the starting point. Following Gehl's analysis, we lay out the wide range of ambitious programs that NYCDOT has set in motion to change the city's approach and that will allow us to build on New York City's tremendous and ever-present potential.

Sincerely,

Janette Sadik-Khan
Commissioner

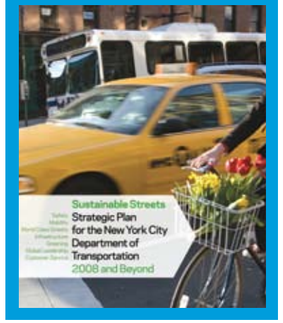
World Class Streets: Remaking New York City's Public Realm

This report is part of an ambitious and far reaching effort to place New York at the forefront of urban development. It builds on two previous plans: *PlaNYC*, Mayor Bloomberg's comprehensive sustainability plan, and Sustainable Streets, NYCDOT's strategic plan. While the previous reports were comprehensive in scope, this document focuses solely on the NYCDOT public realm strategies listed at right.

World Class Streets: Remaking New York City's Public Realm

Long Range Sustainability Plan

New Transportation Policy & Priorities



Public Realm/ World Class Street Strategies

- Plaza Program
- World class boulevards
- Complete streets projects and design standards
- Public art program
- New streetscape materials
- Coordinated street furniture program
- Weekend pedestrian and cycling streets

Reimagining the city

Cities are becoming greener and people-oriented

Many cities today are using their public spaces in ways they haven't in decades. During the twentieth century, many cities redesigned their central areas to better accommodate vehicular traffic and commuters who had moved to the suburbs. Today, however, many cities have rediscovered the advantages of their dense historic forms. In many, public life is being carefully supported through pedestrian, bicycling and public space improvements. People in all parts of the world have responded enthusiastically to these new opportunities to celebrate the public realm.

Strøget, pedestrian priority street, Copenhagen.

COPENHAGEN, DENMARK

A better city, step by step

Copenhagen's old main street was pedestrianized in 1962, marking the start of an extensive city renovation. Over the next four decades, many of the streets and squares in the inner city were gradually transformed into wholly or partially car-free spaces. This created excellent conditions for walking and urban recreation in the city center. In addition, the gradual reduction of parking has substantially reduced car traffic in the city center. At the same time, a targeted policy to create better conditions for bicycling has sustained a high level of personal mobility.

Federation Square, Melbourne.

MELBOURNE, AUSTRALIA

Unified policy for vital, high-quality public streets

In its street pattern and building mix, Melbourne is similar to other large cities. However, over the last few decades, while other cities redesigned their streets to accommodate the automobile and developed indoor shopping malls, Melbourne invited people to celebrate streets as the city's most important public spaces. The city renovated its pavements and street furniture and developed a policy for active building facades to make walking an enjoyable experience.

These renovations had tangible results: from 1995 to 2005, Melbourne experienced a 40% increase in pedestrian traffic. The economic vitality of the city has improved proportionally—as evidenced by the increase in jobs, tax revenues, and property values.

World Class Streets: Remaking New York City's Public Realm

Place des Terreaux, Lyon.

LYON, FRANCE

Coordinated public space policy

The city of Lyon formulated a comprehensive policy in 1989 to create more space for people. City planners created a large number of parking spaces under newly renovated city squares, thus making efficient use of space and hiding a visually unappealing land use. In addition, the city has created a design palette to be used in new projects. The renovation of the city's main streets and squares was extended to the suburbs, where several hundred urban improvement projects have taken place.

Ice skating at Sommerset House, London.

LONDON, ENGLAND

Reducing traffic and generating revenue for the 100 public spaces program

When London introduced congestion pricing in 2003, it was one of the first steps towards a more sustainable and people-friendly city. Traffic in the city center was reduced by 15–20%, and revenue was generated for mass transit and public realm improvements.

At this time, London also created a plan to become the world's leading pedestrian city. A key component is the goal to improve 100 public spaces. Other initiatives included planting one million new trees, the development of a new streetscape design manual, and several smaller scale interventions to improve the quality of the pedestrian experience.

Place del Paisos Catalans, Barcelona.

BARCELONA, SPAIN

Visionary thinking and pioneering public space policy

For the past two decades, Barcelona has been the leading source of inspiration for architects, landscape architects, urban planners, and politicians who work with public spaces. Nowhere in the world can so many examples of parks and squares be seen in one place.

Barcelona has been very imaginative in implementing its public space policy. In the last decade, several hundred new parks, squares, and promenades have been created by tearing down dilapidated apartment buildings, warehouses and factories, and by renovating existing squares and regulating traffic to benefit pedestrians.

Trends in Public Space Activities in the 21st century

1 Increased interest in sports and an active, healthy life style
2 Increased interest in participation in cultural events
3 Increased interest in amenities offered in the city like the waterfront, nature and fresh air
4 Increased interest in year-round outdoor activity

New York's huge potential

New York streets are spacious enough to accommodate many users—cars, pedestrians, cyclists, delivery vehicles, buses and more. Traditionally, however, the streets have been designed primarily for motor vehicle traffic. This policy attracted an increasing number of vehicles, with negative effects on congestion and the overall quality of the public realm.

But New York is a vibrant walking city with hundreds of major attractions. New Yorkers will take naturally to additional public spaces and well-designed, people-oriented streets.

COMPACT

- High density
- Fine grained public transport network
- High volumes of pedestrians
- Efficient street grid

LIVELY AND DIVERSE

- A vibrant city
- Cultural melting pot of the world
- A multitude of street parades, markets, fairs, etc
- Millions of people on the street
- High level of creativity

FIRST CLASS PARKS

- New Yorkers cherish their retreats from a hectic life
- Central Park
- Washington Square Park
- Prospect Park and many more

ATTRACTIVE WATERWAYS

- 600 miles of coastline
- High quality river promenades

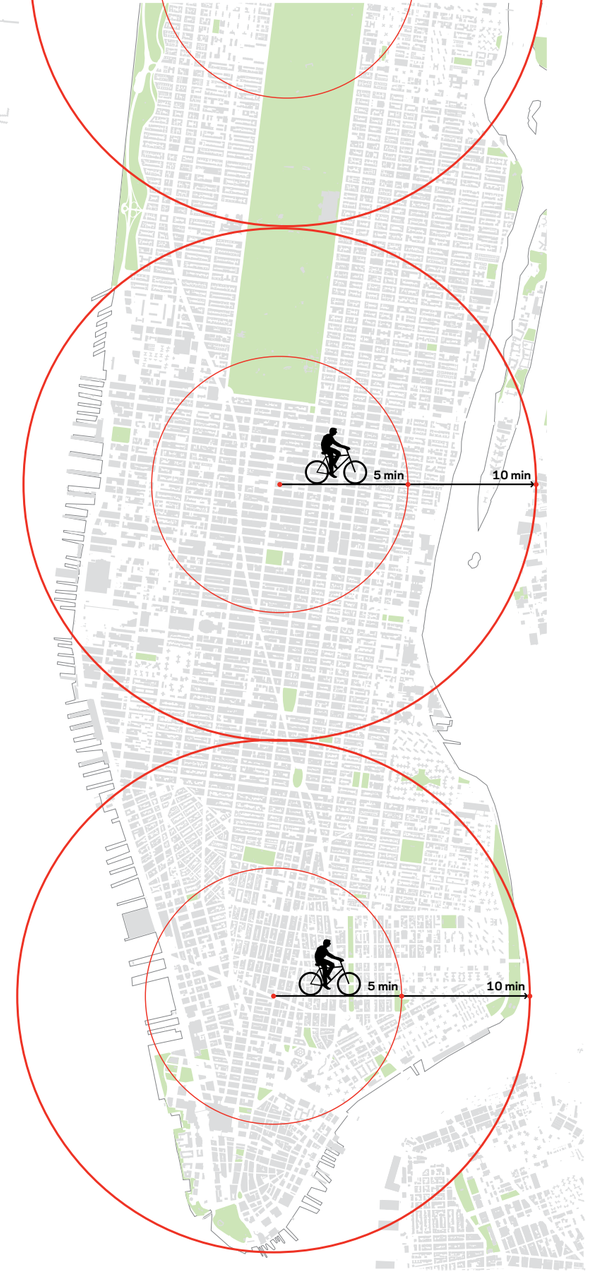
A Walking (and Bicycling) City

New Yorkers spend a lot of time in the public realm as a result of the city's density, which promotes walking, public transit riding and, increasingly, bicycling. Improving walking conditions will benefit everyone in New York City, create more pleasant links between destinations and provide an environment that is enjoyable as well as functional.

Most New Yorkers are never more than a 20 minute walk away from a subway or train station.

10 and 20 min walking catchment area to subway and train stations.

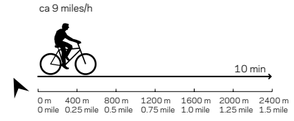
Calculated Manhattan walking distances shown in minutes.



Calculated Manhattan cycling distances shown in minutes.

Pedestrian traffic

New York has some of the highest volumes of pedestrians in the world., and New Yorkers flock to inviting public spaces, such as the Hudson River Greenway, the car-free parks on weekends and the new public spaces that NYCDOT created along Broadway in Midtown Manhattan during 2008.



How Do People Use New York Streets?

Public Life Survey

In 2007, New York City DOT contracted with Gehl Architects to conduct public life surveys of selected sites around the city. Gehl Architects/Urban Quality Consultants is an internationally renowned urban planning and design firm, and is credited with helping to turn Copenhagen into one of the most walkable and bikeable cities in the world.

Gehl Architects has developed a unique field survey technique that quantifies how people use places in cities. For example, the company uses pedestrian count and stationary activity surveys to examine detailed information on where people walk and what they do when stationary, either as part of daily activities or for recreational purposes.

Gehl's data collectors also assess the quality and condition of outdoor seating, the quality of paving materials, construction-related impacts and other qualitative factors that affect the public realm.

Results from the public life survey helped formulate much of the city's strategy for improving streets as public spaces, and can serve as a baseline against which future surveys can be compared.

Method for measuring pedestrian traffic

This part of the study provides information on how much—and where—people walk, sit, stand or carry out various stationary activities in the city. These are a good indicator of the quality of an urban space.

A high number of pedestrians walking in a city does not necessarily indicate a high-quality walking experience. However, if a large number of people choose to engage in voluntary activities (having an outdoor lunch, playing, or sunbathing) then a city most likely has an excellent public realm.

NYCDOT and Transportation Alternatives recruited over 40 volunteers to assist the Gehl staff with data collection in Fall 2007. NYCDOT and Gehl Architects conducted thorough volunteer orientation sessions to ensure data was collected in accordance with the methodology employed by Gehl Architects in cities around the world.

Gehl and NYCDOT are presently coordinating the training and transfer of the Public Space/Public Life survey methology to NYC agencies.

Gehl has used its method in studies in London, Sydney, Perth, Adelaide, Melbourne, Wellington, Rotterdam, Dublin, Riga, Stockholm, Oslo and Copenhagen.

Surveyors counted pedestrians on streets for 10 minutes every hour between 8 a.m. and 8 p.m.

Survey Areas

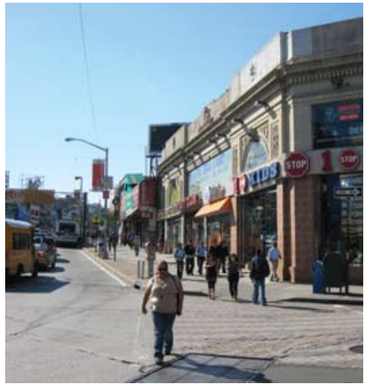
Selection of public life and public space survey areas

The vast size and diversity of New York City's five boroughs and numerous neighborhoods make it impractical to survey the entire city in detail. Instead DOT suggested survey areas that are centers of activity along key multi-modal corridors. By studying these very different but vibrant centers of city life, this survey provides snap shots of the potentials and challenges found in the public realm of New York City today. The study team gained an overall understanding of pedestrian activities along key corridors in Brooklyn, the Bronx, Manhattan and Queens. These insights form part of the basis for NYCDOT's public realm programs.

Data Collection Locations/Conditions

Gehl chose specific locations near key intersections and major destinations. They were chosen to investigate special conditions in each neighborhood as well as typical conditions that can be applied to much of each borough. Data was collected from 8am–8pm during a series of weekdays in October under good weather conditions.

Broadway, Manhattan.



East Fordham Road, Bronx.

Flatbush Ave, Brooklyn.

34th Street, Manhattan.

Soho, Spring Street, Manhattan.

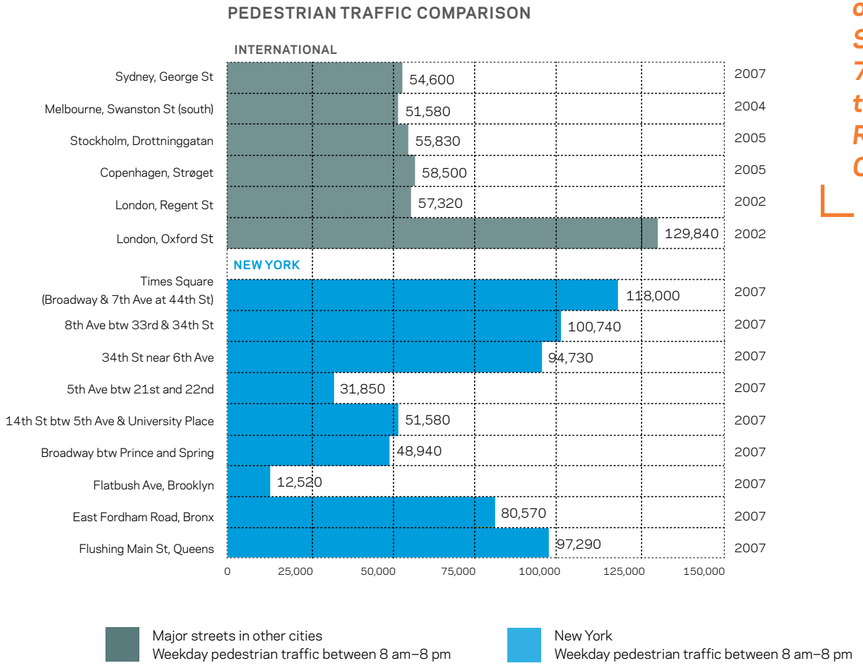
Main Street, Flushing.

Comparison of weekday pedestrian traffic between 8 am–8 pm

New York City is a world-class walking city. Pedestrian volumes on major streets in New York exceed those found in cities like London, Sydney, and Copenhagen. Moreover, high pedestrian volumes are found throughout the city, not just in Manhattan.

One of the most striking findings of this survey is that some main streets in Queens and the Bronx have greater numbers of pedestrians than the centers of major European cities. For example, pedestrian volumes on Flushing's Main Street are about 70% higher than those found on Regent Street in Central London.

Pedestrian volumes on Flushing's Main Street are about 70% higher than those found on Regent Street in Central London.



TIMES SQUARE, 2007

118,000

Total length surveyed: 3.4 miles
Street width: 69–102 feet
Footpath width: 14–20 feet
Status: Shopping and entertainment street and a north-south vehicular link

EAST FORDHAM ROAD, BRONX, 2007

80,570

Total length surveyed: 1.1 miles
Street width: 99 feet
Footpath width: 19 feet
Status: Shopping street and main public transportation and vehicular link

FLUSHING MAIN ST, QUEENS, 2007

97,290

Total length surveyed: 0.8 miles
Street width: 100 feet
Footpath width: 15–16.5 feet
Status: Shopping street and main public transportation and vehicular link

SYDNEY, GEORGE STREET, 2007

54,600

Total length: 1.6 miles
Street width: 72–98 feet
Footpath width: 16–20 feet
Status: Main shopping street with heavy traffic

LONDON, OXFORD STREET, 2007

129,830

Total length: 0.30 miles
Street width: 56–92 feet
Footpath width: 10–39 feet
Status: Shopping street with large numbers of pedestrians and vehicles

COPENHAGEN, STRØGET, 2005

58,500

Total length: 0.75 miles
Street width: 33–39 feet
Footpath width: 33–39 feet
Status: Main street dominated by shopping, cafes and restaurants

Congested Sidewalks

Gehl Architects' studies from around the world suggest that the maximum volume for comfortable pedestrian movement is 12 people per minute per yard of sidewalk width. Anything above this level is considered to be overcrowding. (Other methodologies assess crowding according to the number of people that a street can carry—however such methodologies deal only with capacity and not quality). When Copenhagen's main street, Strøget, reaches the level of 12 persons per minute per yard people start finding alternative routes. This has been the case for the last 30 years.

Despite the fact that sidewalk widths are generous in some parts of the city, key sections of street simply do not accommodate the volume of pedestrian traffic. In New York, people walking compete for space with those waiting at bus stops, and with the many physical items on sidewalks.

Crowding is a sign of low walking quality. When crowding occurs, walking turns into a fight to get from one point to another.

Flushing Main Street.

East Fordham Road.

The sidewalks on Flushing Main St. are overcrowded 83% of the day

Problems with overcrowded sidewalks

Crowding is generally:

BAD FOR COMMERCE
since people have difficulty stopping/ looking at window displays.

BAD FOR SAFETY
since fast walking pedestrians will move out onto the road or people will accidentally be pushed into the road.

BAD FOR THOSE WITH SPECIAL NEEDS
since those in wheelchairs, parents with strollers, people with disabilities, children and the elderly generally need more space for walking than that available on a crowded footpath. These groups can be deterred from walking under such conditions.

BAD FOR ENCOURAGING PEOPLE TO WALK
since people will avoid walking if it is unpleasant to do so.

The sidewalks on East Fordham Road are overcrowded 54% of the day

SIGNS OF CROWDED SIDEWALKS

Overcrowded crosswalk.

People do not have space to wait at crossings.

VOLUMES ON FLUSHING MAIN STREET

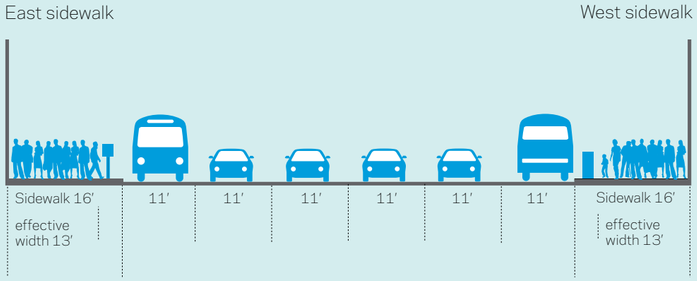
In cases such as Flushing Main St, the number of pedestrians is nearly twice that of vehicle passengers, yet pedestrians are provided less than one third the space.

SPACE ON FLUSHING MAIN STREET

Pedestrians

Vehicular passengers

FLUSHING MAIN STREET, QUEENS BETWEEN ROOSEVELT AND 41ST AVE



46,140
pedestrians /
8 am–8 pm
effective width 13′

56,000
motorists and bus passengers a day utilize the roadway, effective width 65 feet

51,150
pedestrians /
8 am–8 pm
effective width 13′

In some locations, only 50% of the sidewalk on Broadway is possible to use for walking.

Pedestrians are pushed into the road when waiting for a green light.

On very crowded sidewalks, street vendors may cause further problems.

Obstacles on Sidewalks

The effective width for walking is sometimes 50% of the sidewalk

The numerous obstacles found on New York City sidewalks further contribute to crowding and hurt the quality of the pedestrian experience. Vendors and street furniture play a key role in the public life of the City, but often unregulated vendors and poorly placed or planned furniture restrict pedestrian access. Often the most crowded areas (such as sidewalks near subway stops and street corners) are the places where the most obstacles exist. At some street corners, multiple trash cans or newsboxes force people into traffic. Cluttered sidewalks not only impede access but also negatively affect the visual environment.

No protection against unpleasant weather makes the time waiting uncomfortable.

Sidewalk Crowding Affects Public Transit

It is sometimes hard to get to the subway or bus

New York City has one of the world's best public transit systems. Unfortunately, the well-used system is not accessible to all city residents and visitors. At some locations, sidewalks are not broad enough to accomodate the flow in and out of busy subway stops. At others, those waiting for the bus must wait in the sun or rain because of a lack of shelters. In addition, at some outer locations, busy bus stops lack sidewalks, thus making access difficult, if not impossible, for the disabled, elderly, and those pushing strollers.

Crowding on Broadway when students are waiting for the bus.

Limited space for access to and from public transportation..

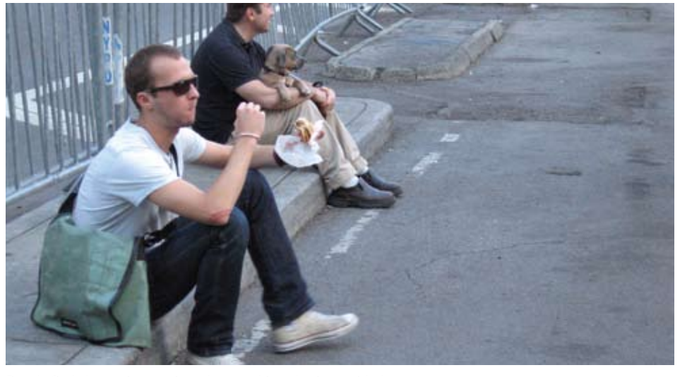
Few resting opportunities while waiting for public transportation excludes some user groups.

Streets without seats

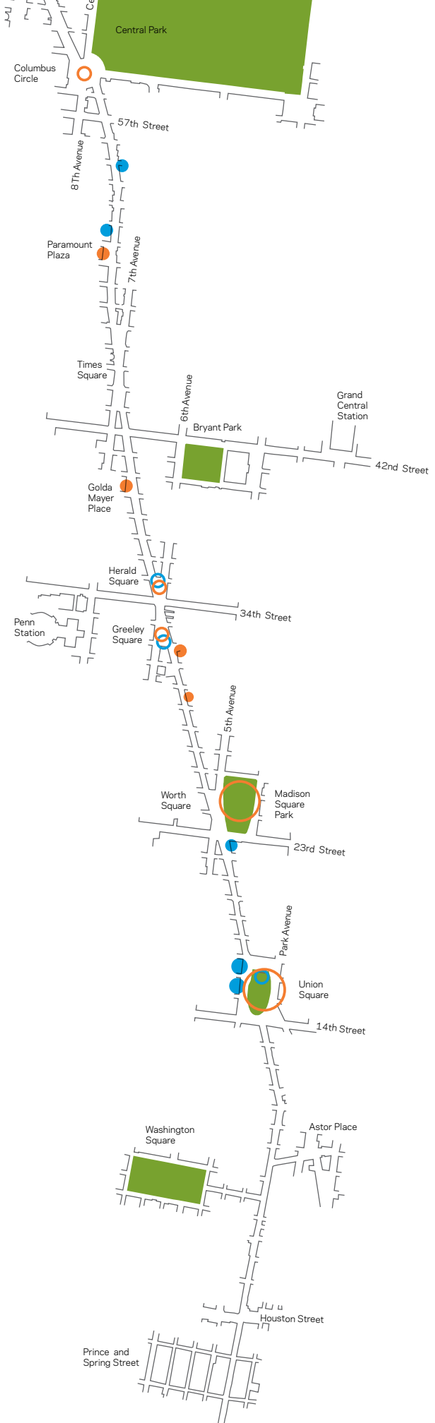
Nowhere to rest

There are very few places for people to sit and rest, meet and interact or people-watch along the streets of New York City. A vastly disproportionate amount of space is allocated to parking cars than to public seating spaces. While New York City provides some of the best urban scenery in the world, there are simply very few places to stop, enjoy and soak in the unique atmosphere.

The few public seating opportunities in the streets are of poor quality and exposed to traffic.



People find alternative seating where nothing else is provided.



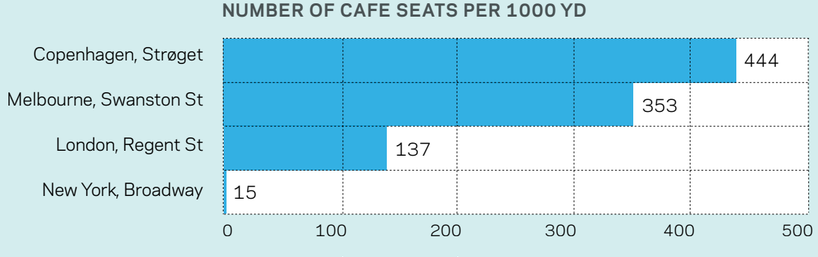
More scaffolding than seating

Scaffolding is left up for too long, while street cafes are few and far between

New York is falling behind other cities in the provision of outdoor seating opportunities. Research from around the world indicates that there is incredible demand for café seating. For example, in London, Copenhagen, and Melbourne, restaurants have found that increased outdoor seating options leads to increased business. The positive effects of providing café seating go beyond the benefits to individual restaurant owners, as café seating contributes to an improved public realm, and increased economic vitality for a city. It is a cause for concern that the three- mile stretch of Broadway from Columbus Circle to Houston Street, one of the City's leading thoroughfares, has only 6 outdoor cafes.

While the city suffers from a shortage of outdoor seating, it is a global leader in scaffolding. The amount of building and renovation underway makes scaffolding a necessity to protect pedestrians. An unintended consequence of recent legislation designed to protect people from building façades with potential problems has been the vast proliferation of long-duration scaffolding that narrows, darkens and uglifies potentially vibrant sidewalks.Although scaffolding is a necessity to protect pedestrians from construction activities, in some cases it is put up far in advance of actual work, or left standing long after it is necessary. For example, scaffolding covers 30% of the buildings along the three miles of Broadway from Columbus Circle to Houston Street.

- Café outdoor seating on the street curb side
- Café outdoor seating in public space
- Public seating in the street
- Public seating in public space



30% of Broadway buildings between Columbus Circle and Houston St are covered with scaffolding.

There are only 6 curb side outdoor cafés on Broadway between Columbus Circle and Soho.

Few Opportunities to Stop

EXAMPLES OF ACTIVITIES

Sitting on café chairs.

Sitting on secondary seating.

Commercial activities.

Standing.

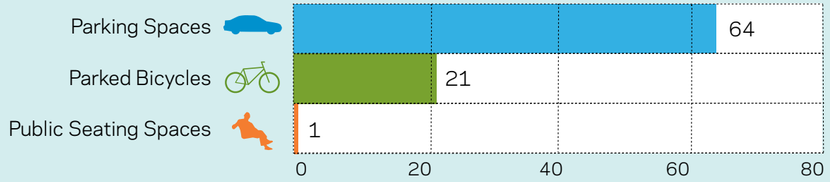
With the exception of Flushing Main Street,the areas surveyed in New York have a significantly lower ratio of stationary activities per 100 yards of street compared to other capital cities. Sitting activities are especially few in New York.

The type of stationary activities found in New York's streets are very different than those found in other world cities. A majority of the stationary activities recorded on Flushing's Main Street are commercial activities associated with street vendors. The majority of the stationary activities recorded along Swanston Street in Melbourne, by contrast, are associated with people window shopping or relaxing in public benches, café chairs and/or secondary seating.

PRINCE ST BETWEEN WEST BROADWAY AND LAFAYETTE

Allocation of space for things at rest on Prince Street:
73% for cars
3% for people
24% for bicycles

Parking Spaces Parked Bicycles Public Seating



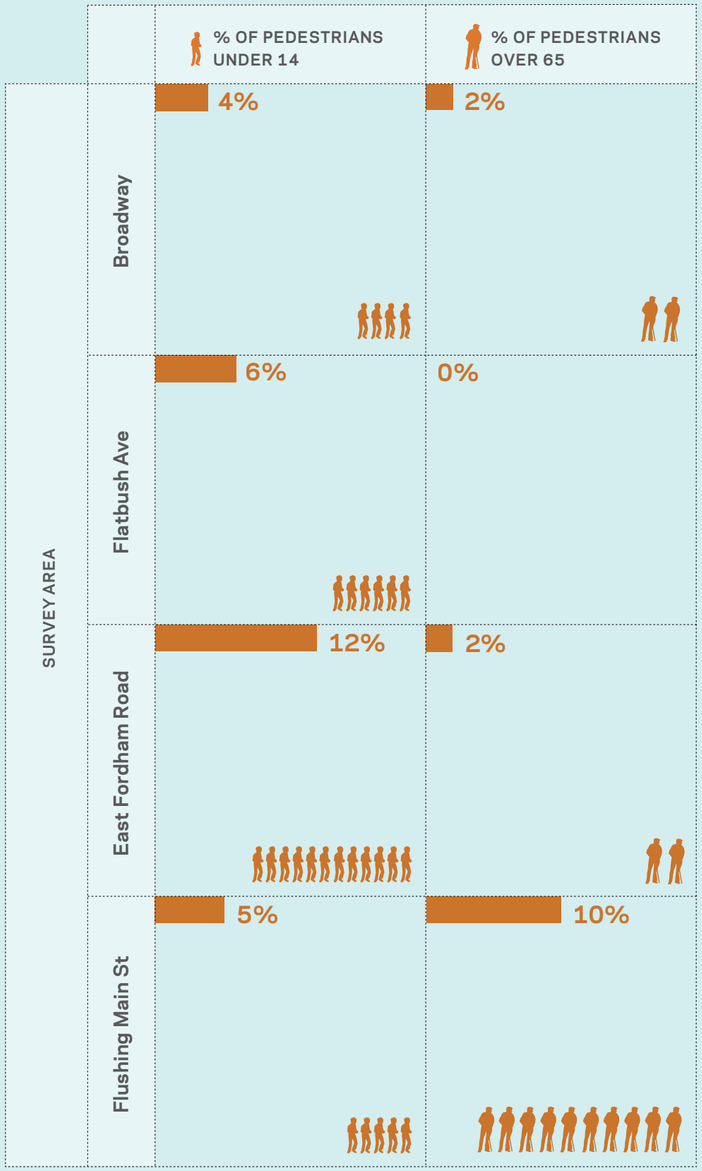
Few children and elderly in the street

Who uses New York streets?

Overcrowded or otherwise unattractive sidewalks and walking environments are not only less pleasant places to be, they in fact discourage some groups from walking or being on a public street altogether.

Only 10% of pedestrians identified at our survey sites were children or seniors (under 14 or over 65 years old), although these groups account for a combined 30% of New York's population

The elderly and young are rarely seen in the street environment in places where streets are traffic dominated and are not perceived as safe.



Few people ever visit the plaza around the arch in Brooklyn's Grand Army Plaza.

Many Public Spaces are Hard to Get to

Many public spaces do not interact with streets and surrounding buildings

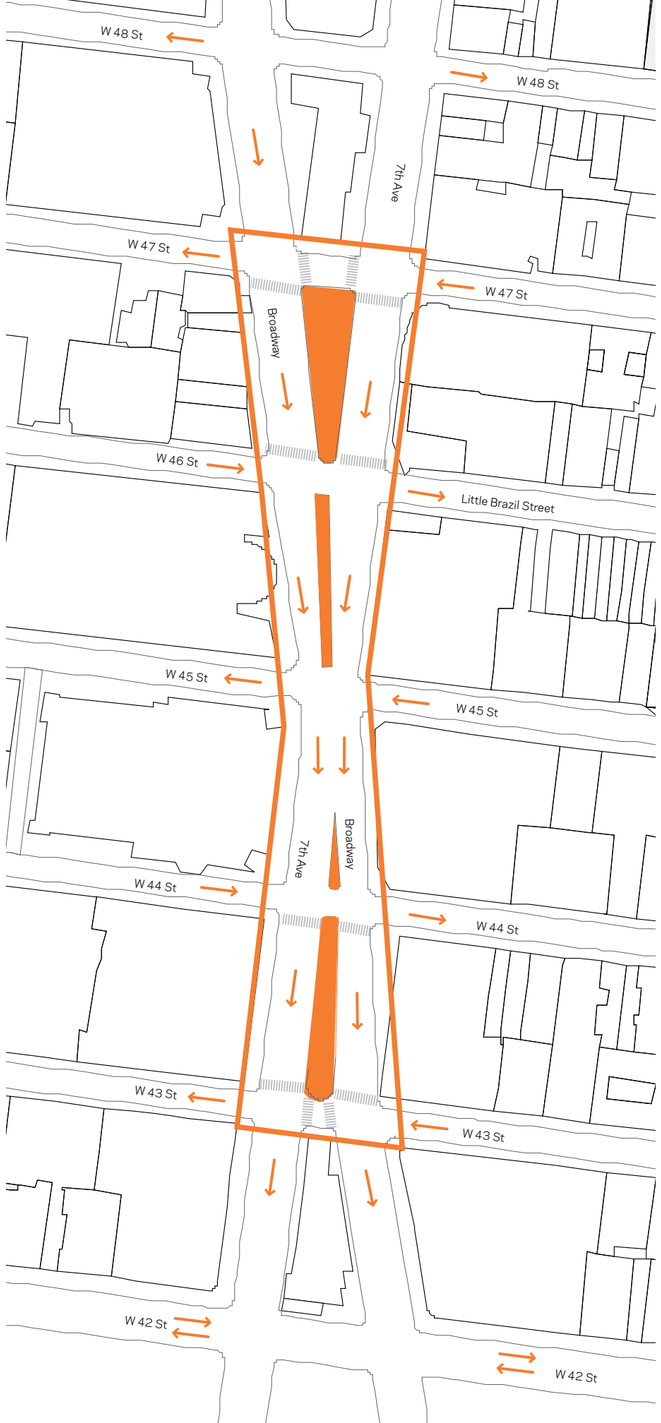
New Yorkers rarely experience the joy of coming across a break in the streetscape- an inviting public space along their journey from Point A to Point B. Instead, they are forced to make a deliberate decision to reach an island of public space- and to get to that island, they often need to negotiate complicated and busy crossings.

Once there, they find none of the opportunities to interact with the indoor environment that a building edge provides. Indoor activities are not allowed to spill into the public realm (and vice versa) because so few public spaces are actually bordered by a building. Instead, the only influence at the border of a public space is often a street full of traffic.

Herald and Greeley Squares are a classic example of this phenomenon. In an effort to protect them from adjacent traffic, planners have surrounded each square with trees, hedges, and walls. As a result, the plazas are visually and physically detached from the pedestrian flow on the sidewalks. The vitality of one space does nothing to feed the other. The lack of visual connections and natural pedestrian flow through the spaces makes them more unsafe at night, and as a result these spaces, and many like them across the City, are closed after dark.

Additionally, most of the actual space in Herald Square is active street space for motor vehicles. 82% of the'square' is taken up by busy through streets. Similar conditions are found in Times Square.

Herald Square is a hidden oasis in the middle of traffic.



Times Square consists of 89% road space 11% people space

Times Square

Total area: 183,000 sq ft

Pedestrian area: 20,200 sq ft

Times Square at night. People are crowded on a narrow traffic island in a traffic dominated space. Recent NYCDOT projects to create more space for people in Madison Square and on Broadway north of 34th Street (see pages 39 and 40) may have future application along Broadway north of 42nd Street.

Closed Façades

Problems with Metal Gates

Sidewalks can be partially illuminated at night by light spilling from closed shops and offices. Metal gates, however, not only limit this ambient light, but also become canvases for graffiti and dirt that further detract from the quality of the city environment. In addition, shuttered streets become uninteresting and unfriendly outside business hours.

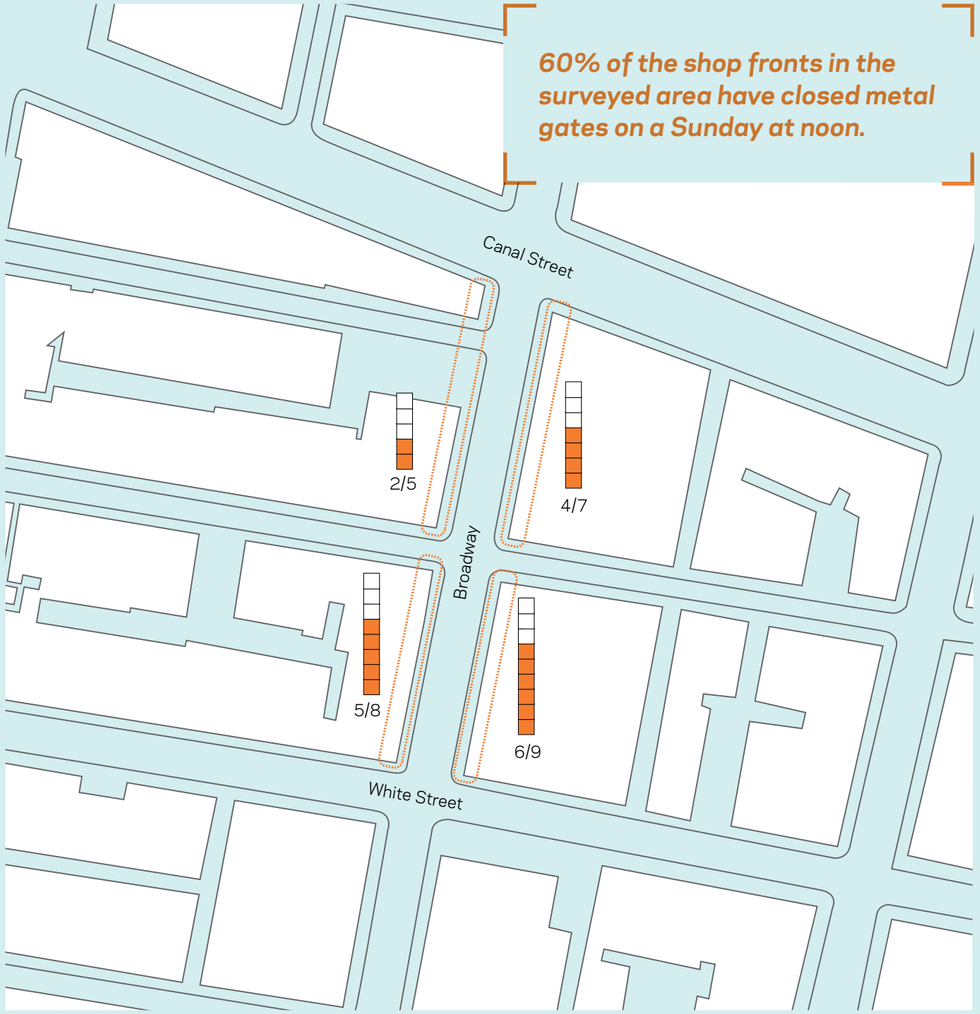
While protecting one's business is of course necessary, business owners could elect to use a more street-friendly design. For example, stores could use lattice work grating instead of the solid metal gates.

Metal gates are not only a problem at night, creating dark and unpleasant streets with nothing to look at, but also after closing hours on weekends, creating uninviting, lifeless and uninteresting streets.

No invitation for a Sunday promenade here.

Open-grilled gates maintain safety but create a more interesting building front along the sidewalk.

60% of the shop fronts in the surveyed area have closed metal gates on a Sunday at noon.



Closed metal gates on Broadway

☐ shop fronts with transparent glass

■ shop fronts with closed metal gates

New York City's World Class Streets Program

Change on our streets

New York City is in the midst of an unprecedented effort to redevelop the City's public realm. Following the mandates set forth in ***PlaNYC*** and ***Sustainable Streets***, and working from the themes developed in the Public Life Survey detailed in the previous chapter, NYCDOT has instituted new design standards and moved forward to implement street projects in its multi-faceted **World Class Streets** initiative, which consists of these elements:

– Public plaza program
– Broadway boulevard projects
– Complete street projects and design standards
– Safe streets for seniors and students
– Public art program
– Coordinated street furniture
– Weekend pedestrian and cycling streets

Pearl Street Triangle Plaza, DUMBO, Brooklyn

Before

After

New Public Space

New York is building plazas throughout the city

One of the central goals in the Open Space chapter of *PlaNYC* is to ensure that every New Yorker lives within a ten minute walk of public open space. To achieve this goal, the City has committed to creating or enhancing a public plaza in every community. NYCDOT and partners have 21 plazas that are already in some stage of design or construction. For example, in 2007 and 2008, DOT employed temporary materials to rapidly transform surplus lots and underutilized roadway into attractive new public spaces in DUMBO and Downtown Brooklyn, Chelsea and the Meatpacking District in Manhattan, and at the HUB in the Bronx.

In June 2008 NYCDOT built upon these efforts and launched the NYC Plaza Program to allow eligible community groups to identify new plaza sites through a competitive application process. The NYC Plaza Program will strengthen the capacity of local organizations to become stewards of the newly created spaces. To do this, DOT and the NYC Department of Small Business Services (SBS) will establish long-term partnerships with community groups to maintain and program the plazas so they are well-managed, active destinations.

Gansevoort Plaza

Before

After

Reshaping Iconic Streets and Spaces

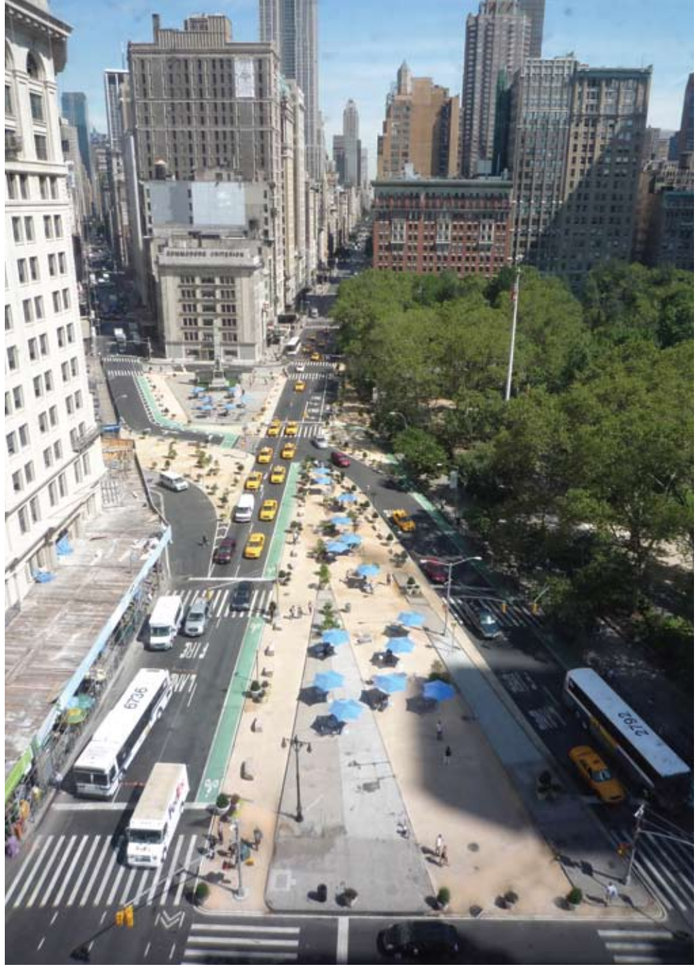
In Summer 2008, NYCDOT transformed Broadway from 42nd to 35th Street. The project, known as Broadway Boulevard, created a ribbon of public gathering spaces along with a protected bicycle lane. Landscaping and distinctive furniture along the corridor brings new foot traffic through the Fashion District as walking is encouraged between bustling Times Square and the Herald Square shopping area.

The positive response by New Yorkers was instantaneous — they flocked to the new spaces. The Times Square and Fashion District business improvement districts (BIDs) and the 34th Street Partnership are handling the maintenance of the new public spaces. The new design "transforms all of Broadway, visually and mentally," according to Barbara Randall, Director of the Fashion Center BID. "People will start thinking of the street differently. They'll start thinking of it as a destination where you can watch the world go by." Transportation Commissioner Sadik-Khan notes that "Broadway is not famous because of the cars going through it. We are trying to have the public space match the name."

Reshaping Iconic Streets and Spaces

In September, 2008, Mayor Bloomberg and NYCDOT unveiled over 41,000 square feet of new public space in Madison Square, bringing new landscaped pedestrian plazas, bicycle lanes and a simpler, safer traffic pattern at Broadway from 25th to 22nd Streets—one of the largest non-park public space projects undertaken by the Bloomberg Administration. The spaces have already filled with pedestrians, tourists, people-watchers and area workers and residents enjoying a meal.

The new space in Madison Square complements adjacent Madison Square Park. In the project's center, a significant new plaza in the shape of the Flatiron Building offers space from which to view one of the world's most photographed landmarks. On Broadway south of 23rd Street, two lanes of roadway have been transformed into a plaza with seating and tables, directly adjoining the Flatiron's building front. The new spaces are supported and maintained by the local business improvement districts and the Madison Square Park Conservancy.



9th Avenue, Chelsea

Putting it All Together

Complete Streets

DOT's award-winning design for Manhattan's 9th Avenue protected bicycle lane achieves a variety of improvements. In addition to separating cyclists from motor vehicle travel lanes and providing for safe vehicle turning movement across the bicycle way, it significantly narrows the avenue crossing distance for pedestrians and creates a more peaceful sidewalk experience along the east side of the avenue. Similar projects are underway across the city.

Carlton Avenue, Brooklyn

Before

After

Bus stop under an elevated train–after improvements. Jerome Avenue and Fordham Road, Bronx.

An Interconnected City

Pedestrians are transit riders, and vice versa

Transit-riding New Yorkers are pedestrians at both ends of their journeys. As a result, sidewalk and bus stop conditions are important to ensuring quality travel conditions. Residents are much more likely to take transit and contribute to the city's sustainability if the route to the train or bus is a pleasant one.

While sidewalks are provided in most of the City, some places do not have the necessary infrastructure. As part of its Sidewalks to Buses initiative, DOT is building sidewalks at bus stops. The agency will build up to 3.75 miles of sidewalk per year as part of this initiative.

Similarly, over 40 bus stops are tucked under elevated train lines, creating difficult waiting conditions for riders. DOT's Bus Stops under the El initiative installs raised islands at these locations to improve safety.

Finally, at some locations sidewalks are not wide enough to accommodate subway riders spilling out of stations. NYCDOT is working with NYC Transit to improve sidewalk quality at these sites.

Sidewalks to Buses–East Tremont, Bronx

Before

After

Subway entrance 33rd Street and Queens Blvd

Before

After

A City Safe for All

Pedestrian projects to benefit students and seniors

The City is also ensuring that New York is more hospitable to children and seniors. DOT's Safe Streets for Seniors and Safe Routes to School programs identify areas of high risk for these two populations.

Safe Streets for Seniors

Although seniors (those 65 and over) represent only 13% of New York's population, they account for 39% of pedestrian fatalities. In light of the dangers seniors face as pedestrians, Mayor Bloomberg launched the "Safe Streets for Seniors" program in January 2008. New York's program is the largest of its kind in the nation. This effort is especially timely, as New York's senior population is expected to increase substantially over the next 25 years.

DOT identified 25 neighborhoods across the City that have a large number of senior citizens and a significant number of crashes involving pedestrians.

DOT recently completed senior safety pedestrian improvements at Brighton Beach in Brooklyn, Flushing in Queens and the Lower East Side. Some specific improvements in these areas include retiming pedestrian signals to give seniors more time to cross the streets, constructing pedestrian refuge island and sidewalk extensions to protect pedestrians and shorten crossing distances, upgrading street markings for better visibility, and reducing the number of travel lanes to calm traffic. Plans for similar improvements are under review for the Fordham/University Heights neighborhood in the Bronx and the Hylan-New Dorp area in Staten Island.

Safe Routes to School

DOT's Priority Schools Program is a large-scale effort to improve pedestrian safety around the City's elementary and middle schools. In 2003, DOT analyzed crash data from the City's 1,400 public and private schools and identified the top 135 priority schools in need of pedestrian safety improvements. By 2006, DOT had implemented the recommended operational improvements near these schools, including new signals, increased crossing time, new crosswalks, better signage, and speed humps. In 2007, DOT (working with DDC) began the construction of long-term capital safety measures including neckdowns, medians, and new sidewalks around the first twelve priority schools. Construction at the next 20 schools is scheduled to start in 2009.

Earlier this year, DOT identified the next group of 135 priority schools that will receive planning studies and improvements. Next year DOT plans to analyze data again to identify, study, and make improvements at 40 priority high schools.

Brighton Beach, Brooklyn

Before

After

East Tremont, Bronx

Before

After

Enjoying the City—Alternative Uses for Streets

Summer Streets

In August 2008, DOT opened a seven mile car-free route from the Brooklyn Bridge to Central Park to bicyclists and pedestrians for three Saturdays in a row. The program, known as Summer Streets, earned rave reviews from New Yorkers and local papers, and caught the attention of cities across the world. Over 150,000 people attended the event, some trying bicycling on city streets for the first time. Traffic impacts on surrounding streets were minimal.

Weekend pedestrian streets

NYCDOT partnered with local merchant and community groups in 2008 to launch several temporary pedestrian streets.

The Montague Street Business Improvement District hosted "Summer Space" for four Sundays in July along three blocks in Brooklyn Heights.

In Williamsburg, Brooklyn, the Northside Merchants Association organized "Williamsburg Walks" on Bedford Avenue for four Saturdays from mid-July to mid-August.

As at Summer Streets on Park Avenue, the idea of weekend pedestrian streets was to open street space to walking and other locally-oriented activities rather than filling it with vendors or a parade. Both events were very successful.

In addition, the City partnered with Friends of Travers Park to create a temporary Play Street in Jackson Heights for twenty consecutive weekends. The traffic-free area extends an over-used playground and connects it to an area used by the local Greenmarket.

Manhattan Bridge Arch, Brooklyn.

A Visually Appealing City

Temporary public art program

NYCDOT recognizes the importance of good design in making vibrant, attractive streets and a more inviting public realm. There is a large scale effort underway to replace older street furniture with well-designed bus shelters, newsstands, and public restrooms created by Grimshaw Architects and selected for the City's Coordinated Street Furniture Franchise with Cemusa, Inc.

New York is currently replacing the city's 3,500 bus shelters and 330 newsstands, along with the city's first public restrooms and covered bicycle racks, to bring modern design and a better overall look to city streets.

Bike rack design competition winner by Ian Mahaffy and Maarten De Greeve.

In addition, NYCDOT has selected a new design for its public bicycle racks, wrapping up an international competition that was launched in early 2008. The agency has also partnered with the artist/musician David Byrne to install nine whimsical bike racks that double as public art.

Finally, in Fall 2008 the agency introduced the Urban Art Program, a public art program with three program tracks. In the pARTners track, the agency will identify priority public art sites appropriate for new commissions. Not-for-profit organizations will team up with artists to design, fabricate and install artworks with input and participation from local community groups. In the Site to Site track, the agency will work with not-for-profit and for-profit organizations to relocate existing artwork to self-selected DOT sites based on site guidelines. Both pARTners and Site to Site projects may be installed for a maximum of eleven months.

David Byrne bicycle rack.

Cemusa Select Bus Service shelter.

DUMBO mural.

Cemusa bike parking shelter.

Cemusa newstand.

New York City's first public toilet.

Lastly, in the Arterventions track, the agency will encourage organization-artist teams to present short-term projects, such as art projections, lighting projects, performance art, or musical/theatrical performances, on self-selected DOT sites. Arterventions projects may be presented for a maximum of one month.

Ninth Avenue Bike Lane, Manhattan.

Raised speed reducers Bolton Avenue, Bronx.

Planning Better Streets: Design Guidelines

For years, the City's design and approval process has favored traffic-oriented space and strictly utilitarian asphalt and concrete features.

To facilitate the changes required by *PlaNYC* and *Sustainable Streets*, DOT is partnering with other city agencies to create a Street Design Manual of policies and design standards to be used by all agencies for street, plaza and other streetscape projects. Agency partners include Design and Construction, Parks, City Planning, Environmental Protection, Buildings, the Economic Development Corporation, the Mayor's Offices of Long Term Planning and Sustainability and Capital Project Development, and city commissions for Public Design and Landmarks Preservation.

The Street Design Manual will ensure that work on city streets prioritizes safety and livability and reflects a context-sensitive, complete-streets approach. It will address both street geometry and street materials, and will enhance the public, multi-dimensional character of our streetscape. The manual's guidelines will also promote greener streets with more trees and vegetation, which will not only beautify and cool the City but also help manage stormwater. In addition, they will improve the coordination of project development within and among agencies to ensure that the City builds better projects faster.

Granite saw-finished curb Madison Avenue, Manhattan.

Painted busway, 34th Street, Manhattan.

Street Geometry: Safer, greener streets

The City's priorities for its streets are reflected in the toolbox of geometric treatments to guide reconstruction and redesign efforts. The design guidelines will encourage sustainable modes of transportation and acknowledge the variety of street types in the City, from truck routes to walking-only streets, and suggest unique treatments for different street types.

On street bikeway, 9th Street, Brooklyn.

Green/landscaped area, Furmanville, Queens.

Median refuge island, Grand Street, Manhattan.

Building Better Streets: Street Materials

Imprinted asphalt, 185th Street and Amsterdam Avenue, Manhattan.

Resin-bound gravel, 9th Avenue & 14th Street, Manhattan.

Modular cobble, New York Stock Exchange.

London pavers, Brooklyn Bridge pedestrian ramp.

In order to broaden the variety of materials that can be used in city projects, and to create a visually-appealing, uniform look, the Street Design Manual will specify a broader set of standard materials for use on streets and sidewalks than is permitted today. New York's streets are not all the same—nor should they be. The handbook will identify the materials appropriate for various types of roadways, sidewalks, and plazas.

People begin using new public space in New York as soon as it is closed to vehicles.

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ADDITIONAL RESOURCES AND CONTACTS

Mayor Bloomberg's administration is committed to ensuring New York is the greenest, most efficient city possible. NYCDOT is unveiling new projects on a regular basis, and encourages the public to participate in shaping the future of the City. For more information please review the following resources:

NYCDOT
www.nyc.gov/dot

PlaNYC
www.nyc.gov/planyc

Gehl Architects
www.gehlarchitects.dk

Sustainable Streets–NYCDOT's Strategic Plan
www.nyc.gov/dot/stratplan

NYC Plaza Program
www.nyc.gov/plazas

DOT Pedestrians and Sidewalks program
www.nyc.gov/html/dot/html/sidewalks/sidewalks.shtml

Pedestrian Projects
www.nyc.gov/html/dot/html/sidewalks/pedestrian_projects.shtml

Safe Routes to Schools
www.nyc.gov/html/dot/html/safety/safety.shtml

Safe Streets for Seniors
www.nyc.gov/html/dot/html/sidewalks/safeseniors.shtml

Safe Routes to Transit
www.nyc.gov/html/dot/html/sidewalks/safertstransit.shtml

NYCDOT Bicycle Program
www.nyc.gov/bicycle

CityRacks Design Competition
www.nycityracks.wordpress.com/

Coordinated Street Furniture
www.nyc.gov/html/dot/html/sidewalks/streetfurniture.shtml

Public Art Program
www.nyc.gov/html/dot/html/sidewalks/urbanart_prgm.shtml

Current DOT Projects
www.nyc.gov/html/dot/html/about/currentproj.shtml

Street Design Manual (upcoming release)