

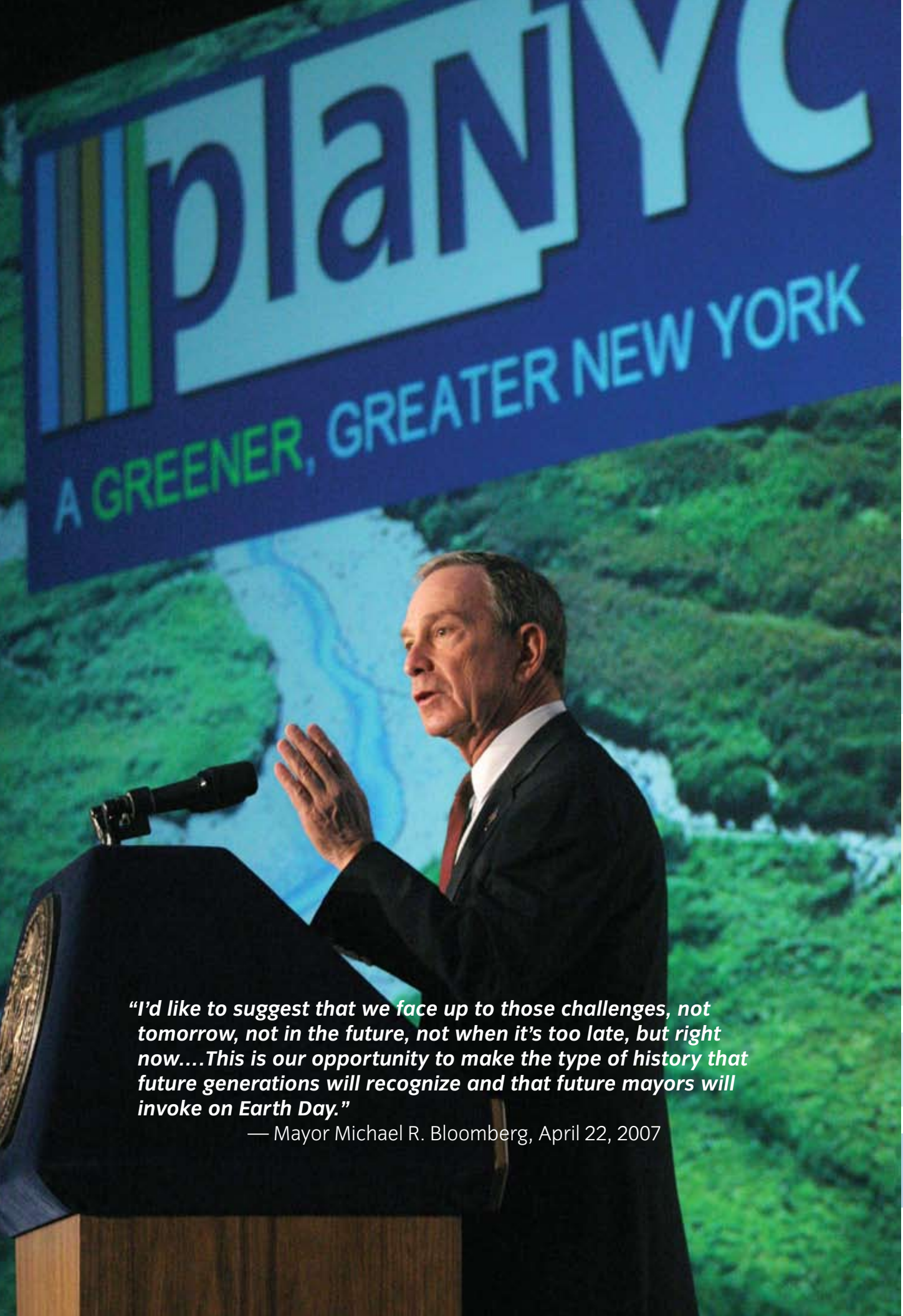


PROGRESS REPORT 2008

A GREENER, GREATER NEW YORK

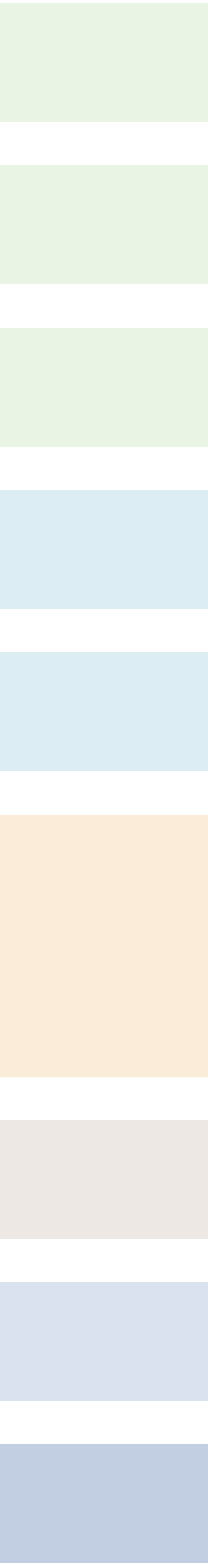







The City of New York
Mayor Michael R. Bloomberg



“I’d like to suggest that we face up to those challenges, not tomorrow, not in the future, not when it’s too late, but right now....This is our opportunity to make the type of history that future generations will recognize and that future mayors will invoke on Earth Day.”

— Mayor Michael R. Bloomberg, April 22, 2007



	OUR GOALS		OUR PROGRESS	PAGE
Housing	Create homes for almost a million more New Yorkers, while making housing more affordable and sustainable		Approved three transit-oriented rezonings and started construction on more than 13,000 affordable housing units	6
Open Space	Ensure that all New Yorkers live within a 10-minute walk of a park		Opened 69 schoolyards as playgrounds, constructed 52 Greenstreets, and started planning for seven of eight large regional parks	9
Brownfields	Clean up all contaminated land in New York City		State Executive Budget included Brownfields Cleanup Program and Brownfield Opportunity Areas program amendments	12
Water Quality	Open 90% of our waterways for recreation by reducing water pollution and preserving our natural areas		Passed new landscaping requirement for commercial parking lots and began work on stormwater management plan	14
Water Network	Develop critical backup systems for our aging water network to ensure long-term reliability		Received new Filtration Avoidance Determination from EPA, purchased more than 5,000 acres to protect our watersheds, and began construction on Croton Filtration Plant	17
Transportation	<p>Improve travel times by adding transit capacity for millions more residents, visitors, and workers</p> <p>Reach a full “state of good repair” on New York City’s roads, subways, and rails for the first time in history</p>	 	Integrated transit expansion into MTA Capital Plan and installed 60 miles of bicycle lanes	20
Energy	Provide cleaner, more reliable power for every New Yorker by upgrading our energy infrastructure		Launched 132 City government energy efficiency projects and sought funding through State regulatory processes	26
Air Quality	Achieve the cleanest air quality of any big city in America		Imposed higher standards on taxis and ferries, and pursued cleaner-burning fuels	30
Climate Change	Reduce our global warming emissions by 30%		Launched neighborhood outreach workshops and started work on adaptation planning	33

One year of progress



APRIL 2007

MAY 2007

Mayor launches PlaNYC on Earth Day

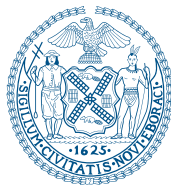
City submits PlaNYC legislation to Albany

PlaNYC supporters form Campaign for New York's Future

New York City hosts C40 Large Cities Climate Summit

16 agencies form stormwater BMP Task Force

Mayor announces taxi fleet to be fully hybrid by 2012



The City of New York
Mayor Michael R. Bloomberg

Dear New Yorkers,

One year ago, on Earth Day 2007, I presented our long-term plan—more than a year in the making—for a greener, greater New York. The plan, called PlaNYC, laid out 127 initiatives designed to address the challenges of a city whose population will grow by one million people by 2030: the need for new capacity, a deteriorating infrastructure, an embattled urban environment, and the global challenge of climate change.



JUNE 2007	JULY 2007	AUGUST 2007	SEPTEMBER 2007
City launches GreeNYC campaign	69 schoolyards open as playgrounds	City issues RFP for regional parks	City Council passes Jamaica rezoning
Administration testifies at State Assembly hearing on PlaNYC proposals	EPA issues Filtration Avoidance Determination (FAD) to NYC	US DOT offers NYC \$354 million for transit in connection with congestion pricing	City files testimony on Con Ed rate case to pursue energy-efficiency investments
Mayor announces that the City will use biofuel to heat City buildings	State Legislature establishes Congestion Mitigation Commission	City opens public plaza in DUMBO	
10 NYC Universities join Mayoral Challenge to reduce greenhouse gas emissions	City adopts building code requiring reflective roofing		

The Earth Day speech, and the 156-page plan it described, was only the beginning of our effort to explain the plan to New Yorkers and the world. Over the last twelve months, members of our Administration and I have presented the plan to more than a hundred organizations around the city and region; discussed it with nearly all of New York City's elected officials at all levels of government; explained it at meetings of many of the city's Community Boards; testified on its initiatives before the City Council, the New York State Legislature, and the United States Congress; visited examples of its ideas in California, Florida, London, Paris, and Shanghai; and featured it in speeches before the U.S. Conference of Mayors, the mayors of the world's 40 largest cities, and the United Nations.

I'm pleased to report that PlaNYC has been as well received locally as it has been nationally and internationally. It has received numerous awards, from groups ranging from the American Institute of Architects to the New York Water Environment Association. Public support for PlaNYC

is essential to its implementation, which is why just one day after the Earth Day launch, members of the Mayor's Sustainability Advisory Board created the Campaign for New York's Future. This effort is now supported by more than 150 organizations that have taken leading roles in helping us advocate for, and implement, initiatives relating to transportation, energy, brownfields, and air quality.

Our partners include organizations like the Clinton Climate Initiative, the New York Restoration Project, the Trust for Public Land, ten of our city's leading universities, and several institutional and corporate donors. The City Council, too, has been an essential partner: in December 2007, it adopted a law codifying PlaNYC's targets for greenhouse gas emissions into law.

Too often in government, plans are unveiled, photo-ops are held, and then all is forgotten. We were determined to avoid that mistake, and to hold ourselves accountable for results. That is why PlaNYC includes an implementation



OCTOBER 2007

First of a million trees planted at Million Trees NYC kickoff

Mayor signs Executive Order 109—City's greenhouse gas emissions reduction plan

NOVEMBER 2007

City Council passes Local Law 55 to codify greenhouse gas emissions reduction targets

Mayor attends U.S. Conference of Mayors Climate Protection Summit in Seattle

City Council approves green parking lot zoning amendment

DECEMBER 2007

Mayor urges global action at United Nations Framework Convention on Climate Change

Groundbreaking for 7 train extension to Hudson Yards

New rules make efficient on-site micro-turbines available to building owners

TLC passes tax regulations requiring all new yellow cabs to be fuel-efficient

JANUARY 2008

Governor's budget incorporated two PlaNYC brownfields initiatives

Congestion Mitigation Commission recommends congestion pricing

timeline with incremental targets that will help ensure steady progress. Since last April, we have launched 118 of our 127 initiatives—and we have already completed several. For instance, we have developed and enacted regulations to clean up our taxis, black cars, and public ferries; we have created more bike lanes, Greenstreets, and planted more trees than we had targeted; we have advanced several key rezonings on schedule; and we have worked with the MTA to put forward a capital plan that, if fully funded, would begin the process of expanding our transit capacity to enable our city to grow and avoid gridlock.

There have also been some setbacks. The New York State Legislature is only now seriously considering reforming the brownfields laws that are critical to cleaning up our contaminated land, and adopting our proposed tax incentives for hybrid cars, solar power, and green roofs that we included in PlaNYC. The New York State Public Service Commission was expected by now to have

adopted a plan to expand incentives for energy-saving retrofits of existing buildings. After a long year of explanation, study, and discussion followed by a process laid out by the State Legislature, the Legislature refused to vote on congestion pricing, which has been shown around the world to be the best solution to traffic in major cities. New York therefore lost a \$354 million Federal grant to fund short-term transit improvements.

This report is an update on the progress we have made in implementing PlaNYC. It also indicates priorities for the next twelve months and for meeting our 2009 milestones. We know that the year ahead will be a great challenge, especially given the downturn in the global economy. But we have learned from the mistakes of the 1970s, when short-sighted budgetary decisions led to disinvestments in critical infrastructure—and a city in decline. We will not allow that to happen again.



FEBRUARY 2008	MARCH 2008	APRIL 2008
City Council passes local law on stormwater management	State legislators introduce PlaNYC tax incentives for hybrid cars	State Legislature refuses to vote on congestion pricing
Mayor announces comprehensive plans for "green" black cars	City Planning Commission approves street tree zoning amendment	City issues Solar RFP
Mayor signs legislation requiring ultra-low sulfur diesel fuel in City-owned ferries	State releases Brownfields Opportunity Area grants	One-year anniversary of PlaNYC
First neighborhood climate change adaptation workshop held in Sunset Park	City Council approves congestion pricing	

Every day we see our needs around us: on our congested streets, we see the need for greater investment in mass transit. In \$100 prices for a barrel of oil and ice sheets melting in Antarctica, we see the need for greater investment in energy efficiency. In the unacceptably high asthma rates that hit New York City's children especially hard, we see the need for investments in cleaner air. With the global economy in turmoil, making those investments will be more difficult, but we cannot not walk away from them. Cities around the world are making major investments in infrastructure, creating jobs, and improving their quality of life. Our position as one of the world's leading economic cities rests on our ability to keep pace—and to build the greener, greater New York that our children deserve.

Michael R. Bloomberg
 Mayor Michael R. Bloomberg



Create homes for almost a million more New Yorkers, while making housing more affordable and sustainable

New York City's population will grow from 8.25 million today to roughly 9.1 million in 2030. While this growth will offer benefits—more jobs, a broader tax base, and an even more vibrant urban culture—it will also bring challenges. The primary challenges are to accommodate the 900,000 new residents and decrease the existing gap between housing supply and housing demand that has made housing less affordable in recent decades. To meet these goals, 265,000 new housing units will need to be added above what was under construction in 2005. To reduce prices and stimulate production, we must expand the potential for housing supply beyond our current capacity—to relieve the pressure to find land, which is a key factor driving up the market cost of housing. At the same time, we must direct that growth to parts of the city where the additional population will not undermine the quality of life.

Our plan for the future of housing includes the following initiatives:

Continue publicly-initiated rezonings

- 1 Pursue transit-oriented development
- 2 Reclaim underutilized waterfronts
- 3 Increase transit options to spur development

Create new housing on public land

- 4 Expand co-locations with government agencies
- 5 Adapt outdated buildings to new uses

Explore additional areas of opportunity

- 6 Develop underused areas to knit neighborhoods together
- 7 Capture the potential of transportation infrastructure investments
- 8 Deck over railyards, rail lines, and highways

Expand targeted affordability programs

- 9 Develop new financing strategies
- 10 Expand inclusionary zoning
- 11 Encourage homeownership
- 12 Preserve the existing stock of affordable housing throughout New York City

Housing

OUR PROGRESS

Approved three transit-oriented rezonings and started construction on more than 13,000 affordable housing units

We are making great progress toward our housing goals. Since mid-2005, building permits for more than 78,000 new units have been issued, which means that our housing supply is expanding significantly. (See *chart: New Privately-Owned Residential Units/Building Permits Issued*). Rezonings in transit-oriented areas are expanding potential supply as well; rezonings adopted since 2005 could result in more than 36,000 new housing units, including 5,200 in the Jamaica rezoning alone,

and anticipated rezonings could facilitate over 35,000 new units. The City is also on track to achieving the Mayor's goal of creating and preserving 165,000 affordable housing units in ten years under the New Housing Marketplace Plan. As of January 2008, 69,836 units of affordable housing had been started under this plan. Over the next year, both rezoning and implementation of the affordable housing plan will continue to create affordable and sustainable housing.



The Amezcuita family moves into their new home at the Morrisania green development in the Bronx

Credit: Mayor's Office

Continue publicly-initiated rezonings

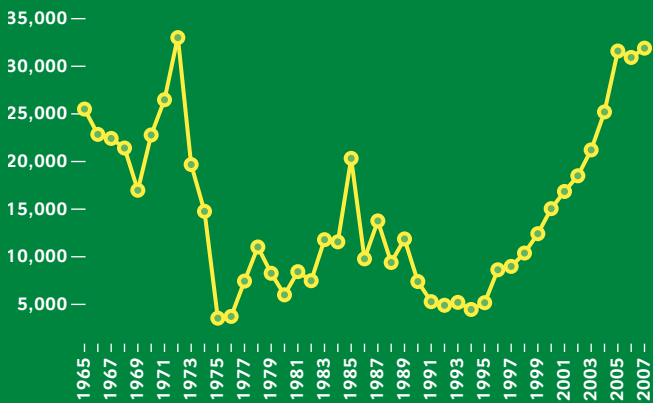
The City is taking the lead in ensuring sustainable housing growth by promoting transit-based development. Opportunities to encourage new housing development are being maximized through rezonings of underutilized manufacturing districts and other underbuilt areas where transit infrastructure exists to support additional residential density. We are working with communities to identify these locations. We are also continuing to reduce zoned density in areas where such infrastructure does not exist. (See *map: Adopted City-Initiated Rezonings*)

In September 2007, the City adopted the Jamaica Plan rezoning, the largest rezoning project of this Administration. The rezoning is anticipated to spur significant new development around a major transit hub. With easy access to multiple transportation options, this area will accommodate increased residential development. Since July 2007, the City has also approved transit-oriented rezonings for the Upper West Side in Manhattan, Bedford-Stuyvesant, and Fort Greene/Clinton Hill in Brooklyn. Other rezoning proposals in the pipeline include those for Harlem's 125th Street, Dutch Kills, Lower Concourse, and Sunset Park neighborhoods.

Create new housing on public land

This last fiscal year, we started almost 1,700 units of affordable housing on public land. Last August, we presented keys to the first low-income homebuyer at the Marcy New Homes development in Brooklyn, which was formerly City-owned vacant land. Also last summer, on West 147th Street in Manhattan, a facility known as P.S. 90 was approved for conversion to approximately 75 affordable residential units and community facility space. We

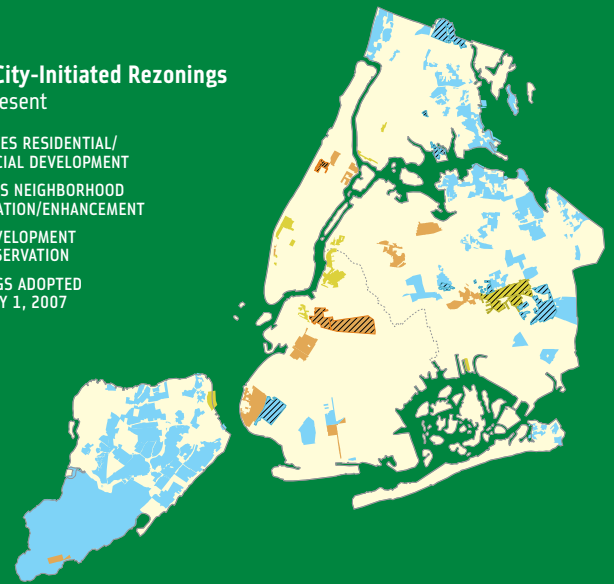
New Privately-Owned Residential Units/Building Permits Issued New York City 1965–2007



Source: U.S. Census New Construction Statistics

Adopted City-Initiated Rezoning 2002 to Present

- FACILITATES RESIDENTIAL/COMMERCIAL DEVELOPMENT
- PROMOTES NEIGHBORHOOD PRESERVATION/ENHANCEMENT
- BOTH DEVELOPMENT AND PRESERVATION
- ▨ REZONINGS ADOPTED SINCE MAY 1, 2007



Source: NYC Department of City Planning

will continue to survey existing City land uses for additional opportunities for adaptation and reuse for housing.

Explore additional areas of opportunity

We have prepared a draft inventory of rail yards, rail lines, and highways that have the potential to be decked over and redeveloped with housing and other uses. We will issue the final report later this year. In parallel, the City and the Metropolitan Transportation Authority (MTA) are moving forward with plans to deck over the Caemmerer Railyards on Manhattan's west side to create new land for development; a developer was announced on March 26, 2008.

Expand targeted affordability programs

The challenge of affordability affects households in all five boroughs. That is why we are harnessing the city's real estate market to create more affordable housing. Innovative tools include leveraging the expanding role of private capital in affordable housing and adapting tax and zoning incentives to the current market. This year will see City-initiated reforms to the 421-a tax incentive program, a program to encourage construction of affordable and market-rate housing through a tax exemption. The changes will modernize the tax incentive to better target it toward the creation of housing for low- and middle-income families. Through the creation of an Affordable Housing Trust Fund, the program will create affordable housing in the 15 poorest neighborhoods in the city. These reforms aim to create the maximum amount of affordable housing for the city and ensure that construction of new housing continues at a strong pace.

Inclusionary zoning creates affordable housing by allowing developers to build more units in exchange for making as much as a third of the apartments affordable to moderate-income New Yorkers. In October 2007, as construction neared completion, the lottery opened for Palmer's Dock, the first project to use the new Inclusionary Housing Program, in the recently rezoned area of Greenpoint-Williamsburg; it will provide 113 affordable housing units. Upcoming rezonings such as Dutch Kills in Queens, Lower Concourse in the Bronx, and Coney Island in Brooklyn, will add the potential for more than 3,800 affordable units through the Inclusionary Housing Program. (See map: *Rezonings with Inclusionary Zoning*)

In the wake of the mortgage foreclosure crisis, the City has moved beyond just encouraging homeownership to preserving existing homeownership. In December 2007, the City, with nonprofit and philanthropic partners, launched the Center for NYC Neighborhoods to mitigate the effects of concentrated foreclosures in New York City, and protect New Yorkers and their neighborhoods. In its first year, the Center expects to provide assistance to approximately 18,000 New Yorkers across the five boroughs.

The Center is a joint effort of the NYC Department of Housing Preservation and Development, the City Council, private philanthropy, banks and lenders, and the city's nonprofit community. The effort aims to fund a major expansion and coordination of counseling and referral services, legal assistance loan remediation, preventive outreach, and education about subprime lending and mortgage foreclosures. The Center is the first of its kind in the nation and will establish national best practices for addressing the mortgage crisis.



CASE STUDY: THE REVITALIZATION OF JAMAICA, QUEENS

New federal office buildings, a new campus for York College, and AirTrain light rail service linking to JFK International Airport have triggered new private investment in this vibrant neighborhood. But Jamaica's zoning, largely in place since 1961, limited future redevelopment of the downtown area.

As part of a multi-agency initiative, called the Jamaica Plan, the Department of City Planning initiated a rezoning proposal for a 368-block area. The rezoning, adopted in September 2007, will leverage Jamaica's superior transit infrastructure to spur the creation of 3 million square feet of commercial space in the central business/transportation hub with 9,500 jobs and 5,200 housing units, including over 700 affordable units. Zoning changes will protect adjacent lower-scale neighborhoods. The Jamaica Plan will also significantly upgrade sewer and water infrastructure and provide new open space and additional street trees.

“...a thoughtful, comprehensive plan on the table to address a vital goal: New York City's long-term viability. The alternative is a city lurching from one crisis to the next.” *New York Post*, April 23, 2007

Rezoning with Inclusionary Zoning

- ADOPTED
- IN PIPELINE



Source: NYC Department of City Planning

Next Steps

While the successes over the past year have been significant, we still have much work to do to prepare for the needs of future New Yorkers. We will continue to work on rezonings that increase density in neighborhoods with good transit. We will also continue innovative projects such as adapting outdated buildings to new uses as we did at the Park Lane at Sea View on Staten Island where we renovated the historic Nurse's Residence and Cottageto create apartments for senior citizens. We will continue to rehabilitate the New York City Housing Authority's housing stock, the largest in the country, to maintain these 180,000 public housing units for the foreseeable future.

Housing Progress

INITIATIVE	LAUNCHED*	PROGRESS SINCE APRIL 22, 2007	IMPLEMENTATION MILESTONE FOR DECEMBER 2009
1 PURSUE TRANSIT-ORIENTED DEVELOPMENT			
Use upcoming rezonings to direct growth toward areas with strong transit access	✓	Jamaica rezoning passed in Sept. 2007. Other approved rezonings: Upper West Side, Fort Greene/Clinton Hill, Bedford-Stuyvesant. 125th St. rezoning approved by the City Planning Commission in March 2008. Will launch public review in 2008 for: Moynihan Station, Manhattan; Lower Concourse and 161st St./River Avenue, Bronx; Dutch Kills, Queens; and St. George, Staten Island	Complete current Administration's agenda for rezonings and land use studies
2 RECLAIM UNDERUTILIZED WATERFRONTS			
Continue restoring underused or vacant waterfront land across the city	✓	Draft Environmental Impact Statement scoping document for Coney Island rezoning issued Feb. 13, 2008. Public review to begin by early 2009. Anticipate start of public review process for Hunter's Point South and Lower Concourse rezonings in 2008. Studying the Gowanus Canal Corridor and Staten Island North Shore	Complete current Administration's agenda for rezonings and land use studies
3 INCREASE TRANSIT OPTIONS TO SPUR DEVELOPMENT			
Use transit extensions to spark growth as the subways did more than a century ago	✓	The 34th Street BRT is scheduled for implementation in summer 2008 and will support the Hudson Yards development and the Moynihan Station Project	Implement increased transit options including BRT to spur development
4 EXPAND CO-LOCATIONS WITH GOVERNMENT AGENCIES			
Pursue partnerships with City and State agencies throughout the city	✓	HPD and NYCHA received responses to the Affordable Housing for the Bronx RFP in December 2007, which includes three new construction development sites and one rehabilitation site that together will result in over 1,000 rental and homeownership units. With DOT, construction will begin on the former Cook St. DOT parking lot site in Brooklyn	Create database of City, State, and Federal land for co-location opportunities and housing
5 ADAPT OUTDATED BUILDINGS TO NEW USES			
Seek to adapt unused schools, hospitals, and other outdated municipal sites for productive use as new housing	✓	On Aug. 22 2007, keys were presented to low-income homebuyers at the Marcy New Homes development. On Sept. 27, HPD announced teams to build affordable housing on NYCHA properties on Manhattan's West Side. In October, a rehabilitation project began on the Sea View Hospital Campus, to provide apartments for low- and moderate-income senior citizens	Use database to identify and execute on initial sites
6 DEVELOP UNDERUSED AREAS TO KNIT NEIGHBORHOODS TOGETHER			
Continue to identify underutilized areas across the city that are well-served by transit and other infrastructure	✓	On July 30, 2007, DCP issued a framework to guide future land use changes in the Gowanus Canal Corridor that would reconnect the vibrant neighborhoods on either side of the canal; project awaiting funding for the EIS. City preparing for public review process for Flushing Municipal Parking Lot 1 rezoning in Queens	Complete current Administration's agenda for rezonings and land use studies
7 CAPTURE THE POTENTIAL OF TRANSPORTATION AND INFRASTRUCTURE INVESTMENTS			
Examine the potential of major infrastructure expansions to spur growth in new neighborhoods	✓	Jamaica rezoning passed on September 10, 2007, capitalizing on opportunities provided by the AirTrain. City expects to begin public review for Willets Point rezoning in 2008. Working on a rezoning around West 34th St. area in Manhattan, as part of the Moynihan Station project, for which a scoping document was issued in 2007	Identify rezoning opportunities that emerge with the implementation of new transit projects†
8 DECK OVER RAILYARDS, RAIL LINES, AND HIGHWAYS			
Explore opportunities to create new land by constructing decks over transportation infrastructure	✓	Preparing a draft inventory of railyards, rail lines, and highways with the potential to be decked over and redeveloped. Final report to be issued in summer 2008. City and MTA moving forward with plans to deck over Caemmerer Railyards; MTA selected developer on March 26, 2008, and will begin environmental work in spring 2008	Identify railyards, rail lines, and highways that coincide with sustainable development and have the capacity for anticipated growth
9 DEVELOP NEW FINANCING STRATEGIES			
Continue to pursue creative financing strategies to reach new income brackets	✓	City actively pursued passage of new 421-a legislation to allow the City to leverage new development for affordable housing. In February 2008, the State Legislature signed final pieces of the new legislation into law and began the public review process for Rules of Implementation	Complete the Mayor's New Housing Marketplace Plan to build 165,000 units of affordable housing
10 EXPAND INCLUSIONARY ZONING			
Seek opportunities to expand the use of inclusionary zoning (IZ), harnessing the private market to create economically integrated communities	✓	Encouraging IZ in rezonings: Hudson Yards, Greenpoint/Williamsburg, West Chelsea, South Park Slope, Maspeth/Woodside, Fort Greene/Clinton Hill, Bedford Stuyvesant, and the Upper West Side. Pursuing IZ in 125th St., Lower East Side, and Dutch Kills rezonings. Considering IZ in rezoning proposals: Lower Concourse, 161st St./River Avenue, Sunset Park, Coney Island, DUMBO, and Sherman Creek	Pursue inclusionary zoning in all appropriate rezonings initiated and reviewed by the City
11 ENCOURAGE HOMEOWNERSHIP			
Continue to develop programs to encourage home ownership, emphasizing affordable apartments over single-family homes	✓	Center for NYC Neighborhoods created to mitigate the effects of concentrated foreclosures with counseling and referral services, legal assistance, loan remediation, preventive outreach, training, research, and advocacy. Released RFP for the development of low-income homeownership housing and rentals in the Bronx in September 2007	Complete the Mayor's New Housing Marketplace Plan to build 165,000 units of affordable housing
12 PRESERVE THE EXISTING STOCK OF AFFORDABLE HOUSING THROUGHOUT NEW YORK CITY			
Continue to develop programs to preserve affordable housing that so many New Yorkers depend upon today	✓	Preserved over 60,000 units of affordable housing since 2005. In fall 2007, HPD evaluated a 20-project portfolio of New York City-held HUD multifamily mortgages to determine how to preserve their affordability, and continues to work with a preservation consultant to develop a comprehensive approach to increasing preservation efforts	Complete the Mayor's New Housing Marketplace Plan to build 165,000 units of affordable housing

* Initiative begun by the City, including planning or advocacy stages
 † 2015 milestone set--no 2009 milestone



Ensure that all New Yorkers live within a 10-minute walk of a park

Over the last five years, the City has added more than 400 acres of new parkland, much of it by reclaiming stretches of the waterfront that were abandoned by industry decades ago. Yet because of our population density, the city has fewer acres of green space per person than almost any other major American city. As the city's population continues to grow, and as competition from housing, office space, and other uses intensifies, demands on our parks and open space will increase.

Our plan for the future of open space includes the following initiatives:

Make existing sites available to more New Yorkers

- 1 Open schoolyards across the city as public playgrounds
- 2 Increase options for competitive athletics
- 3 Complete underdeveloped destination parks

Expand usable hours at existing sites

- 4 Provide more multi-purpose fields

- 5 Install new lighting

Re-imagine the public realm

- 6 Create or enhance a public plaza in every community

- 7 Green the cityscape

Open Space

OUR PROGRESS

Opened 69 schoolyards as playgrounds, constructed 52 Greenstreets, and started planning for seven of eight large regional parks

Today, more New Yorkers have access to green space and parks than they did one year ago when PlaNYC was launched. In the last 12 months, we have planted more than 33,501 trees, many of them in neighborhoods with disproportionate health burdens. Fifty-two new Greenstreet sites now enhance the New York streetscape. Both of these improvements help cool summer air temperatures, helping to conserve energy, reduce stormwater runoff, improve air quality, and increase property values. We have begun planning seven of our eight regional parks, involving local communities in the planning of their neighborhoods. In the coming year, we will continue to implement the initiatives in PlaNYC steadily and as quickly as possible.

Make existing sites available to more New Yorkers

PlaNYC's first achievement was in our schoolyards-to-playgrounds program. On July 1, 2007, just 71 days after Earth Day, we opened 69 schoolyards as playgrounds, meeting our

commitment to open all schoolyard sites for which no improvements were required. In addition, the City completed construction on the first three sites in need of renovation. Working with the Trust for Public Land (TPL) through a public-private partnership, we have completed designs on an additional 32 schoolyard sites on which we will begin reconstruction this summer. In late 2008, 20 additional schoolyards will be designed and their capital improvements will begin. We are studying a further 109 sites and scheduling community meetings and design days. These playgrounds will provide needed play space for more than 360,000 children by 2030. We are also evaluating appropriate sites for high-quality fields across the city to increase options for competitive athletics.

This year we are in the planning phase for seven of the eight regional parks projects identified in PlaNYC. Regional park designs for Ocean Breeze, McCarren, and Calvert Vaux (Dreier Offerman) Parks have already been



Council Member Gale A. Brewer, 8th grader Kevin Fich, and Mayor Bloomberg open the JHS 220 playground in Brooklyn

Credit: NYC Department of Parks and Recreation

presented to the Art or Landmarks Commissions; the other four will be submitted this spring and summer. The eighth PlaNYC site, High Bridge Park, which spans Manhattan, and the Bronx, requires the expertise of a historic preservation specialist who will be hired this summer; design can begin later this year. We are incorporating feedback from multiple community listening sessions, along with on-site and online surveying for each new park. Environmental reviews have also begun for each of the regional parks projects. Design and construction fees are in place in the budget to meet the rigorous timelines established in PlaNYC. (See table: *Regional Parks Status Updates*)

Expand usable hours at existing sites

To meet growing demand, we are moving forward on our commitment to expand usable hours at our current, high-quality recreation facilities. With our Asphalt to Turf initiative, we have completed topographical surveys for ten sites and are developing designs; contracts for these will be bid this spring and construction will begin in the fall. Within the Asphalt to Turf initiative, the City is committed to using the new tufted and knitted type of synthetic turf. In response to the concerns about certain types of synthetic turf—in particular, the crumb rubber infill type—the City is also undertaking a health and safety assessment. To expand usable playing time, the City is adding new field lighting at existing athletic fields. We have completed the design for nine new fields and will begin adding field lighting to these sites in April. In addition, we have identified an additional 27 sites, which will receive new field lighting, and will begin design on these sites this summer.

"PlaNYC 2030 contains a bold and thoughtful set of proposals that already has raised the bar for discussing New York's future." Manhattan Borough President Scott Stringer, *New York Post*, May 18, 2007



Big Bird, Mayor Bloomberg, and Bette Midler, president of the New York Restoration Project, plant tree number one in the Bronx

Credit: Mayor's Office



Rendering of improvements to Ocean Breeze Park, Staten Island

Credit: NYC Department of Parks and Recreation

CASE STUDY: MillionTreesNYC

MillionTreesNYC is a citywide, public-private initiative with an ambitious goal: to plant and care for one million new trees across the city's five boroughs over the next decade. Launched on October 9, 2007, by the Parks Department and New York Restoration Project (NYRP), it is a collaboration of many partners, including community-based and non-profit groups, government agencies, businesses, private property owners, and New Yorkers. By planting these trees, New York City can enlarge its urban forest by 20 percent. This urban forest—made up of street trees, park trees, and trees on public, private and commercial land—is one of our most valuable environmental assets and also improves our quality of life.

To achieve this, we are aggressively expanding our street tree planting program, and have identified 220,000 opportunities for tree planting over the ten-year campaign. With a mandate to plant 22,000 street trees each year, the City will seek to establish a steady supply of quality trees by engaging in long-term procurement contracts directly with growers. In addition, the City will reforest 2,000 acres of existing parkland.

To complement our expanded street and park tree planting program, NYRP has initiated a community-based tree planting strategy. NYRP and other non-profit organizations will seek individual and corporate donations to purchase and plant trees on other public lands including schoolyards, public housing complexes, libraries, community health centers, and university campuses.

The first plantings are focused in six Trees for Public Health neighborhoods. These neighborhoods—Morrisania, Hunts Point, East New York, East Harlem, Far Rockaway, and Stapleton—have a combination of below-average tree canopy cover and above-average

asthma rates among young people. By planting street trees and greening these areas, we anticipate not only neighborhood beautification but also improved air quality and community health.

We have worked to build local support and engagement through an extensive outreach campaign and ongoing meetings with community boards, advisory committee members, corporate partners, and stakeholders. April 2008 marks the launch of MillionTreesNYC Month, when we will engage every New Yorker to help plant and care for our expanding urban forest. Public outreach and education, stewardship workshops, and volunteer plantings are planned throughout the month to promote the benefits of a canopy of one million new trees in our city.

Re-imagine the public realm

This summer we will begin to invest nearly \$4 million to reclaim underused public rights-of-way for public spaces throughout the city. These new or enhanced plazas will help improve the quality of life in communities that lack adequate open space. And, to add to the 52 newly constructed Greenstreet sites created in fall 2007, the City is conducting site surveys for the next 50 Greenstreet locations that will transform acres of unused road space into green space this spring. (See map: *City-wide Greenstreets, Trees Planted and Plazas*)

In March 2008, the City Planning Commission approved a zoning text amendment that will require all building owners who construct or substantially enlarge buildings to plant a street tree for every 25 feet of street frontage of the zoning lot, with a minimum requirement of one street tree. If planting a tree is not feasible

Regional Parks Status Updates

PARK NAME	BOROUGH	COMMUNITY DESIGN CONSULTATION	DESIGN SUBMITTED TO ART/LANDMARKS COMMISSION	CONSTRUCTION TO BEGIN	OPEN FOR USE BY THE PUBLIC
Soundview Park	Bronx	June and Sept. 2007	Summer 2008	Summer 2009	Winter 2010
Drier Offerman Park Phase 1	Brooklyn	May 2007	May 2007	June 2008: Soccer fields (2)	Summer 2009
Drier Offerman Park Phase 2	Brooklyn	May 2007	May 2007	April 2009	Spring 2010
McCarren Park	Brooklyn	June 2007	January 2008	Spring 2009	Spring 2011
Ocean Breeze Park	Staten Island	June and Sept. 2007	January 2008	Spring 2009	Fall 2011
The High Bridge	Manhattan/Bronx	June 2007	Winter 2008	Winter 2009	Winter 2011
Fort Washington Park	Manhattan	Aug. 2007, Sept. 2007, Nov. 2007	Spring 2008	Fall 2009	Fall 2011
Highland Park	Queens	June 2007	Summer 2008	Winter 2009	Winter 2011
Rockaway Park	Queens	June 2007	Summer 2008	Summer 2009	Summer 2011

Source: NYC Department of Parks and Recreation

Citywide Greenstreets, Trees Planted, and Plazas Since May 2007

- GREENSTREETS
- PLAZAS
- TREE PLANTINGS



Source: NYC Department of Parks and Recreation (Greenstreets, trees)
NYC Department of Transportation (Plazas)



The new public plaza at 9th Avenue and 14th Street in Manhattan

Credit: NYC Department of Transportation

due to underground infrastructure or for other reasons, they will be able to be able to make a payment in lieu of planting and the Parks Department will plant a tree nearby for them. Through this mechanism, new construction will not only create value for the builder but also for neighbors, because street trees have been shown to increase property values for the entire street. We are working with the City Council to secure final approval of this amendment.

Next Steps

We are on track to achieve our initiatives, which will create over 800 acres of upgraded parkland and open space spread across virtually every neighborhood in the city. Using existing open space wisely is the only way we can expand recreational opportunities for New Yorkers without unduly constricting available land for housing, jobs, and other needs. This year, we will continue our implementation

efforts on park sites and Greenstreets; we will open new plazas in places such as Lou Gehrig Plaza in the Bronx and Frederick Douglass Circle in Harlem; and we will continue to expand our tree-planting capacity to achieve the levels we will need to finish planting a million trees by 2017. With the support of partners such as NYRP and all residents, we can achieve our goal of making a park only a walk away from each New Yorker.

Open Space Progress

INITIATIVE	LAUNCHED*	PROGRESS SINCE APRIL 22, 2007	IMPLEMENTATION MILESTONE FOR DECEMBER 2009
1 OPEN SCHOOLYARDS ACROSS THE CITY AS PUBLIC PLAYGROUNDS			
Open schoolyards as playgrounds in every neighborhood	✓	Opened 69 schoolyards as playgrounds, completing commitment to open all Category 1 sites. Construction completed on first three sites in need of renovation; design complete for 32 more to be reconstructed beginning summer 2008. Twenty more schoolyard sites to begin capital construction by end of 2008. Community meetings and design days will be held for a further 109 sites	Open all Category 1 sites not requiring capital improvements
2 INCREASE OPTIONS FOR COMPETITIVE ATHLETICS			
Make high-quality competition fields available to teams across the city	✓	Evaluating appropriate sites for high-quality competition fields across the city	Open fields up for community use on 43 fields
3 COMPLETE UNDERDEVELOPED DESTINATION PARKS			
Fulfill the potential of at least one major undeveloped park site in every borough	✓	In planning phase for seven of eight park sites. Environmental reviews began for six parks. Plan for Ocean Breeze received Art Commission approval and began design phase. Conceptual design for McCarren Park received Community Board approval. Presented to Landmarks and Art Commissions in spring 2008. Approved Master Plan for Dreier Offerman Park and began soccer field construction in April	Complete community outreach and designs for all regional parks
4 PROVIDE MORE MULTI-PURPOSE FIELDS			
Convert asphalt into multi-use fields	✓	Design for first field completed by City. Remaining 24 sites to be completed by consultants. Topographic surveys completed for 10 sites and development of schematic designs is underway. Contracts for 10 sites will be complete for bidding in spring 2008 and construction to begin in fall 2008. Studying health concerns related to synthetic turf	Complete development of all proposed multi-purpose fields
5 INSTALL NEW LIGHTING			
Maximize time on our existing turf fields by installing lights for nighttime use	✓	City completed design for 9 new fields and will begin construction in April. City identified an additional 27 sites to receive new field lighting and will begin design on these sites this summer.	Complete installation of all proposed field lights
6 CREATE A PUBLIC PLAZA IN EVERY COMMUNITY			
Create a new or enhance an existing public plaza in every community	✓	On August 8 2007, opened new public plaza in DUMBO; 25 other plazas are in development. DOT working group with local groups to identify new plazas and will provide maintenance and operational training for community partners. In summer 2008, will issue an RFP for a design consultant to design public plazas	Continue development of identified plaza initiatives and develop a process for community identification of potential new plazas
7 GREEN OUR CITYSPACE			
Fill every available street tree opportunity in New York City	✓	City launched the MillionTreesNYC Initiative with New York Restoration Project, and planted "Tree One" on October 9 2007. Planted over 33,501 trees as part of our MillionTreesNYC campaign, of which 11,548 are newly planted street trees, and initiated an aggressive strategy of full-block planting. Efforts are focused on highest need areas	Plant 15,000 street trees a year
Expand Greenstreets program	✓	Completed the design and construction of 52 new Greenstreet sites in fall 2007. Completing site surveys for the next 50 Greenstreet locations to be constructed in spring 2008	Complete 240 Greenstreets

* Initiative begun by the City, including planning or advocacy stages

Extended version of Progress updates and full list of acronyms available online at www.nyc.gov/plaNYC2030



Clean up all contaminated land in New York City

As our need for space grows while our supply of land remains fixed, we must use our existing land more efficiently. Brownfields—land where redevelopment is complicated by actual or perceived contamination—comprise as much as 7,600 acres of land in New York City. In some cases, the confirmed presence of contaminants has stalled development; in others, the fear of pollution has prevented effective land use. There is a need for brownfield programs that ensure that land can be tested, cleaned up, and used to its full potential—especially in areas where the combination of economic distress and environmental contamination has created sites that blight communities. There is also a need for access to information that can help people determine sites' contamination risk and for greater community input on sites in neighborhoods where brownfields are concentrated.

Our plan for the future of brownfields includes the following initiatives:

Make existing brownfield programs faster and more efficient

- 1 Adopt on-site testing to streamline the cleanup process
- 2 Create remediation guidelines for New York City cleanups
- 3 Establish a City office to promote brownfield planning and redevelopment

Expand enrollment into streamlined programs

- 4 Expand participation in the current State Brownfield Cleanup Program (BCP)
- 5 Create a City program to oversee all additional cleanups
- 6 Provide incentives to lower costs of remediation

Encourage greater community involvement in brownfield redevelopment

- 7 Encourage the State to release community-based redevelopment grants
- 8 Provide incentives to participate in Brownfield Opportunity Area (BOA) planning
- 9 Launch outreach effort to educate communities about brownfield redevelopment

Identify remaining sites for cleanups

- 10 Create a database of historic uses across New York City to identify potential brownfields
- 11 Limit liability of property owners who seek to redevelop brownfields

uses comprehensive planning, dynamic work plans, and streamlined investigative techniques to manage uncertainty at contaminated sites. At one Triad project in the Bronx, a team quickly identified the three small areas that required detailed investigation—saving money and allowing an affordable housing project to advance.

Expand enrollment into streamlined programs

One shortcoming in the existing Brownfields Cleanup Program (BCP) was the exclusion of historic fill sites—moderately-contaminated brownfields more frequently found in the city than in rural areas. The City submitted legislation last May to require that these sites be eligible for the BCP. In January, the Governor's budget bill endorsed this concept and proposed to allow historic fill sites into the BCP.

Our most significant brownfields proposal is to create a streamlined, City-administered program for moderately-contaminated sites that would implement State cleanup and provide liability relief upon successful remediation. This program would supplement the State's cleanup efforts as well as address the public health issue of sites that are currently being cleaned up without any government oversight. We included this in our legislative proposal last May and have been working with the State on the details. We will continue to advocate for the adoption of this approach.

Encourage greater community involvement in brownfield redevelopment

We succeeded in achieving the release of past years' Brownfield Opportunity Area (BOA) grant funding and in eliminating the requirement for a memorandum of understanding (MOU) for future grant rounds. The new grants will provide \$2.5 million to advance community-based brownfield planning in nine areas of the city.

To strengthen community-based planning, PlaNYC proposed to offer developers in the BCP a 10 percent tangible property tax credit if their development conforms to approved BOA plans. This was included in both our brownfields legislation proposed last May and in the proposals put forward by the Governor's Office in January 2008.

Identify remaining sites for cleanups

To reduce uncertainty and streamline the process of determining whether land is contaminated, we will begin to create a web-based

Brownfields

OUR PROGRESS

State Executive Budget included Brownfields Cleanup Program and Brownfield Opportunity Areas program amendments

While we achieved some success in improving community involvement and piloting streamlined investigations, our brownfields plan is still in its early stages. We have invested time and effort on two important steps: working with State agencies, the Governor's Office, and the State Legislature to achieve brownfields reform, and creating a NYC Office of Environmental Remediation (OER). Several other initiatives will only become feasible once these two steps are achieved. We will set up OER over the next year and continue to advocate for better cleanup options for city sites.

Make existing brownfield programs faster and more efficient

We are poised to create OER to work with the State in developing a New York City-specific brownfield remediation process that will meet existing State standards but work better for New York City sites. OER will be the point of contact for our incentive programs and will assist community organizations with brownfield redevelopment programs.

We are piloting Triad, a streamlined approach to assessing the contamination on a site. It

“Land. Mark Twain said they're not making any more of it, but the Bloomberg administration is going to try anyway.” *The New York Observer*, April 24, 2007



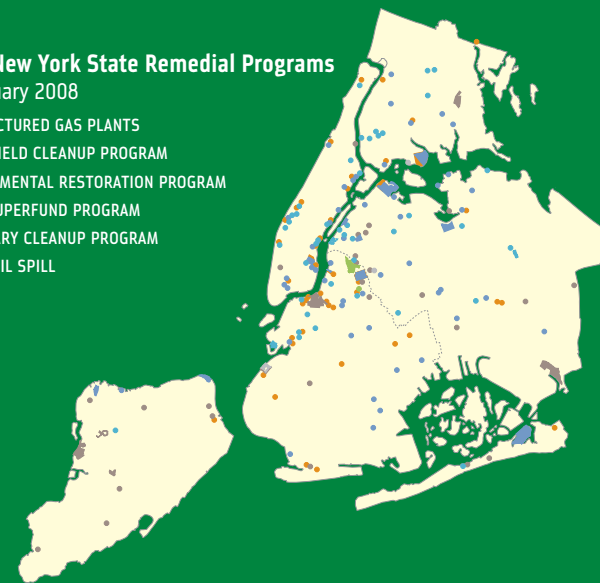
Public Place, a brownfield on the Gowanus Canal in Carrol Gardens, Brooklyn

Credit: Mayor's Office of Environmental Coordination

Sites in New York State Remedial Programs

As of January 2008

- MANUFACTURED GAS PLANTS
- BROWNFIELD CLEANUP PROGRAM
- ENVIRONMENTAL RESTORATION PROGRAM
- STATE SUPERFUND PROGRAM
- VOLUNTARY CLEANUP PROGRAM
- MAJOR OIL SPILL



Source: NYS Department of Environmental Conservation

application to provide public information about historic land uses. Making data available about previous uses on a site will give a clearer picture of potential contamination—and help clear up fears where there is no real likelihood of contamination. By helping people understand the history of land, this database

will speed up the appropriate development of brownfields in New York City.

Next Steps

The critical next steps in cleaning up our contaminated land will be to encourage the State Legislature's adoption of a reform and expansion

of the BCP, and to create the OER. Together with developers and residents, we will improve our brownfields approach. We will make it more comprehensive and inclusive than ever before to ensure that all our land is cleaned up and put to productive and appropriate use.

Brownfields Progress

INITIATIVE	LAUNCHED*	PROGRESS SINCE APRIL 22, 2007	IMPLEMENTATION MILESTONE FOR DECEMBER 2009
1 ADOPT ON-SITE TESTING TO STREAMLINE THE CLEANUP PROCESS			
Pilot the "Triad" program on two sites	✓	Two pilot sites underway: Melrose (Bronx) and former petroleum terminal in Brooklyn. Soil vapor study begun in Melrose; initial results show less contamination than anticipated. For the Brooklyn site, a work plan is being drafted for a remedial investigation	Conduct first two Triad pilots and evaluate their effectiveness in the city environment
2 CREATE REMEDIATION GUIDELINES FOR NEW YORK CITY CLEANUPS			
Analyze New York City's soil and develop a set of standard cleanup remedies appropriate to the city	✓	Working with the State, the City is proposing a soil study to determine what concentrations of historic fill exist across the city to determine how fill material can be best handled when fill sites are redeveloped. Discussion of scope and funding mechanisms continue	Complete urban soil study; city-specific remediation guidelines under development
3 ESTABLISH A CITY OFFICE TO PROMOTE BROWNFIELDS PLANNING AND REDEVELOPMENT			
Create a new City office to increase resources dedicated to brownfields planning, testing and cleanups	✓	The City has begun a search for the Director of the Office of Environmental Remediation (OER) as well as technical review staff at DEP, and will continue the interview process to fill the positions	Establish and fully staff office; regularly evaluate city applications and E-designated sites
4 EXPAND PARTICIPATION IN CURRENT STATE BROWNFIELD CLEANUP PROGRAM			
Ask the State to redistribute BCP tax credits to relieve budgetary pressures, and begin covering New York City-specific contamination	✓	In May 2007, proposed legislation to redistribute tax credits in State BCP and expand eligibility to more sites. In January, Governor's Office budget bill proposed to make historic fill sites eligible for BCP and provide a non-tax credit path for BCP sites. Working to promote brownfields reform in the current legislative session	Enact recommended changes to State law
5 CREATE A CITY PROGRAM TO OVERSEE ALL ADDITIONAL CLEANUPS			
Create a City-sponsored program to provide oversight of cleanups for any sites not enrolled in other programs	✓	As part of its Albany legislation, submitted proposal for City oversight of brownfields cleanups that are not enrolled in other programs and, on September 25, provided further details in testimony at a Senate/Assembly brownfields hearing. The City continues to advocate with the State for this important program	Establish City BCP; oversee all voluntary clean ups and E-designated (Council legislation, State DEC approval, and regulations promulgated)
6 PROVIDE INCENTIVES TO LOWER COSTS OF REMEDIATION			
Dedicate \$15 million to capitalize a fund to support brownfields redevelopment	✓	In 2007, began researching/interviewing real estate and community experts to determine what form of funding would spur the highest levels of remediation. Identified inadequate financing for site assessment and remediation as two hurdles. A program will address these obstacles to be operational in 2009	Establish a revolving loan fund; issue first loan for City remediation project
7 ENCOURAGE STATE TO RELEASE COMMUNITY-BASED REDEVELOPMENT GRANTS			
Advocate for State to reform the Brownfields Opportunity Area (BOA) program and release planning grant funds to community groups	✓	On March 7, the Governor, Speaker and Senate Majority Leader signed an MOU that releases funds for BOA grants to the 2005 and 2006 award recipients. These grants will provide \$2.5 million for nine BOA projects in New York City	Allocate funds to all previous BOA awardees; advocate for a new process to streamline State grants to BOAs
8 PROVIDE INCENTIVES TO PARTICIPATE IN BROWNFIELDS OPPORTUNITY AREA (BOA) PLANNING			
Advocate for financial incentives for developments constructed in coordination with a BOA	✓	Proposed bill to give a 10% tax credit to sites redeveloped in accordance with a BOA plan. In January, the Governor's budget bill included such a provision. The City and its community partners continue to advocate for this	Enact State tax incentives for private developers working in coordination with BOA applications
9 LAUNCH OUTREACH EFFORTS TO EDUCATE COMMUNITIES ABOUT BROWNFIELDS REDEVELOPMENT			
Educate, outreach, and provide technical assistance to communities, private developers, and City agencies to promote brownfields redevelopment	✓	In September, the City began to survey non-profits and BOA grantees to determine training and resource needs; preparing a local brownfields planning workshop for fall 2008	Begin outreach campaigns and liaison services to private developers and non-profit organizations
10 CREATE A DATABASE OF HISTORIC USES ACROSS NEW YORK CITY TO IDENTIFY POTENTIAL BROWNFIELDS			
Conduct a historic use assessment for all city sites in order to measure long-term progress toward goal	✓	In 2007, the Administration reviewed historic land use maps, databases, and other resources for the public to research sites' previous uses. The City will release a Request for Services (RFS) to GIS contractors to create a database and design an internet application in 2009	Launch study to aggregate all relevant data for a City environmental database
11 LIMIT LIABILITY OF PROPERTY OWNERS WHO SEEK TO REDEVELOP BROWNFIELDS			
Create an insurance program and legal protections to limit the liability of developers willing to clean up land they did not pollute	✓	City conducted interviews and research on existing and proposed financial incentive programs, and is continuing to evaluate the most effective insurance and legal protection program design	Design and launch a market-feasible supplemental insurance policy

* Initiative begun by City, including planning or advocacy stages

Extended version of Progress updates and full list of acronyms available online at www.nyc.gov/PlaNYC2030



Open 90% of our waterways to recreation by preserving natural areas and reducing pollution

New York City is surrounded by a maze of waterways that combine to form a rich, natural estuary. After spending billions of dollars over many decades on sewer systems and wastewater treatment plants, New York Harbor is now cleaner than it has been in over 100 years. However, when rainstorms overwhelm our treatment plants, the City must dump untreated wastewater into our waterways to prevent sewage back-up into homes and streets. While the pollution from these Combined Sewer Overflows (CSOs) gets flushed out of the harbor and major rivers naturally, it lingers in many of our man-made and natural tributaries. The majority of those tributaries are still so polluted that even boating is discouraged.

Our plan for the future of water quality includes the following initiatives:

Continue implementing infrastructure upgrades

1 Develop and implement Long-Term Control Plans

2 Expand wet weather capacity at treatment plants

Pursue proven solutions to prevent stormwater from entering the system

3 Increase use of High Level Storm Sewers (HLSS)

4 Capture the benefits of our open space plan

5 Expand the Bluebelt program

Expand, track, and analyze new Best Management Practices (BMPs) on a broad scale

6 Form an interagency BMP Task Force

7 Pilot promising BMPs

8 Require greening of parking lots

9 Provide incentives for green roofs

10 Protect wetlands

City submitted Waterbody/Watershed plans for 18 waterbodies to the New York State Department of Environmental Conservation (NYSDEC). In May, we completed the Flushing Bay CSO Retention Facility, which stores 43 million gallons of runoff and sewage for gradual release to wastewater treatment plants after storms have passed. Additional facilities include tanks to capture 75 million gallons of CSOs flowing into Alley Creek in Queens, Spring Creek in Brooklyn, and Paerdegat Basin in Brooklyn. The City is also expanding the capacity of several wastewater treatment plants to treat additional stormwater; constructing pumping facilities; installing additional storm sewers to separate rainwater from sewage; and improving systems to detect sewer blockages. (See map: *Wastewater Drainage Areas and Combined Sewer Overflow Locations*)

Pursue proven solutions to prevent stormwater from entering the system

During periods of rain, several locations in the city experience localized flooding and septic tank failures. In certain areas, where the geography and land use make them feasible, we are developing plans to expand our Bluebelt system to address this problem. Bluebelts are natural solutions to capture and naturally filter stormwater. They are designed to redirect stormwater into enhanced creeks, streams, and wetlands. This system protects the surrounding waterways and reduces flooding by absorbing water from 4,000 acres on Staten Island. Over the last year, the City has acquired 39 acres for the New Creek Bluebelt in Staten Island, and will soon acquire land for the South Beach and Oakwood Beach Bluebelts. In addition, the Wetlands Transfer Task Force recommended that the City transfer 76 additional small wetland parcels on Staten Island to Department of Environmental Protection (DEP) for addition to the Bluebelt system.

Expand, track, and analyze new Best Management Practices (BMPs) on a broad scale

To realize the potential of strategies to keep stormwater out of our combined sewer system, we are evaluating potential designs and technologies to incorporate into the city's urban fabric. These techniques, known as Best Management Practices (BMPs), enhance natural processes and retain, detain or cleanse stormwater. Some innovative examples include rooftop stormwater detention, green roofs, landscaping, porous pavement, infiltration basins and vegetated swales.

Water Quality

OUR PROGRESS

Passed new landscaping requirement for commercial parking lots and began work on stormwater management plan

To reclaim our waterways for recreation, we have committed billions of dollars for additional infrastructure improvements to capture and treat a higher volume of stormwater and sewage. These investments are part of an historic commitment of \$23 billion to improve our water and wastewater infrastructure for the period of 2007–2017. Because we aim to capture even more stormwater than can be achieved through “end of pipe” solutions, large wastewater infrastructure projects are just one of several approaches. Therefore, in addition to capital investments, we are working to reduce the amount of rainfall that flows into the combined sewers in the first place,

including enacting zoning amendments that require new and enlarged parking lots to incorporate natural landscaping, and developing a citywide plan for Best Management Practices (BMPs) by the end of 2008.

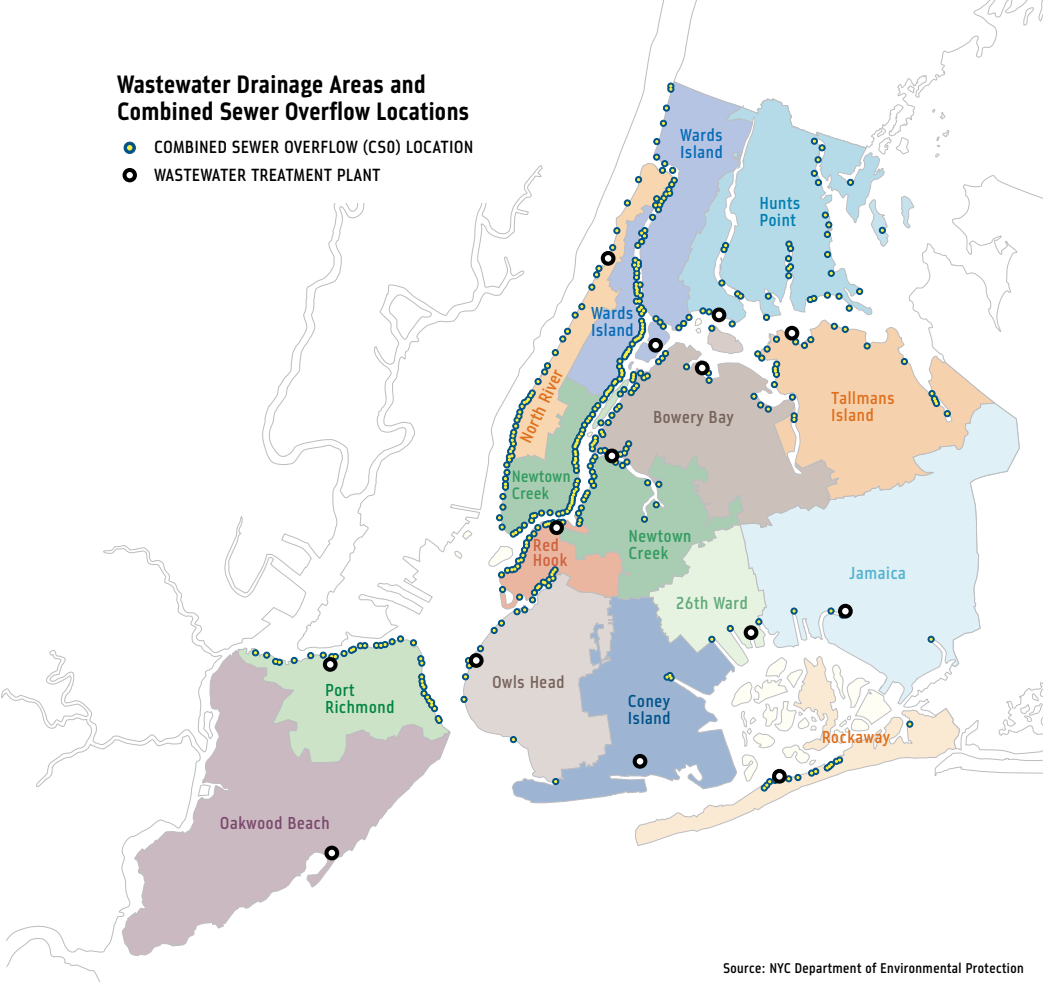
Continue implementing infrastructure upgrades

The City's investment in infrastructure projects has increased the volume of CSO captured from 30 percent in 1980 to 70 percent today. To increase CSO capture rates to 75 percent, the City is planning to invest billions of dollars in additional capital projects. To guide this investment, in June 2007, the

“Tying stormwater capture with traffic-calming makes absolute sense...because you won't get another chance [to tear up the street] for five to ten years.” Carter Craft, February 14, 2008

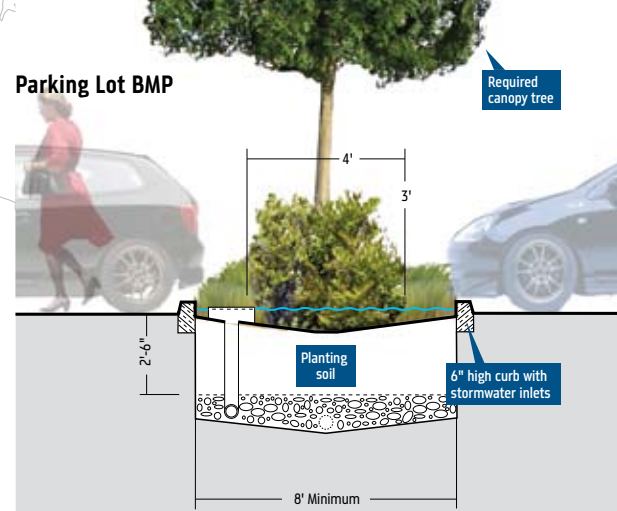
Wastewater Drainage Areas and Combined Sewer Overflow Locations

- COMBINED SEWER OVERFLOW (CSO) LOCATION
- WASTEWATER TREATMENT PLANT



Source: NYC Department of Environmental Protection

Parking Lot BMP



Source: NYC Department of City Planning



Credit: Star Whitehouse Consulting

An Interagency BMP Task Force has been charged with developing a pragmatic plan for distributed stormwater control and the regulations and financial incentives necessary to implement it. We held three well-attended public meetings that involved several different stakeholders. The Task Force will release a draft comprehensive BMP plan by October 2008, as promised in PlaNYC. In early 2008, the City Council passed and Mayor Bloomberg signed Local Law 5 to enact this planning effort and timetable into law.

The work of the Interagency BMP Task Force builds on parallel efforts in Jamaica Bay. In October 2007, the City released the Jamaica Bay Watershed Protection Plan to address a range of environmental issues, including untreated discharges into the Jamaica Bay watershed related to stormwater. The impacts of these discharges are heightened by development, bulkhead construction, dredging, and wetlands fill, which have altered the Bay's natural ecosystem. The Jamaica Bay Plan estimated that investments in BMPs could reduce untreated discharges to the Bay by 6 percent to 24 percent. In the past year, the City has released a request for proposals for various projects, including studies on different rooftop BMPs; evaluation of five innovative designs for tree pits that contain underground water storage devices; the distribution of 1,000 rain

barrels to homeowners; an expansion of its program to remove sewer-blocking sediments; the placement of an oyster reef and ribbed mussel beds; and the construction of porous pavement on City-owned parking lots.

The City is not waiting for the results of those pilots and the report of the BMP Task Force to implement green infrastructure controls. We have continued our aggressive tree planting plan and expansion of Greenstreets. The City also enacted zoning amendments that require commercial and community facility parking lots to install planted islands with canopy trees, interior landscaped areas designed as vegetated swales, and other landscaping. We are the first major city in the United States to require these controls on private parking lots. (See diagram: *Parking Lot BMP*)

In addition, we proposed a property tax abatement for the construction of vegetated roofs and have submitted it to the State Legislature. We have also designed the reconstruction of the Belt Parkway to include vegetated swales to capture and filter stormwater runoff before it flows into Jamaica Bay.

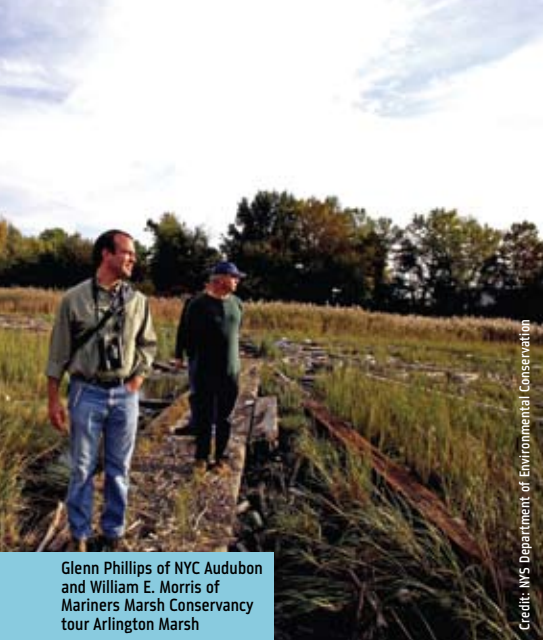
Wetlands play an important role in maintaining and even improving our water quality. In October 2007, the Wetlands Transfer Task Force, formed to assess available City-owned properties that contain wetlands, issued its

report and recommended the transfer of more than 2,000 wetlands parcels to the Department of Parks and Recreation (DPR) and other agencies that can protect them. As part of this recommendation, the city transferred 70 acres of wetlands in Arlington Marsh on Staten Island's North Shore to the DPR for preservation in its wild condition. The marsh is regarded by many as one of the city's most important natural areas.

Many of our remaining wetlands are not owned or managed by the City, which is why we are also assessing whether existing Federal and State laws sufficiently protect New York City's remaining wetlands. The City created an interagency working group in October 2007 to evaluate gaps in existing Federal and State wetlands protection. This is a necessary first step toward developing a comprehensive policy to protect and manage wetlands in the city. We also submitted a funding proposal to the State for mapping tidal wetlands in the city, based on satellite imagery.

"PlaNYC is good for my constituents and all New Yorkers..."

New York State Assembly Member José Rivera, June 15, 2007



Glenn Phillips of NYC Audubon and William E. Morris of Mariners Marsh Conservancy tour Arlington Marsh

Credit: NYS Department of Environmental Conservation

Next Steps

The City will continue to work to restore our natural ecology and the recreational use of our waterways, upgrade our sewer lines, and invest in vital sewer infrastructure projects. We will expand the use of natural solutions by assessing the transfer of City-owned properties on Staten Island into the Bluebelt system, acquiring additional property necessary for Bluebelts, and investigating the viability of creating a Bluebelt in Queens around Spring Lake. In October, the Interagency BMP Task Force will release its draft stormwater management report that will make recommenda-

tions to implement the most successful BMPs on a larger scale. After a comment period required by Local Law 5, a final report will be issued in December 2008. If funding is secured, we will complete detailed maps of all tidal wetlands in the city and will integrate that data into the existing electronic maps available to the public. Ultimately, we will build on the work of the Wetlands Transfer Task Force and begin to develop an overall City policy on wetlands. The balance between ecology, recreation, and water quality will underpin our efforts as we continue reclaiming our waterways for the next generation of New Yorkers.



Water Quality Progress

INITIATIVE	LAUNCHED*	PROGRESS SINCE APRIL 22, 2007	IMPLEMENTATION MILESTONE FOR DECEMBER 2009
1 DEVELOP AND IMPLEMENT LONG-TERM CONTROL PLANS			
Complete Long-Term Control Plans for all 14 New York City watersheds, as required by law	✓	Submitted Waterbody/Watershed (WB/WS) plans for 18 waterbodies to the NYS DEC in June, detailing strategies for CSO reduction	Submit WB/WS plans for 18 waterbodies to NYSDEC, detailing strategies for CSO reduction
2 EXPAND WET WEATHER CAPACITY AT TREATMENT PLANTS			
Reduce Combined Sewage Overflow (CSO) discharges by more than 185 million gallons per day (mgd) during rainstorms	✓	The City continues construction at the Newtown Creek and the 26th Ward Waste Water Treatment Plant to maximize the volume of water these plants process during storms, thereby reducing the CSO discharges in surrounding areas	Continue construction
3 INCREASE USE OF HIGH LEVEL STORM SEWERS (HLSS)			
Convert combined sewers into HLSS and integrate HLSS into major new developments, as appropriate	✓	In April 2007, drainage plan for HLSS completed for Laurelton, Queens. DEP identified additional drainage areas for HLSS in Throgs Neck, Gowanus, Hudson Yards, Manhattanville, and the Yellowstone Blvd. area of Queens	Create standardized process to analyze proposed sites for possible HLSS (process for HLSS will always be dictated by the unique characteristics of the site)
4 CAPTURE THE BENEFITS OF OUR OPEN SPACE PLAN (SEE OPEN SPACE INITIATIVES)			
5 EXPAND THE BLUEBELT PROGRAM			
Expand Bluebelt in Staten Island and other boroughs, where possible	✓	Acquired 39 acres for the New Creek Bluebelt in Staten Island; acquiring 31 more acres. In April 2008, will acquire 38 acres for the South Beach Bluebelt and in 2009, will acquire the property necessary for the Oakwood Beach Bluebelt. Began to determine viability of the Spring Lake Bluebelt, Queens	Begin expanding Bluebelt to other parts of Staten Island
6 FORM AN INTERAGENCY BMP TASK FORCE			
Form an interagency BMP task force	✓	Launched Interagency BMP Task Force to develop a stormwater management plan. Held three public meetings. Working with stakeholders and consultants to assess cost-effective and practical strategies. Local Law 5 passed on February 19, requiring a draft City stormwater management plan by October 1, 2008	Complete comprehensive BMP plan and associated budget
7 PILOT PROMISING BEST MANAGEMENT PRACTICES (BMPs)			
Reintroduce 20 cubic meters of ribbed mussel beds	✓	DEP released an RFP on February 27 to procure a consultant to design the ribbed mussel pilot and the necessary monitoring process. The City expects the consultant to be selected and to begin work in fall 2008	Complete pilot and plan for additional mollusk habitats
Design five expanded tree pits and monitor impacts	✓	DEP released an RFP on February 27 to design the tree pit pilot and the necessary monitoring process. DEP expects the consultant to begin work by June 2008	Complete pilot
Pilot one swale to collect rainwater from roadways	✓	DEP released an RFP on February 27 to design the pilot and the necessary monitoring process. DEP expects the consultant to begin work by June 2008	Complete pilot and identify additional appropriate locations
8 REQUIRE GREENING OF PARKING LOTS			
Modify the zoning resolution to include design guidelines for off-street parking lots for commercial and community facilities	✓	Green parking lot zoning amendment approved November 28. On March 24, City Cloning Commission passed zoning amendments that require tree planting for all new developments and major enlargements citywide and prevent excessive paving of front yards	Complete ULURP process; zoning requirement in effect
9 PROVIDE INCENTIVES FOR GREEN ROOFS			
Encourage the installation of green roofs through a new incentive program	✓	Working with members of both the State Assembly and the Senate to introduce legislation on incentives for the installation of green roofs in the city. Once the legislation is introduced, the City will encourage the legislature to pass the legislation and the Governor to sign it in to law	Launch initiative
10 PROTECT WETLANDS			
Assess the vulnerability of existing wetlands and identify additional policies to protect them	✓	Initial study of gaps in existing State and Federal laws, and other threats to the protection of wetlands in New York City began in October. Findings will inform the task force's recommendations regarding a municipal wetlands policy	Complete wetlands study and draft policy

* Initiative begun by the City, including planning or advocacy stages

Extended version of Progress updates and full list of acronyms available online at www.nyc.gov/plaNYC2030



Develop critical backup systems for our aging water network to ensure long-term reliability

The long-term vision of the New Yorkers who built our water supply system—starting in the 1840s—has given us a network of reservoirs, aqueducts, and water mains sufficient to meet the needs of our growing population well into the future. Our Catskill and Delaware Watersheds provide some of the nation’s purest water. However, our supply system faces challenges that we must address over the next 25 years. Critical elements such as aqueducts and water tunnels currently cannot be taken out of service for long-term repair and maintenance—the kind of work that only needs to be done once a generation or more. In addition, as development continues to encroach on the city’s upstate watersheds, we will have to continue vigilant monitoring and protection of our reservoirs.

Our plan for the future of our water network includes the following initiatives:

Ensure the quality of our drinking water

- 1 Continue the Watershed Protection Program
- 2 Construct an Ultraviolet Disinfection Facility for the Catskill and Delaware systems
- 3 Build the Croton Filtration Plant

Create redundancy for aqueducts to New York City

- 4 Launch a major new water conservation effort
- 5 Maximize existing facilities
- 6 Evaluate new water sources

Modernize in-city distribution

- 7 Complete Water Tunnel No. 3
- 8 Complete a backup tunnel to Staten Island
- 9 Accelerate upgrades to water main infrastructure

Water Network

OUR PROGRESS

Received new Filtration Avoidance Determination from EPA, purchased more than 5,000 acres to protect the watersheds, and began construction on Croton Filtration Plant

Over the last year, the City has taken significant steps on the water network initiatives in PlaNYC. We received a Filtration Avoidance Determination from the federal government. The City’s watershed land acquisition program reached a new milestone, exceeding 130,000 total acres for the first time. We have met significant milestones on the planned completion of City Water Tunnel No. 3. And construction of the Croton Filtration Plant began last year.

Our water system includes some of the City’s most expensive infrastructure. As a result, we paid significant attention this year to securing the financial resources sufficient to meet our needed budget commitments. We achieved

three major steps. First, we began modernizing the Department of Environmental Protection’s (DEP) billing and receiving system, which will improve the accuracy of water bills in part by connecting water meters to the new citywide wireless communication network. Second, a landmark law passed by the City Council will allow the City to punish those who do not pay their water bills—thus ending the practice of forcing honest New Yorkers to subsidize deadbeats. Finally, the Water Board approved an increase in water rates. While we seek to avoid increases in water rates as much as possible, we also recognize that our water supply depends on sufficient funding for the investments we need.



Rendering of the new Catskill-Delaware Ultraviolet Disinfection Facility

Credit: Department of Environmental Protection

Ensure the quality of our drinking water

The drinking water from the watersheds west of the Hudson River—the Catskill and Delaware systems—has continued to be pure. This is due to the natural buffers that prevent land near our reservoirs from becoming highly developed. In July, the United States Environmental Protection Agency (EPA) recognized the integrity and effectiveness of our approach by granting the City an historic 10-year renewal of its Filtration Avoidance Determination (FAD), which allows the City to use Catskill and Delaware water without building expensive water filtering plants. Under the FAD, we will continue to protect reservoirs by upgrading wastewater treatment facilities in towns near the reservoirs, replacing failing septic systems, preserving wetlands, working with private land owners to improve land management practices, constructing stormwater best management practices, and purchasing land in the watershed.

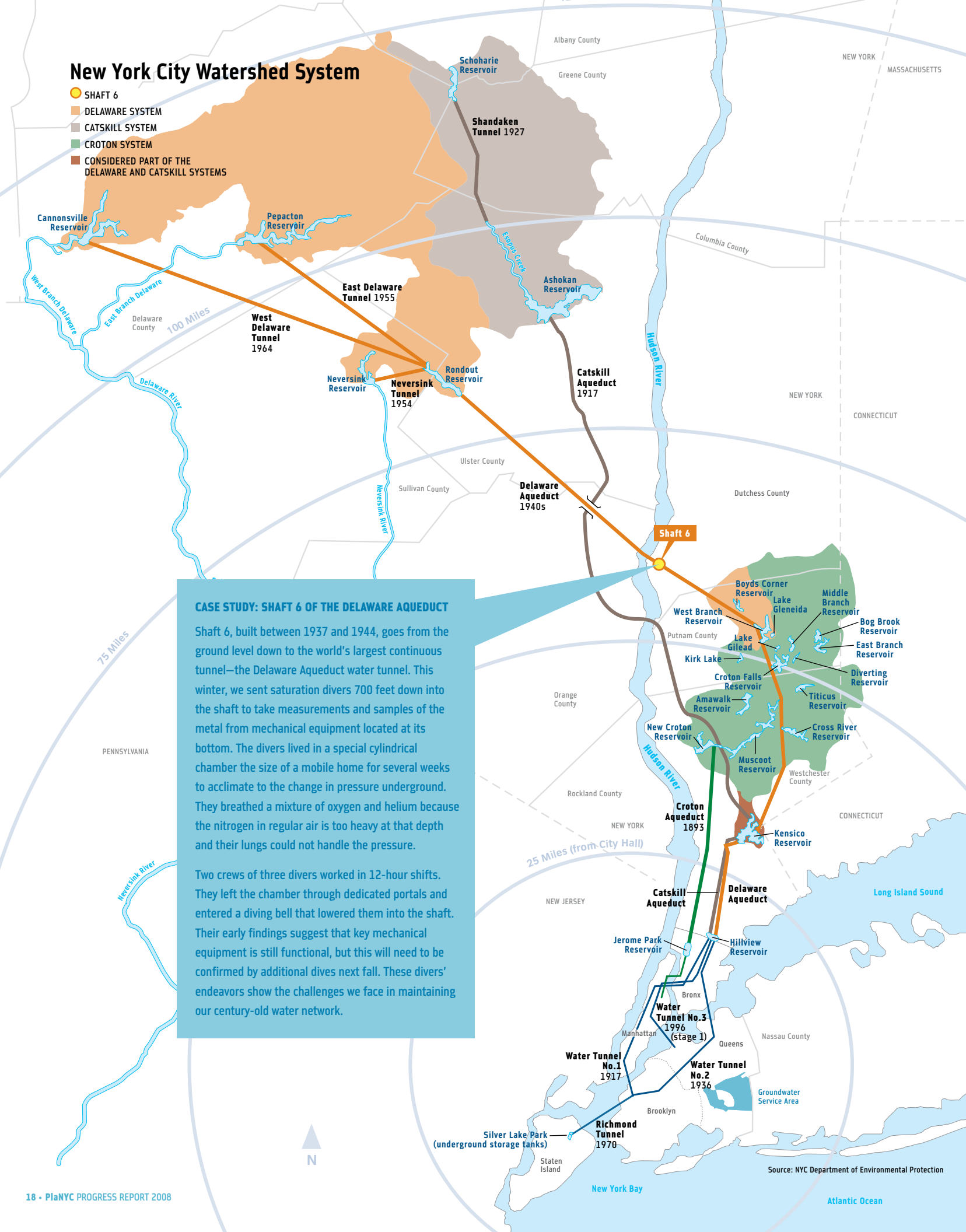
Since receiving the renewal of the FAD last summer, we have extended contracts to the Watershed Agricultural Council and Catskill Watershed Corporation to continue to expand these kinds of efforts. We have also submitted a strategy to leverage land trusts as part of the land acquisition program. The City continues to work with the Environmental Facilities Corporation for the upgrade of wastewater treatment plants in the watersheds.

To ensure the continued diversity of the city’s drinking water resources, we are constructing the Croton Filtration Plant in Van Cortlandt Park to allow for much heavier reliance on water from east of the Hudson River—the Croton Watershed. Work began on the facility in August. And, to meet new EPA regulations for all of our drinking water, in February we began construction of a 2 billion-gallon-per-day capacity Ultraviolet Disinfection Facility in Eastview, New York. Although these projects have seen construction costs rise, an independent review determined that external factors—such as the global increase in steel and concrete prices—were mainly to blame.

“All New Yorkers who care about the future of the city—economically, socially and health-wise—would do well to get firmly behind Mr. Bloomberg.” *The New York Observer*, May 22, 2007

New York City Watershed System

- SHAFT 6
- DELAWARE SYSTEM
- CATSKILL SYSTEM
- CROTON SYSTEM
- CONSIDERED PART OF THE DELAWARE AND CATSKILL SYSTEMS



CASE STUDY: SHAFT 6 OF THE DELAWARE AQUEDUCT

Shaft 6, built between 1937 and 1944, goes from the ground level down to the world's largest continuous tunnel—the Delaware Aqueduct water tunnel. This winter, we sent saturation divers 700 feet down into the shaft to take measurements and samples of the metal from mechanical equipment located at its bottom. The divers lived in a special cylindrical chamber the size of a mobile home for several weeks to acclimate to the change in pressure underground. They breathed a mixture of oxygen and helium because the nitrogen in regular air is too heavy at that depth and their lungs could not handle the pressure.

Two crews of three divers worked in 12-hour shifts. They left the chamber through dedicated portals and entered a diving bell that lowered them into the shaft. Their early findings suggest that key mechanical equipment is still functional, but this will need to be confirmed by additional dives next fall. These divers' endeavors show the challenges we face in maintaining our century-old water network.

Create redundancy for aqueducts to New York City

We face significant challenges in moving water from the watersheds to the city. Many of the tunnels and aqueducts we rely on are more than 50 years old, and we lack the excess capacity to allow us to close down portions of the system to undertake their long-term maintenance and repair. The Delaware Aqueduct, which carries 50 percent of the city's water, has leaks; while it is not in imminent danger, it must at some point be turned off and fixed. (See case study: *Shaft 6 of the Delaware Aqueduct*.) After careful study, DEP identified several strategies for providing alternative water sources while the aqueduct is repaired. In the fall of 2007, we began the preliminary design phase on the three most favorable infrastructure alternatives: increasing the capacity of the Catskill Aqueduct; sinking more drinking water wells in Southeast Queens; and constructing a new aqueduct between the Rondout and West Branch Reservoirs. To mitigate the impact of an emergency, DEP is also recon-

structing and upgrading the Cross River and Croton Falls Pump Stations to transfer water from the Croton Watershed to the Delaware Aqueduct.

We are phasing in our water conservation effort to reduce consumption by 5 percent. We are building capacity and designing programs for a multi-year water conservation effort; but, because of current budget conditions, we have made the choice to prioritize capital construction projects related to the Delaware Aqueduct—in part because water conservation programs can be activated fairly quickly. We will continue to develop these programs for broader launch as soon as resources allow.

Modernize in-city distribution

Our construction of City Water Tunnel No. 3—already nearly a 40-year project—will allow City Water Tunnel No. 1, completed in 1917, to be inspected and repaired for the first time in its history. Over the last year, we began construction of the shafts to connect the tunnel to water mains in the street and began lining

the tunnel with concrete. The main phase of the new tunnel is on schedule to enter operation in 2013.

In order to accelerate upgrades to our infrastructure, we are aiming to increase the rate at which we replace water mains from 60 miles to over 80 miles annually. DEP has launched a planning process to meet this accelerated schedule, and has initiated projects to expand the rate of water main replacement.

Next Steps

Our water network is a priceless, critical asset, supplying one of our most basic needs. However, water network projects are large, expensive, and take years—sometimes decades—to complete. That is why we have made an historic commitment of \$23 billion to improve our water and wastewater infrastructure over the next 10 years. Through investment in our critical backup systems, and more efficient use of existing resources, we will ensure that New Yorkers enjoy a reliable water supply into the next century.



Water Network Progress

INITIATIVE	LAUNCHED*	PROGRESS SINCE APRIL 22, 2007	IMPLEMENTATION MILESTONE FOR DECEMBER 2009
1 CONTINUE THE WATERSHED PROTECTION PROGRAM			
Aggressively protect our watersheds as we seek to maintain a Filtration Avoidance Determination (FAD) for the Catskill and Delaware Water Supplies	✓	On July 30, EPA issued a new 10-year FAD. In November, the City submitted a strategy to work with land trusts to augment the Land Acquisition Program. In December, the City submitted an evaluation of potential engineering alternatives to address turbidity at the Ashokan Reservoir	Renew the City's Filtration Avoidance Determination and fulfill its commitments
2 CONSTRUCT AN ULTRAVIOLET DISINFECTION PLANT FOR THE CATSKILL/DELAWARE SYSTEMS			
Construct an Ultraviolet Disinfection Facility to destroy disease-causing organisms in our upstate watershed	✓	DEP began construction on the Ultraviolet Disinfection Facility and anticipates completion in 2012	Begin construction of Ultraviolet Disinfection Facility
3 BUILD THE CROTON FILTRATION PLANT			
Construct a water filtration plant to protect the Croton supply	✓	In August, DEP began construction of the Croton Water Filtration Plant and has met all construction milestones to date	Continue to construct Croton Filtration Plant
4 LAUNCH A MAJOR NEW WATER CONSERVATION EFFORT			
Implement a water conservation program to reduce citywide consumption by 60 million gallons a day (mgd)		On June 16, 2007, released a Request for Expression of Interest to participate in a Performance-Based Model to achieve water use savings. Hired Director of Marketing in fall 2007 to launch expanded conservation program. Due to budget constraints, program is currently deferred, except for initial \$6 million required for programming of the collection and billing system	Launch water conservation program
5 MAXIMIZE EXISTING FACILITIES			
Add 245 mgd to our supply potential through increased efficiency	✓	Completed the environmental review of the Cross River Pump Station, allowing the transfer of 60 mgd from the Croton Watershed to the Delaware Aqueduct. Bid released to obtain construction contracts. Design progressing for the Croton Falls Pump Station, allowing the transfer of 180 mgd from the Croton Watershed to the Delaware Aqueduct	Begin installation of new hydraulic pumps; begin designing enhanced filtration plant for greater use of Jamaica groundwater
6 EVALUATE NEW WATER SOURCES			
Evaluate 39 projects to meet the shortfall needs of the city during a prolonged shutdown of the Delaware Aqueduct	✓	DEP started facility planning for 3 infrastructure projects expected to be most effective, including the use of in-city groundwater (up to 55 mgd), optimization of the Catskill Aqueduct (up to 60 mgd), and construction of a parallel tunnel (minimum of 440 mgd)	Finalize a short list of projects for piloting and design
7 COMPLETE WATER TUNNEL NO. 3			
Complete construction of Stage 2 of Water Tunnel No. 3, and begin repairing Water Tunnel No. 1	✓	The City completed the tunneling of the Brooklyn/Queens leg in 2001 and the construction of shafts on this leg is significantly complete. DEP completed the mining of the Manhattan leg of Water Tunnel No. 3 in 2006. Construction of the shafts and the lining of the Manhattan leg continues. Activation is scheduled for 2013	Open Brooklyn/Queens leg
Complete Stages 3 and 4 of Water Tunnel No. 3	✓	Preliminary design (10%) for the construction of Stage 3, also known as the Kensico City Tunnel, is nearly complete. Given the long-term nature of Stage 4, design has not yet started	Complete design of Stage 3 ¹
8 COMPLETE A BACKUP TUNNEL TO STATEN ISLAND			
Replace pipelines connecting Staten Island to Tunnel No. 2	✓	DEP has nearly completed design of the new tunnel to Staten Island	Begin replacing pipelines
9 ACCELERATE UPGRADES TO WATER MAIN INFRASTRUCTURE			
Increase replacement rate to over 80 miles annually	✓	DEP launched a planning process to increase the rate of water main construction, pending funding	Continue to replace water mains

* Initiative begun by the City, including planning or advocacy stages

¹ 2015 milestone set—no 2009 milestone



Improve travel times by adding transit capacity for millions more residents, visitors, and workers



Reach a full “state of good repair” on New York City’s roads, subways, and rails for the first time in history

New York City’s success has always been driven by the efficiency and scale of its transportation network. But, for the last 50 years, we have underinvested in our infrastructure. Despite dramatic progress, we have not yet achieved a full state of good repair across our transit and road networks. And, with population and ridership growing, virtually all subway routes, river crossings, and commuter rail lines will be pushed beyond their capacity in the coming decades—making transportation our greatest potential barrier to growth.

Our plan for the future of transportation includes the following initiatives:

Build and expand transit infrastructure

- 1 Increase capacity on key congested routes
- 2 Provide new commuter rail access to Manhattan
- 3 Expand transit access to underserved areas

Improve transit service on existing infrastructure

- 4 Improve and expand bus service
- 5 Improve local commuter rail service
- 6 Improve access to existing transit
- 7 Address congested areas around the city

Promote other sustainable modes

- 8 Expand ferry service
- 9 Promote cycling

Improve traffic flow by reducing congestion

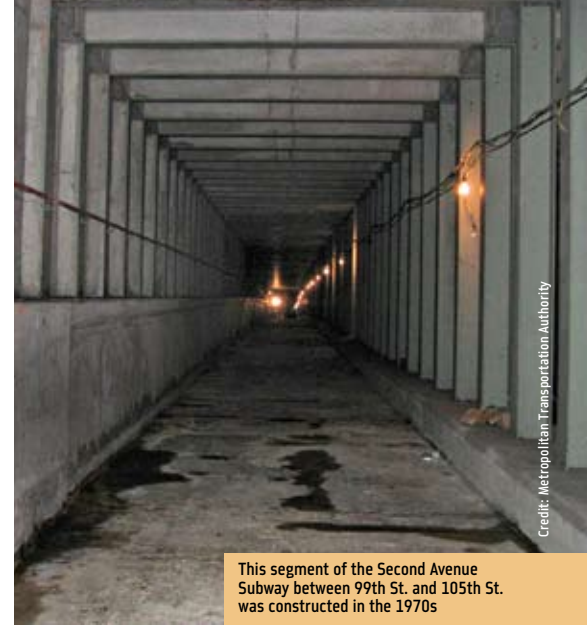
- 10 Pilot congestion pricing
- 11 Manage roads more efficiently
- 12 Strengthen enforcement of traffic violations
- 13 Facilitate freight movements

Achieve a state of good repair on our roads and transit system

- 14 Close the Metropolitan Transportation Authority’s state of good repair gap
- 15 Reach a state of good repair on the city’s roads and bridges

Develop new funding sources

- 16 Establish a new regional transit financing authority



This segment of the Second Avenue Subway between 99th St. and 105th St. was constructed in the 1970s

Credit: Metropolitan Transportation Authority

budget constraints may force the MTA to extend some timelines. The failure of the State Legislature to vote on congestion pricing has not only deprived us of an important traffic reduction tool, but also cost the city a \$4.5 billion source of capital for transit and the \$354 million that the federal government had offered for short-term transit improvements.

Build and expand transit infrastructure

In 2007, transit ridership again reached historic highs. Subway ridership increased more than 4 percent over 2006, with weekday ridership now averaging more than 5 million passengers daily—the first time it has done so since 1952. The Long Island Rail Road (LIRR) served its highest number of customers since 1949, averaging nearly 290,000 daily—a 4.4 percent increase from 2006. MTA Bus Company ridership rose more than 11 percent on its 81 routes. And New Jersey Transit (NJT) also experienced record ridership, carrying 865,000 every weekday.

Many of the 11 major capital projects identified in PlaNYC have been included in the MTA Capital Plan for 2008–2013. Released in late February, the MTA Capital Plan includes critical funding for phases 1 and 2 of the Second Avenue Subway, the third track on the LIRR main line, completing East Side Access and bringing Metro-North service to Penn Station. In addition to these infrastructure investments, the Capital Plan allocates \$50 million for targeted studies in Queens, the Bronx, the Upper West Side of Manhattan, Southeastern Brooklyn, Staten Island’s North Shore, Long Island, and the west side of the Hudson River. These studies will guide future system expansion program work, including engineering and environmental review, to provide increased access to these underserved communities. If completed, these studies would fulfill one

Transportation

OUR PROGRESS

Integrated transit expansion into MTA Capital Plan and installed 60 miles of bicycle lanes

Over the past year, we have been working to make the vision for sustainable transportation we set out in PlaNYC a reality. The New York City Department of Transportation (NYCDOT) has created a new division of Planning and Sustainability and has taken dramatic steps toward improving bicycle opportunities and public spaces. We are working closely with the Metropolitan Transportation Authority (MTA) to implement Select Bus Service (SBS), our version of Bus Rapid Transit (BRT), as well as on the huge challenge of developing and fund-

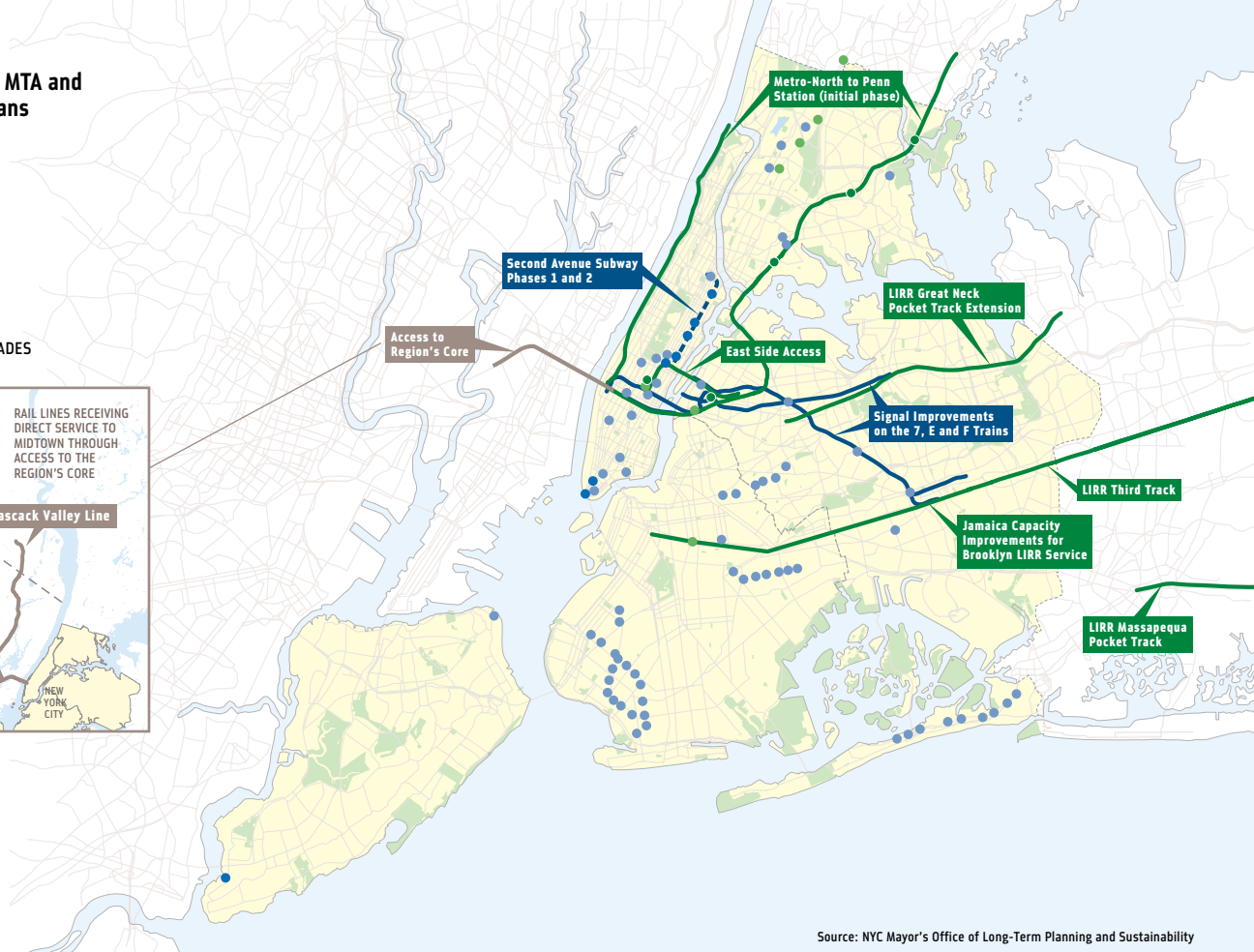
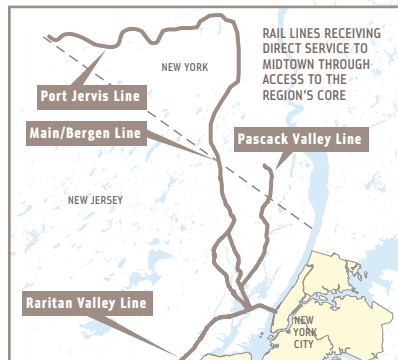
ing the next MTA Capital Plan. And we have engaged all New Yorkers in a discussion of the role that congestion pricing can play in reducing traffic, improving air quality, and funding transit. In some cases, we are on pace for the goals we established last year; in others, we are exceeding even those ambitious timelines. Still, critical gaps remain: for example, the major projects currently under construction—phase 1 of the Second Avenue Subway, East Side Access, and the Fulton Transit Center—are not funded through completion, and

“By enacting this plan, New Yorkers will do a service to the nation by affirming the wisdom of strengthening our infrastructure and showing that it can be done.” Felix Rohatyn, *The Financial Times*, April 26, 2007

Transit Improvements in MTA and Port Authority Capital Plans Selected Projects

- MTA NEW YORK CITY TRANSIT
- MTA COMMUTER RAIL
- PORT AUTHORITY/NJ TRANSIT

- NEW SUBWAY STATION
- SUBWAY STATION UPGRADES
- NEW COMMUTER RAIL STATION
- COMMUTER RAIL STATION UPGRADES



Source: NYC Mayor's Office of Long-Term Planning and Sustainability

of PlaNYC's initiatives: studying transit options for underserved areas. (See map: *Transit Improvements in MTA and Port Authority Capital Plans*)

In addition, NJT and the Port Authority of New York and New Jersey (PANYNJ) have worked toward funding Access to the Region's Core (ARC), a project that will increase capacity for commuters west of the Hudson River. In May 2007, NJT announced that it would allocate a total of \$1.5 billion to ARC, in addition to the Port Authority's commitment to invest up to \$3 billion.

Funding remains the key challenge. The MTA must now turn to the State to fund the Capital Plan. By failing to pass congestion pricing, the State Legislature cost the City and the MTA \$4.5 billion in transit capital funding. The MTA Capital Plan faces a \$13.8 billion funding gap that must be met through new funding sources. Even with the \$4.5 billion from NJT and PANYNJ, ARC is only half-funded. (See table: *MTA 2008–2013 Capital Plan Highlights*)

Improve transit service on existing infrastructure

The City, MTA, and the New York State Department of Transportation (NYSDOT) have been working on the planning and development of five SBS corridors. Significant improvements have been made in the past year to four of the

MTA 2008–2013 Capital Plan Highlights

PROJECT	DESCRIPTION	AMOUNT
CORE CAPITAL PROGRAM		
New York City Transit	590 subway cars, 2,492 new buses, 44 station rehabilitations, and investments in track, signals, and subway infrastructure	\$14.3B
LIRR	68 new rail cars and investments in stations, track, signals, and rail infrastructure	\$2.6B
Metro-North	330 new rail cars and investments in stations, track, signals, and rail infrastructure	\$1.8B
MTA Bus	484 new buses, investments in repair, and upgrades to bus depots	\$363M
Security Program and Interagency	\$590M in security enhancements and a market uncertainty fund to cover cost overruns	\$1B
SUBTOTAL		\$20.8B
COMPLETION OF EXISTING EXPANSION PROJECTS		
East Side Access	Completion of project (in addition to \$4.1B in current funding)	\$3.1B
Second Avenue Subway	Completion of phase I: 96th St to 63rd St (in addition to \$3B in current funding)	\$1.4B
Fulton Transit Center	Completion of project (in addition to \$903M in current funding)	\$295M
South Ferry	Completion of project (in addition to \$490M in current funding)	\$27M
Regional Investments	LIRR track improvements in preparation for East Side Access	\$476M
Capital Construction	Planning, design and construction management	\$200M
SUBTOTAL		\$5.5B
NEW CAPACITY ENHANCEMENT PROJECTS		
Communications-Based Train Control (CBTC) Expansion	Installation of CBTC on Queens Blvd. (E and F trains) and Flushing lines (7 train)	\$1.4B
Second Avenue Subway	Partial funding for phase II: 105th St. to 125th St.	\$1B
Penn Station Access	Partial funding for Metro-North service to Penn Station	\$400M
Jamaica Capacity Improvements	Reconfiguration of LIRR tracks to increase capacity and efficiency, and provide increased Brooklyn service	\$150M
7 Train Subway Cars	Fleet expansion to accommodate introduction of CBTC and extension to far west side	\$175M
Capacity Planning Studies	Studies of long-term system expansion, including bus, subway, light rail, and commuter rail expansions	\$50M
Sustainability Investments	Investments to reduce the MTA's environmental footprint and to improve energy efficiency	\$50M
SUBTOTAL		\$3.2B
TOTAL		\$29.5B

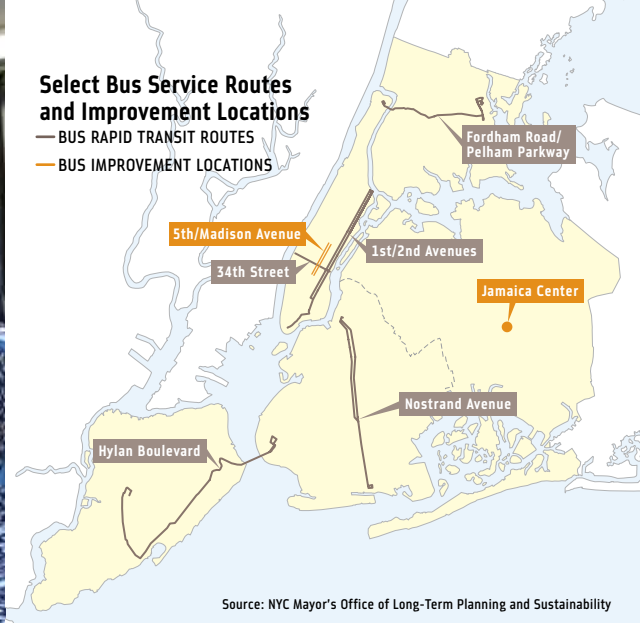
Source: NYC Mayor's Office of Long-Term Planning and Sustainability

“...if it can reduce the health burden on New Yorkers and on the environment, it deserves a shot now.” *El Diario/La Prensa*, June 6, 2007



NYC DOT Commissioner Sadik-Khan, MTA Director Elliot Sander, and Mayor Bloomberg aboard a new MTA Select Bus Service bus

Credit: Mayor's Office



Source: NYC Mayor's Office of Long-Term Planning and Sustainability



NYPIRG's Gene Russianoff speaks at the kickoff of the Campaign for New York's Future

Credit: Neysa Pranger

five chosen SBS corridor plans; the fifth, on Merrick Boulevard, has been changed into a set of bus improvements in Downtown Jamaica. In addition, 34th Street in Manhattan was added as a new SBS corridor and bus priority improvements are now planned for Fifth Avenue and Madison Avenue in Manhattan. The first SBS corridor, on Fordham Road in the Bronx, is set to begin service in June 2008. The remaining four SBS services had been planned to start over the next few years, but relied on federal funds contingent on congestion pricing. The City is now pursuing additional funding sources, but the SBS projects may be delayed by the loss of Federal funds. (See map: *Select Bus Service Routes and Improvement Locations*)

Several efforts to improve service on existing infrastructure demonstrate the interrelated nature of long-term and short-term transportation investments. For example, one initiative in PlaNYC, to expand local LIRR service in Brooklyn and Queens, is contingent on the completion of East Side Access and several improvements to track and signal capacity at the Jamaica station—all of which depend on the full funding of the MTA Capital Plan. Similarly, the short-term improvements proposed by the MTA as a complement to congestion pricing would have achieved many of the goals for improved bus service to neighborhoods with high rates of driving to Manhattan, but depended on the approval of congestion pricing and the \$354 million USDOT grant.

The City and MTA are also working to improve bus service throughout the five boroughs. Last August, DOT opened an HOV lane on the Manhattan Bridge and is beginning to assess a bus lane on the Queensboro Bridge. In fall 2007, the City's first transit signal priority (TSP) corridor was activated on Victory Boulevard in Staten Island. With TSP, equipped buses communicate with traffic signals to minimize the

time they stop at intersections. The Victory Boulevard system has improved running times by 17 percent and provides a model for other locations; the next location will be on Fordham Road in the Bronx, as part of SBS service.

The PlaNYC initiative to study "congested corridors" around the city where congestion is particularly severe began in early spring 2008, with studies now underway in five of the ten corridors identified: Amboy Road (Staten Island), Church Avenue (Brooklyn), White Plains Road (Bronx), Woodhaven Boulevard (Queens), and 181st Street (Manhattan). Public meetings with these communities will occur throughout this spring to gather local input. Short-term and long-term improvement measures will be developed by the end of 2008 and will be reviewed with local stakeholders. The Final Report, including recommendations for the five corridors, is expected by summer 2009. Funding for the second group of five corridors is expected this fall, and those projects are expected to be initiated in late 2008. (See map: *Congested Corridor Studies*)

Promote other sustainable modes

The City is making significant progress toward expanding ferry and bicycling options—two sustainable modes identified in PlaNYC. While New York Harbor is already home to the largest and best-used network of urban ferry services in North America, we are advancing plans to pilot ferry services between Manhattan and the Rockaways, which is planned to start service in spring 2008. Construction continues on the planned landing at Slip 5 of the Battery Maritime Building; together with the reconstructed East 90th Street Ferry Landing. This will provide part of the infrastructure for a new network of services connecting the two sides of the East River. At the Midtown Ferry Terminal at East 34th Street, two new ferry landing barges with four slips have opened for

service and construction is scheduled to begin this year on a new passenger pavilion. Equally importantly, the plans for a crosstown select bus service on 34th Street would fulfill a PlaNYC commitment and make ferry service attractive for the majority of commuters who do not work within easy walking distance of the river.

In 2007, the City designed and installed approximately 60 miles of bicycle lanes and installed roughly 800 new bicycle parking racks, in both cases significantly exceeding the PlaNYC installation target rate. In addition, innovative design was incorporated into projects like the Ninth Avenue protected bicycle path. In 2008, 80 miles of new bicycle lanes are planned for installation, including expanded pilots of both the protected bicycle path design and green bicycle lane and intersection markings; 400 additional bicycle parking racks are also planned for 2008.

Improve traffic flow by reducing congestion

PlaNYC proposed piloting a congestion pricing system in the most congested areas of Manhattan as a means of reducing traffic, improving air quality, and raising funds for the transit system. In August 2007, the U.S. Department of Transportation offered a conditional grant of \$354 million in funds to support the implementation of congestion pricing and the expansion of transit services if New York State approved the Mayor's plan or a similar plan for congestion pricing by April 2008.

In July 2007, the State Legislature passed legislation creating the Traffic Congestion Mitigation Commission. The mandate of the Commission was to evaluate approaches to reducing congestion, including the Mayor's plan, and to recommend a comprehensive traffic congestion mitigation plan to the City and the State by January 31, 2008. Over the fall of 2007 and early 2008, the Commission

"... congestion pricing is a thoughtful and innovative approach to the problem."

U.S. Senator Barack Obama, March 27, 2008

Congested Corridor Studies



Source: NYC Mayor's Office of Long-Term Planning and Sustainability



City Council Transportation Committee Chairman John C. Liu at a congestion pricing hearing

Source: New York City Council

went through a comprehensive process of consulting with the public, evaluating a wide range of alternative approaches to traffic mitigation, and weighing the advantages and disadvantages of those approaches. An inter-agency staff group of NYCDOT, MTA, PANYNJ, and NYSDOT assisted the Commission and provided detailed analysis of congestion pricing and alternative traffic mitigation strategies. After evaluating several options and holding 14 public hearings, the Commission recommended that the City and State adopt congestion pricing in Manhattan south of 60th Street, as well as implement a set of taxi fare and parking policies. The Commission's plan would have reduced vehicle miles traveled within the congestion zone by 6.8 percent, raised \$491 million a year in net revenues for transit investment, and would have had lasting benefits on the environment, economy, and transportation system of the City and region. After reviewing the plan, Mayor Bloomberg endorsed the Commission's recommendation.

Although the City Council approved it, the State Legislature refused to vote on legislation authorizing congestion pricing. As a result, the City lost \$354 million in federal aid for transit improvements that had been conditional on congestion pricing. Furthermore, the MTA now faces a \$13.8 billion shortfall in its Capital Plan. Above all, the State Legislature's failure prevented New York City from piloting the one approach proven around the world to reduce traffic in major cities. This failure to meet the challenge of addressing traffic congestion and funding transit will have lasting negative consequences on the city's environment, economy, and quality of life. Unless the Legislature fully funds the Capital Plan, this decision also threatens to erase over two decades of progress in restoring the health of New York City's transit network.

Achieve a state of good repair on our roads and transit system

Even with the progress that has been made in the last 25 years, the MTA system has not yet achieved a full state of good repair. As part of its recently released 2008–2013 Capital Plan, the MTA proposed \$4.9 billion toward meeting a state of good repair goal, representing 17 percent of the full five-year program. These investments focus both on visible infrastructure, such as \$1.4 billion to rehabilitate 44 passenger stations, as well as invisible infrastructure, including \$1.6 billion in signal upgrades.

Through City and Federal funding, New York City's bridges are already at a state of good repair. We will keep up this record by rehabilitating the Brooklyn Bridge ramps (2009–2014), and continuing the Harlem River Bridge rehabilitation projects (2007–2016).

To achieve a state of good repair on our roads, in PlaNYC we projected that it will be necessary to increase the rate of street resurfacing from the average of approximately 730 lane miles per year achieved between 1996 and 2005 to 1,000 lane miles by 2009. Over the last year, we have been expanding our capacity by hiring additional staff and procuring new equipment; we project that 950 lane miles will be resurfaced over the next year—50 lane miles above what had been planned. The City's Street Assessment rating has already increased from 69.9 percent in "good condition" in 2006 to 70.3 percent in 2007. Additionally, we are ensuring that the acquisition of a second asphalt plant, which will use recycled content, is proceeding on schedule, so that resurfacing will continue to be environmentally friendly and economically efficient.



A cyclist rides the Ninth Avenue Bike Lane, created in October 2007

Credit: NYC Department of Transportation

CASE STUDY: NINTH AVENUE "COMPLETE STREET" AND PROTECTED BICYCLE PATH

In October 2007, we completed a bicycle path on Ninth Avenue in Manhattan that is protected from moving vehicles by a row of parked cars, and from turning vehicles by special bicycle signals. The first of its kind in the United States, this fully protected bicycle path runs southbound on Ninth Avenue from West 23rd Street to West 16th Street in Manhattan. Unlike other bicycle lanes where cars are able to enter the bicycle lane, this new design creates an exclusive path for bicycles between the sidewalk and parked vehicles. In addition to the bicycle path and traffic signals for bicyclists, this "complete street" project made improvements for all street users. Those improvements include greenery-filled refuge areas for pedestrians, a new curbside parking plan to facilitate deliveries to local businesses and signalized left-turn lanes for motor vehicles.

"It's a tough choice and it's a bold idea."

New York City Council Speaker Christine C. Quinn, June 18, 2007



NYC DOT's accelerated resurfacing schedule requires more paving crews

Credit: NYC Department of Transportation



Speaker Quinn, MTA Director Elliot Sander, Mayor Bloomberg, and MTA Chairman H. Dale Hemmerdinger announce the #7 line subway extension

Credit: Mayor's Office

CASE STUDY: JOB CREATION IN PLANYC

Sustainable investments create jobs. That's the key finding of a third-party study of the potential for job creation if all of PlaNYC's initiatives were implemented. The capital plans and construction phase for these projects are expected to support 422,000 direct jobs (in person-years) and, after indirect spending is considered, a total of 865,000 total jobs. Annual operations and maintenance spending could directly support 7,700 permanent jobs and, after all rounds of the multiplier effect, the total operational spending is estimated to support nearly 12,000 jobs annually.

The report projects that the level of capital jobs will peak at 88,300 jobs in 2011. As capital projects are completed, demand for operations employment to maintain new infrastructure and deliver services would rise. While capital projects constitute a much greater share of potential total jobs created, operations jobs could increase significantly after 2017 and might eventually peak to a level of 12,000 annual permanent jobs by 2025.

Our transportation, water quality, water network, and energy initiatives create the most jobs. In addition to traditional construction jobs, more transit will require additional bus drivers and subway operators; green building retrofits will require green architects and green contractors who know the latest in building technologies; stormwater management practices will require landscapers. Therefore, PlaNYC's initiatives will help lead New York to a sustainable economy as well as a sustainable environment.

Develop new funding sources

Last year, we identified over \$50 billion in projects that would add transit capacity and reach a full state of good repair for the first time in New York City's history. To fund the \$30 billion gap in project financing over sources already expected, we proposed the creation of a dedicated source of funding—including unprecedented contributions from the City, State, and net revenues of congestion pricing—allocated by a new regional funding authority.

The concept of a new authority raised concerns about the proliferation of public entities in New York City, but the central focus of that proposal—an infrastructure investment fund fully dedicated to New York City's mass transit—was widely embraced. The Governor's Office included the concept of a "lockbox" for funding for transit expansion in its proposed budget in January 2008, to accept revenues from congestion pricing. In the absence of congestion pricing, however, the State must identify sources of funds and approaches to dedicating them to transit.

Next Steps

Over the past year, the City and its people have been part of a tremendous planning effort to reduce congestion on our streets and improve our transit system for future generations. The failure of the State Legislature to vote on congestion pricing—after its approval by the City Council—casts doubt on whether New York will tackle its transportation problems in an effective way. The City, MTA, and the region's other transit providers will continue their work as described in PlaNYC, but the fundamental challenge the region faces is whether the MTA Capital Plan will, in fact, be fully funded by the State Legislature. Some opponents of congestion pricing offered alternative financing mechanisms, and it remains to be seen if they will materialize. Funding has been the perennial problem facing transit in the New York City region: the need for a new Hudson River tunnel was first identified in the 1980s; for LIRR access to Grand Central Terminal in the 1960s; for the Second Avenue Subway in 1929. The challenge has always been whether New Yorkers are willing to invest in their city. The discussion over the MTA Capital Plan will be the critical test that will answer whether we will make a sustainable decision or not.

"...at this point, doing nothing about this city's worst traffic, as some advocate, is not an option." *Staten Island Advance*, March 2, 2008



Transportation Progress

INITIATIVE	LAUNCHED*	PROGRESS SINCE APRIL 22, 2007	IMPLEMENTATION MILESTONE FOR DECEMBER 2009
1 INCREASE CAPACITY ON KEY CONGESTED ROUTES			
Seek to fund five projects that eliminate capacity constraints	✓	In its 2008–2013 Capital Program, MTA proposed \$1.38B in new funding (plus \$2.96B in current funding) to complete phase 1 of SAS, \$1.0B to begin construction on phase 2 of SAS, and \$150M for the LIRR's third track project	Have funding mechanism in place
2 PROVIDE NEW COMMUTER RAIL ACCESS TO MANHATTAN			
Seek to expand options for rail commuters	✓	In its 2008–2013 capital program, MTA proposed \$3.14B in new funding (plus \$4.11B in current funding) to complete East Side Access and \$400M for the initial phase of new Metro-North service to Penn Station, including new stations in Manhattan and the Bronx	Continue construction of East Side Access and Second Ave. Subway; move other projects into engineering phase
3 EXPAND TRANSIT ACCESS TO UNDERSERVED AREAS			
Seek to provide transit to new neighborhoods	✓	In its 2008–2013 capital program, MTA proposed \$50.0M to study potential transit expansions for Queens, Bronx, Manhattan's Upper West Side, Southeastern Brooklyn, Staten Island's North Shore, Long Island and the west side of the Hudson River. NYCEDC will procure consultant services to study new transit options in Staten Island's North Shore by summer 2008	Complete Staten Island study and study of potential subway expansion
4 IMPROVE AND EXPAND BUS SERVICE			
Initiate and expand Bus Rapid Transit	✓	Improvements made to five SBS corridor plans (added Manhattan's 34th St., with Downtown Jamaica's Merrick Boulevard reframed into bus priority improvements). Bus priority improvements planned for Manhattan's Fifth and Madison Avenues. First SBS corridor on Bronx's Fordham Road begins in June 2008. Remaining four to be introduced between 2008 and 2011	Open five SBS routes
Dedicate Bus/High Occupancy Vehicle (HOV) lanes on the East River Bridges	✓	The City opened an HOV lane on the Manhattan Bridge in August 2007. The City is initiating a study for a bus lane on the Queensborough Bridge this spring and will have recommendations by the end of the year	Operate bus service lanes on all three bridges
Explore other improvements to bus service	✓	DOT has initiated the Bus Hot Spots program to move buses more quickly through congested intersections. In 2007, a Transit Signal Priority Program, begun on Staten Island's Victory Boulevard, will be used in future SBS corridors as well, starting with Fordham Road this spring	Complete implementation of operating improvements for 22 locations
5 IMPROVE LOCAL COMMUTER RAIL SERVICE			
Seek to make better local use of Metro-North and Long Island Rail Road (LIRR) stations	✓	In its 2008–2013 capital program, MTA allocated \$150M to redesign Jamaica tracks to facilitate new service into Grand Central and new cross-borough service between Flatbush Avenue and Jamaica	Improve local connectivity
6 IMPROVE ACCESS TO EXISTING TRANSIT			
Facilitate access to subways and bus stops citywide	✓	Completed the redesign of three bus stops under elevated subways to improve connections between bus/subway service and two new sidewalk designs improving the interface between subway/bus stations and sidewalks, all at sites in Brooklyn and the Bronx. By June 2008, the 40th St. project will be completed and additional access projects initiated	Complete construction of up to three bus stops under ELs, up to two Sub-Side interface, and up to 15 new sidewalks to bus stops
7 ADDRESS CONGESTED AREAS AROUND THE CITY			
Develop congestion management plans for outer-borough growth corridors	✓	Initiated a study of ten congested traffic corridors to develop targeted plans with communities to reduce congestion, improve air quality, and provide a safer environment. Measures will be developed by the end of 2008 and reviewed with local stakeholders. The Final Report, focusing on the first five corridors, is expected by summer 2009	Complete studies for nine corridors and begin implementation (2009)
8 EXPAND FERRY SERVICE			
Seek to expand ferry service and better integrate it with the city's existing mass transit system	✓	A year-round pilot ferry service from the Rockaways to Manhattan will start in spring 2008. NYCEDC issued RFPs for additional ferry service around the city. Two new ferry landing barges opened for service at East 34th St. as did the East 90th St. landing, with construction ongoing at Slip 5's landing at Battery Maritime Building. Crosstown BRT on 34th Street now being planned	Issue contract and launch service; study crosstown BRT
9 PROMOTE CYCLING			
Complete the City's 1,800-mile bike master plan	✓	In 2007, the City designed and installed approximately 60 miles of bicycle lanes, while incorporating innovative designs (see case study). In 2008, 80 miles of new bicycle lanes are planned for installation, including expanded pilots of both the protected bicycle path design and green bicycle lane and intersection markings	Complete 200 directional lane miles of bike routes
Facilitate cycling	✓	In 2007, the City installed roughly 800 new bicycle parking racks, significantly exceeding the PlaNYC installation target rate. In 2008, DOT plans to install 400 additional bicycle parking racks. DCP's proposed Bicycle Parking Text Amendment, expected to begin public review in 2008, would require bike parking in new buildings	Install 400 new CITYRACKS per year; improve and update maps annually
10 PILOT CONGESTION PRICING			
Seek to use pricing to manage traffic in the Central Business District (CBD)	✓**	Despite extensive study, public consultation, and adjustments, and the approval of the City Council, the State Legislature refused to vote on congestion pricing	Install and run congestion pricing system by spring 2009
11 MANAGE ROADS MORE EFFICIENTLY			
Expand the use of Muni Meters	✓	Since April 2007, the City installed nearly 550 new Muni Meters, with nearly 450 reserved for noncommercial vehicles. Installation will continue in busy commercial districts, replacing all single space meters in Manhattan by July 2009.	Install Muni Meters in most outer borough central business districts
Create an integrated traffic management system	✓	The City will install 4,500 advanced traffic technology in the Bronx, Queens, and Brooklyn (Staten Island already converted), and additional variable message signs in Staten Island and eastern Queens, by 2010	Consolidate TMC
12 STRENGTHEN ENFORCEMENT OF TRAFFIC VIOLATIONS			
Expand the force of Traffic Enforcement Agents (TEAs)	✓	Postponed to fiscal year 2009 due to budget constraints. Recruiting expected to begin in fall 2008	Hire 100 TEAs and deploy
Enable all TEAs to issue blocking-the-box tickets	✓	In February 2008, Senator Lanza and Assembly Member Kavanaugh introduced legislation to amend the State Vehicle and Traffic law to treat block-the-box violations as parking violations, empowering TEAs to issue the violation	Obtain authority to issue tickets ¹
Expand the use of traffic enforcement cameras	✓	In January 2007, Senator Padavan and Assembly Member Glick introduced legislation in Albany to authorize the use of cameras for vehicles that exceed the speed limit. In March 2008, Senator Golden and Assembly Member Bing introduced legislation to authorize the use of cameras to issue violations to vehicles intruding in designated bus lanes	Install cameras
13 FACILITATE FREIGHT MOVEMENTS			
Improve access to John F. Kennedy International Airport (JFK)	✓	Additional auxiliary traffic lanes along the Van Wyck Expressway were added in September 2007. The City held the first steering group meeting to study arterial highway traffic management. Safety and capacity improvements were completed in Springfield Gardens and Jamaica. Travel time signage will be installed along the Whitestone Bridge in summer 2008	Implement short-term recommendations from JFK Access Task Force
Explore High Occupancy Truck Toll (HOTT) Lanes	✓	In April 2008, NYSDOT initiated a 24-month Managed Use Lane Study to look at HOTT lanes. Will complete the Managed Use Lane Study in 2009	Complete study
14 CLOSE THE METROPOLITAN TRANSIT AUTHORITY'S STATE OF GOOD REPAIR GAP			
Seek a grant from the SMART Authority to cover the MTA's funding gap	✓	In its 2008–2013 capital program, MTA proposed \$4.9B for state of good repair (17% of total program), including rehabilitation of 44 subway stations, 10 Metro-North and LIRR stations, system-wide track rehabilitation, repair of bridges, flood control improvements, and modernization of power substations.	Have funding mechanism in place ¹
15 REACH A STATE OF GOOD REPAIR ON THE CITY'S ROADS AND BRIDGES			
Seek a grant from the SMART Authority to cover the City Department of Transportation funding gap	✓	Through City funding, 950 lane miles will be resurfaced between July 2007 and June 2008, an increase of 50 lane miles over what had been planned. DOT hiring additional staff and obtaining enough equipment to increase to 1,000 lane miles in the next year	Resurface 1,925 lane-miles of city streets is exceeding our current pace of resurfacing by 125 lane-miles
Seek a grant from the SMART Authority to fund accelerated capital repairs	✓	Through City and Federal funding, on pace to continue maintaining all City bridges in a state of good repair. Major upcoming projects include the rehabilitation of the Brooklyn Bridge ramps, from 2009 through 2014, and the continuation of the Harlem River Bridge rehabilitations from 2007–2016	Complete scheduled 10-year bridge capital plan on schedule
16 ESTABLISH A NEW REGIONAL TRANSIT FINANCING AUTHORITY			
Seek to create a SMART Financing Authority to advance new projects and achieve a state of good repair	✓	PlaNYC proposed a dedicated source of funding—with contributions from the City, State, and congestion pricing revenues—allocated by a new, regional authority. The proposal's intent was met by the lockbox created for congestion pricing revenues, but the State Legislature's failure to vote on congestion pricing means that no lockbox is likely	Establish SMART Fund

Extended version of Progress updates and full list of acronyms available online at www.nyc.gov/PlaNYC2030

* Initiative begun by the City, including planning or advocacy stages
 ** Launched by the City, but rejected by the State Legislature
¹ 2015 milestone set—no 2009 milestone



Provide cleaner, more reliable power for every New Yorker by upgrading our energy infrastructure

New Yorkers face rising energy costs and carbon emissions from an ineffective wholesale electricity energy market, aging infrastructure, inefficient buildings, and growing energy needs. Every year, New Yorkers collectively spend approximately \$13.4 billion on the energy that powers our lights and electronic devices and on fuel for heating and hot water. Our buildings' energy use is by far the largest contributor in the city to climate change, contributing approximately 80 percent of our citywide greenhouse gas emissions. And it is growing. In 2007, we hit a record level of electricity consumption of 54,869 gigawatt-hours—23 percent more than ten years ago. (See chart: *New York City Electricity Consumption 1997–2007*.) Transmission constraints, rising construction costs, and regulatory uncertainty make it difficult to plan adequately for this growing demand. At this rate, our electricity demand will exceed available supply by 2012, leaving New Yorkers dependent on a constrained and inefficient power system that pushes energy costs and emissions even higher.

Our plan for the future of energy includes the following initiatives:

Improve energy planning

- 1 Establish a New York City Energy Planning Board

Reduce New York City's energy consumption

- 2 Reduce energy consumption by City government
- 3 Strengthen energy and building codes for New York City
- 4 Create an energy efficiency authority for New York City
- 5 Prioritize five key areas for targeted incentives
- 6 Expand peak load management
- 7 Launch an energy awareness and training campaign

Expand the city's clean power supply

- 8 Facilitate repowering and construct power plants and dedicated transmission lines
- 9 Expand Clean Distributed Generation ("Clean DG")
- 10 Support expansion of natural gas infrastructure
- 11 Foster the market for renewable energy

Modernize electricity delivery infrastructure

- 12 Accelerate reliability improvements to the city's grid
- 13 Facilitate grid repairs through improved coordination and joint bidding
- 14 Support Con Edison's efforts to modernize the grid

In the meantime, the City is moving forward with plans to improve the energy performance of its own buildings and fleets by 30 percent over the next decade. Since it may take several years to benefit from these energy efficiency efforts, we are also working to expand the city's clean power supply and modernize our electricity delivery infrastructure.

Improve energy planning

In addition to pursuing legislation for a New York City Energy Planning Board, the City is actively participating in the Long-Range Electric Resource Plan and Infrastructure Planning proceeding before the PSC. We are advocating for a local comprehensive, long-term energy planning process that considers reliability, costs, and environmental impacts such as greenhouse gas emissions and air pollution.

To improve energy efficiency planning, in January, the City teamed with Con Edison, National Grid, and the Natural Resources Defense Council to propose a New York City Energy Efficiency Partnership plan as part of the ongoing Energy Efficiency Portfolio Standard proceeding at the PSC. This partnership would facilitate communication among all major energy efficiency providers and better harmonize their programs; it would help to achieve most of the goals of the Energy Efficiency Authority envisioned in PlaNYC.

Reduce New York City's energy consumption

In 2030, approximately 85 percent of our energy usage will come from buildings that already exist today. As a result, the centerpiece of our plan is improving the efficiency of existing buildings. Efforts to expand incentives to improve the energy efficiency of buildings moved slightly forward this past year as a result of PSC decisions. In 2007, the PSC called for the creation of \$140 million in new gas efficiency programs as part of two gas utility rate cases, but did not call for a significant expansion of Con Edison's electric efficiency programs as part of the Con Edison Electric rate case. The PSC will also develop the framework for greater efficiency efforts through its Energy Efficiency Portfolio Standard proceeding.

New York City government is leading by example in the effort to reduce energy use. In October, Mayor Bloomberg signed Executive Order 109, which established the City's goal to reduce its energy consumption and greenhouse gas emissions 30 percent by 2017, and created an Energy Efficiency Steering Committee charged with developing the plan to

Energy

OUR PROGRESS

Launched 132 City government energy efficiency projects and sought funding through State regulatory processes

Last May, the City submitted draft legislation to the State Legislature outlining its key energy proposals. Since then, the major forum for energy policy discussions has been the hearings and proceedings before the New York State Public Service Commission (PSC), which controls utility rates and policies across the state. As an active participant in these cases, the City pursued PlaNYC initiatives. We

have advocated for the creation of new energy efficiency programs, greater deployment of smart meters, and better investments in our electric grid. We have also advocated for improved local energy planning and significant increases in energy efficiency funding. These efforts are critical to provide the necessary funding to meet our ambitious citywide energy efficiency effort.

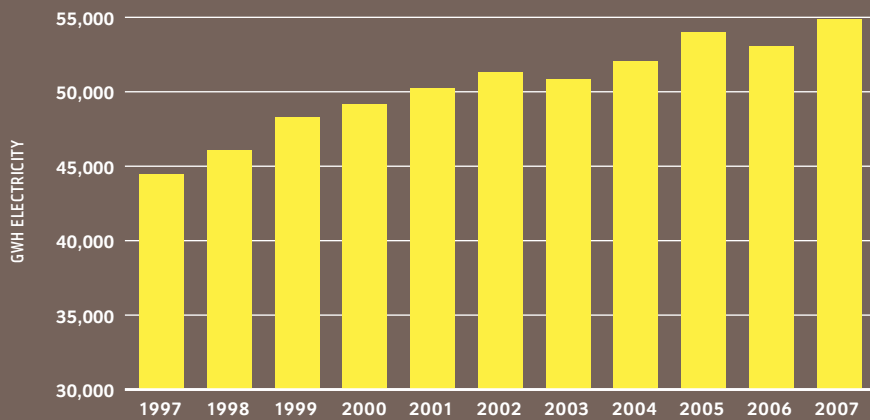
"This bid for energy conservation would be the broadest attack on climate change ever undertaken by an American city." *The Economist*, April 26, 2007



Deputy Mayor Dan Doctoroff and NRD's Ashok Gupta look on as Deputy Mayor Ed Skyler hands Mayor Bloomberg Executive Order 109

Credit: Mayor's Office

New York City Electricity Consumption 1997-2007



Source: Con Edison

achieve this goal. The goal was then codified into law by the City Council in Local Law 55 of 2007. On December 5, the Energy Efficiency Steering Committee allocated \$80 million in Fiscal Year 2008 to 132 efficiency projects that collectively are expected to reduce City government greenhouse gas emissions by an estimated 34,000 tons annually, as well as to several planning efforts. By June 30, the Committee will submit a long-term plan to achieve the 2017 goal.

In July 2007, ten leading New York City universities accepted the Mayor's Challenge to match the City's commitment to reduce 30 percent by 2017. To date, the participating universities have completed their greenhouse gas inventories and are developing action plans outlining how they will achieve their targets.

Achieving significant gains in energy efficiency will also require updated codes and standards at both the State and City level. In July 2007, Mayor Bloomberg signed into law the first major overhaul of the City's construction codes since 1968. The new codes facilitate sustainable building by providing fee rebates for green design, requiring documentation demonstrating compliance with the State energy code, and mandating reflective roofs. We have been working with the State to increase the stringency of New York State's energy code, and, in April 2008, the State adopted a new standard that increases required lighting efficiencies by as much as 30 percent for many space types.

Reducing electricity consumption citywide will require all New Yorkers to contribute. To educate the public on the simple things they can do to help, in June 2007, the Mayor launched GreenNYC, a multi-media public outreach campaign. (See case study: GreenNYC.) In addition to public education, the City is working with the State and other partners to train those lighting professionals who exert enormous

impact on building efficiency. The first efforts, to be rolled out in the coming months, will include trainings in energy-efficient lighting design and the development of a not-for-profit lighting resource center.

Expand the city's clean power supply

Long-term power purchase agreements are critical to overcome key energy market constraints. They help induce investment in state-of-the-art, clean generation projects. This will help to achieve the 2,000 to 3,000 MW of additional supply capacity identified as needed by 2015 to meet new demand and to allow obsolete plants to retire. The City continues to be an active participant in a PSC proceeding examining issues associated with long-term electricity contracts. In addition, the City is working with the New York Power Authority to secure electricity resources for government operations through a long-term power purchase agreement. It is hoped that this contract—with bids now being evaluated—

will help bring 500 MW of new, clean capacity into the city and help displace the use of less efficient power plants. (See table: *PlaNYC and the New York State Public Service Commission (PSC)*)

To further expand our clean energy supply and displace the use of less efficient, dirtier plants, Mayor Bloomberg gave conditional support for US PowerGen's proposed investment into additional clean energy capacity in Sunset Park, Brooklyn, in October. The company is currently working with the local community to understand and address any concerns about the proposal; and the City is awaiting the outcome of those discussions and the commitments to ensure local air quality improvements before granting final endorsement.

Solar energy and clean distributed generation (DG) have the potential to play a more significant role in our energy supply. To help increase

PlaNYC and the New York State Public Service Commission (PSC)

	PSC REGULATORY PROCESS	CURRENT PROCESSES	PLANYC INITIATIVES PURSUED
RATE CASES	<ul style="list-style-type: none"> Utility files for a rate increase to the PSC for approval to increase rates City of New York comments as an official "active party" PSC determines outcome 	Con Edison Electric rate case	<ul style="list-style-type: none"> Energy Efficiency Partnership (similar to NYCEEA) Demand reduction plan to meet PlaNYC goals Clean DG, smart meters and real time pricing Prudent investment in infrastructure
		Con Edison Gas rate case	Incentives for gas efficiency programs
		Key Span/National Grid Gas rate case	Incentives for gas efficiency programs
		Con Edison Steam rate case	<ul style="list-style-type: none"> Repowering of Hudson Avenue steam plant to generate electricity and steam Further study of district energy potential
GENERIC PROCEEDINGS	<ul style="list-style-type: none"> PSC initiates a proceeding to introduce an issue and raise questions to be addressed City of New York as an "active party" participates in working groups to identify solutions PSC determines what actions will move forward, or determines next steps (e.g., set goals, create planning framework, identify necessary policies) 	Energy Efficiency Portfolio Standard Proceeding	<ul style="list-style-type: none"> Energy Efficiency Partnership (similar to NYCEEA) Demand reduction plan to meet PlaNYC goals Increase in System Benefits Charge programs and funding
		Long-Range Resource Plan and Infrastructure Planning Process Proceeding	<ul style="list-style-type: none"> Long-term power supply contracts through RFP process NYC Energy Planning Board or alternative long-term planning process

Source: NYC Economic Development Corporation

"...everyone who cares about this city should focus attention on the sweeping plans Mayor Bloomberg unveiled yesterday for tackling the gargantuan challenges ahead." *New York Daily News*, April 23, 2007



The GreenNYC multi-media environmental campaign helps New Yorkers reduce their carbon footprint

Credit: NYC & Company



Mayor Bloomberg and Governor Paterson introduce Verdant Power's underwater turbines

Credit: Mayor's Office



The largest privately-owned solar energy generation station in Manhattan on the roof of 45 Rockefeller Plaza

Credit: Mayor's Office

CASE STUDY: GreenNYC

Our goal of reducing the city's carbon footprint cannot be met through government action alone. That is why, on June 25, 2007, Mayor Bloomberg announced GreenNYC, an educational awareness campaign aimed at consumers. GreenNYC is a collaboration between corporate partners and dozens of media partners. The campaign consists of television, radio, and print advertisements, as well as street pole banners, bus stop shelters, and phone kiosks in English and Spanish. Featuring a signature campaign bird and new GreenNYC logo, the message lists ten actionable steps that New Yorkers can take to rise to the challenge of creating a more sustainable city. The tagline for the campaign is "Small Steps, Big Strides" to demonstrate how small actions can lead to great change and can help reduce New York City's carbon footprint. To jumpstart consumer action, the City partnered with Con Edison and General Electric to provide 2.4 million Con Edison customers with a \$1 off coupon toward the purchase of GE Energy Smart™ Energy Star® qualified compact fluorescent light bulbs (CFLs) in the residential Con Edison electric bills that summer.

This Earth Day, NYC & Company will launch a green portal on www.nycvisit.com for residents and tourists to locate information on green businesses and walking tours throughout the city. The site will include information on specific businesses to help New Yorkers live a greener lifestyle. It will cover a variety of industries and environmentally-conscious businesses, including restaurants, markets, hotels, home design shops, eco tours, transportation companies, eco friendly dry cleaning services, plus many more. Next year, GreenNYC will release more educational campaigns and will continue to use media to emphasize that every New Yorker can make a difference.

the amount of Clean DG, we released the first ever safe-use regulations for micro-turbines, an efficient and commercially available technology that is already in demand by many building owners. We also worked to remove key barriers to solar electricity in the city by supporting state legislation that would expand opportunities for net-metering and streamline the interconnection process; we will continue to advocate for this. The City also released a request for proposals (RFP) for the installation of 2 MW of solar capacity on City-owned buildings, which will more than double the city's total solar electricity capacity.

Modernize electricity delivery infrastructure

The City has been very active in PSC investigations of both the 2006 Long Island City blackout and the 2007 steam system explosion in Manhattan, and continues to advocate for a number of Con Edison electric and steam system improvements. In addition, the City filed testimony in the Con Edison Electric rate case for prudent but significant investment in energy infrastructure, and Con Edison now expects to invest over \$2 billion in its energy delivery system during 2008.

Next Steps

Our growing energy demand and aging power plants continue to be significant contributors to citywide greenhouse gas emissions. That is why in the coming year we will update citywide energy and building regulations to significantly improve energy efficiency. Building on the overhaul of New York City's construction codes last summer, we will move aggressively in the coming year to reduce energy consumption in buildings through a series of legislative and regulatory changes. This will include an effort to benchmark building energy use and to encourage comprehensive energy audits, building upgrades, and the updating of lighting systems in commercial buildings to meet the new State lighting standards. At the same time, we will work with Con Edison, New York State Energy Research and Development Authority, and others to expedite energy efficiency planning for New York City and continue to actively participate in the proceedings before the PSC. We hope to expand our Mayoral Challenge initiative to include additional universities and new types of institutions, and increase GreenNYC's outreach efforts with new partnerships and resources. Finally, we will work with New York Power Authority to contract for 500 MW of new capacity and will pursue additional new, clean energy capacity opportunities.

Energy Progress

INITIATIVE	LAUNCHED*	PROGRESS SINCE APRIL 22, 2007	IMPLEMENTATION MILESTONE FOR DECEMBER 2009
1 ESTABLISH A NEW YORK CITY ENERGY PLANNING BOARD			
Work with the State and utilities to centralize planning for the City's supply and demand initiatives	✓	City submitted proposed legislation to Albany for a NYC Energy Planning Board, filed comments supporting the Board through the Long-Term Planning and Supply Portfolio Proceeding at the NYS PSC, and continues to advocate for the legislation and improved long-range planning	Establish NYC Energy Planning Board
2 REDUCE ENERGY CONSUMPTION BY CITY GOVERNMENT			
Commit 10% of the City's annual energy bill to fund energy-saving investments in City operations	✓	Executive Order 109 committed City to a 30% reduction in municipal greenhouse gas emissions by 2017 and established a steering committee to set reduction plan. Submitted Dec. 5, the short-term plan includes \$80 million for efficiency projects in 132 buildings, a series of pilots, and studies to inform long-term plan by June 30	Begin investing approximately \$80 million a year into improving the energy efficiency of City buildings
3 STRENGTHEN ENERGY AND BUILDING CODES IN NEW YORK CITY			
Strengthen our energy and building codes to support our energy efficiency strategies and other environmental goals	✓	Revised building code includes: green design fee rebates; requirements for NYS Energy Code compliance; requirements for reflective roofs. Participated in working groups on NYS energy code. Beginning to analyze codes for mandatory benchmarking	Complete and adopt first rounds of code changes (2008, 2010)
4 CREATE AN ENERGY EFFICIENCY AUTHORITY FOR NEW YORK CITY			
Create the New York City Energy Efficiency Authority (NYCEEA) responsible for reaching the City's demand reduction targets	✓	Proposed NYCEEA in May 2007 legislation. Submitted a New York City Energy Efficiency Partnership proposal in January to the PSC with Con Edison, National Grid, NYPA, and NRDC as part of ongoing Energy Efficiency Portfolio Standard proceeding	Create a new authority responsible for the implementation of NYC energy conservation and efficiency programs
5 PRIORITIZE FIVE KEY AREAS FOR TARGETED INCENTIVES			
Use a series of mandates, challenges, and incentives to reduce demand among the city's largest energy consumers	✓	Ten universities will reduce GHG emissions by 30% by 2017 as part of a Mayoral Challenge and have completed GHG inventories and draft action plans. PSC proceedings resulted in April 2007 PSC Order removes utility disincentives and \$140 million for gas efficiency programs	Pass necessary local laws, building codes, and energy code
6 EXPAND PEAK LOAD MANAGEMENT			
Expand participation in Peak Load Management Programs through smart meters	✓	In September, filed testimony in Con Edison Electric rate case supporting deployment of smart meters to support expansion of real-time pricing and peak load management. In December, PSC directed Con Edison to proceed with deployment, beginning in Queens and Westchester County	Ensure Con Edison begins deployment of advanced meters with plan for greater deployment
Support expansion of real-time pricing (RTP) across the city	✓	In September, filed testimony in the Con Edison Electric rate case supporting deployment of smart meters for all customers to enable greater participation in RTP. In December, the PSC directed Con Edison to proceed with deployment of smart meters beginning in Queens and in Westchester County	Establish appropriate rate
7 LAUNCH AN ENERGY AWARENESS AND TRAINING CAMPAIGN			
Increase the impact of our energy efficiency efforts through a coordinated energy education, awareness, and training campaign	✓	On June 25, GreenNYC, PlaNYC's outreach campaign, was launched. With Con Edison and General Electric provided \$1-off coupon for CFL purchases in August. Working with NYSERDA and CUNY to develop programs for energy efficiency and pursuing plans for lighting resource training center	Launch energy awareness campaign; set up training, certification, and monitoring programs
8 FACILITATE REPOWERING AND CONSTRUCTION OF POWER PLANTS AND DEDICATED TRANSMISSION LINES			
Facilitate the construction of 2,000 to 3,000 MW of supply capacity by repowering old plants, constructing new ones, and building dedicated transmission lines	✓	Through testimony in electric and steam rate cases, advocated for repowering of Hudson Avenue Steam Plant. Advocated for evaluation of transmission capacity in/around the city. In October, announced contingent support of repowering in Sunset Park on condition of environmental improvement. Continue to advocate for Article X reenactment and approval of NYC Energy Planning Board	Establish NYC Energy Planning Board
9 EXPAND CLEAN DISTRIBUTED GENERATION (CLEAN DG)			
Increase the amount of Clean DG by 800 MW	✓	On September 7, filed testimony in Con Edison Electric rate case to increase the amount of Clean DG that can be connected to the electric grid. In October, City released new regulations for use of microturbines. DCAS completed a Clean DG feasibility study for City-owned sites	Study the capacity to increase interconnection limits in each network and work with manufacturers on new circuit breaker technologies
Promote opportunities to develop district energy at appropriate sites in New York City	✓	In July, Constellation Energy concluded initial study of Hudson Yards and found district energy to be feasible. Initiated conversations with development teams, including Hudson Yards/Javits Center and downtown Brooklyn, and will study district energy for Hunts Point Food Distribution Center and Willets Point	Review completed Con Edison Hudson Yards District Energy Study and move forward on district energy projects based on report findings
10 SUPPORT EXPANSION OF NATURAL GAS INFRASTRUCTURE			
Support critical expansions to the city's natural gas infrastructure	✓	Undertaking assessment of long-term gas supply, including pipeline enhancements and potential sources of natural gas. Examined merits of Broadwater LNG terminal proposal for Long Island Sound, for which FERC issued final study in early 2008 and approved on March 20; City endorsed Broadwater in early 2007. (State expected to take a position on Broadwater by spring 2008)	Support appropriate natural gas expansion proposals
11 FOSTER THE MARKET FOR RENEWABLE ENERGY			
Create a property tax abatement for solar panel installations	✓	City submitted solar tax abatement bill in July; seeking sponsors to reintroduce it this year	Launch the solar incentive
Study the cost-effectiveness of solar electricity when evaluated on a real-time pricing scenario	✓	We have refined our criteria for suitable sites for the study, and as part of our Solar America Cities project, have secured the assistance of National Renewable Energy Laboratory (NREL) to assist with further design of the study. By summer 2008, will release RFP for consultants to conduct study	Complete study
Support the construction of the city's first carbon-neutral building, primarily powered by solar electricity	✓	Schematic design of the city's first carbon-neutral building, Solar Two, is complete	Begin construction of the city's first carbon-neutral building
Increase use of solar energy in City buildings through creative financing	✓	Released an RFP for a solar developer to purchase, install, own, and operate 2 MW of solar capacity in exchange for a long-term power purchase agreement. Over the next few months, the City will receive bidder proposals, select a developer, finalize a contract, and enter into a power purchase agreement	Select solar developer to install solar panels; enter into long-term solar power purchase agreement
Work with the State to eliminate barriers to increasing the use of solar energy in the city	✓	In spring 2007, USDOE designated NYC a Solar America City and awarded funding for solar programming. RFPs to be released in summer 2008. Participating in the NYS Renewable Energy Task Force, which in February recommended updated net metering bill, expanded Renewable Portfolio Standard funding, and solar R&D	Increase/remove solar cap in New York City and increase net-metering opportunities statewide
Pilot one or more technologies for producing energy from solid waste	✓	In 2007, designated members of Citywide Siting Task Force, created a structure to evaluate sites for alternative waste technology project, and convened first Task Force meeting. Drafted scope of work for second phase feasibility study of Hunts Point anaerobic digestion project	Begin designing at least one pilot alternative waste technology facility
End methane emissions from sewage treatment plants and expand the productive use of digester gas	✓	Embarked on two-year program to contain all methane from wastewater treatment plants. Designing process to analyze several projects that could use methane to create energy and completed engineering design for a demonstration project at Owl's Head Wastewater Treatment Plant. Continuing program to contain all methane	End methane emissions from wastewater treatment plants
Study the expansion of gas capture and energy production from existing landfills	✓	The City will initiate a study to explore the feasibility of generating more energy from the gas from its in-city landfills	Complete initial study; begin to follow up on recommendations
12 ACCELERATE RELIABILITY IMPROVEMENTS TO THE CITY'S GRID			
Advocate for Con Edison to implement recommendations from the City's report on the northwest Queens power outages	✓	The PSC issued an order on July 20 implementing Long Island City outage recommendations, and the City filed a Petition asking the PSC to revisit 26 of the City's 53 recommendations	Begin implementation of City recommendations and all other appropriate recommendations to improve grid reliability
13 FACILITATE GRID REPAIRS THROUGH IMPROVED COORDINATION AND JOINT BIDDING			
Pursue the passage of joint bidding legislation	✓	NYCEDC has hired PB Americas and Urbitran Associates to conduct a comprehensive street management plan to generate short, medium, and long-term solutions, such as joint bidding, to better coordinate right-of-way procedures and reduce street closures	Approve joint bidding citywide, improve coordination, and begin work on pilot multi-utility tunnel with location identified by formalized team of City, State, and utility representatives
Ensure adequate pier facilities are available to Con Edison to offload transformers and other equipment	✓	NYCEDC will set up a working group with Con Edison, KeySpan, generators, NYCEDC Asset Management, Energy and Maritime divisions to ensure adequate access to the piers	Initiate a working group with relevant parties ¹
14 SUPPORT CON EDISON'S EFFORTS TO MODERNIZE THE GRID			
Support Con Edison's 3G System of the Future Initiative	✓	On September 7, the City filed testimony in the Con Edison Electric rate case supporting research and development associated with the 3G System of the Future Initiative	Continue to support Con Edison's 3G initiative ¹

* Initiative begun by the City, including planning or advocacy stages

¹ 2015 milestone set—no 2009 milestone



Achieve the cleanest air quality of any big U.S. city

Despite improvements since the passage of the Clean Air Act of 1970, New York City's air quality still fails to meet federal standards. Trucks and cars, boilers, power plants, and construction equipment continue to emit pollutants that trigger asthma attacks and contribute to disease. New York City is second only to Los Angeles among U.S. cities for the poor quality of its air.

Our plan for the future of air quality includes the following initiatives:

Reduce road vehicle emissions

- 1 Capture the air quality benefits of our transportation plan
- 2 Improve fuel efficiency of private cars
- 3 Reduce emissions from taxis, black cars, and for-hire vehicles
- 4 Replace, retrofit, and refuel diesel trucks
- 5 Decrease school bus emissions

Reduce other transportation emissions

- 6 Retrofit ferries and promote use of cleaner fuels
- 7 Seek to partner with the Port Authority to reduce emissions from Port facilities
- 8 Reduce emissions from construction vehicles

Reduce emissions from buildings

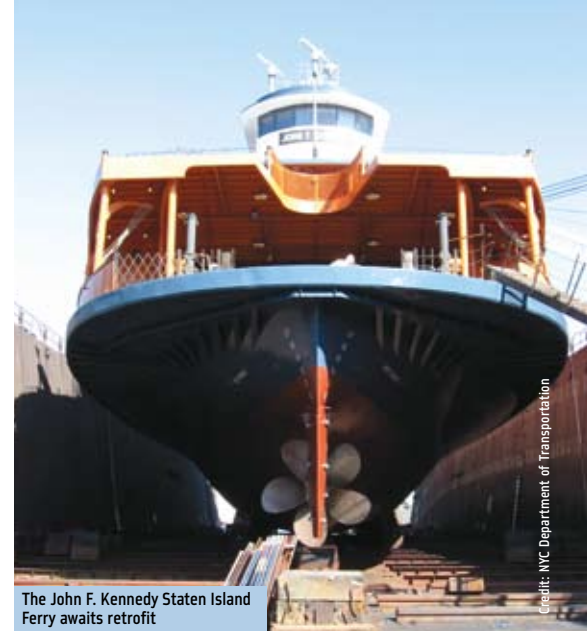
- 9 Capture the air quality benefits of our energy plan
- 10 Promote the use of cleaner-burning heating fuels

Pursue natural solutions to improve air quality

- 11 Capture the benefits of our open space plan
- 12 Reforest targeted areas of our parkland
- 13 Increase tree plantings on lots

Understand the scope of the challenge

- 14 Launch collaborative local air quality study



The John F. Kennedy Staten Island Ferry awaits retrofit

Credit: NYC Department of Transportation

tions by 30 percent by 2017, the City has launched an extensive study of its fleet operations to look at lower-emission, higher mileage vehicles and operational changes to reduce the City's use of vehicles.

The largest fleet of automobiles on New York City roads is the more than 48,000 taxis, black cars, livery cabs, and limousines regulated by the Taxi and Limousine Commission (TLC). PlaNYC included an initiative to require high-efficiency vehicles in those fleets, and TLC unanimously passed landmark regulations in December 2007 to require all new yellow taxis to be high-efficiency vehicles starting in October 2008. In February 2008, Mayor Bloomberg proposed a similar set of requirements for the black cars. (See case study: *Efficient Yellow Taxicabs and Black Cars*)

While fewer than half of all New York City households own an automobile, New Yorkers still own nearly 2 million vehicles. To encourage those buying new cars to choose hybrid vehicles, PlaNYC proposed to exempt hybrids from the 4 percent City sales tax. Although the State Legislature failed to adopt this proposal in 2007, it has been reintroduced by State Senator Andrew J. Lanza and Assembly Member Adriano Espaillat as Senate Bill 7023/ Assembly Bill 042581A, and the City will be working with the State Legislature to support its passage.

Reduce other transportation emissions

We have partnered with the Port Authority of New York and New Jersey (PANYNJ) to reduce emissions from the eight Staten Island ferries by upgrading engines, installing exhaust control devices, and switching to ultra-low-sulfur diesel fuel. Two small boats will receive a catalyst for soot reduction and a selective catalytic reduction system that is highly effective for reducing nitrogen oxide. Larger boats will

Air Quality

OUR PROGRESS

Imposed higher standards on taxis and ferries and pursued cleaner-burning fuels

The PlaNYC initiatives we launched this year start us toward the goal of cleaner air. We have adopted policies to convert all yellow taxis to clean vehicles, proposed similar improvements to black cars, began retrofitting on the Staten Island Ferry fleet, continued retrofitting private trucks, invested in energy efficiency upgrades for City-owned buildings, and began to switch to cleaner-burning fuels. We have planned a local air quality study that will measure the variation in street-level air quality across different neighborhoods. This year, we will focus on approaches to reduce school bus emissions even more, expand cleaner vehicles to the livery fleet, and cut pollutants from construction equipment.

Reduce road vehicle emissions

Road vehicle emissions are one of the three main local sources of air pollution. They generate about 11 percent of our local direct

emissions of PM 2.5, as well as 52 percent of nitrogen oxide emissions and 32 percent of volatile organic compound (VOC) emissions, both of which contribute to ozone and PM 2.5. Reducing emissions from cars, trucks, and buses requires several strategies: fuel efficiency, cleaner fuels, cleaner or upgraded engines, and the retrofit of diesel exhaust systems with filters and catalysts. The City has been a leader in these approaches; even before PlaNYC, we owned the largest single fleet of hybrid cars in the United States, and were exploring alternative fuels such as Compressed Natural Gas (CNG) and biodiesel in the City's fleet of over 6,800 heavy-duty vehicles.

Over the past year, the City has expanded its use of sulfur-free biodiesel, CNG, diesel-electric hybrid, and other alternative technologies for its vehicles. As part of its effort to reduce the greenhouse gas emissions of City opera-

"From reducing traffic and asthma-inducing pollution and improving public transportation options...the mayor's plan will put New York City on a path to an even greener and greater future." Bronx Borough President Adolfo Carrión, June 15, 2007

receive upgrades to their engines so that they meet the current EPA standard. Newer boats will be upgraded to meet more stringent EPA Tier 2 standards.

These measures will reduce the eight-boat fleet's total nitrogen oxide emissions by an estimated 40 percent, and will also reduce direct PM 2.5 emissions on each vessel by 79 percent. We are also working with the New York State Energy Research and Development Authority (NYSERDA) to reduce exhaust emissions from private ferries operating in New York Harbor. This program involves testing technologies on boats owned by several operators and installing catalysts to reduce their impact on local air quality.

Reduce emissions from buildings

The use of heating fuel contributes 29 percent of the local emissions of PM 2.5—due to our dependence on heating oil in apartment buildings, and the use in some large buildings of cheaper grades of oil that are highly polluting. One reduction approach is to use sulfur-free biodiesel. In 2007, Mayor Bloomberg announced that the City would burn blends of 5 percent biodiesel in its boilers that use lighter and cleaner distillate (No. 2) heating oil. This commitment will produce air quality benefits and will allow the City to assess whether the blends will cause any operational problems. The City is also planning pilot projects to test the feasibility of using blends of 20 percent biodiesel in some of its No. 2 boilers, as well as in some of its boilers that use heavier and dirtier residual (No. 6) oil. We are also assessing potential citywide requirements for biodiesel and other cleaner fuels, taking into account local health benefits, greenhouse gases, land use, and global food prices.

We committed \$285 million, which would qualify for a State machinery matching grant, to convert more than 100 school boilers from high-sulfur No. 6 oil to cleaner fuels. Over the past year, we launched a study of conversions to clean up the most boilers in neighborhoods with the worst asthma rates. Two school boilers are currently under construction, three have been put out for bid, three others are in design, and the determination of scope is underway for nine more.

Pursue natural solutions to improve air quality

Trees clean the air. The MillionTreesNYC campaign, launched last October, has already planted 33,501 trees on sidewalks, parkland, and private property. Our effort will ramp up even further in 2008, to reach the rates required to expand New York City's tree population from five million to six million by 2017. (See case study: MillionTreesNYC on page 10)

Understand the scope of the challenge

Because existing routine air monitoring focuses on region-wide trends and does not capture street-level data or air quality variation among neighborhoods, we are launching a local air quality study. Each season over the next two years, the City will collect air samples at over 130 locations throughout the five boroughs. The locations represent a wide range of traffic and local environments. This baseline data will be used to establish priority neighborhoods for improvement and track changes over time as development, policy, and transit initiatives proceed.

Next Steps

To cut road transportation pollution emissions, we plan to pilot hydrogen fuel cell and battery all-electric vehicles in the City fleet, and implement recommendations from the ongoing City fleet study to achieve the lowest level of vehicle use feasible. We will work to introduce cleaner vehicles into the livery cab fleet. We will work to encourage private auto buyers to choose hybrids by passing Senate Bill 7023/Assembly Bill 042581A. And we will launch the anti-idling campaign promised in PlaNYC.

We will continue to address non-road pollution emissions, including piloting technologies to clean up private ferries, and to develop new approaches to reduce emissions from construction vehicles. We will also seek out partnerships with the PANYNJ, the Metropolitan Transit Authority, New Jersey Transit, and private operators to identify and implement policies for additional reductions in airplane, locomotive, and marine sources.

Over the past year, our efforts to enact a broader oil heating policy were deferred as we learned of concerns about the lifecycle and secondary land impacts of certain biofuels, as well as certain operational concerns. But we will lay the groundwork for a comprehensive heating oil policy in the next year.



CASE STUDY: EFFICIENT YELLOW TAXICABS AND BLACK CARS WILL BRING CLEANER AIR AND A 0.75 PERCENT REDUCTION IN CITYWIDE CO₂ EMISSIONS

In December, the Taxi and Limousine Commission (TLC) unanimously passed regulations requiring new yellow taxicabs to achieve a city mileage rating of 25 miles per gallon (mpg) in October 2008, except for handicap-accessible taxicabs. In October 2009, the standard will rise to 30 mpg. Almost 380 hybrids were on the road when the proposal was announced in May; now, as owners convert ahead of schedule, we have over 800. They have proven their reliability during the three annual inspections, and the first 18 hybrids in the fleet have already logged over 200,000 miles each. The regulations will save \$11,000 per car, each year, in gasoline, for industry-wide savings of roughly \$140 million per year. By 2012, when the entire fleet has converted to the 30 mpg standard, it will clean the air and reduce the City's greenhouse gas emissions by 296,000 tons annually, or by 0.5 percent.

In February 2008, the Mayor proposed that TLC require new black cars—those that serve corporate clients—to meet fuel efficiency standards of 25 mpg in 2009 and 30 mpg in 2010. The proposal also mandates vehicle retirement and provides protection for black car operators against competitors who operate non-clean vehicles. To help drivers, the City has worked with the financial sector, auto dealers, and black car fleets to develop solutions that will finance the higher down payment. By 2013, nearly all black cars will meet the new standards, improving air quality and reducing carbon emissions by 136,000 tons annually, or 0.25 percent. Mayor Bloomberg indicated the City's intention to complete the PlaNYC clean taxi initiative by working with the livery industry, again taking into account the unique aspects of that industry.

“...a broad, complicated and exciting blueprint.”

The New York Times, April 23, 2007



Air Quality Progress

INITIATIVE	LAUNCHED*	PROGRESS SINCE APRIL 22, 2007	IMPLEMENTATION MILESTONE FOR DECEMBER 2009
1 CAPTURE THE AIR QUALITY BENEFITS OF OUR TRANSPORTATION PLAN (SEE TRANSPORTATION INITIATIVES, PAGE 25)			
2 IMPROVE FUEL EFFICIENCY OF PRIVATE CARS			
Waive New York City's sales tax on the cleanest, most efficient vehicles	✓	On February 27, State Senator Lanza and Assemblyman Espaillat introduced the hybrid sales tax legislation to the State Assembly. The City will seek approval by the end of June	Offer incentive
Work with the MTA, the Port Authority, and the State DOT to promote hybrid and other clean vehicles		Started to explore expansion of the State's Clean Vehicle Pass program. City will initiate meetings with PANYNJ and the MTA to discuss this and other options for providing incentives to promote hybrid and other clean vehicles	Release assessment of policy options and begin implementation
Pilot new technologies and fuels, including hydrogen and plug-in hybrid vehicles	✓	In October, Shell Hydrogen, City, and General Motors reached an agreement to locate 2 pilot hydrogen fueling stations in the city. Shell is finalizing a lease agreement with DSNY and then will submit the stations for review	Have an operational hydrogen station in New York City
3 REDUCE EMISSIONS FROM TAXIS, BLACK CARS, AND FOR-HIRE VEHICLES			
Reduce taxi and limousine idling		The Taxi and Limousine Commission (TLC) and DOT to offer rebates through State funding to black car and for-hire vehicle owners who install anti-idling technologies. Anti-idling technologies allow drivers to heat their vehicles when stopped without running the engine. Will begin piloting potential anti-idling technologies in spring 2008	Equip participating yellow taxis and black cars with anti-idling equipment
Work with TLC and the taxicab industry to double the taxi fleet's efficiency	✓	On December 11, TLC unanimously passed regulations requiring all yellow taxicabs coming into service as of October 1, 2008 to achieve a city mileage rating of 25 miles per gallon (mpg), with the exception of accessible taxicabs: in October 2009 standard increases to 30 mpg	Work toward completing new standards for taxis
Work with stakeholders to double the fuel efficiency of black cars and for-hire vehicles	✓	On February 27, Mayor Bloomberg proposed resolutions to require new licensed black cars to achieve a fuel efficiency standard of 25 mpg in 2009 and 30 mpg in 2010. Includes a requirement for vehicle retirement	Work toward completing new standards for for-hire vehicles by 2010
4 REPLACE, RETROFIT, AND REFUEL DIESEL TRUCKS			
Introduce biodiesel into the City's truck fleet, go beyond compliance with local laws, and further reduce emissions	✓	In March, DPR expanded use of B20 to 10 fuel sites and to 800 operated vehicles and equipment. DSNY expanded B5 and piloted B20 at one depot. In July, DOT introduced B5 to heavy trucks. In November, DEP introduced B5 to maintenance fleet and has expanded the use of B5 to 9 other sites	Dispense a biodiesel blend at all city-owned diesel fueling stations
Accelerate emissions reductions of private fleets through existing Congestion Mitigation and Air Quality (CMAQ) programs	✓	NYSERDA awarded \$3.2 million to private fleets in New York City in summer 2007. New round of funding totalling \$6 million will be released by mid-2008	Upgrade additional vehicles
Work with stakeholders and the State to create incentives for the adoption of vehicle emission control and efficiency strategies		NYS DEC released the State Implementation Plan (SIP) for fine particulates and credited PlaNYC initiatives for helping to achieve air quality standards. However, the SIP does not propose the creation of a statewide retrofit fund	Draft proposed parameters of fund
Improve compliance of existing anti-idling laws through targeted educational campaign	✓	Partnered with NYSDEC and DEP to carry out an enforcement action to address urban air pollution in East Harlem, culminating in a press conference on November 16. Convening agencies to address enforcement challenges and barriers and beginning discussions with potential partners to plan a comprehensive public education campaign	Launch anti-idling campaign
5 DECREASE SCHOOL BUS EMISSIONS			
Retrofit both large and small school buses and reduce their required retirement age	✓	DOE installed a combination of DOCs and crankcase filters on 2,300 large buses, and 750 large special education buses. In 2007, DOE began testing active and passive diesel particulate filters (DPFs) on 9 buses. In January 2008, DOT and DOE applied for \$29 million in CMAQ funds for DPFs and an accelerated retirement program for school bus fleet	Begin retrofits on smaller school buses
6 RETROFIT FERRIES AND PROMOTE USE OF CLEANER FUELS			
Retrofit the Staten Island Ferry fleet to reduce emissions	✓	Retrofitted engines on three ferries with pollution control equipment and the JFK went into dry dock on October 10. Retrofit plan incorporated into LL 3, signed in February 2008. Due to delays at Port Authority, JFK not yet upgraded. Upgrade of JFK and Molinari expected in 2008. January 2008, fueled fleet with ULSD and B5	Complete engine upgrades to Staten Island Ferry fleet
Work with private ferries to reduce their emissions	✓	DOT reached preliminary agreement with NY Waterway to retrofit one ferry in the next few months, with an agreement to retrofit the whole fleet once operational concerns are met	Install DOCs in ferries; pass legislation promoting the use of ULSD
7 PARTNER WITH THE PORT AUTHORITY TO REDUCE EMISSIONS FROM PORT FACILITIES			
Seek to work with the Port Authority (PANYNJ) to reduce emissions from its marine vehicles, port facilities, and airports	✓	Met with EPA to explore nationwide Port Initiative, funding sources, and opportunities for reducing PANYNJ's emissions. Teamed up with EPA and PANYNJ to bring a national conference called Faster Freight Cleaner Air to New York City on July 8-9, 2008, to explore options for reducing pollution for ports and their related activities	Begin creating a plan
8 REDUCE EMISSIONS FROM CONSTRUCTION VEHICLES			
Accelerate adoption of technologies to reduce construction-related emissions	✓	The City has amended its rules for selecting Best Available Technology for construction equipment in order to allow contractors to use a wider range of technology that can eliminate even more pollution	Require, through contracts, applicable on-road vehicles used in city construction projects to follow requirements of Local Law 77
9 CAPTURE THE AIR QUALITY BENEFITS OF OUR ENERGY PLAN (SEE ENERGY INITIATIVES, PAGE 29)			
10 PROMOTE THE USE OF CLEANER-BURNING HEATING FUELS			
Lower the maximum sulfur content in heating fuel from 2,000 parts per million (ppm) to 500 ppm	✓	On June 11, Mayor Bloomberg announced a commitment to introduce B5 into the heating oil for City boilers. Contract has been released. The City is also formulating a broader policy to reduce harmful air pollution from heating fuel, by analyzing the most cost-effective methods for reducing pollution	Draft new sulfur content requirements for State Code
Reduce emissions from boilers in 100 City public schools	✓	With PlaNYC funds, the SCA has begun construction on two boilers. Three have been put out to bid, three are in design, and nine are in scope development phase. The SCA is working with the City to develop a strategy to target additional schools toward the goal of converting 100 boilers in City schools	Begin replacing boilers
11 CAPTURE THE AIR QUALITY BENEFITS OF OUR OPEN SPACE PLAN (SEE OPEN SPACE INITIATIVES, PAGE 11)			
12 REFOREST TARGETED AREAS OF OUR PARKLAND			
Reforest 2,000 acres of parkland	✓	On October 20, the City added 10,000 new trees on Its My Park Day and planted almost 30,000 trees in the fall planting season. Convened an Urban Reforestation Advisory Conference in November 2007 to enhance reforestation efforts and secured consultant design services for future planting. April 2008 will see over 20,000 trees planted	Begin reforesting 2,000 acres of parkland
13 INCREASE TREE PLANTINGS ON LOTS			
Partner with stakeholders to help plant one million trees by 2017	✓	On October 9, the City launched the MillionTreesNYC Initiative in partnership with the New York Restoration Project, and since then has planted over 33,501 trees. An Advisory Committee has been convened to coordinate a strategic plan. Conducted extensive community outreach and launched a website (www.milliontreesNYC.org)	Launch partnership and begin planting trees
14 LAUNCH COLLABORATIVE LOCAL AIR QUALITY STUDY			
Monitor and model neighborhood-level air quality across New York City	✓	DOHMH, with Queens College and other partners, finalized a design for the New York City Community Air Survey (NYCCAS), to include measurements at a minimum of 130 locations in each season each year. Building and testing of monitoring instruments will continue through spring 2008. NYCCAS to begin first air sampling campaign in summer 2008	Launch Study

* Initiative begun by City, including planning or advocacy stages



Reduce global warming emissions by more than 30%

Of all the challenges that face New York City, only one is truly new: global climate change. The scientific consensus around the world has only become clearer over the last year: the Earth's climate is changing, as a result of human emissions of greenhouse gases. Glaciers are melting; sea levels are rising; temperatures are increasing. As a city with over 500 miles of coastline exposed to sea level, that already suffers from heat waves during the summer and that relies on reservoirs that are subject to droughts, climate change is a real threat. As a city responsible for a quarter of 1 percent of the entire planet's greenhouse gas emissions, it is imperative that New York play a leading role in this global effort.

Our goal is to reduce citywide greenhouse gas emissions by 30 percent by 2030. The good news is that we are already a remarkably efficient city, and virtually all our PlaNYC initiatives will also reduce greenhouse gases. At the same time, we are also preparing for the climate change that is already beginning to occur. We have begun working with vulnerable neighborhoods to develop site-specific strategies, and we are working now to create an intergovernmental Task Force to protect our city's vital infrastructure and to launch a citywide strategic planning process for climate change adaptation.

Our plan for the future of climate change includes the following initiatives:

- 1 Create an intergovernmental Task Force to protect our City's vital infrastructure
- 2 Work with vulnerable neighborhoods to develop site-specific strategies
- 3 Launch a citywide strategic planning process for climate change adaptation

Climate Change

OUR PROGRESS

Launched neighborhood outreach workshops and started work on adaptation planning

Over the last year, we have made significant progress toward implementing a broad greenhouse gas reduction strategy. Many of our achievements—transit-oriented rezonings, fuel-efficient yellow taxis, tree planting, reflective roofing requirements in our new building code, rules allowing fuel-efficient micro-turbine generators—will directly reduce the city's carbon footprint. Nearly all of the other ongoing efforts related to PlaNYC will in some way help that effort further. In November 2007, the City Council passed Local Law 55, sponsored by Councilmember James F. Gennaro, which codifies PlaNYC's goal of reducing citywide greenhouse gas emissions by 30 percent below 2005 levels by 2030. Local Law 55 will ensure that the commitment to addressing climate change continues beyond the current Administration.

The law also requires the City to reduce the carbon footprint of municipal operations much faster, by 30 percent by 2017.

Create an intergovernmental Task Force to protect our city's vital infrastructure

While reducing the City's greenhouse gas emissions is a critical step toward mitigating the impacts of global climate change, certain impacts from a changing climate are inevitable. In many cases, such as the potential flooding due to more intense storms, these will exacerbate challenges the city already faces.

To assist City and State agencies, as well as authorities and private companies, to prepare for climate change in a coordinated way, the City has been working toward the establishment of a New York City Climate Change Adaptation Task Force, which will be convened this year. To advise this and other efforts, the City will convene a group of scientists and insurance experts as a technical committee, which will develop scenarios on which Task Force members will base their adaptation strategies.



Rendering of a new Marine Transfer Station

Credit: NYC Department of Sanitation

CASE STUDY: SOLID WASTE MANAGEMENT PLAN

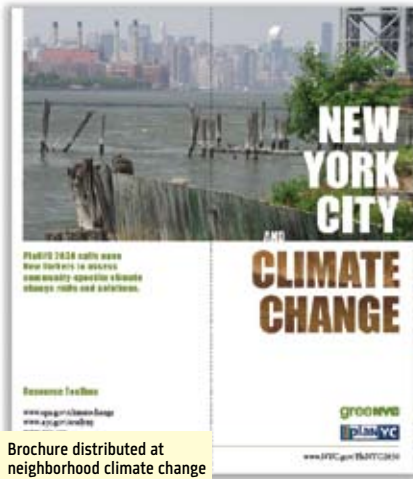
The Fresh Kills landfill closure on Staten Island in 2001 caused a significant increase in the carbon footprint of municipal operations. Since then, the City has relied on long-distance trucking to transport most Department of Sanitation (DSNY) waste to facilities outside of the city. The 2006 Comprehensive Solid Waste Management Plan (SWMP) laid out a strategy to convert most waste transport to rail and barge, which will reduce the annual impact of waste transport by 192,000 metric tons of CO₂e.

The switch from truck to barge and rail has begun. In Staten Island and the Bronx, all DSNY-managed waste is exported by rail; some commercial waste also leaves the Bronx by rail. In Brooklyn, we awarded a rail contract for a portion of Brooklyn's DSNY-managed waste, and negotiations are underway for a similar arrangement for DSNY-managed waste in Queens. Commercial waste at Queens and Brooklyn facilities will eventually be exported by rail.

Full implementation of the SWMP transport network requires the construction of a number of marine transfer stations (MTS). Four of these stations—East 91st Street in Manhattan, Red Hook and Bensonhurst in Brooklyn, and College Point in Queens—will take waste from DSNY trucks (and some commercial trucks), put it into long-haul containers, and load it onto barges. A fifth MTS at West 59th Street in Manhattan will accept Manhattan construction and demolition debris for export by barge; we expect to finalize that contract this year. Finally, we plan to build a MTS at Gansevoort Street in Manhattan to send recyclables by barge to the citywide processing facility to be built in Sunset Park, Brooklyn.

Proposals for container transport and disposal from the MTSs are being considered for contract negotiations. We have received State permits to construct and operate the College Point station, and we expect to receive them for the Red Hook station. We are working on a permit from the U.S. Army Corps of Engineers for water-related construction at the College Point station. Legislative hearings were held for State permits for the East 91st Street and Bensonhurst stations. We are awaiting State Legislature approval for the Gansevoort Street station, also critical to the plan.

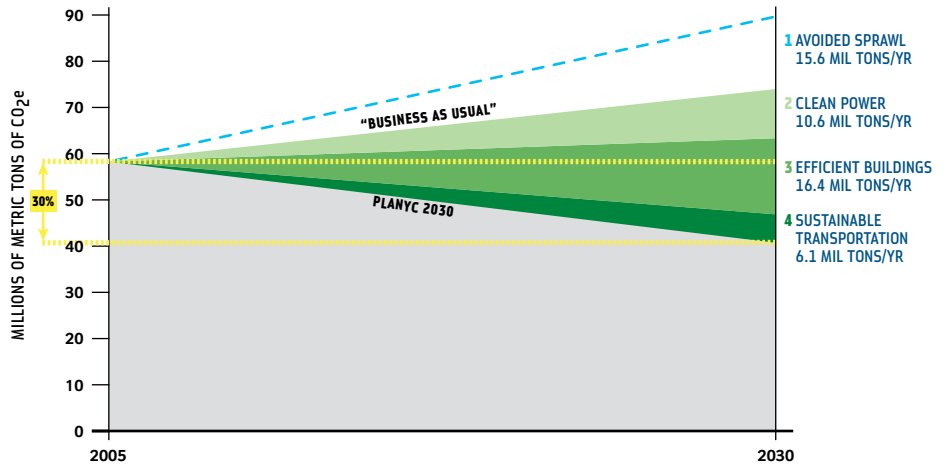
"Mayor Bloomberg continues to be a national leader in the fight against global warming and he has set a bold agenda for the city of New York." Seattle Mayor Greg Nickels, October 2007



Brochure distributed at neighborhood climate change planning workshops

Credit: NYC Mayor's Office of Long-Term Planning and Sustainability

Projected Impacts of Our Greenhouse Gas Reduction Strategies



Credit: NYC Mayor's Office of Long-Term Planning and Sustainability

Work with vulnerable neighborhoods

The impacts of climate change, and potential solutions to address it, will take place at the neighborhood level. That is why we are developing and undertaking a neighborhood-based education effort in the 40 communities around the city most vulnerable to climate change impacts. We will provide information necessary for communities to begin to consider the most appropriate adaptation strategies. The City has held two workshops to pilot this approach—in Sunset Park, Brooklyn, and Broad Channel, Queens—and will be revising the approach in response to feedback from participants. We will then begin to engage the full list of neighborhoods later this year.

Launch a citywide strategic planning process for climate change adaptation

Adaptation to climate change requires a comprehensive understanding of potential impacts and possible adaptation strategies. We will begin by assessing the full range of potential adaptation responses, using a risk-based, cost-benefit approach to inform investment decisions. Additionally, strategies to protect against storm surge and flooding will be assessed. We will begin to develop the scope of work needed to guide these assessments this year.

Because the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRMs) are drawn using data that may be several decades old, we seek to update these maps to reflect current meteorology. To advance this initiative, we have set up an inter-

agency group to work with FEMA to update the FIRMs to reflect not only current weather information, but more accurate topography and bathymetry. We will convene a task force to amend the City's building code to incorporate climate change adaptation responses; it will evaluate issues such as structural changes made necessary by climate change and the need to require passive survivability—the ability of buildings to be inhabitable without energy.

Next Steps

Scientists indicate that a certain amount of climate change is at this point irreversible. We are working to prepare New York City for the potential impacts that a changing climate may cause. We have developed a neighborhood education process and, this year, will begin holding meetings throughout the five boroughs to educate residents about climate change and its implications for their neighborhood, and to begin engaging them in discussions on ways they can make a difference. This year, we will launch our citywide task force on infrastructure, bringing together all the entities that control critical infrastructure in the city to work together to develop climate change adaptation plans. We will also begin to develop the scope of work needed to fully assess all potential adaptation strategies appropriate for New York City; we will continue to work on updating FEMA flood insurance maps; and we will work toward amending the City's building code to incorporate measures necessary to allow the city's buildings to be more resilient to expected climate change impacts.



Mayor Bloomberg and UN Secretary General Ban Ki-moon



Former President Bill Clinton, Mayor Bloomberg, and NYCHA Chairman Tino Hernandez

CASE STUDY: NEW YORK CITY AND THE GLOBAL EFFORT AGAINST CLIMATE CHANGE

PlaNYC is a comprehensive set of city-level strategies, but it is clear that cities alone cannot tackle this problem effectively. Cities must work together, and national policies are needed. In May 2007, New York City hosted the C40 Cities Climate Leadership Group, an effort of the Clinton Climate Initiative that brings together the mayors of the world's 40 largest cities to share ideas and make joint commitments to address this global crisis. In November, Mayor Bloomberg traveled to Seattle to address the U.S. Conference of Mayors Climate Protection Summit and to testify before a field hearing of the U.S. House of Representatives Select Committee on Energy Security and Global Warming. At those events, he proposed the adoption of a national carbon tax on fossil fuels as the most effective way to incentivize businesses and individuals to reduce their greenhouse gas emissions.

The integration of the U.S. economy means that neither cities nor states are able to tax carbon effectively; an effective strategy requires a national approach.

Similarly, national approaches must take place in the context of a shared global effort to tackle this global challenge. In December 2007, Mayor Bloomberg traveled to Bali, Indonesia, to address the United Nations Climate Change Conference. There, he not only reminded delegates of the important role that cities can and must play in reducing carbon, but also urged the world's largest economies, including the United States, to play leadership roles in making commitments—a point he reiterated at a subsequent United Nations meeting in New York in February 2008. While New York City is currently a model for cities around the world for our commitment and action on climate change, there is still much to accomplish. Without action at the local, state, national, and global levels, we will not be able to prevent catastrophic climate change.

Thinking globally, the City also made a new commitment to reduce the indirect carbon emissions caused by its use of tropical hardwood in benches, boardwalks, and other City facilities. Deforestation has been estimated to cause 20 percent of all greenhouse gas emissions, and was a major focus at the UN conference in Bali. Fulfilling a commitment he made in Bali, in February 2008, Mayor Bloomberg announced a plan to reduce the City's current uses of hardwoods by 20 percent in the near term, and to study alternative materials for all uses while allowing certain critical projects to continue with existing designs. This plan has resulted in the use of recycled plastic lumber and concrete for repairs to sections of the Coney Island, Rockaway Beach, and Staten Island boardwalks. In addition, City park benches will be made from alternative materials, including recycled plastic lumber, domestic wood, and steel.

Climate Change Progress

INITIATIVE	LAUNCHED*	PROGRESS SINCE APRIL 22, 2007	IMPLEMENTATION MILESTONE FOR DECEMBER 2009
1 CREATE AN INTERGOVERNMENTAL TASK FORCE TO PROTECT OUR CITY'S VITAL INFRASTRUCTURE			
Expand our adaptation strategies beyond the protection of our water supply, sewer, and wastewater treatment systems to include all essential city infrastructure	✓	Members have been identified and a kick-off meeting is being scheduled. In coming months, the City will guide the task force as it completes an inventory of critical at-risk infrastructure and begins to develop adaptation plans	Complete an inventory of all at-risk infrastructure with a priority list of high-risk components
2 WORK WITH VULNERABLE NEIGHBORHOODS TO DEVELOP SITE-SPECIFIC PROTECTION STRATEGIES			
Create a community planning process and "toolkit" to engage all stakeholders in community-specific climate adaptation strategies	✓	The City has worked with UPROSE and the Sunset Park community to develop a model educational process and "toolkit." Two pilot workshops have been held so far in Sunset Park and Broad Channel, Queens. In summer 2008, we will hold additional pilot workshops before launching a citywide campaign	Complete community planning toolkit and create a climate change adaptation plan with UPROSE
3 LAUNCH A CITYWIDE STRATEGIC PLANNING PROCESS FOR CLIMATE CHANGE ADAPTATION			
Create a strategic planning process to adapt to climate change impacts	✓	The City will begin a scoping study as a first step toward creating a strategic planning process	Release scoping study for a comprehensive climate adaptation planning process
Ensure that New York's Federal Emergency Management Administration (FEMA) 100-year floodplain maps are updated	✓	The City continues to identify strategies for working with FEMA to update its FIRMs. Over the next few months, the City will meet with appropriate FEMA staff to develop the scope of work for map revision	Complete remapping of NYC 100-year floodplain
Document the City's floodplain management strategies to secure discounted flood insurance for New Yorkers		Held discussions with FEMA and NYSDEC on National Flood Insurance Program's (NFIP) Community Rating System (CRS) application. An analysis of the costs/benefits demonstrated the potential for minimal reductions in premiums; therefore, application efforts are on hold	Complete application to FEMA
Amend the building code to address the impacts of climate change		The City will incorporate climate change adaptation issues into upcoming code updates	Create a Task Force to evaluate necessary changes to the Building Code

* Initiative begun by the City, including planning or advocacy stages

Extended version of Progress updates and full list of acronyms available online at www.nyc.gov/PlaNYC2030

Next Steps

The year since Mayor Bloomberg issued PlaNYC has been a busy one. It has involved the effort of more than 20 City agencies; the help of our Sustainability Advisory Board; partners and supporters from all across New York City and indeed from around the world; and close cooperation with the City Council and other elected officials.

Working together, we have achieved great things.

We have completed rezonings to facilitate more transit-oriented development; we have planted 33,501 trees to date, and have begun work on our new regional parks; we have started to move our taxis and black cars—some 23,000 vehicles—to fuel-efficient vehicles; we have begun reorienting the city's streets to encourage bicycling. And we have engaged all of New York City in the most significant discussion about transportation in a generation.

Most of all, we have changed the way many New Yorkers think about their city, its environment—and our future.

Our challenge going forward is to maintain this level of effort. Long-term plans, by definition, take years of consistent effort to complete. And this challenge is magnified by the many things that distract us from the long-term view: elections, recessions, the crises of the moment.

So we make both a short-term and long-term commitment. Over the next year, we will take several big steps, with our 2009 milestones as key targets. We will turn our particular focus toward energy and buildings—the realm that is responsible for nearly 80 percent of our greenhouse gas footprint and over \$13 billion in annual costs citywide. To do this, we will advocate for regulations requiring

buildings to benchmark their energy use, so that the market can put value on those that are more efficient; we will push harder for fast action from Albany to provide the millions of dollars in incentives needed to get owners to retrofit their buildings; and we will work toward rules to require new buildings to be green and existing buildings to upgrade. We will focus even more on attacking sources of air pollution across the city. We will complete our sustainable stormwater management plan and begin its implementation. And we will continue to work for a more sustainable—and more extensive—transportation system, including fully funding the Metropolitan Transit Authority.

On Earth Day 2008, this Administration and this City Council will have 618 days remaining in office. So, we also must turn our attention to ensuring that sustainability remains a focus of City government beyond our tenure. We will work with the City Council to pass a law making the Mayor's Office of Long-Term Planning and Sustainability a permanent part of City government, and to require periodic updates to PlaNYC to account for changing trends and priorities. We will begin annual reporting of our greenhouse gas footprint later this year, in accordance with Local Law 55, with even greater precision and detail than in our first carbon inventory released last year. And we will develop a set of sustainability indicators for New York City, to ensure that New Yorkers will easily be able to track—in as quantitative a way as possible—our progress toward key goals.

In 2030, will you still love New York? Ensuring that the answer is “yes” will require us to face up to the challenges of the future. Not tomorrow. Not when it's too late. But now.

It is our turn. It is our city.

The development of PlaNYC, and the implementation of its initiatives, has been an enormous collaborative effort on the part of government agencies, civic organizations, academic experts, community groups, consultants, interns, representatives of organized labor and the private sector, elected officials, and thousands of New Yorkers. Although it is impossible to acknowledge each individually, we wish to thank all those who have contributed their ideas, their time, their expertise, and above all, their passion for New York City.



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