The City of New York
Executive Budget
Fiscal Year 2027

Zohran Kwame Mamdani, Mayor

Mayor's Office of Management and Budget
Sherif Soliman, Director

New York City Climate Budgeting

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To my fellow New Yorkers:

Addressing climate change, lowering costs and making life easier for working people are not separate commitments—they are one and the same. Climate Budgeting is about recognizing that the fight for affordability and the fight for a livable future are inseparable. I am proud to share the investments that our City is making to build a New York that is more affordable, more sustainable, and more resilient in the face of the climate crisis.

And even amid significant fiscal challenges, climate change has remained a core priority of this administration.

The climate crisis deepens the affordability crisis that working New Yorkers already face every day. Rising utility bills—driven by increasingly extreme summers and winters—force families to pay more simply to stay safe in their own homes. Rising sea levels and inland flooding threaten public safety, disrupt essential services and cause devastating damage to homes and neighborhoods. Heat stress and air pollution continue to endanger the health of New Yorkers across the five boroughs.

Our administration is tackling rising energy costs at their source by pushing utilities to constrain costs instead of passing them on to working families. At the same time, we are making smart investments that lower emissions, reduce utility bills and improve quality of life.

That includes installing electric heat pumps to replace failing boilers across NYCHA developments and launching a new Condo and Co-Op Hub through the New York City Accelerator program to help low- and middle-income homeowners decarbonize their homes. This year, the City will also begin purchasing 100% renewable electricity to power its government operations—a major step that will help deliver nearly 20% of New York City's total electricity consumption from clean hydropower while reducing dependence on dirty fossil fuels.

At the same time, we are protecting public spaces, infrastructure and neighborhoods from the growing risks of flooding and extreme heat through major coastal resiliency projects and the implementation of Climate Resiliency Design Guidelines.

Because climate change does not affect every New Yorker equally, our response prioritizes the communities that are disproportionately affected by the crisis—from targeted cloudburst investments in flood-prone neighborhoods to the City's Urban Forest Plan to expand tree canopy in historically underserved communities.

I am proud to lead a city that strives every day to live up to its values. Climate Budgeting creates accountability for our climate goals through a transparent, metrics-driven process that allows New Yorkers to see both our progress and the challenges ahead. The report reflects those values in action.

Zohran Kwame Mamdani
Mayor

Dear New Yorkers:

I am proud to publish the City's third annual Climate Budgeting report, continuing New York City's global leadership in making strategic investments that reduce emissions, improve air quality and strengthen resilience against flooding and extreme heat.

The Office of Management and Budget (OMB) is uniquely positioned to help head this work because of its ability to coordinate across agencies and break down silos that too often limit government's capacity to respond to crises at the scale they demand. By ensuring that budget and policy decisions are evaluated through the lens of meeting our climate goals, we are turning ambitious plans into measurable progress.

The connection between climate action and fiscal responsibility is undeniable, and the fiscal challenges cannot become an excuse for inaction.

Extreme weather continues to drive up the costs of maintaining aging infrastructure while the growing frequency of floods and heat waves places additional strain on City services and resources. Investments that reduce emissions and strengthen resilience are not optional—they are essential to protecting New Yorkers and preventing far greater costs in the future.

This publication reflects ongoing work that will continue evolving as new analysis, changing conditions and lessons learned shape our approach. We remain committed to transparency about both our progress and the challenges ahead: where investments are advancing our goals, where gaps remain and what additional action is necessary for New York City meets its climate targets.

Advancing our climate agenda responsibly means building a budget that serves all New Yorkers—protecting working families from rising costs while making strategic investments in the infrastructure, policies and programs that will secure a livable and affordable city for generations to come.

Sherif Soliman
Director, New York City Mayor's Office of Management and Budget

EXECUTIVE SUMMARY

The impacts of climate change—such as hotter summers, stronger storms, and increased flooding—pose an urgent and growing threat to the health, safety, housing, and livelihoods of New Yorkers. **Climate Budgeting is a process to identify and advance cost-effective strategies to achieve net-zero emissions and strengthen New York City's resilience to climate hazards.**

Led by the **Mayor's Office of Management and Budget** in collaboration with the **Mayor's Office of Climate and Environmental Justice** and partners across city agencies, **Climate Budgeting** uses the annual budget cycle to regularly assess progress toward climate goals and proactively advance strategic policies, investments, and opportunities to align spending with emissions-reduction and resiliency objectives.

Affordability must be a central consideration in climate planning and decision-making to ensure that actions benefit New Yorkers in their daily lives, especially those in Environmental Justice communities where residents are disproportionately affected by both climate change and increasing costs of living. Rising temperatures pose a risk for households that cannot afford air conditioning, while increasing flood risk drives up insurance, repair, and housing costs for impacted residents.

Meeting the city's emissions targets will require significant upfront investments for building upgrades, as well as expanding renewable and reliable energy to ensure grid stability. Prioritizing affordability will help build a sustainable and climate-resilient future that is safe, accessible, and equitable for all.

NEW INVESTMENTS & POLICIES SINCE FISCAL YEAR (FY) 2026 EXECUTIVE PLAN

Accelerating decarbonization

$38.4 million will provide **all-electric heating and cooling** at the New York City Housing Authority's Beach 41st Street development.

$306.9 million in capital funding and annual expense funding starting with **$16.9 million** in FY 2027 will expand the city's **bus lanes**, while **$75.4 million** in capital funding and **$11.2 million** in expense funding starting in FY 2027 will support new **bike lanes**.

$55.1 million for renovation of MADE Bush Terminal will include electrification, solar, electric vehicle charging, and flood resiliency.

$26.4 million for the reconstruction of the **Harper Street and Hamilton Avenue Asphalt Plant docks** will help reduce emissions by shifting shipments from trucks to barges.

Local Law 97 implementation will be further enabled by **additional decarbonization trade staff** and **$343,000 for a reporting platform** in FY 2027.

$28.9 million to increase **electric vehicle purchases** will help the city meet its 2035 fleet electrification goal.

Ensuring energy affordability

A **new NYC Accelerator Co-op and Condo Hub**, supported by **$1.8 million** per year, will provide specialized assistance to low- and middle-income buildings.

A **$350,000 pilot program** will, for the first time, support direct community participation in regulatory proceedings that determine energy costs for New Yorkers.

New city regulatory proceeding interventions propose lowering utility profits to **promote affordable energy and lower energy bills** by 2 to 4 percent for New Yorkers.

Expanding flood protection

Expanded funding for the **Bureau of Coastal Resilience,** starting with **$10.6 million** in FY 2027, will establish critical in-house capacity to manage the city's growing portfolio of shoreline protection assets and strengthen coastal resilience planning.

$95.0 million for a **cloudburst hub** will help prevent dangerous flooding during intense rainfall events in Homecrest, Brooklyn. A **$658.5 million** addition to upgrade the **Coney Island Boardwalk** will use resilient materials and elevates the southern edge.

The city's **Resilient Acquisitions Framework** establishes a voluntary program for homeowners in high-flood-risk areas to sell their properties and relocate, with communities shaping end uses that enhance neighborhood-level flood protection.

$3.2 million to repair and elevate the **Utopia Parkway seawall** in Queens will enhance protection against rising tides.

A **new stormwater building code study** will develop provisions to mitigate flood risk in new construction.

Promoting heat safety

Local Law 23 of 2026 requires building owners to provide cooling to tenants, addressing indoor heat vulnerability as climate change worsens.

The city's **first Urban Forest Plan** outlines strategies to expand tree canopy to 30 percent citywide, with a focus on Environmental Justice areas, and will advance community engagement and educational programs.

Advancing long-term climate planning

In 2027, the city will release a climate plan to equitably and affordably deliver on its climate goals, enabled by **$1.6 million** in FY 2027 and $1 million each year after.

Progress Towards Net-Zero Emissions

New York City has made substantial progress in reducing greenhouse gas emissions over the past two decades. However, as is the case in most cities, significant challenges remain. Changes to statewide electricity planning have significantly slowed electric grid decarbonization, which is fundamental to achieving the city's goal of net-zero emissions by 2050. Setbacks include the cancelation of the Clean Path New York transmission line and the federal cancellation of multiple large-scale offshore wind projects. At the same time, the needs of an aging and growing energy distribution system are contributing to record-high electricity costs for consumers, increasing financial burdens on families and businesses, and hampering efforts to electrify both buildings and transportation.

In light of these challenges, New York City's continued investments in decarbonization and commitment to meaningful policies are all the more critical to reaching the city's goals. Decarbonizing buildings—which account for the largest source of emissions citywide—is central to this effort. New York City's buildings are more energy efficient today than ever before, with fuel oil usage down over 70 percent since 2005 and natural gas usage at its lowest in the last decade. Local Law 97 of 2019, which requires most buildings over 25,000 square feet to meet greenhouse gas emissions limits beginning in 2024, with stricter limits coming into effect between 2030 and 2050, is the most impactful climate action within city control.

To achieve the city's goals, more work will be needed to realize the expansion of renewable energy, energy storage, and electricity transmission upgrades, and implement energy efficiency and decarbonization measures across all buildings—including affordable housing and small buildings. The city will also need to further encourage New Yorkers to shift from private cars to public transit and other modes of active transportation, while also supporting the adoption of electric vehicles.

Progress Towards Climate Resiliency

New York City has made significant investments to protect its residents from flooding and extreme heat, which are projected to become more intense and frequent in coming years. To reduce risks to its buildings and infrastructure, the city is embedding resiliency into its capital investments through the Climate Resiliency Design Guidelines. Beginning in 2027, all applicable capital projects will be required to evaluate their exposure to future flooding, extreme heat, and precipitation and incorporate protective design measures that address these risks.

The city is also undertaking major infrastructure projects to manage stormwater and protect coastal areas from higher tides and storm surges. However, many locations remain at risk, and it will take decades and substantial resources to implement infrastructure improvements in all at-risk areas. The city is studying location-specific standards for stormwater and shoreline management, which will inform long-term, comprehensive plans. Implementing these plans will require addressing major resource needs for capital construction and ongoing operations and maintenance costs.

Extreme heat causes more deaths in New York City each year than any other climate-related hazard, and the city is implementing strategies to protect New Yorkers both outdoors and in their homes. While Local Law 23 of 2026 will expand air conditioning access, energy affordability remains a significant barrier to cooling for many households. The city's new Urban Forest Plan aims to combat rising temperatures through expanded tree canopy.

Currently, canopy coverage is growing on public land but declining on lower-density one- and two-family residential properties, slowing overall progress. Protecting all New Yorkers from rising temperatures will require canopy preservation, including on private property, and equitable access to cooling indoors.

INVESTMENTS IN THE FIVE-YEAR CAPITAL PLAN (FY 2026-2030)

Net-Zero Emissions:

- $4.7 billion in decarbonization investments, including school and city-owned-building electrification
- $24.9 billion for net-zero-emissions-compatible projects such as mass transit, bike and bus networks, and energy efficiency upgrades
- $2.5 billion for projects that improve the efficiency of fossil fuel systems, reducing emissions in the near-term but locking in polluting infrastructure
- $2.1 billion for projects installing fossil fuel systems that face barriers to electrification, which the city will address by developing a fossil fuel phase-out plan

Resiliency to Heat and Flooding:

- $7.5 billion in projects that address flood risk and $1 billion in projects that address extreme heat risk, inclusive of $486 million for projects that address both
- $41.3 billion for projects with elements that contribute to flood resiliency, heat resiliency, or both
- $208 million for projects in heat- or flood-vulnerable areas representing opportunities to strengthen heat resiliency, flood resiliency, or both

In April 2027, the Mamdani administration will release its long-term climate action plan. The Climate Budgeting process will support the development and implementation of a strong plan that advances the city's climate goals by clearly showing what has been achieved so far, identifying remaining gaps, and translating climate planning into concrete budget decisions that drive measurable progress.

As New York City advances this work, it will continue to demonstrate global leadership, provide a model for other cities, and leverage Climate Budgeting to turn climate ambitions into actionable investments and policies that promote affordability and a better quality of life for all New Yorkers.

SOURCE: NYC DEP

1. Process & New Investments

New climate-related funding across agency capital and expense budgets and new city climate policies since the Climate Budgeting publication in May 2025 illustrate how integrating climate considerations into budget decisions enables New York City to pursue its ambitious climate goals while managing fiscal constraints and advancing multiple priorities—emissions reductions, climate resiliency, affordability, and equity.

CLIMATE BUDGETING PROCESS

New York City's Climate Budgeting process advances cost-effective strategies to achieve two critical goals: **reaching net-zero greenhouse gas emissions citywide by 2050 and protecting the city and its residents from climate threats, including extreme heat and flooding.** As the city works to reach these goals, it will prioritize affordability and equity to ensure climate investments improve New Yorkers' quality of life.

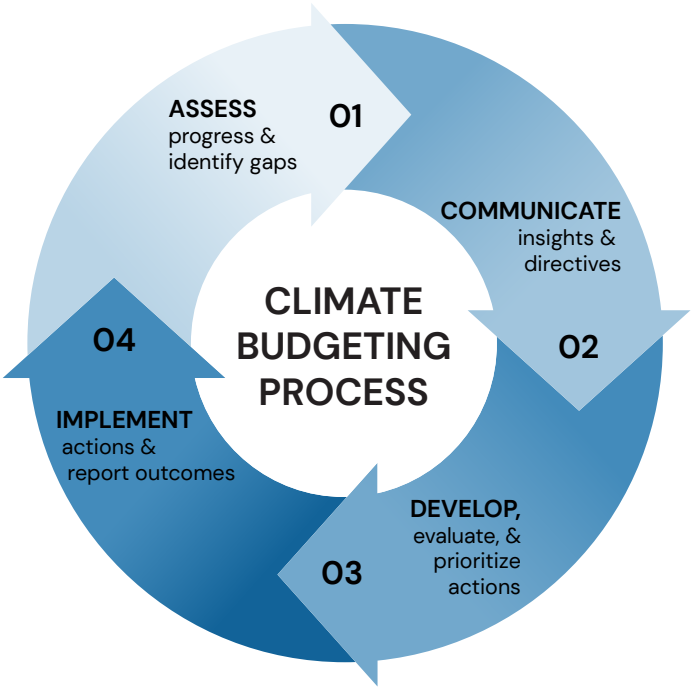
How the Climate Budgeting process works

The city assesses progress toward its climate goals, identifies priorities, and provides guidance ahead of the annual budget cycle. Throughout the year, the Mayor's Office of Management and Budget (OMB), the Mayor's Office of Climate and Environmental Justice (MOCEJ), and agencies work together to develop strategic climate actions for expense and capital funding.

Proposals are evaluated to prioritize the most impactful and cost-effective options. The city evaluates barriers to pursuing climate-aligned projects, identifies feasible solutions that advance climate goals and operational needs, and advances high-impact actions within its fiscal constraints.

Annual updates on the city's progress, along with assessments of whether planned investments align with climate goals, help identify high-impact opportunities and reveal gaps where additional action is needed in the years ahead. These updates are published alongside new city policies and capital and expense investments, as part of the city's Executive Budget.

This collaborative process ensures that every budget cycle moves New York City closer to a resilient, net-zero-emissions future through coordinated action and data-driven decision making across city government.



Read more about Climate Budgeting here:

NEW INVESTMENTS & POLICIES

Laying the Groundwork for Net-Zero Emissions

Accelerating decarbonization

The city is making coordinated investments in public housing, private buildings, city facilities, and transportation to accelerate progress toward reaching net-zero emissions. A **$38.4 million investment to install heat pumps and energy upgrades at the New York Housing Authority's (NYCHA) Beach 41st Street** development in the Rockaways will deliver reliable, clean heating and cooling to residents while reducing emissions. **$55.1 million** for a renovation of **MADE Bush Terminal Building C** will include electrification, solar panels, electric vehicle (EV) charging, and flood resiliency to the historic waterfront building.

$306.9 million in capital funding and new annual expense funding starting with **$16.9 million** in Fiscal Year (FY) 2027 will help the city deliver on its commitment to provide **faster and more frequent buses**. More buses in service and bus lane expansion will enable more New Yorkers to shift away from car-oriented travel and reduce emissions from bus idling. **$75.4 million** in capital funding and new annual expense funding starting with **$11.2 million** in FY 2027 will support **bike lane buildout**, data collection, and maintenance, promoting greater access to sustainable transportation. An **additional $28.9 million will increase medium-duty EV purchases** to help the city meet its mandate (Local Law 140 of 2023) to transition to a 100 percent electric light- and medium-duty vehicle fleet by 2035.[1] Transportation decarbonization will also be driven by mode-shift to waterways.

$26.4 million for the reconstruction of the **Harper Street and Hamilton Avenue Asphalt Plant Docks** will help the Department of Transportation (DOT) to shift deliveries of aggregate materials—the sand and stone used to manufacture asphalt for city streets—from trucks to barges for the first time. This mode shift is expected to reduce greenhouse gas emissions by moving freight off of congested city streets and onto waterways. This project also incorporates wet floodproofing design so the structure can withstand coastal flood events without significant damage.

Decarbonization trade staff at the Department of Citywide Administrative Services (DCAS) will help fill a critical gap in completing city-government building electrification, while the expanded **Department of Buildings (DOB) Building Energy Analysis Manager platform** will enable Local Law 97 enforcement by supporting a platform to aggregate building energy use and emissions data and manage compliance reporting from building owners—ensuring the city can effectively track progress toward its most impactful emissions reduction strategy.

Ensuring energy affordability

Energy affordability is critical to achieving a just transition to net-zero emissions. **$1.8 million per year to expand the NYC Accelerator program** will provide free support to condo and co-op owners for decarbonization planning and compliance with Local Law 97.[2] The city has also expanded its contract with the New York City Energy Efficiency Corporation to administer the Commercial Property Assessed Clean Energy loan program, which helps building owners finance upgrades to comply with Local Law 97.

This expansion also supports the Affordable Housing Reinvestment Fund, which enables building owners to purchase compliance offsets that directly fund deep electrification retrofits in affordable housing, and the Department of Housing Preservation and Development's (HPD) pre-development loans for affordable housing preservation.[3] While the state budget has not been finalized at the time of publishing, the Governor and State Senate's proposed extension of the J-51 Reform tax abatement through 2036 would provide tax benefits for eligible energy efficiency and electrification retrofits in condos and co-ops. This support would help hundreds of buildings reduce their emissions, preserve housing affordability, and lower costs for low- and middle-income condo and co-op owners.

NYC ACCELERATOR CO-OP AND CONDO HUB

The establishment of the NYC Accelerator Co-op and Condo Hub will provide specialized support to over 1,000 low- and middle-income cooperative buildings through engagement, decarbonization planning, and connecting with existing incentives and financing. The Co-op and Condo Hub builds on the existing Accelerator program, while addressing challenges specific to these building types. For example, co-op buildings are governed by member-owners who often lack building science expertise and need assistance to implement cost-effective energy efficiency and electrification upgrades. The Hub can provide case managers to attend board meetings, assist with building-specific decarbonization planning, and connect buildings to financing resources, helping co-ops to navigate Local Law 97 compliance while managing costs for residents.

The city also promotes affordable energy rates through utility rate cases, the lengthy legal proceedings with New York State's Public Service Commission that determine energy delivery rates and planned utility investments.[4] The city regularly submits testimony on behalf of ratepayers by advocating for appropriate investments and policies.

The city is now advocating for lower utility profit rates after assessing that these rates are roughly 50 percent higher than necessary to attract private investment. City support for a **Utility Rate Case Advocacy Pilot** program will, for the first time, fund direct community representation in legal proceedings to advocate for lower consumer utility rates. Non-profit organizations representing disadvantaged communities and Environmental Justice areas will receive support to participate in upcoming rate case proceedings. Impacted communities have often lacked the resources to meaningfully engage in the proceedings.

CLEAN HEAT FOR ALL

NYCHA's Clean Heat for All (CH4A) program aims to install 30,000 window-based heat pumps at 10,000 NYCHA apartments by 2029.[12] NYCHA's new 2026 Sustainability Agenda expanded its goal to 20,000 apartments by 2031, and outlines its next steps to achieve this goal.[13] It plans to install heat pumps at sites including Woodside Houses, Saint Nicholas Houses, Claremont Consolidated, Bay View Houses Campos Plaza II, and Beach 41st Street House, which received a new $38.4 million investment to install window heat pumps in all 712 apartments.[14] Window heat pumps reduce greenhouse gas emissions, provide heating, cooling, and increased comfort for tenants, and lower energy costs. Scaling this program will help advance clean electrification and life-saving access to cooling more quickly, affordably, and equitably across the city.

Strengthening Resiliency Infrastructure

Expanding flood protection

Expanded funding for the **Bureau of Coastal Resilience, starting with $10.6 million in FY 2027**, will establish critical in-house capacity to manage the city's growing portfolio of shoreline protection assets. This funding will enable the development of coordinated citywide coastal flood planning for infrastructure needs in coming decades. Funding to advance the **FiDi-Seaport Resiliency Environmental Impact Study** has the potential to unlock up to $3.6 billion in federal funding to relocate and fortify ferry terminals, while city and federal funding for shoreline protection at **Coney Island Creek** will build resiliency against sea level rise and storm surges. A **Stormwater Building Code Study** will put forward recommendations to mitigate flood risk in new construction.

Cloudburst management uses a combination of grey infrastructure, such as sewers and underground storage tanks, and green infrastructure, such as trees and rain gardens, to absorb, store, and transfer stormwater and minimize flooding from intense rainfall events. A **$95.0 million investment** will fund the construction of a **cloudburst hub to alleviate flooding in Homecrest, Brooklyn**, one of the over 80 flood priority areas that DEP has identified for flooding interventions.[5] The project will include porous pavement and subsurface storage to absorb and store rainwater, creating more capacity in the local sewer system, and preventing flooding during intense rainfall. By reducing strain on the sewer system, cloudburst management can minimize damage to property and infrastructure while also protecting residents from dangerous flooding.

The city is also investing in major coastal protection projects needed for comprehensive flood protection. A **$658.5 million upgrade to the 100-year-old Coney Island Boardwalk** will make it more resilient and increase protection for the Amusement District and the neighboring residential area, which is an Environmental Justice area. The reconstruction will use resilient materials and elevate much of the southern edge of the boardwalk to address flooding, with construction phased to minimize disruption to public access. A **$3.2 million investment for Utopia Parkway** in Queens will repair a deteriorating seawall and elevate it an additional two feet, protecting the waterfront, adjacent road, and upland neighborhood from increasing tides.

JEWEL STREETS RESILIENT ACQUISITIONS PILOT

The Resilient Acquisitions program is currently being piloted in Brooklyn's Jewel Streets neighborhood, which experienced significant flooding during Hurricane Ida and continues to face frequent flooding during moderate and extreme rainfall events due to challenging topographic conditions and a lack of drainage infrastructure.[15] The land's end uses—ranging from resilient infrastructure like stormwater systems to natural spaces such as parks and community gardens and, in some cases, new housing—will be determined through community engagement. By integrating community input into end-use planning and prioritizing voluntary, resident-centered solutions, the program addresses neighborhood priorities while helping to achieve the city's broader flood resiliency goals.

FIG. 1.1 | INVESTMENTS AND REALLOCATIONS SINCE FY 2026 EXECUTIVE PLAN

Program	Purpose	Funding (in Millions)
CAPITAL		**FY 2026-2030**
Coney Island Boardwalk	Reconstruct the Coney Island Boardwalk, making it more resilient.	$658.5
Bus Lane Expansion	Expand citywide bus lane infrastructure.	$306.9
Homecrest Cloudburst Hub	Absorb, store, and transfer stormwater to minimize flooding from intense rainfall events in Homecrest, Brooklyn.	$95.0
Bike Lane Expansion	Build additional miles of protected bike lanes citywide.	$75.4
Decarbonization and Flood Resiliency at Bush Terminal	Renovate MADE Bush Terminal with electrification, solar panels, electric vehicle charging, and flood resiliency upgrades.	$55.1
Clean Heating and Cooling at NYCHA	Install heat pumps and other energy upgrades to deliver reliable, clean heating and cooling to apartments at NYCHA's Beach 41st Street Houses.	$38.4
Fleet Electrification	Increase the city's medium duty electric vehicle purchases.	$28.9
Asphalt Plant Dock Reconstruction	Reconstruct docks at city asphalt plants to shift to marine deliveries, reducing greenhouse gas emissions by moving freight trucks off streets.	$26.4
Utopia Parkway Seawall	Repair and elevate the deteriorating seawall, ensuring continued protection and adding resilience to rising tidal projections.	$3.2
EXPENSE		**FY 2027**
Bus Lane Expansion	Expand citywide bus lane infrastructure.	$16.9
Bike Lane Expansion	Build additional miles of protected bike lanes citywide.	$11.2
Bureau of Coastal Resilience (BCR)	Expand capacity at BCR, which manages the portfolio of coastal protection assets and citywide planning for coastal flood risk.	$10.6
FiDi-Seaport Resiliency	Perform environmental review to advance the Financial District and Seaport Climate Resilience Master Plan.	$4.5
Building Owner Assistance for Local Law 97	Create a new Co-Op and Condo Hub within the Accelerator program to provide technical assistance to low- and moderate-income buildings, including financial planning, and building-specific services.	$1.8
Climate Planning	Develop a citywide climate plan, adaptation plan, and energy plan.	$1.6
Utility Rate Case Advocacy Pilot	Provide grants to community organizations to meaningfully participate in state legal proceedings that set consumer utility rates.	$0.4
Building Energy Reporting	Aggregate benchmarking data and support Local Law 97 compliance.	$0.3
Coney Island Creek Shoreline Protection	Raise the shoreline to protect Coney Island from flooding due to both sea level rise and storm surges.	$0.1
Stormwater Building Code Study	Develop building code provisions to mitigate stormwater flood risk, per Local Law 12 of 2026.	$0.1

Figure Source: NYC OMB

New York City also continues to pursue grant funding to advance climate resiliency whenever possible. The state's Water Quality Improvement Project will support **green infrastructure projects** at NYCHA's Sheepshead Bay development (**$8.0 million**) and along medians on Neptune and Bayview Avenues (**$2.0 million)** in Brooklyn.[6] The New York State Climate Smart Communities program will help **floodproof a critical food distribution facility at Hunts Point** in the Bronx (**$2.0 million**), as well as support **DOT in implementing cooling features ($1.6 million)** in neighborhoods with high heat vulnerability, which are often Disadvantaged Communities and Environmental Justice Areas.[7]

Shade structures, misting features, and drinking fountains help reduce heat exposure in the summer and improve neighborhood quality of life year-round. A collaboration between the Fund for Public Health in New York City and the NYC Health Department will support **pop-up cooling stations**, transportable tents with misting, shade, and drinking water, in heat-vulnerable neighborhoods.

While the city pursues a wide range of flood resiliency strategies—from large-scale coastal protection projects to targeted infrastructure interventions—some properties and neighborhoods remain difficult to protect, highlighting the need for acquisition options where flood risk is most severe. To address the vulnerability of the over 94,000 housing units in one- to four-unit residential buildings at risk of severe damage and loss of life during floods, the **Resilient Acquisitions Framework** was launched to provide residents the option to sell high-flood-risk homes to the city and relocate to safer areas.[8] Acquisition projects are advanced in specific neighborhoods when three criteria align: homeowner interest, available funding, and identified long-term uses for the land that build flood resilience and meet community needs. This framework helps communities most vulnerable to severe flooding, particularly those where alternative protection measures are limited.

Promoting heat safety

The city passed **Local Law 23 of 2026,** requiring owners of tenant-occupied buildings to provide cooling systems capable of maintaining a temperature no greater than 78 degrees Fahrenheit in sleeping rooms by June 1, 2030, **to protect tenants from extreme heat and prevent heat-related deaths.**[9] The law requires owners who control building temperatures to maintain this standard from June 15 through September 15. HPD will provide tenant notices characterizing potential rent impacts, establish rules to limit utility burdens, and offer hardship extensions where appropriate. NYCHA is also required to provide a comprehensive cooling plan by January 1, 2028, to provide cooling in sleeping rooms for at least 25 percent of covered dwelling units.

In April 2026, the city released its first **Urban Forest Plan**, a blueprint mandated by Local Law 148 of 2023 that outlines comprehensive strategies to protect and equitably expand tree canopy to achieve the city's goal of 30 percent coverage.[10] New York City's tree canopy currently covers 23 percent of the city's land area, but some communities have disproportionately less coverage. The Urban Forest Plan prioritizes distributional equity, directing resources to enable equitable expansion of a healthy urban forest, which will help keep neighborhoods cool, improve air quality, absorb stormwater, and improve quality of life for New Yorkers. The city will support implementation of the plan through community engagement and educational programs and the launch of a Tree Canopy Challenge program to incentivize tree canopy growth.

Long-Term Planning

Local Law 149 of 2025 mandates a consolidated and streamlined approach to long-term citywide climate planning.[11] **Funded by a new $1.6 million investment in FY 2027** and $1 million annually thereafter, these plans will provide a comprehensive vision for the city's climate future every four years, building out cohesive strategies to address sustainability, resilience, climate adaptation, and energy policy. The next climate plan will be released in 2027, followed by an adaptation plan in 2028, and an energy plan in 2029.

SOURCE: NYC DEP

2. Progress Toward Achieving the City's Climate Goals

New York City is committed to achieving net-zero greenhouse gas emissions by 2050 and to doing its part to support the Paris Agreement's goal of limiting global temperature rise to 1.5 degrees Celsius, while addressing increasing threats from climate hazards that endanger residents' lives, homes, and livelihoods. For both **Net-Zero Emissions** and **Climate Resiliency**, this section includes an assessment of how planned capital investments align with climate objectives and an evaluation of the city's trajectory toward its goals. It presents the progress, challenges, and opportunities shaping the city's path to a resilient, net-zero-emissions future.

NET-ZERO EMISSIONS AND AIR QUALITY

Emissions-Reduction Investments

The Climate Alignment Assessment is an evaluation tool used to provide a citywide view of how the city's capital plan is aligned with its stated climate goals. Every capital project is evaluated to determine whether it supports or meets relevant goals or standards in each of three climate priority areas: Net-Zero Emissions, Flood Resiliency, and Heat Resiliency.

The following assessment provides insight into investments that advance decarbonization or that continue reliance on fossil fuel systems. This helps the city understand where to focus its efforts on identifying cost-effective alternatives to avoid locking in fossil fuel infrastructure. Capital funding described in this section reflects citywide allocations in the Five-Year Capital Plan (FY 2026-2030)*. For more information on the funding described in this section, see: Climate Alignment Assessment in the Technical Appendix.

Investments Advancing Decarbonization

Planned capital funding over the next five years (FY 2026-2030) includes $4.7 billion for projects focused on decarbonization, to help reduce greenhouse gas emissions in line with achieving net-zero emissions by 2050. These investments, shown in Figure 2.1, include projects across multiple sectors where most or all costs support emissions reductions—such as building electrification, renewable energy, EVs and charging infrastructure, and reducing emissions from waste.

Most of these planned investments are for work in city-managed buildings, which make up the single largest source of emissions from New York City's government operations.[16] More than $4 billion is allocated to projects in facilities including schools, hospitals, recreation centers, and police precincts for upgrades to heating ventilation and air conditioning (HVAC) and mechanical systems, electrification of heat and hot water, energy efficiency upgrades such as installing efficient lighting, and energy efficiency and electrification-readiness projects like façade and insulation improvements. $2.4 billion worth of these building decarbonization projects receive some support from the DCAS Department of Energy Management (DEM), which provides dedicated funds to city agencies to support energy efficiency and emissions reduction work.[17]

Planned capital funding includes $233 million for renewable energy projects: solar panels, hydroelectric generation, offshore wind infrastructure, and other net-zero-emissions-compatible energy projects. In addition to $207 million allocated for purchasing EVs for its fleet, including a new investment of $28.9 million for medium-duty EVs, the city also plans to invest $147 million in a network of EV charging stations. This includes charging stations for city-owned vehicles as well as publicly accessible chargers for private vehicles. The capital plan also includes $136 million for projects that reduce emissions from organic material, solid waste, and wastewater treatment.

**Note that the Climate Budgeting cycle follows New York City's budget cycle, which presents a Five-Year Capital Plan and Ten-Year Capital Strategy in alternating years. This publication reflects the Five-Year Capital Plan (FY 2026-2030), while last year's May 2025 publication reflected the Ten-Year Capital Strategy (FY 2025-2035).*

FIG. 2.1 | CAPITAL INVESTMENTS IN DECARBONIZATION

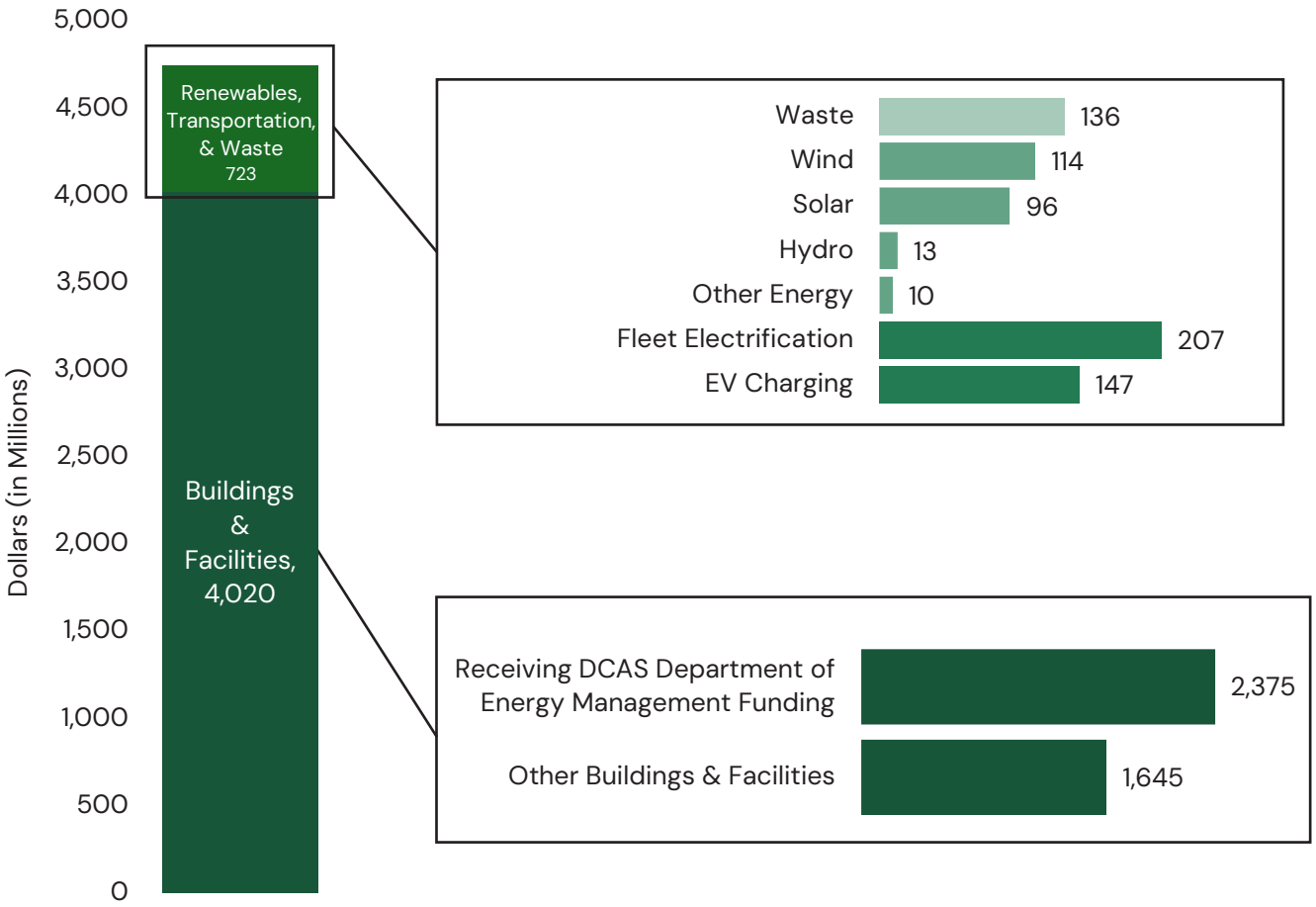


Figure Source: NYC OMB

Investments Contributing to a Net-Zero-Emissions Future

$24.9 billion is allocated for projects that contribute to long-term emissions reductions while advancing other city priorities. The city continues to support its vast public transportation network, including $634 million for bus lane infrastructure and enforcement cameras and $2.1 billion in subsidies to the Metropolitan Transportation Authority. To provide safe access for cyclists and pedestrians, the city is investing $467 million in the citywide greenways network to span the length of the Manhattan and the Harlem River Waterfront and connect pathways throughout Brooklyn and Queens.[18]

These investments are important for reshaping New York City's built environment to make net-zero-emissions-compatible transportation the preferred option for all New Yorkers. Keeping the city's facilities in a state of good repair also plays an important role in facilitating emissions reductions. Over the next five years, the city has allocated $17.9 billion to comprehensive upgrades that also decrease energy use by replacing windows and roofs, sealing building envelopes, and upgrading energy systems, and to the construction of new buildings, many of which must be all-electric under current code.[19]

Investments Reducing Emissions in the Short-Term, while Locking in Fossil Fuel Systems

While the city invests billions of dollars in decarbonization, it also continues to purchase and maintain fossil fuel-powered infrastructure that is inconsistent with its long-term net-zero emissions goal (Figure 2.2). This tension reflects the challenges of incorporating net-zero-emissions-compatible technologies into complex, often aging municipal infrastructure. It also presents an opportunity to identify where these investments persist and to begin to shift towards investing in electric, hybrid, or other alternatives where they are feasible.

Nearly $2.5 billion over the next five years is allocated to projects that replace existing fossil fuel systems with more efficient alternatives. While these measures can significantly reduce emissions in the short-term, they also lock in polluting infrastructure for decades to come. Nearly two thirds of this funding, or $1.6 billion, is for work in buildings. Examples include fuel-switching from oil to natural gas or installing high-efficiency gas-powered HVAC systems.

$281 million worth of projects with a short-term emissions benefit receive some support from DCAS DEM, which advances emissions-reducing projects across city agencies. DCAS DEM's support for these types of investments highlights how central fuel efficiency and fuel switching can be to short-term emissions reductions.

Replacing these systems with efficient, all-electric alternatives faces challenges, including the need for specialized engineering and operating expertise, as well as upgrades to electrical systems, building envelopes, and ductwork.

Aging facilities are often repaired on an emergency basis, leaving little time to plan for system conversions, and full electrification can, in some cases, be prohibitively expensive or technically impractical. These types of investments illustrate the persistent barriers to full building electrification and underscore the need for long-term planning to phase out fossil fuel systems in city buildings. The remaining $848 million for projects with a short-term emissions reduction benefit include hybrid-electric and other fuel-efficient vehicles, fuel-efficient equipment upgrades, and energy upgrades.

SPECIALIZED VEHICLES

New York City has set ambitious fleet electrification goals, requiring all agencies to transition to all-electric light- and medium-duty vehicles by 2035, and heavy-duty vehicles by 2038, as available.[23,24] The city currently operates over 5,700 EVs—nearly 20 percent of its municipal fleet—and has installed over 2,400 electric charging ports.[25,26,27]

However, agencies continue to budget for and purchase medium- and heavy-duty internal combustion engine vehicles via the city's capital plan. Many of these heavy-duty vehicles, like ambulances and sewer flusher trucks, need to be available 24/7 for deployment for the continued safety and reliability of city functions. There remain substantial challenges to electrifying these emergency units and specialized trucks, including few options available on the marketplace, coupled with the need for more fast-charging options to accommodate an expansion and significant backup-power plans in cases of major power losses.

The city also faces obstacles to electrifying other types of vehicles and equipment. For example, the city's network of ferries currently relies primarily on diesel. Efforts to reduce ferry-related emissions are advancing with a new hybrid-electric ferry to Governors Island, plans to operate an all-electric ferry to Hart Island, and other renewable diesel solutions for ferry infrastructure.

Investments Locking in Fossil Fuel Systems

Investments totaling $2.1 billion include new fossil fuel systems or extend the useful lives of existing ones, locking in polluting infrastructure without associated emissions reduction benefits (Figure 2.2). These projects, which include buildings, vehicles, and other equipment purchases, are misaligned with the city's commitment to reach net-zero emissions by 2050.

The city is allocating $1.2 billion in capital funding for new internal combustion engine vehicles, including medium- and heavy-duty fleet, and specialized vehicles such as ferries, barges, and aircraft. Few electric alternatives for these types of vehicles are currently available on the market or approved by the city for widespread emergency use.

As an interim step to reduce emissions from these hard-to-electrify vehicles, the city has successfully transitioned its entire municipal heavy-duty and off-road fleet from fossil diesel to renewable diesel.[20]

The city continues to procure electric light-duty vehicles primarily through its expense budget. For more information on the transition to an all-electric fleet, see *Specialized Vehicles*. Spending on projects with new fossil fuel infrastructure in buildings and facilities, including emergency backup generators, new constructions with gas service, and the installation or replacement of fossil-fuel-powered HVAC systems, totals $689 million. While many newly constructed buildings are required to be all-electric under current code, specialized facilities such as hospitals, waste processing facilities, and sites with emergency applications are exempt.[21]

FIG. 2.2 | CAPITAL INVESTMENTS WITH FOSSIL FUELS

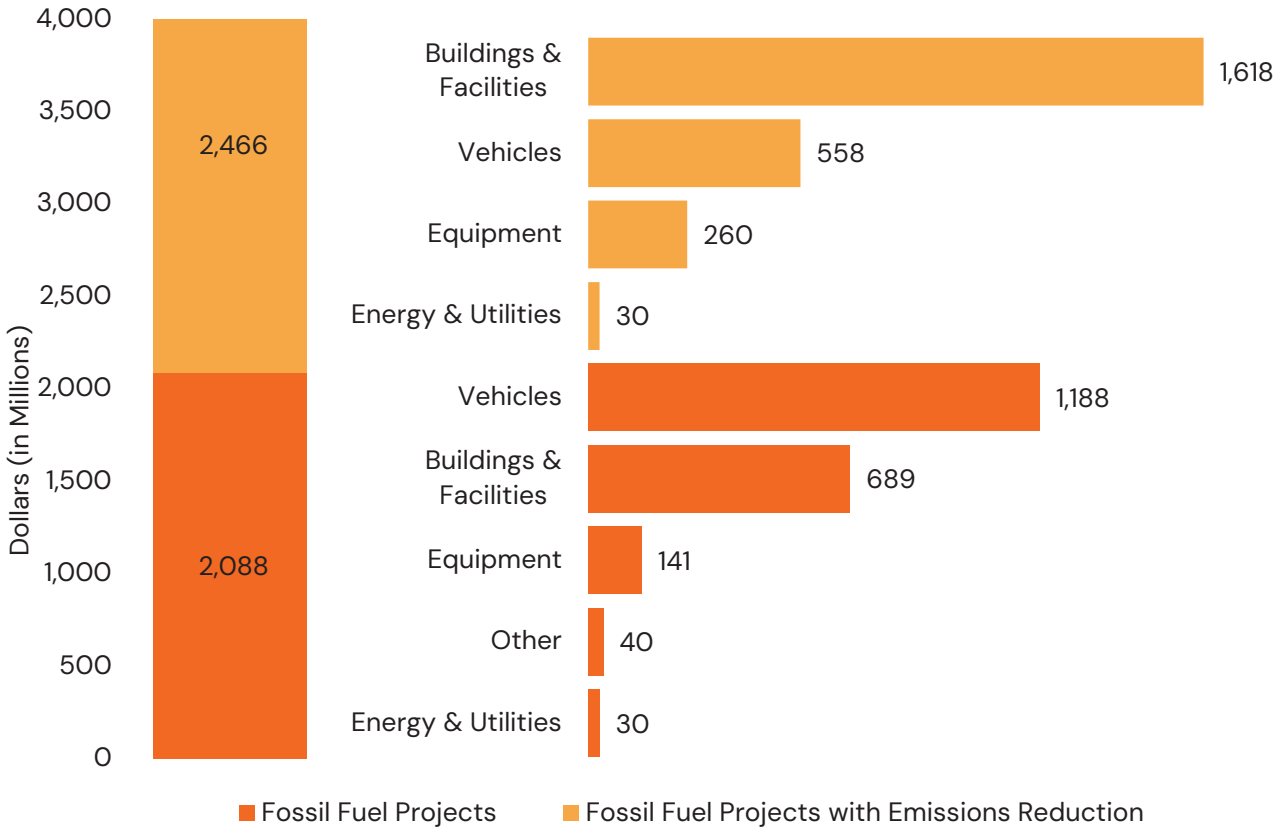


Figure Source: NYC OMB

The city has allocated $141 million for equipment that relies on diesel, gas, or biofuel. Most of this funding is for emergency backup power essential to protecting the health and safety of New Yorkers, especially during extreme weather events. It also presents a decarbonization challenge, with few electric options currently available at scale. An additional $70 million is allocated for projects that prolong the use of fossil fuel-related infrastructure, such as new parking lots and utility-scale energy projects.

These investments highlight existing technological barriers to decarbonization, while also pointing to opportunities for the city to assess where net-zero-emissions-compatible alternatives can be implemented without compromising safety.

Environmental and Social Benefits

Planned capital funding through FY 2030 includes $62.4 billion, or 53 percent of total planned funding, for projects that contribute to at least one of the environmental and social benefits highlighted in Figure 2.3. Environmental and social benefits align with issue areas identified in the Environmental Justice NYC Report, which assesses environmental justice issues in New York City, allowing the city to track spending more holistically. For example, a project to enhance bus or bike lane infrastructure has the added benefit of improving air quality as more New Yorkers use alternative forms of transportation.

FIG. 2.3 | CAPITAL INVESTMENTS WITH ENVIRONMENTAL AND SOCIAL BENEFITS

Benefits	Project Criteria *Projects that support…*	FY 2026-2030 (in Millions)
Access to Resources	Access to public spaces and natural areas like parks, green roofs, playgrounds, and more.	$11,769.4
Access to Safe & Healthy Housing	Access to affordable housing for New Yorkers.	$22,038.1
Air Quality	Reducing indoor and outdoor air pollution through large-scale tree planting and electrification initiatives.	$17,291.5
Water Quality	Sewers, wastewater management, and improvement to waterways like green infrastructure, wetland restoration.	$22,150.8
Reduced Exposure to Climate Change	Resiliency to long-term impacts of flood or heat risk including coastal protections and public pools.	$33,553.2
Reduced Exposure to Hazardous Materials	Reducing exposure to indoor and outdoor hazardous materials through environmental remediation.	$1,809.4
Circular Economy	Waste reduction and beneficial reuse through composting, or gas-to-grid initiatives.	$848.8

Figure Source: NYC OMB

Investments in decarbonization that reduce fossil fuel combustion also reduce New Yorkers' exposure to harmful air pollutants and improve health outcomes. Capital allocations for Bluebelts, wetlands, community gardens, and other nature-based infrastructure strengthen resiliency and have the added benefit of increasing New Yorkers' access to public spaces and natural areas, while also improving local air quality.[22]

Even projects with adverse climate impacts, such as new fossil fuel infrastructure, may provide environmental and social benefits by, for example, supplying critical facilities with emergency power.

EXPENSE HIGHLIGHTS

Efforts to reduce emissions span budgets and initiatives across agencies. For example, the city has committed to purchasing renewable energy certificates to power New York City government operations with 100 percent clean and renewable electricity. DCAS DEM funds energy personnel and trade staff across agencies and implements Local Law 97's requirements for city government operations by centralizing emissions reduction efforts across city facilities, and the DOB Bureau of Sustainability is implementing Local Law 97 requirements for large privately owned buildings. The city also purchases light-duty EVs for its fleet, installs EV charging stations, and advances programs to support alternative transportation methods. Curbside pickup of organic waste diverts this material from landfills towards beneficial reuse, helping reduce emissions.

In many cases, these efforts are embedded within agency operations through a continued commitment to integrate decarbonization practices, and there is not a distinct budget for emissions reductions within agency budgets. Therefore, the amounts in Figure 2.4 do not represent all city expenditures on emissions reductions but rather highlight major projects and programs.

FIG. 2.4 | EXPENSE BUDGET HIGHLIGHTS: EMISSIONS

Emissions Source	Example Investments	FY 2027 Executive Budget (in Millions)
Buildings & Facilities	The DOB Bureau of Sustainability, DCAS Division of Energy Management, and programs to provide decarbonization assistance to building owners.	$147.1
Energy	Funding to purchase 100 percent renewable energy for city operations.	$98.0
Transportation	Electric vehicles and charging infrastructure, renewable diesel for city fleet, and the expansion of micromobility and bus networks.	$66.7
Waste	Funding for organic material collection and processing, which reduces emissions from waste.	$42.9

Figure Source: NYC OMB

New York City Emissions Forecasts

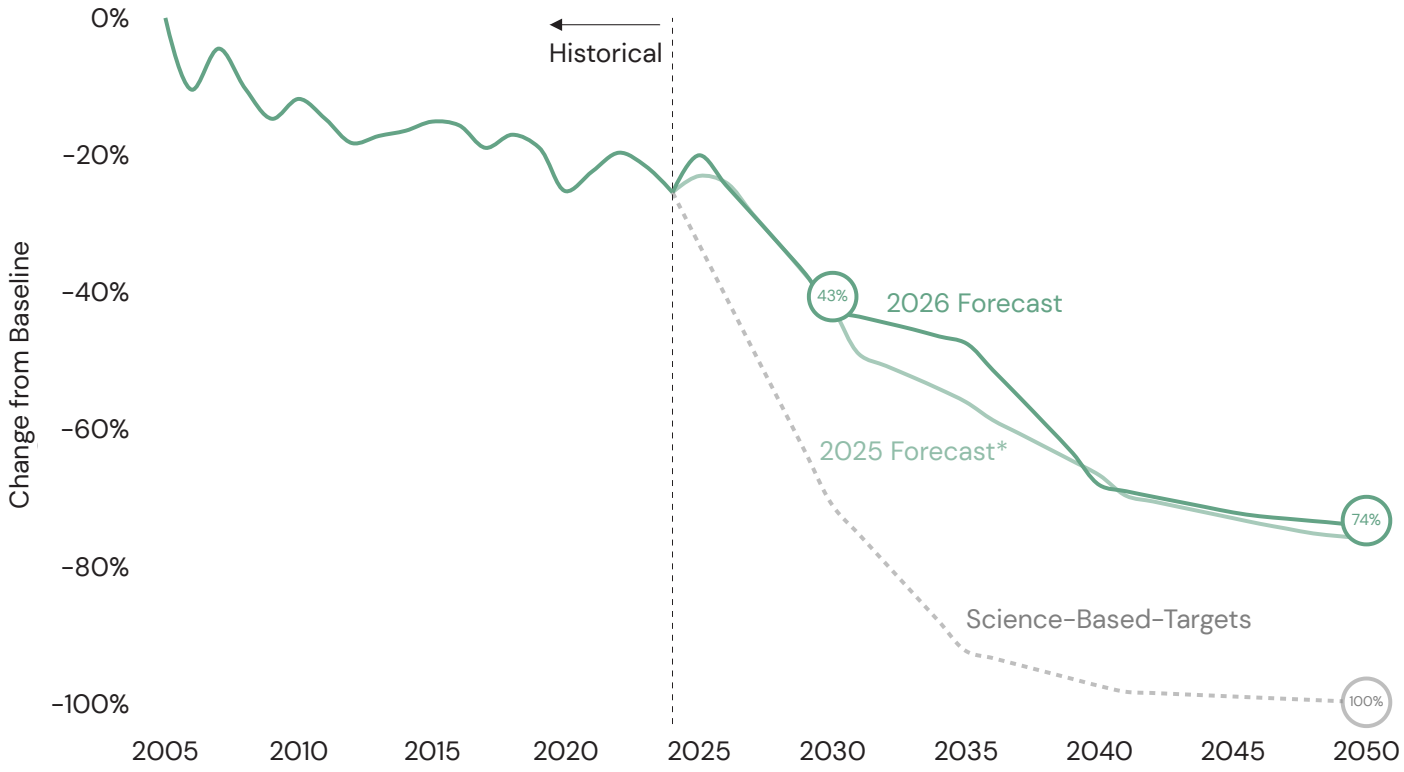
Achieving net-zero greenhouse gas emissions in New York City by 2050 requires coordination across all sectors and levels of government. Buildings—the largest source of citywide emissions—need to reduce emissions by implementing energy efficiency measures and replacing oil and gas heating with electric heat pumps and all-electric appliances. Vehicles must transition from fossil fuels to electric models, and transportation policies will need to support public transit and active transportation as alternatives to private vehicle use. The state must meet its mandate to provide 100 percent emissions-free electricity statewide for the city to achieve its emissions target and fully realize the benefits of these investments. Together, these changes require long-term planning, sustained progress over decades, and policy coordination and support from all levels of government.

Citywide Emissions Forecast

New York City has made substantial progress toward decarbonizing its municipal operations, while also enacting policies to drive and support emissions reductions citywide. Nonetheless, neither the city government nor the city as a whole is yet on a path to eliminate fossil fuel consumption by 2050, which is a prerequisite for achieving net-zero emissions. The city's success depends in part on the decarbonization of the electric grid by 2040, as required under state law. However, recent changes in the energy landscape have slowed progress to meeting this target.

New York City is expected to reduce citywide emissions by 43 percent by 2030, and 74 percent by 2050. This represents slower progress than previously projected in the May 2025 Climate Budgeting Publication, which forecasted emissions reductions of 49 percent citywide by 2030 and 78 percent by 2050. The principal cause of this change is slower decarbonization of the electric grid serving New York City.

FIG. 2.5 | CITYWIDE EMISSIONS FORECAST



The Science-Based Targets reference line represents C40 Cities' independent assessment of 'fair-share' emissions targets for New York City to align with the Paris Agreement goal of limiting global temperature rise to 1.5 degrees Celsius
Figure Source: NYC OMB

By 2050, natural gas use is expected to generate the majority—69 percent—of remaining emissions. Landfills and diesel vehicles are projected to be the next largest sources at 12 percent and 9 percent, respectively. Fuel oil is expected to account for 5 percent of remaining emissions, while other vehicle emissions, electricity, steam, and wastewater will account for smaller shares. These findings indicate that additional action will be needed, particularly to reduce natural gas use in buildings, in order to close the gap to net-zero.

Air Quality

Air quality is closely linked to greenhouse gas emissions, as most of the air pollutants that affect human health are released by fossil fuel combustion. These air pollutants, including nitrogen oxides (NOx) and particulate matter (PM2.5), increase the risk of asthma, heart disease, and premature death.[28]

Air pollution sources within the city include oil and gas boilers and hot water heaters in buildings; tailpipe emissions from gas and diesel vehicles; and "peaker" power plants that burn fossil fuels to meet peak electricity demand. Decarbonization measures have the added benefit of reducing air pollutants and helping to address environmental justice concerns. Currently planned climate actions through 2050 could prevent about 1,330 premature deaths, 1,270 emergency department visits for asthma, and 340 respiratory and cardiovascular hospitalizations. If New York City meets its 2050 net-zero emissions target, those benefits rise to about 2,180 prevented premature deaths, 2,090 avoided emergency department visits, and 550 avoided hospitalizations.

FIG. 2.6 | EMISSIONS IN 2050

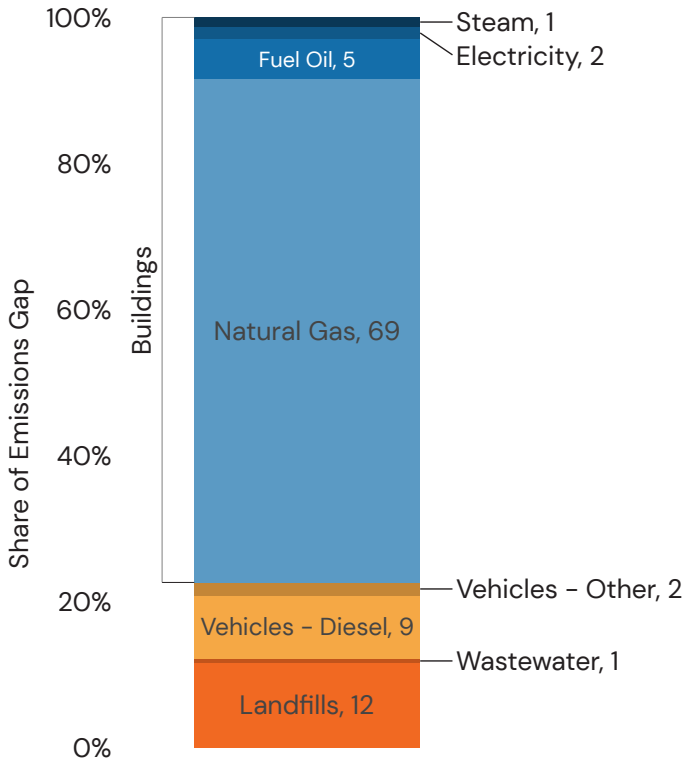


Figure Source: NYC OMB

FIG. 2.7 | MODELED HEALTH IMPACTS

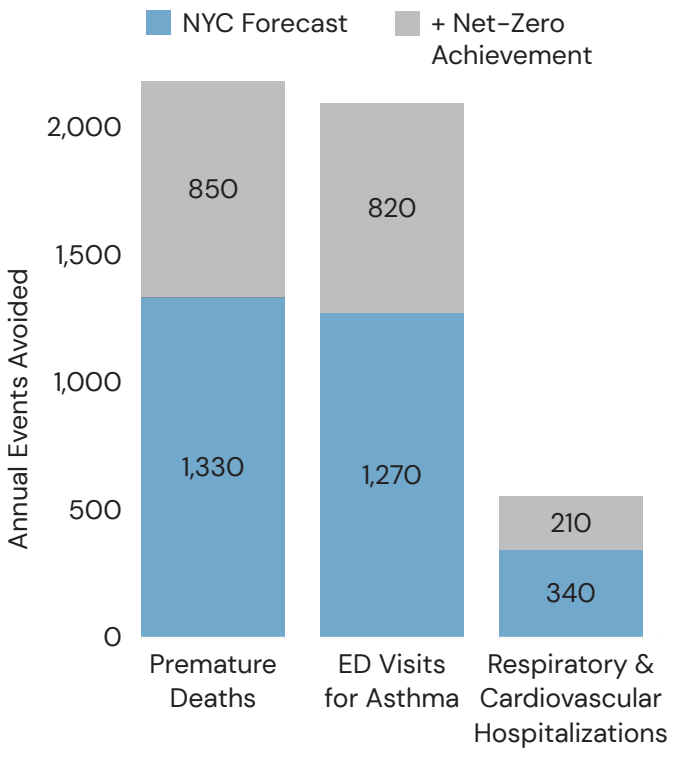


Figure Source: NYC OMB

Citywide Actions

Today, buildings are responsible for 69 percent of the city's greenhouse gas emissions, through their use of natural gas, fuel oil, and electricity. The city's landmark green buildings law, Local Law 97, went into effect in 2025, with nearly 95 percent of private buildings subject to the law submitting their emissions data as required, and 91 percent of buildings subject to the law reporting emissions under their statutory limits. The city supports building electrification and other decarbonization upgrades for low- and moderate-income building owners and low-income rental units through the J-51 tax abatement and for affordable rental housing through HPD's Resilient & Equitable Decarbonization Initiative and the Affordable Housing Reinvestment Fund, as well as technical support through NYC Accelerator. Additional programs, including NYCHA's Clean Heat For All Challenge, support electrification in affordable housing. Recent investments are advancing these technologies at scale, including deployments at developments such as Beach 41st Street in Queens.

The city has provided crucial support for offshore wind projects through the South Brooklyn Marine Terminal (SBMT) offshore wind hub. This hub will provide an onshore staging ground for wind turbine construction, as well as a connection point for transmission lines from wind farms. Without the city's funding and support of the SBMT offshore wind hub, the Empire Wind 1 development, which also received significant support from the state, may not have been able to interconnect in New York City. When completed, Empire Wind 1 will provide 810 megawatts (MW) of electricity to New York City, or about 8 percent of the city's peak electricity demand. When other offshore wind developments move forward, SBMT will be well positioned to support them as well. The city has also worked with the state to support the Champlain Hudson Power Express (CHPE) project, a new transmission line bringing clean hydropower to New York City from Québec. This project is on track to become operational in 2026 and will deliver 1,250 MW of clean hydropower directly to New York City.

Transportation makes up 26 percent of citywide emissions. Decarbonizing transportation will require a multifaceted solution that includes widespread replacement of gas and diesel vehicles with EVs, and helping New Yorkers shift from driving private vehicles to walking, biking, and taking public transportation. The administration's commitment to improving bus service citywide is one important element of this effort. The city continues to support electrification of private vehicles by making city-owned charging stations available for public use, incentivizing For-Hire-Vehicle drivers to convert to EVs, and supporting school bus companies in efforts to secure state and federal funding for electric school buses. New York State also plays a vital role in encouraging the shift from internal combustion engine vehicles to EVs. As federal incentives for EVs have expired, the state's continued commitment to phasing out the sale of internal combustion engine vehicles by 2035, supporting transit agencies and school bus companies in electrifying their bus fleets, and encouraging EV charging infrastructure throughout the city and state will be especially critical.

The city's remaining emissions, approximately 4 percent of the total, stem largely from methane emissions from landfills and wastewater treatment plants. Waste-reduction efforts such as food composting aim to lower emissions from the waste sector.

Setbacks to Grid Decarbonization

Emissions from fossil fuel-generated electricity currently make up 35 percent of New York City's greenhouse gas emissions, and electricity demand is expected to grow as buildings and vehicles shift to all-electric technologies. Realizing the full benefits of electrification requires a clean power grid. The Climate Leadership and Community Protection Act (CLCPA) mandates New York State deliver 70 percent renewable electricity statewide by 2030. However, the 2025 New York State Energy Plan projected that the state would not reach that benchmark until 2037 and would achieve 100 percent carbon-free electricity by 2040. Negotiations around amendments to the CLCPA have become a factor in the FY2027 New York State budget.

New York City faces growing risks to both energy reliability and affordability. These factors influence the pace of electric grid decarbonization and, in turn, citywide emissions reductions. Reliability challenges and rising energy costs are driven by a combination of federal and state policies, as well as market developments.

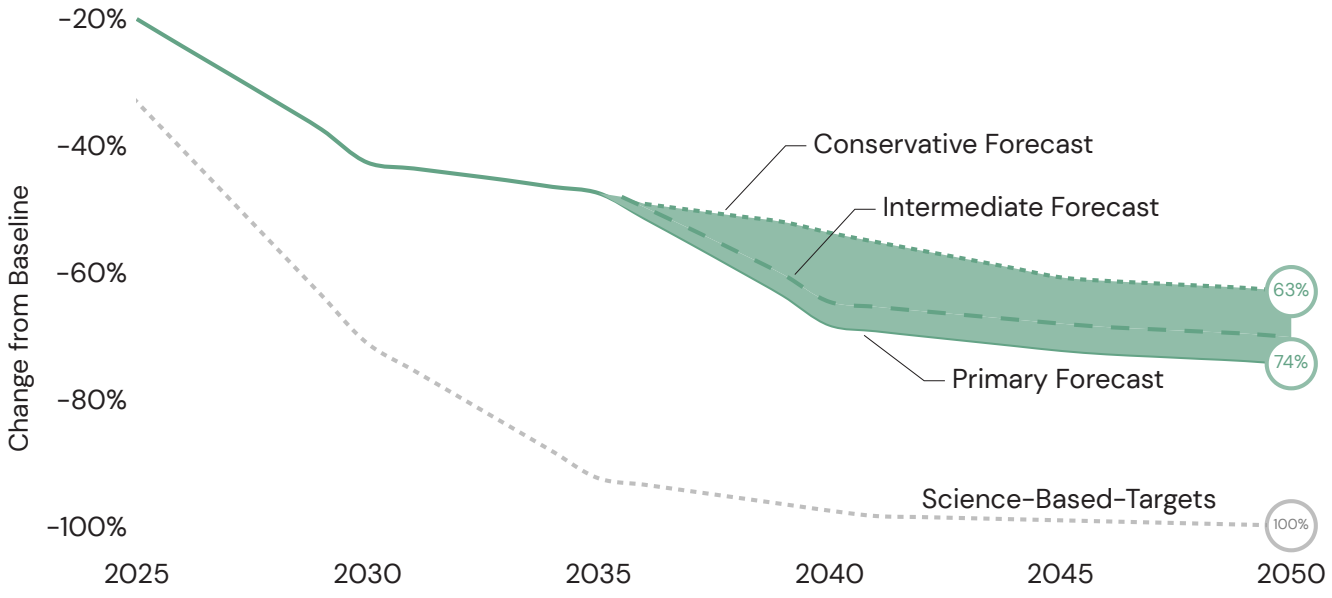
The rollback of the Inflation Reduction Act—including the Clean Energy Investment Tax Credit and Clean Energy Production Tax Credit—the pause on permit issuance for offshore wind development, and threats to state-level clean vehicle regulations, have created major uncertainty for renewable energy developers and driven up costs.

UNCERTAINTY RANGE OF THE CITYWIDE GHG FORECAST

At the time of publication, significant uncertainty remains around efforts to decarbonize the city and state's electric grids. For this reason, the city has developed a primary greenhouse gas emissions forecast, accompanied by two alternative projections. The citywide emissions forecast incorporates the State Energy Plan's assumptions for power sector emissions, which include clean hydrogen deployment to make emissions-free electricity by 2040; however, clean hydrogen technology does not exist at scale and there is not yet a clear path for its development.

Two alternative projections consider differing assumptions regarding the speed of deployment for new renewable energy sources—primarily solar and wind generation—as well as energy storage, and how quickly fossil fuel power plants can be phased out. In the intermediate scenario, power plants continue to use fossil fuels after 2040, and the speed of renewable energy resource development reflects expected market demand. In the most conservative scenario, power plants continue to use fossil fuels after 2040 and new renewable energy is deployed at a slower pace similar to that observed in recent years in New York State.

FIG. 2.8 | RANGES OF UNCERTAINTY IN THE CITYWIDE FORECAST



The Science-Based Targets reference line represents C40 Cities' independent assessment of "fair-share" emissions targets for New York City to align with the Paris Agreement goal of limiting global temperature rise to 1.5 degrees Celsius
Figure Source: NYC OMB

The recently approved Northeast Supply Enhancement natural gas pipeline will lock in fossil fuel use in the state's electricity grid for decades. In 2025, the New York Public Service Commission paused the Public Policy Transmission Need process for transmission lines from planned offshore wind farms and the proposed Clean Path transmission line that would have delivered renewable electricity to New York City from upstate New York. Additionally, the Cap and Invest initiative, a key recommendation of the New York State Climate Action Council's Scoping Plan for the implementation of the CLCPA that would set a price on emissions from power plants, has not yet advanced.

Market factors have also exacerbated many of these challenges. Continued inflation and supply chain disruptions are driving up costs across electricity generation and distribution systems. High electricity delivery charges in New York City further strain the resources available to support renewable energy development, transmission, and storage.

Several additional factors contribute to New York City's electricity reliability needs. Many in-city power plants are over 50 years old, resulting in higher failure rates during periods of peak demand. Gradual retirement of these older, fossil-fuel-dependent plants has created a supply bottleneck.

The city also faces congestion in electricity transmission lines that bring imported power into the city. At the same time, electricity demand is rising due to data centers and the electrification of building heating and transportation. Con Edison now projects that New York City could face potential shortages in electricity supply on peak demand days beginning in 2032.[29] Federal threats to offshore wind, including the Empire Wind 1 development, add further risk. These challenges may force in-city fossil fuel plants to remain operational longer than planned.

The demands of an aging and growing electricity system contribute to record-high costs for consumers, burdening New York City families and businesses and slowing efforts to electrify buildings and transportation. Delays in renewable energy development and declining energy reliability contribute to rising electricity costs, which in turn hinder the adoption of electrification, a critical long-term decarbonization strategy. Managing electricity costs is essential for improving affordability and livability in New York City, and for supporting the widespread adoption of emissions-free building systems citywide.

City Government Operations

Emissions from New York City government operations, which include electricity and fuel consumption in city-run buildings, fleet vehicles, and other municipal sources, continue to decrease in line with projections made in the May 2025 Climate Budgeting Publication. Government operations are now expected to reduce emissions 71 percent by 2030, and 74 percent by 2050.

City government is on track to meet and exceed its 2030 emissions reduction target established by Local Law 97; however, it is not yet on track to reach net-zero by 2050. The city's purchase of 100 percent renewable electricity via Tier 4 Renewable Energy Credits (RECs) is expected to begin with the 2026 activation of the CHPE transmission line and is the most significant near-term driver of emissions reductions, as it effectively eliminates all electricity-derived emissions from city government operations. Figure 2.9 forecasts emissions reductions both with and without RECs.

With RECs, emissions from municipal operations are expected to be 26 precent of baseline by 2050. Of the remaining emissions, energy consumption in city government buildings and facilities will account for 67 percent, landfill and wastewater emissions will contribute 26 percent, heavy duty vehicles will contribute 5 percent, and 2 percent will come from other sources.

New York City has supported renewable energy development through government operations decisions as well as its support of the offshore wind hub at SBMT. The city's engagement enabled the construction and completion of CHPE, a new transmission line bringing clean hydropower to New York City from Québec.

The city government's commitment to purchase 100 percent renewable energy was critical for financing the project, which will supply up to 20 percent of New York City's annual electricity. Additionally, Local Law 99 of 2024 directs the city to install 100 MW of solar capacity on city-owned property by the end of 2030, and 150 MW by 2035. To date, the city has installed over 31 MW of solar capacity.[30]

The city is taking key steps to electrify its vehicle fleet. Local Law 140 of 2023 requires agencies to transition to all-electric light- and medium-duty vehicles by 2035 and electric heavy-duty vehicles by 2038. More than a quarter of the city's light-duty fleet is electric. For heavy-duty and off-road vehicles that are difficult to electrify, the city has transitioned to renewable diesel and is piloting electric alternatives.

Initiatives are underway to tackle emissions from buildings, the largest source of emissions in the city government's portfolio. The School Construction Authority and partner agencies are working to make schools green and healthy, and reducing greenhouse gas emissions and air pollution, including by electrifying heating in public schools.

Work is also underway to develop a fossil fuel phase-out plan for all city buildings, to support comprehensive and cost-effective electrification across all city-owned and city-operated facilities.

While the city has taken major strides toward its citywide and municipal net-zero goals, more work remains. Policy solutions are needed to advance decarbonization of affordable housing, low- and medium-income housing, and small buildings. The city also needs more comprehensive solutions to encourage shifts to active and public transport. Setting interim 2040 decarbonization targets for citywide and government operational emissions could help focus efforts and achieve deeper emissions reductions across sectors.

FIG. 2.9 | CITY GOVERNMENT EMISSIONS FORECAST

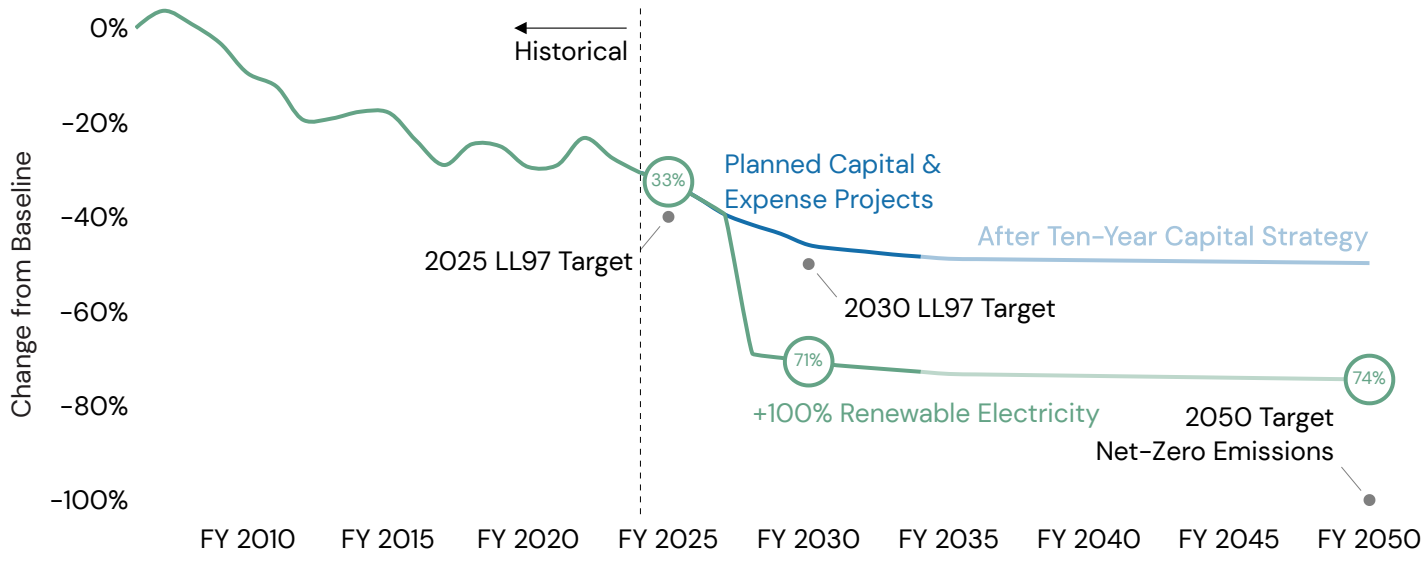


Figure Source: NYC OMB

RESILIENCY TO HEAT AND FLOODING

Climate Resiliency Investments

The following assessment highlights how planned capital investments strengthen resiliency by protecting critical assets, infrastructure, and public spaces, while also identifying areas where opportunities for further action still exist. Capital funding described in this section reflects citywide allocations in the Five-Year Capital Plan (FY 2026-2030). For more information on the funding described in this section, see: Climate Alignment Assessment in the Technical Appendix.

Targeted Investments Addressing Flood and Heat Risk

New York City continues to invest in a diverse portfolio of coastal resiliency protections, stormwater flood management, and extreme heat mitigation strategies to address long-term climate risk. The city has allocated $7.5 billion for capital projects that reduce flood risk and over $1 billion for projects that mitigate extreme heat, including $486 million allocated to projects that address both hazards.

Investments to address **coastal flooding** protect against water from rising sea levels or waves from storms. These types of investments include neighborhood-scale projects, which protect distinct geographic areas from sea level rise, tidal, and surge flooding through interventions such as flood walls and gates, elevated coastlines, and nature-based solutions, as well as asset-level projects, which incorporate resilient design to protect individual assets.

Neighborhood-scale coastal flood protection projects and targeted interventions total $964 million and include Brooklyn Bridge-Montgomery Coastal Resilience, East Side Coastal Resiliency, FiDi-Seaport Coastal Resilience, the Battery Coastal Resilience, Red Hook Coastal Resiliency, Tottenville Shoreline Protection Project, the Raised Shorelines initiative, and coastal protection projects managed by the U.S. Army Corps of Engineers (USACE). These projects are central to the city's long-term coastal resiliency and are currently in different phases of design and construction.[31] For more information on how this portfolio of large-scale projects addresses citywide coastal flood risk, see Protecting Coastal Neighborhoods (page 36).

An additional $707 million is planned for other coastal resiliency projects designed to protect specific waterfront assets such as parks, public spaces, and facilities. This includes projects at Harlem River Park and Greenway, Barretto Point Park, Governors Island, Bayswater Park, and the reconstruction of piers, seawalls, and other coastal infrastructure across the city.

Investments in **stormwater flood** protection address rain or snow events that can cause flooding in any part of the city—not only along the coast. These projects are designed to prevent streets, sidewalks, and buildings from becoming inundated with flooding, using a variety of resiliency strategies and multi-hazard approaches (see Figure 2.10).

The city has allocated $901 million to rain gardens, porous pavement, and other green infrastructure, and an additional $174 million for tree canopy preservation and expansion, to retain stormwater from streets, sidewalks, and other hard surfaces before it can enter the sewer system or cause local flooding.[32]

$36 million is allocated to preserve and enhance the city's natural wetlands, in addition to $291 million for the Bluebelts program, which preserves and enhances natural drainage corridors to convey, store, and filter stormwater.[33] These projects also have the benefit of increasing public access to green spaces and improving air quality for New Yorkers.

$423 million is planned for cloudburst management projects, which use a combination of methods that absorb, store, and transfer stormwater to minimize flooding from sudden, heavy downpours.[34] Planned investments total $1 billion for new sewer buildout projects to directly address chronic stormwater flooding in Southeast Queens.

An additional $316 million is allocated for sewer capacity upgrades and flood alleviation in other priority areas, including neighborhoods identified in DEP's 2024 Stormwater Analysis.[35]

In addition to the afformentioned investments, which directly strengthen flood resiliency, planned capital funding also includes $4.8 billion for state-of-good-repair work on citywide sewers and efforts to prevent combined sewer overflows—events in which stormwater mixes with untreated sewage and discharges into local waterways during heavy rainfall.[36] While these projects are primarily focused on maintenance and overflow management, rather than flood protection, this ongoing work remains critical to the city's long-term capacity to manage stormwater, protect local waterways, and maintain water quality.

The city has allocated $2.3 billion to upgrade city facilities, including schools, hospitals, and police precincts, for long-term protection from flood risk. These investments protect assets through upgrades such as elevating mechanical and electrical systems above future flood levels or installing floodwalls and flood gates to keep water out.

FIG. 2.10 | CAPITAL INVESTMENTS IN FLOOD RESILIENCY

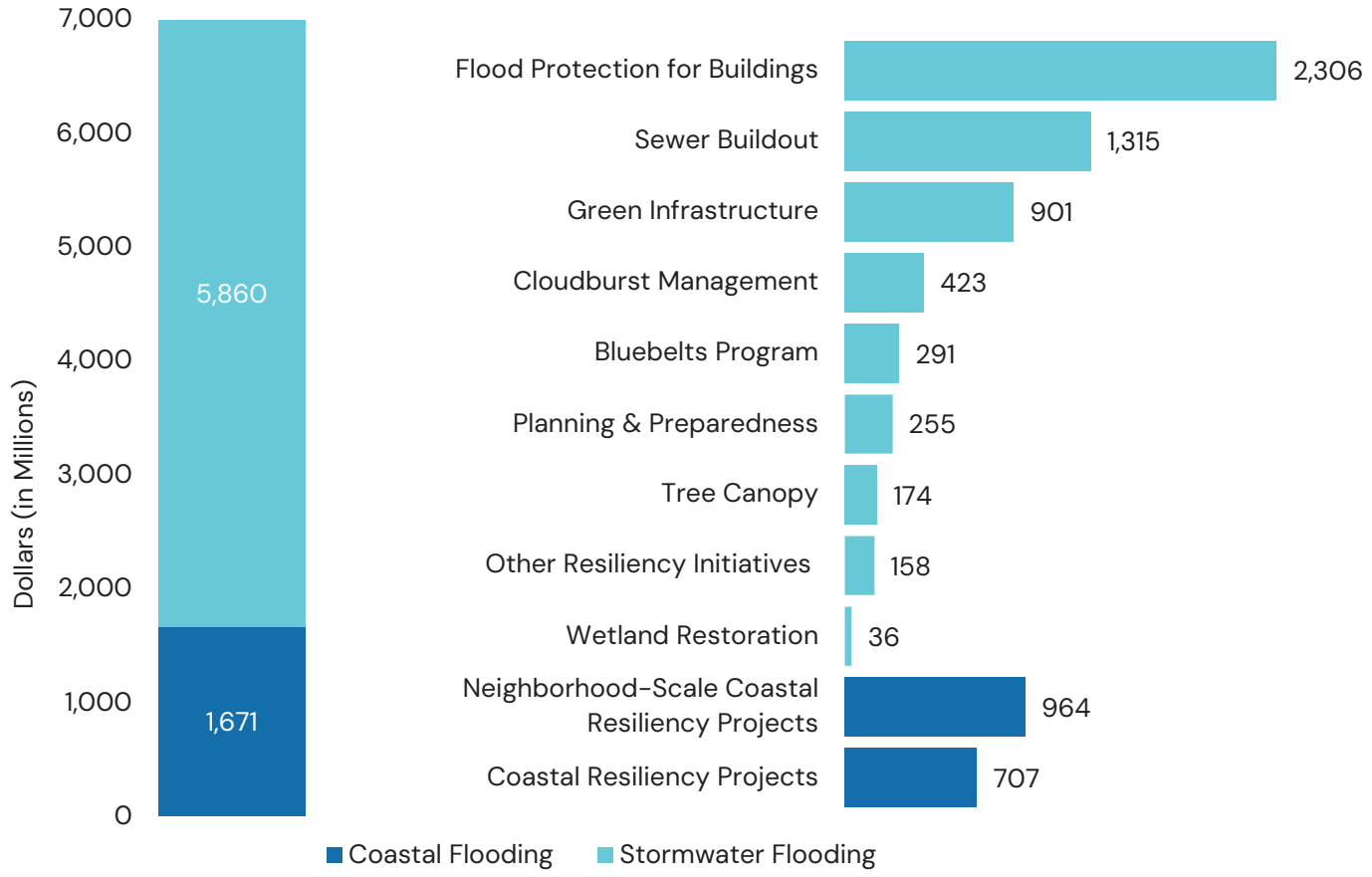


Figure Source: NYC OMB

Planned capital funding also includes $158 million for other projects that support efforts to address flooding, such as specialized vehicles for DEP use and improved drainage in natural and public spaces.

Investments in **heat resiliency** include projects that help reduce local temperatures and help New Yorkers stay cool as extreme heat becomes more frequent. Planned capital funding includes $174 million for tree canopy preservation and expansion and $36 million for projects to preserve and enhance the city's wetlands.

Other planned investments that help keep the city livable in the face of rising temperatures include $148 million for public pools and associated facilities to help New Yorkers stay cool during hot weather; $401 million for HVAC and other cooling upgrades to buildings; and $9 million for cooling features in city parks and playgrounds, such as new drinking fountains and spray showers.

Some projects help address risks posed by multiple climate hazards at once. Planned capital funding includes $486 million for projects that address both **flood and extreme heat risk**, contributing to the total allocations for each risk. For example, tree canopies provide shade and help lower air temperatures, while the permeable soil around their roots absorbs and retains stormwater, reducing runoff.[37] Similarly, wetlands cool surrounding areas and help protect against coastal and inland flooding by absorbing excess water and releasing it gradually.[38]

Projects that affect the continuity of essential services and operations during weather-related power outages, such as floods, storms, and other natural disasters, also support resilience to multiple climate hazards. $255 million for emergency backup power and other emergency preparedness measures ensure that critical facilities can continue their operations during these events.

FIG. 2.11 | CAPITAL INVESTMENTS IN HEAT RESILIENCY

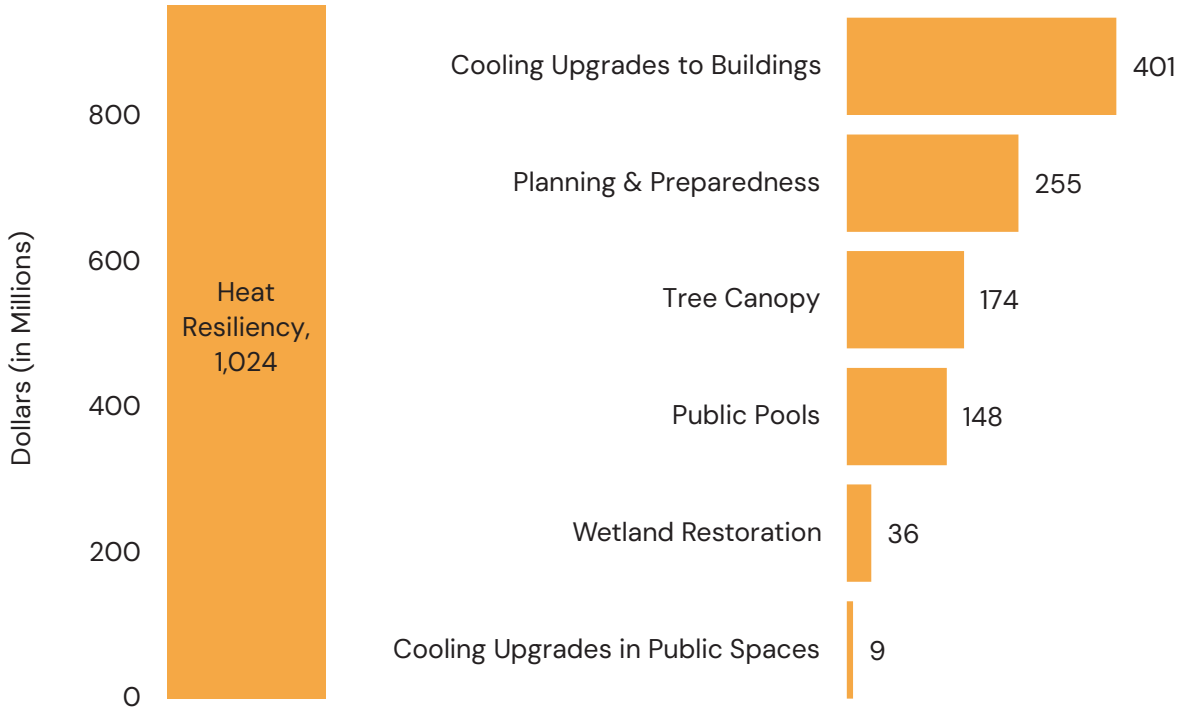


Figure Source: NYC OMB

Investments Contributing to a Climate Resilient Future

The city's investment in climate resiliency takes multiple forms. Some are specifically designed to protect city assets and reduce heat and flood risk, while others, although primarily focused on other priorities such as keeping infrastructure and facilities in good repair, still offer important opportunities to strengthen resiliency. An additional $41.3 billion is allocated to capital projects that include components that contribute to flood or heat resiliency, or both.

For example, $19 billion is allocated for building and facility upgrade projects where part of the scope includes flood resiliency components, such as waterproofing, elevating critical systems, or installing drainage. Upgrades along the city's waterfront total $1.1 billion for infrastructure such as piers, boardwalks, and ferry landings that contain flood resilient design elements.

Expanding permeable surface coverage and drainage contributes to the city's overall ability to absorb stormwater. $1.9 billion is allocated for projects incorporating these elements in parks, public spaces like playgrounds and plazas, and on city streets.

Heat-mitigation measures, including enhanced cooling capacity, heat-resistant building materials, and expanded green spaces, are part of $22.6 billion of planned building and facility constructions and renovations across the capital portfolio.

Planned capital funding includes $7.1 billion for projects that incorporate tree planting or expanding green space, which help reduce the urban heat island effect. This includes $2.6 billion for sewer projects that take advantage of street work to plant trees, $1.3 billion for projects along the waterfront, $841 million for green infrastructure, and $2.4 billion for city parks, public spaces, and streets.

Investments with Opportunities to Enhance Resilient Design

Currently, capital projects are not required to follow a consistent standard of resilient design, and some planned investments lack appropriate measures to address their exposure to risk. These projects present opportunities to add incremental design features that better protect both city assets and New York City residents from long-term climate risks. Projects totaling $208 million in heat- or flood-vulnerable areas offer opportunities to enhance heat resiliency, flood resiliency, or both by incorporating additional resilient design.

Analysis of planned capital spending identified $167 million for projects located in **high-flood-risk areas or along the city's waterfront** that do not currently include flood resiliency measures. Over three quarters of this funding is for projects in buildings and facilities across agencies, including work related to comprehensive renovations, and upgrades to HVAC, electrical, and mechanical systems. Many agencies continue to face challenges with incorporating resilient design strategies to protect buildings, piers, parks, and other capital assets from climate risk—particularly when dealing with existing sites or assets, which were not initially built to resilient standards. For more information on barriers to resilient design, see *Agency Design Standards*.

Additional opportunities to improve flood resiliency exist within waterfront infrastructure projects, including upgrades to piers, ferry, shipping, cruise facilities, and marinas. Many of these projects are focused on infrastructure upgrades or state-of-good-repair work, such as replacing fendering systems, bulkheading, or making electrical improvements that do not enhance adaptability to long-term flood risk.

Opportunities to incorporate resilient design elements include elevating waterfront infrastructure and critical systems above future flood levels, incorporating exterior and interior floodproofing measures, or adding permeable surfaces, which could help protect investments against long-term flood risk. $41 million for capital projects in **high-heat vulnerability** areas do not currently include heat mitigation measures.

More than half of this funding is for work in public buildings such as police precincts, courthouses, and public libraries, where renovations were not explicitly found to be using indoor heat guidelines. Opportunities to improve occupant thermal safety while reducing energy consumption include window glazing and shading, vegetated or light-colored roofs, and passive ventilation design.

AGENCY DESIGN STANDARDS

Designing for heat and flood resiliency is increasingly becoming mainstream across city agencies' capital portfolios, though challenges remain in standardizing the process, building comprehensive strategies, and budgeting for resiliency components.

Many agencies already use the Climate Resiliency Design Guidelines (CRDG)—which will be mandated for eligible projects starting in 2027—to screen city-owned assets for climate risk and design city facilities to withstand climate impacts.[39] For example, DEP's Bureau of Engineering Design and Construction oversees $10.7 billion worth of capital projects, including water supply and wastewater treatment infrastructure, and applies the CRDG to every project it builds. DEP is working to expand application across other asset types.

Other agencies, like HPD, use their own Design Guidelines with varying resiliency standards for new construction and preservation projects, which follow strict climate risk screenings and compliance standards, making them compatible with the city's long-term climate goals.[40,41] This includes over $10 billion for new construction projects in the Five-Year Capital Plan. Similarly, the NYC Parks Department follows its own sustainability and resiliency standards when designing coastal parks and facilities in parks.[42]

Resiliency planning often involves trade-offs between capital-intensive interventions and targeted measures, with costs that vary by asset type, scope, and scale. Incremental adds like increased indoor cooling capacity, added shade structures to public spaces, or dry and wet floodproofing can add to project costs. This is especially true for non-city owned assets receiving city capital, such as leased facilities, affordable housing, cultural facilities, and landmarked buildings, where feasible approaches may be limited. However, prioritizing resiliency at earlier stages of scoping and design can help minimize costs. As the CRDG become mandatory in 2027, resilient design will be more consistently reflected in long-term planning and costs.[43]

RESILIENCY EXPENSE HIGHLIGHTS

Efforts to build a more resilient city span budgets and initiatives across agencies. For example, maintenance of green infrastructure, catch basins, and Bluebelts keeps infrastructure working during rain events.[44] In addition, as large-scale coastal initiatives such as the East Side Coastal Resiliency Project become operational over the next several years, the city will face operational costs associated with their maintenance and deployment during storms. These recurring costs are part of the city's expense budget, which primarily funds operations and services, as opposed to the capital budget, which funds long-term infrastructure projects.

In many cases, these efforts are embedded into operations, and there is not a distinct budget for resiliency within agency budgets. Therefore, the amounts in Figure 2.12 do not represent all city expenditures on climate resiliency but rather highlight major projects and programs.

FIG. 2.12 | EXPENSE HIGHLIGHTS FOR CLIMATE RESILIENCY

Resiliency Category	Example Investments	FY 2027 Executive Budget (in Millions)
Coastal Flooding	Funding for the Bureau of Coastal Resiliency, including developing standards for construction of coastal infrastructure.	$13.8
Stormwater Flooding	Funding added since Hurricane Ida to enhance resiliency to stormwater flooding, such as green infrastructure and Bluebelt maintenance and increasing catch basin cleaning.	$44.4
Heat	Funding for citywide tree planting, maintenance and forestry management, which help reduce the urban heat island effect, and roof coatings to reduce internal building temperatures.	$20.5
Planning & Preparedness	Climate-related planning efforts including a program to protect vulnerable New Yorkers during extreme weather events and funding for long-term climate planning.	$3.8

Figure Source: NYC OMB

Assessing Citywide Adaptation to Climate Risks

The city's programs and investments continue to bolster resilience to climate threats. No single measure shows how well the city is adapting to rising temperatures and floodwaters, but examining the prevalence of adaptation strategies now and the impact of city actions on future conditions provides insight into which communities may have greater need for additional intervention.

Managing Extreme Heat

Extreme heat results in more deaths in New York City each year than any other climate-related hazard. According to the NYC Health Department, over 500 New Yorkers die prematurely because of hot weather each summer.[45] New York City, like other dense urban areas, is warmer than its rural and suburban surroundings. With climate change, New York City will experience more frequent, longer lasting, and more intense heat waves. Addressing these risks requires citywide interventions that address both indoor and outdoor heat exposure.

Access to Air Conditioning

Ensuring people are protected from extreme heat when indoors is critical, as heat-stress-related deaths most commonly occur in homes without air conditioning. Citywide data show that around 89 percent of residences have air conditioning, but across different neighborhoods this ranges from about 70 percent to 98 percent, with the lowest air conditioning prevalence in East Flatbush in Brooklyn and East Harlem in Manhattan. Air conditioner prevalence for NYCHA residents has increased on average by a little over 13 percent since last year. Gains for these residents were particularly notable in East Harlem, Claremont, Sheepshead Bay, and Mariner's Harbor, where air conditioning registrations rose more substantially.

In December 2025, the city passed Local Law 23, requiring landlords to provide tenants with cooling systems capable of maintaining 78 degrees Fahrenheit in bedrooms, if requested, by June 1, 2030. Access to air conditioning equipment alone, however, will not ensure that residents are protected from dangerous temperatures. More than one in five New Yorkers are reluctant to use their air conditioners due to concerns about high utility costs, and this number is likely to increase as energy costs rise.[46] Fifty percent of adult New Yorkers report limiting household energy use due to cost in the last year, compared to 39 percent in 2022.[47] This practice is more common among New Yorkers from marginalized communities, including those living in high-poverty neighborhoods and among Black and Latino New Yorkers. As extreme heat becomes more frequent and severe, addressing both the availability and affordability of cooling will be critical.

Extreme heat also impacts productivity, including for students. Air conditioning in public school classrooms has marginally increased, on average, since 2025, with significant improvements in neighborhoods including Prospect Heights, Homecrest, Highbridge, and Wakefield. As the city progresses towards its commitment to build new schools as all-electric, and to convert existing schools to all-electric heating systems, students will gain access to modern cooling, reducing greenhouse gas emissions while creating healthy, safe, and comfortable learning environments.

New York City's Tree Canopy

In addition to working to keep homes, workplaces, and schools safe and comfortable during extreme heat, the city is advancing strategies to keep New Yorkers safe when outdoors. Trees are essential for managing increasing temperatures; blocks with dense tree canopy cover can be several degrees cooler than comparable areas without. Between 2017 and 2021, canopy cover increased significantly in high-density areas and on public lands such as parks and sidewalks, with some of the largest gains in neighborhoods in the Bronx, including Co-op City, Crotona Park East, West Farms, and Highbridge.

FIG. 2.13 | TREE CANOPY CHANGE ACROSS NEIGHBORHOODS SINCE 2017

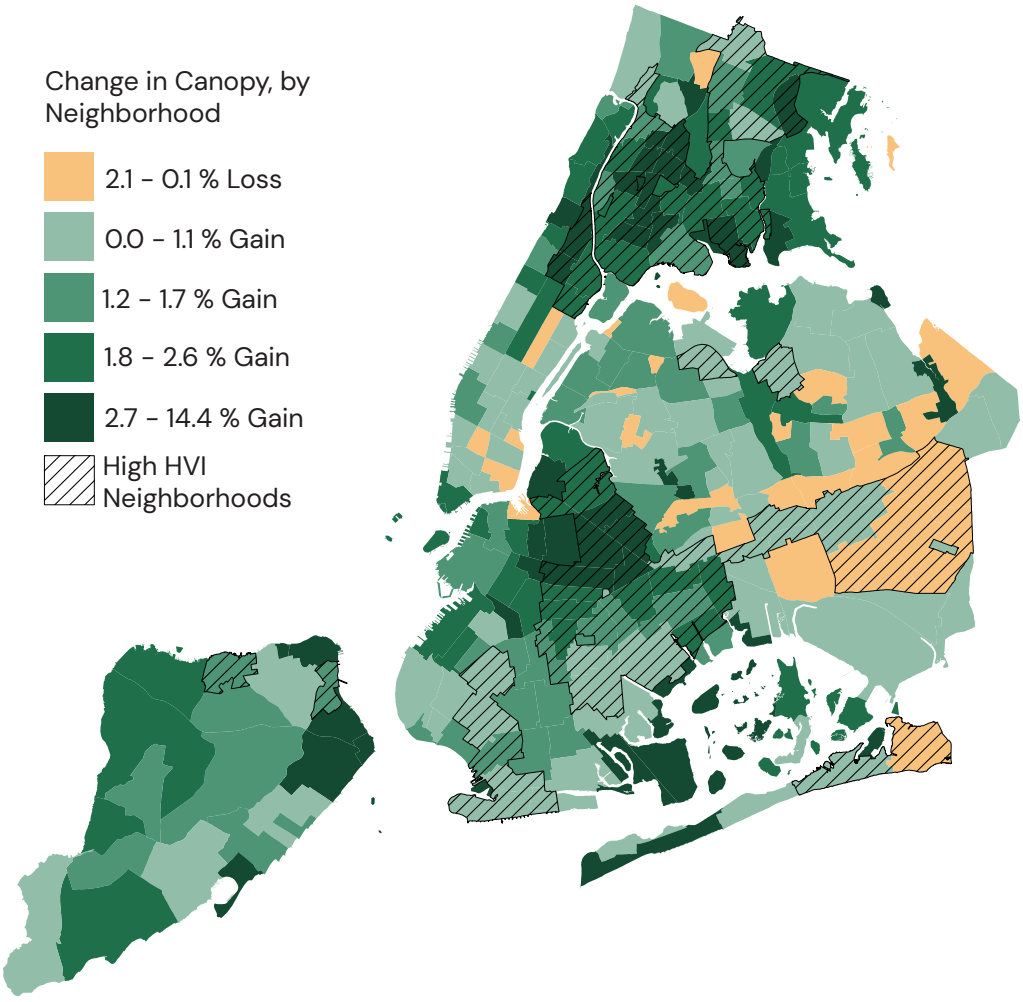


Figure Source: NYC OMB

CASE STUDY: TREE CANOPY EXPANSION IN BEDFORD STUYVESANT

Tree canopy helps decrease temperatures through shading and transpiration. The goal of expanding citywide tree canopy to 30 percent coverage, through preservation and stewardship of existing trees, could lower temperatures on city streets by about 2 degrees Fahrenheit.

Between 2017 and 2021, the neighborhood of Bedford-Stuyvesant in Brooklyn saw the largest increases in tree canopy cover among residential neighborhoods, with growth of 4 percent. Despite overall canopy growth trending upwards, there were marked differences in canopy growth by land use type. Most of the increase occurred on public park land and public rights-of-way, which saw a 3.6 percent growth. In contrast, tree canopy decreased on private land in this neighborhood, dropping by 1.3 percent across all private land use categories. This neighborhood showcases the common trends observed for the city's canopy between 2017 and 2021; expansion on NYC Parks Department property and rights-of-way, and loss on private property.

However, there was an overall loss of canopy on one-to-two family private properties, impacting resiliency to extreme heat in neighborhoods such as Todt Hill, Tottenville, and Mariner's Harbor in Staten Island, as well as South Ozone Park and Queens Village in Southeast Queens. Tree canopy cover is an important indicator of overall outdoor heat resiliency, and preserving existing canopy can be as or more impactful as planting new trees to enhance overall tree canopy cover.

In April 2023, the city's long-term strategic plan set forth a goal of achieving 30 percent tree canopy cover citywide. The May 2025 Climate Budgeting publication, using 2017 canopy coverage data as a baseline, projected that the city would reach the goal of 30 percent coverage by 2050. This analysis calculated the relative change in canopy change (both loss and growth) between years and estimated how much canopy would grow if trends continued, alongside planned actions, such as the Neighborhood Tree Planting Program.

An updated forecast, using newly available 2021 tree canopy coverage data and new methods, parses canopy by property type for more granular analysis, allowing the city to assess how tree canopy is expected to change in different ways on publicly-owned versus privately-owned land.

Tree canopy is now expected to cover 28.7 percent of the city in 2050, putting the city on a longer timeline to achieve the goal of 30 percent cover. While trees on public land continue to drive canopy growth, canopy loss on private one- to two-family residential properties is slowing progress towards this goal.

This gap supports the findings from the newly developed Urban Forest Plan, led by MOCEJ in collaboration with the NYC Parks Department, Nature Conservancy, Natural Areas Conservancy, City Parks Foundation, and Partnerships for Parks, which describe the need for programs to encourage maintenance and stewardship of trees on private property.

FIG. 2.14 | TREE CANOPY CHANGE, BY PROPERTY TYPE

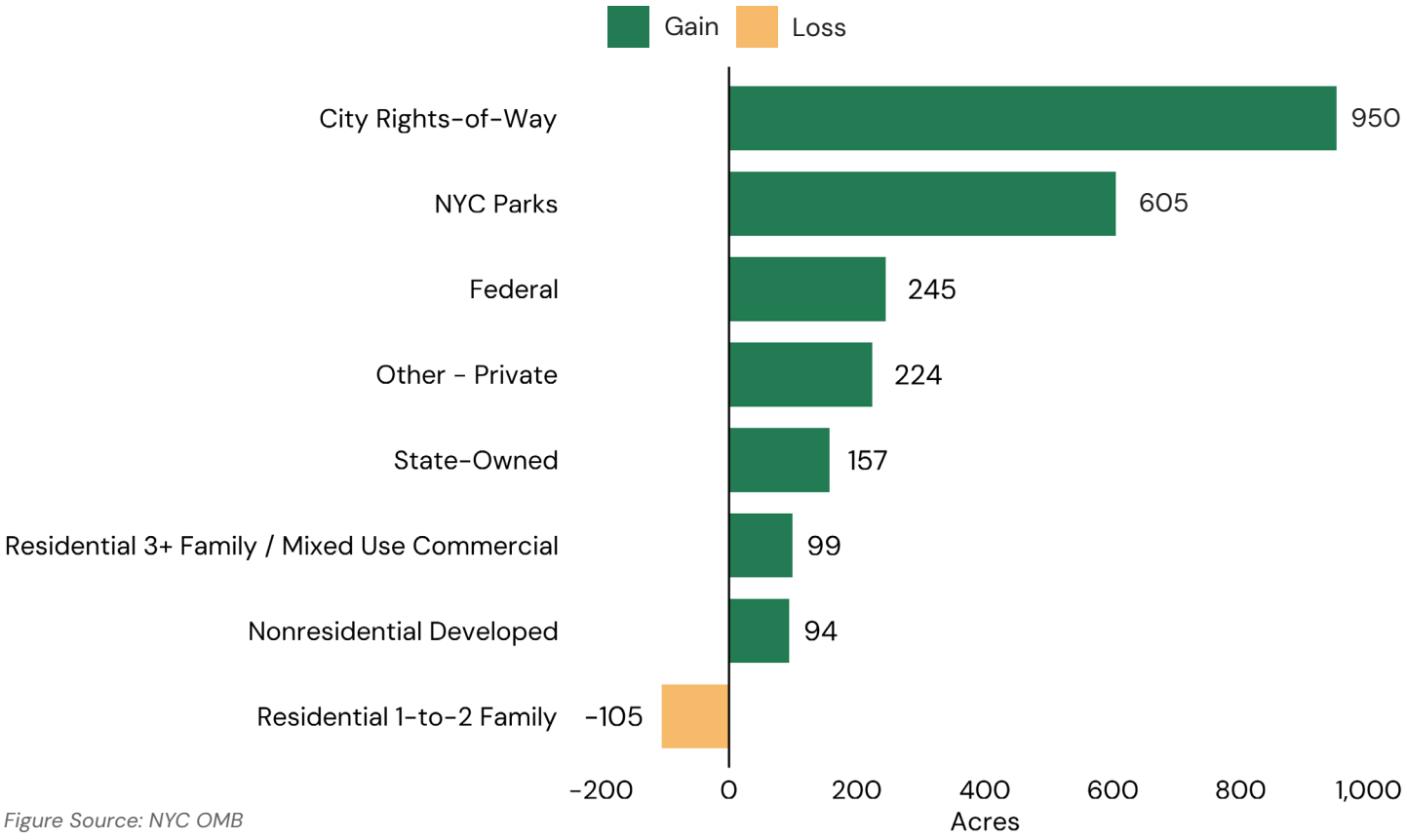


Figure Source: NYC OMB

The Urban Forest Plan sets the goal of reaching 30 percent citywide canopy cover by 2040; to achieve this goal, it will be critical to address communities where canopy is decreasing and reverse this trend.

The cooling effects of tree canopy are especially critical for those neighborhoods more vulnerable to the impacts of extreme heat. As illustrated in the 2025 Climate Budgeting Publication, areas with higher Heat Vulnerability (according to the NYC Health Department's Heat Vulnerability Index, or HVI) may experience 67 percent more cooling benefit from expanded tree canopy by 2050 compared to lower-HVI neighborhoods.

Future iterations of this analysis will explore the impacts of cool (light-colored and vegetated) roof surfaces. The city is advancing this work through initiatives such as the NYC CoolRoofs workforce program and Local Laws 92 and 94 of 2019, which require certain buildings to install green roofs. Future updates will assess how tree canopy expansion and increased adoption of cool roofs together could help reduce neighborhood temperatures as the climate warms.

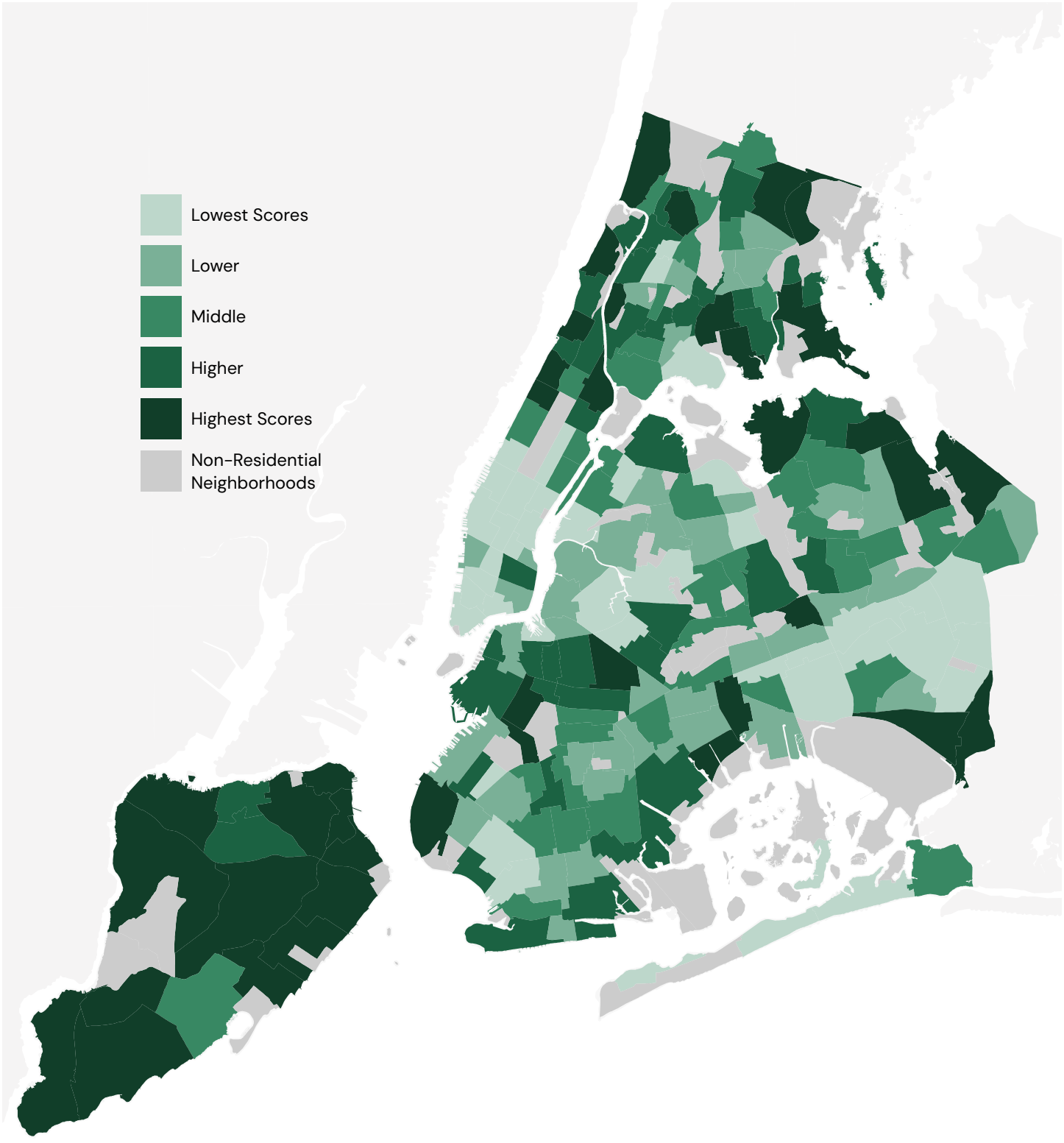
SOCIAL AND COMMUNITY ADAPTATION MEASURES

In addition to physical adaptation measures, social cohesion and community capacity play an important role in climate resilience. A set of social indicators is being developed in consultation with the Social Cohesion and Community Capacity Working Group, a diverse team of institutional and government researchers, academic experts, and environmental justice leaders. Over the course of a year, the Working Group reviewed peer-reviewed literature and evaluated a wide range of potential indicators, including communication networks, preparedness efforts, support systems for vulnerable populations, and measures of social cohesion. These factors often reflect both formal programs and informal community practices that keep residents safe.

There is broad scientific agreement that strengthening social and community capacity can be as important as physical adaptation for building community resilience, but there are relatively few established methods for measuring these strategies. One example is the U.S. Forest Service's Stewardship Mapping Project, which identifies where community-based organizations provide social support and maps their connections across sectors. Another is the NYC Preparedness & Recovery Institute, which strengthens New York City's ability to plan for, coordinate, and respond to emerging public health challenges. Other indicators, such as uptake of NotifyNYC notifications and involvement in centralized disaster preparedness activities, can also serve as proxies for disaster awareness, though cannot be inventoried spatially.

Given the broad, research-backed consensus of the importance of these social dimensions of climate resiliency, the city will continue to partner with the Working Group and other partners to explore additional data sources. These efforts aim to support the inclusion of new indicators related to social cohesion and community capacity in future Climate Budgeting analyses.

FIG. 2.15 | OUTDOOR HEAT RESILIENCY INVENTORY SCORES, BY NEIGHBORHOOD



This map assesses outdoor heat resiliency by aggregating relevant adaptation indicators to provide a relative scoring of neighborhoods, grouped into quintiles based on a standardized scale from 0 to 100. Darker-shaded neighborhoods indicate higher levels of adaptive capacity and access to resources for managing outdoor heat, while lighter shades indicate comparatively lower levels. Neighborhoods in the top quintile are labeled "Highest Scores," while those in the bottom quintile are labeled "Lowest Scores." For more information, see Technical Appendices.
Figure Source: NYC OMB

FIG. 2.16 | INDOOR HEAT RESILIENCY INVENTORY SCORES, BY NEIGHBORHOOD

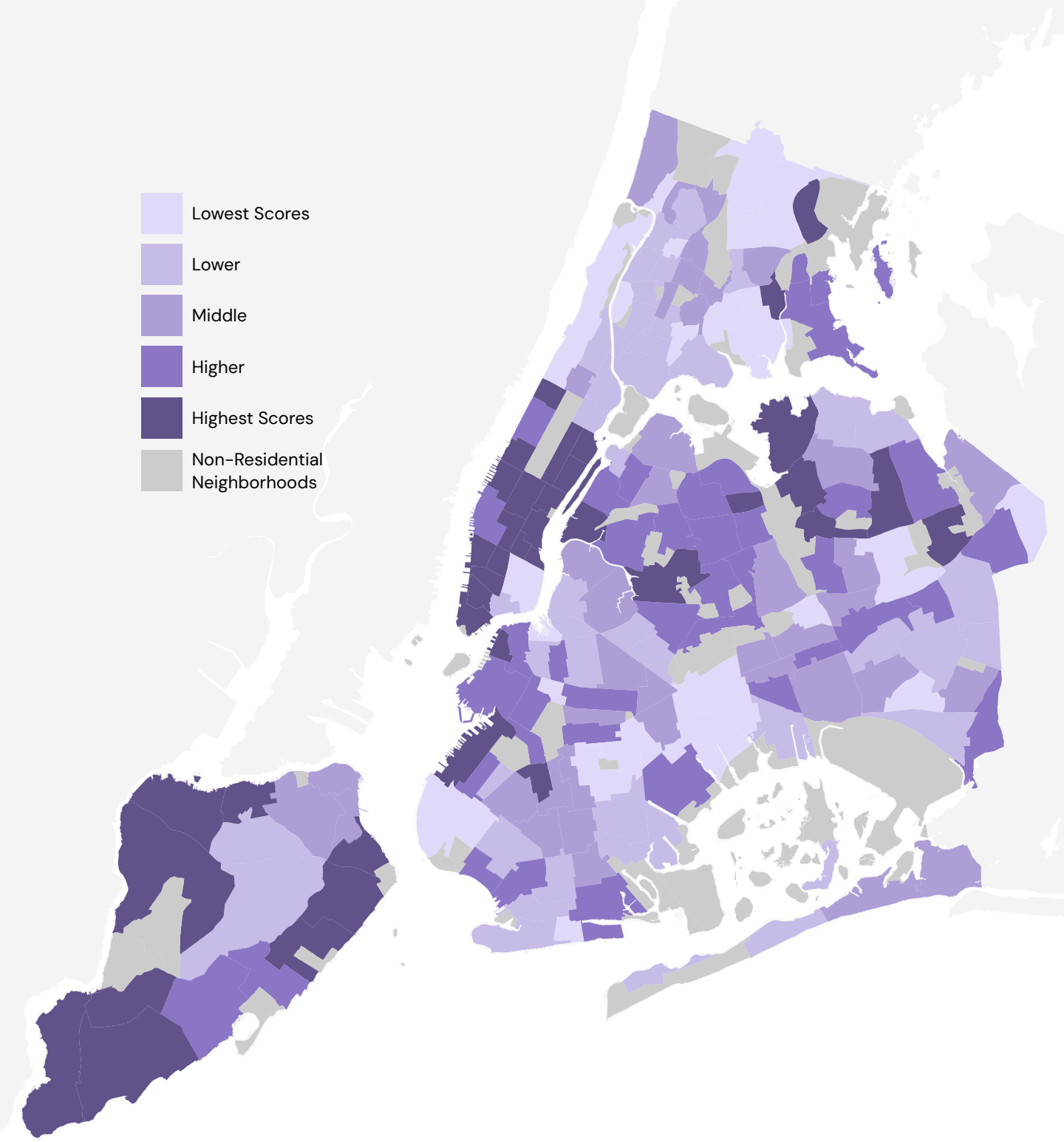


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Figure Source: NYC OMB

Resiliency to Flooding

New Yorkers have experienced the threats of climate change firsthand through major storms that have caused severe and sometimes deadly flooding. In 2012, Hurricane Sandy resulted in 43 deaths, widespread power outages, and extensive flooding driven by storm surge that disrupted the lives of millions.[48] In 2021, Hurricane Ida killed 13 New Yorkers with flooding caused by the most intense rainfall recorded in the city's history.[49] The New York City Panel on Climate Change projects that climate change will increase both the frequency and the intensity of heavy rainfall and continue to worsen coastal storms and high tides.[50] In response, the city has invested in major infrastructure improvements to address flooding and is advancing long-term planning needed to better manage flood risk across public and private property.

Building-Level Adaptation

One-sixth of New York City lies within the present-day 100-year floodplain, representing $250 billion in property value and exposing approximately 440,000 residents to flood risk.[51] Strategies to address flood risk range from large-scale coastal protection projects designed to reduce flood exposure across neighborhoods, to building-level protections, such as building code requirements and flood insurance.

The city's Building Code includes flood protection requirements for buildings at risk of coastal flooding from storms. These requirements, including Appendix G, generally apply when buildings are newly constructed or substantially improved through redevelopment, retrofits, or insurance requirements. Many existing buildings in coastal flood-prone areas predate these regulations and are not required to comply. An estimated 10 percent of residential units in the floodplain are likely to have building-level protections.

Across neighborhoods where coastal flood Building Code requirements apply, the proportion of existing residential units likely to have incorporated building-level protections varies widely.

For example, about 83 percent of residential units in Tompkinsville on Staten Island and 73 percent in the Lower East Side of Manhattan are likely to have incorporated protections through building code requirements and the permitting process, compared with about 3 percent in Flushing in Queens and 2.5 percent in East Harlem. These differences reflect variation in redevelopment patterns and building age and highlight where building-level protections remain limited.

The Building Code currently lacks provisions requiring stormwater flood risk mitigation in new construction, despite widespread vulnerability across the city. This regulatory gap particularly affects Environmental Justice communities with older housing stock, informal basement apartments, and areas with limited stormwater infrastructure. The city has allocated funding to complete a Stormwater Building Code study by July 2028, as required by Local Law 12 of 2026, which will develop building code provisions to mitigate stormwater flood risk.

Prevalence of insurance policies is another indicator of neighborhood flood resilience. On average, about 20 percent of residential buildings citywide carry National Flood Insurance Program (NFIP) policies, and coverage rates vary widely across neighborhoods. For example, approximately 95 percent of residential buildings in Tribeca and 90 percent in Dumbo carry NFIP policies, compared with about 20 percent in Greenpoint and 9 percent in Mott Haven. These coverage rates do not correspond with the prevalence of likely building-level flood protections, suggesting that financial protection through insurance and physical risk-reduction measures are not closely aligned across neighborhoods.

For households that do carry NFIP coverage, caps on coverage may limit the extent of relief following major flood events, requiring owners to rely on supplemental insurance or pay out of pocket. Lack of publicly available data on private insurance policies presents a challenge in understanding the prevalence, cost, and terms of supplemental insurance coverage.

With climate-related disasters increasing in frequency and severity, there is risk that insurers may increase premiums or withdraw coverage, as is happening in other parts of the country facing risks such as wildfires. The impact of these dynamics on New York City's property values and mortgage markets is not well understood, but risk exacerbating the housing affordability crisis. City investments in large-scale coastal infrastructure will reduce risk and uncertainty for insurers, which should stabilize or lower insurance premiums and costs for property in protected areas. The city is exploring ways to work with insurers and reinsurers to quantify how new infrastructure will reduce the risk of damage during storms. Obtaining data on citywide insurance coverage and financial protections will be critical to support long-term financial resiliency and ensure insurance markets reflect investments in coastal protection.

FLOODNET

The city's FloodNet program enables real-time, street-level monitoring of flooding across the five boroughs. Developed in partnership with New York University, the City University of New York, and multiple city agencies, FloodNet uses a system of sensors that collect high-frequency data on flood conditions in real time, with each sensor collecting water depth at one-minute intervals. These data enable improved understanding of when and where flooding occurs, especially in neighborhoods that experience recurring events. Over time, the program can support assessments of infrastructure, such as drainage and green infrastructure, and contribute to more informed planning decisions. FloodNet also provides agencies with greater visibility into hyperlocal flood patterns, which help to better understand impacts across communities.

Stormwater Management

In 2024, DEP published a Stormwater Analysis outlining the growing challenges posed by more frequent and extreme rainfall and identifying strategies to strengthen resiliency. More than 100 areas across the city were identified as experiencing chronic stormwater flooding and sewer backups. Addressing current and future stormwater flooding in these areas will require a significant expansion in stormwater management capacity, including a combination of underground sewer upgrades, surface-level green infrastructure, cloudburst management projects, and Bluebelts. Substantial planning is needed to determine the specific needs and solutions for each location. Under Local Law 70 of 2025, DEP will recommend the appropriate level of service to address flood risk in each area by July of 2026, and publish a comprehensive stormwater plan by 2035.

As the city develops comprehensive plans for stormwater management, it must also address how actions on private property, such as paving over green space, can exacerbate flooding. The city is evaluating ways to reduce stormwater flowing into sewers from private properties, partnerships with private landowners, and new legislative requirements.

Protecting Coastal Neighborhoods

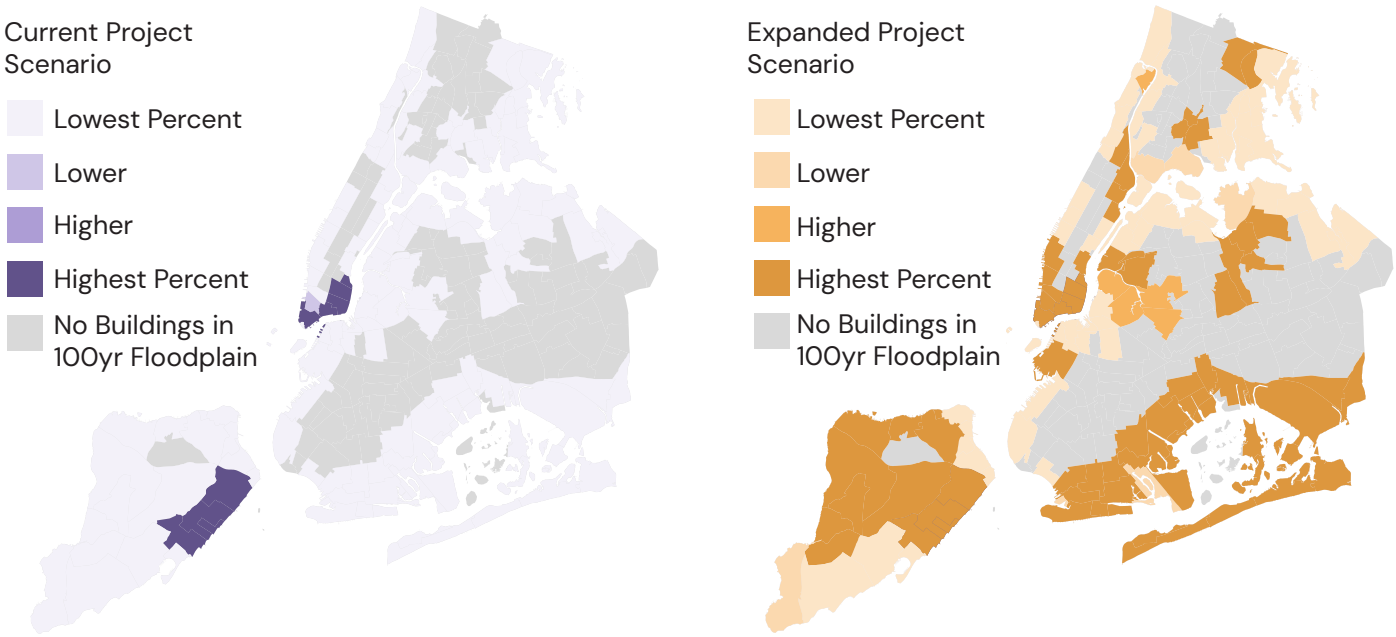
New York City's coastline spans 520 miles and contains a range of buildings and infrastructure, from homes along the beaches of the Rockaways to high-rises in the Financial District. In the years since Hurricane Sandy, the city and its partners, including the Battery Park City Authority and USACE, have undertaken numerous initiatives to protect New Yorkers from the increasing threat of coastal storms and chronic tidal flooding. These include large-scale coastal protection measures, targeted interventions, and regionalized planning and feasibility studies. The current portfolio of projects is expected to protect 21 percent of at-risk buildings in the 2050 100-year floodplain. However, the diversity of the city's coastline means that each mile has unique needs and will require a tailored approach informed by comprehensive planning and community engagement.

The city's existing portfolio of coastal resiliency projects has been heavily supported by federal resources, including Federal Emergency Management Agency (FEMA) Public Assistance grants and U.S. Department of Housing and Urban Development Community Development Block Grants following Hurricane Sandy, USACE-led projects, and FEMA's Building Resilient Infrastructure and Communities Program. However, these resources have been made available reactively and cannot be relied upon to cover future needs.

To address this challenge, the city convened a Resilience Finance Task Force in 2024 to explore long-term strategies for new revenue generation and sustainable financial structures to support coastal resiliency projects.

To understand the scale of the need, the Task Force considered a portfolio of potential coastal protection infrastructure projects evaluated by the Special Initiative for Rebuilding and Resiliency published after Hurricane Sandy and the USACE New York and New Jersey Harbor and Tributaries Study (NYNJHATS). In 2022, USACE released a Tentatively Selected Plan for NYNJHATS which outlined numerous coastal defense systems across the city. This plan has an estimated cost of over $50 billion over the next 30 years.

FIG. 2.17 | BUILDINGS PROTECTED FROM FUTURE FLOOD RISK, BY NEIGHBORHOOD



Scenarios include a "Current" scenario, reflecting completed, in-progress, and funded projects, and an "Expanded" scenario, reflecting longer-term feasibility studies that have explored various alternatives to reinforce the city's coast, to illustrate the potential impact of a $50 billion investment. The analysis uses buildings protected as an isolated measure for understanding how planned protections may reduce future exposure over time. Coastal protection projects also benefit infrastructure such as public transit facilities, roads, and parks.
Figure Source: NYC OMB

While the plan is still subject to study, finalization, and congressional approval, and there is no guarantee that it will be implemented, NYNJHATS provides the best-available reference for understanding the scale and cost of infrastructure that may be required to address coastal flood risk. Once new infrastructure is built, the city will require funding for operations and maintenance to ensure the infrastructure remains functional. The Task Force found these costs could reach hundreds of millions of dollars per year.

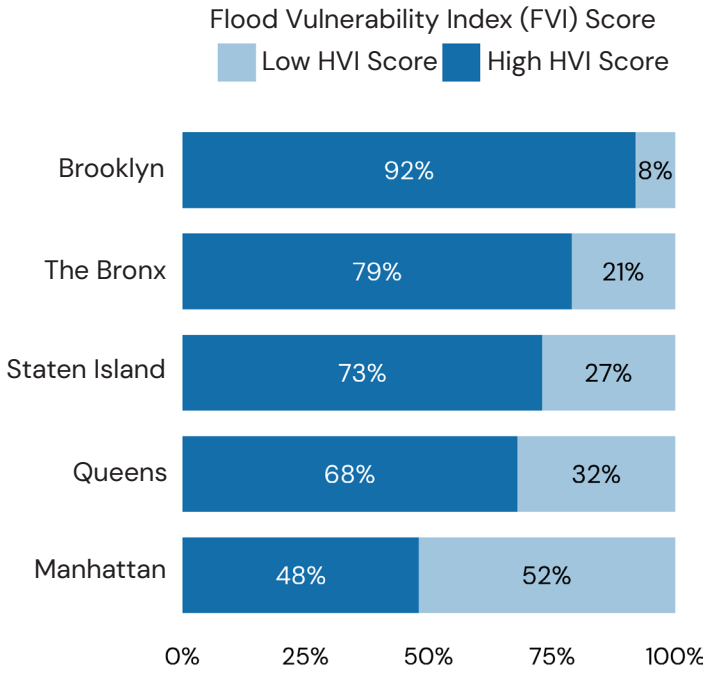
The cost of implementing such a large-scale coastal protection infrastructure strategy across the city exceeds what the city's budget can accommodate.

The Task Force recommended that the city establish shoreline protection districts to fund local operations and maintenance, pursue multiple long-term revenue sources to support construction, create a Resilience Finance Authority and Board to finance capital costs, and collaborate with the insurance industry on resiliency. These proposals are being evaluated to determine viability as well as next steps. The costs of these projects are high, but the protection they afford is needed. A portfolio of projects at a scale comparable to that studied by the Task Force could protect 83 percent of buildings currently at risk in the projected 2050 100-year floodplain.

Figure 2.18 shows, by borough, the percent of buildings in New York City in higher vulnerability census tracts, as measured by the Flood Vulnerability Index (FVI) 2050s storm-surge scenario. Understanding where exposure increases vulnerability to hazard helps the city prioritize adaptive measures for communities in most need.

Proactive, city-led planning is needed to establish coastal protection targets and define a long-term vision that reflects local risks, conditions, and needs. To support this work, the city is advancing planning efforts to clarify appropriate standards across the coastline, which will inform a comprehensive, citywide coastal resilience plan.

FIG. 2.18 | PERCENT OF BUILDINGS AT FLOOD RISK, BY BOROUGH



The FVI estimates vulnerability to flooding across NYC. It includes a sub-index that reflects susceptibility to harm and capacity to recover using 12 socioeconomic indicators and information about physical exposure to various climate scenarios. This figure overlays that sub-index with the 2050s storm-surge risk scenario to understand the proportion of buildings in higher vulnerability areas. Figure Source: NYC OMB

Funding has been added in the FY 2027 Executive Budget to advance the comprehensive plan, which will develop coastal risk reduction strategies to ensure the city can make informed investments, leverage funding opportunities, and advance a targeted approach to protecting the city's coastline.

Fortifying neighborhoods to address worsening coastal conditions will require sustained planning, strategic investment, and careful implementation to ensure it is done equitably and responsibly.

SOURCE: NYC DEP

3. Looking Forward

The city will streamline and improve internal and citywide processes to ensure that Climate Budgeting prioritizes the most cost-effective and impactful investments to help New York City build a resilient, clean, and healthy future.

IMPLEMENTING CLIMATE GOALS RESPONSIBLY

The success of New York City's climate action will be measured not only by emissions and risks reduced, but also by how these policies and investments tangibly improve daily life for New Yorkers—cooler streets and homes during heatwaves, stronger protection from flooding for people and property, cleaner air, lower costs, and equitable access to clean energy. The Climate Budgeting process continues to support the city as it progresses towards its ambitious climate goals, while recognizing the scale of action and investment still needed to build a resilient, clean, and healthy future for all New Yorkers and focusing on improving affordability, especially in a city that faces some of the highest construction, housing, and utility costs in the country. Programs like the NYC Accelerator Co-Op and Condo Hub and Affordable Housing Reinvestment Fund help to support both affordability and building decarbonization. Efforts to expand flood protections, tree canopy, and access to cooling, are considering how to balance addressing risk with added costs. The city will continue exploring ways to reduce energy costs by investing in renewable energy and storage, advocating for lower, affordable utility rates, and enabling community organizations to directly participate in the rate-setting process. The upcoming Environmental Justice NYC Plan will provide recommendations on embedding environmental justice considerations into city processes and decision-making to support vulnerable communities.

In April 2027, the city will release its next long-term climate action plan. Climate Budgeting will inform this plan by providing a clear understanding of the city's progress to date, identifying remaining gaps, and translating climate planning into concrete budget decisions that drive measurable progress toward emissions reduction and climate resiliency goals.

Cities have historically been leaders on climate action, advancing ambitious plans even when national governments move in the opposite direction. Now is no exception. This year, Climate Budgeting became a requirement for participation in C40 Cities, a global network of mayors driving climate action. As New York City advances its climate goals, it will continue to demonstrate global leadership and provide a model for other cities in the C40 network and beyond. Climate Budgeting will serve as the central mechanism for translating climate ambitions into actionable investments and policies that deliver a healthier, safer, and more affordable city for all New Yorkers.

TECHNICAL APPENDICES

To explore the technical appendices, which include detailed methodologies of analyses presented in this document, follow this link or scan the QR code below.

Technical Appendix A: Climate Budgeting Tools and Investment Tracking
Technical Appendix B: Greenhouse Gas Emissions and Air Quality Forecasting
Technical Appendix C: Resiliency Exposure Inventory and Forecast

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Budget Director, Sherif Soliman

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OMB Environmental Sustainability & Resiliency Task Force

Director, Sustainability & Resiliency, Lia Cairone
Assistant Director, Resiliency Policy and Budget, Kara Kirchhoff
Assistant Director, Sustainability Policy, Ross MacWhinney
Unit Head, Budget, Claire Douglas
Unit Head, Resiliency Policy, Peter Mattingly
Unit Head, Sustainability Policy, Samir Farhat

Sage Block, Shawn Inshan, EJ Katz, Anna Liebowitz, Hannah Murphy, Aurora Robertson, Mallory Rutigliano, Fandi Tang, Max Vilgalys

New York City Climate Leadership

Chief Climate Officer, Louise Yeung
Chief Decarbonization Officer, Sana Barakat

Network Partners

C40 Cities Climate Leadership Group

Agencies

Brooklyn Navy Yard Development Corporation (BNYDC), Brooklyn Public LIbrary (BPL), Metropolitan Transportation Authority (MTA), New York Public Library (NYPL), NYC Administration for Children's Services (ACS), NYC Department for the Aging (DFTA), NYC Department of Buildings (DOB), NYC Department of Citywide Administrative Services (DCAS), NYC Department of Design and Construction (DDC), NYC Department of City Planning (DCP), NYC Emergency Management (NYCEM), NYC Department of Correction (DOC), NYC Department of Cultural Affairs (DCLA), NYC Department of Environmental Protection (DEP), NYC Department of Health & Hospitals (H+H), NYC Department of Health & Mental Hygiene (DOMH), NYC Department of Housing Preservation & Development (HPD), NYC Department of Parks and Recreation (DPR), NYC Department of Sanitation (DSNY), NYC Department of Transportation (DOT), NYC Economic Development Corporation (NYCEDC), NYC Fire Department (FDNY), NYC Housing Authority (NYCHA), NYC Human Resources Administration (HRA), NYC Mayor's Office of Climate & Environmental Justice (MOCEJ), NYC Office of Cheif Medical Examiner (OCME), NYC Office of Technology and Innovation (OTI), NYC Policy Department (NYPD), NYC School Construction Agency (SCA), Queens Public Library (QPL), The City University of New York (CUNY), The Trust for Governor's Island (TGI)

Individuals

Saahithi Achanta, Thomas Ansorge, William Arniotes, Bernadette V. Baird-Zars, Sana Barakat, David Becker-Turk, Jason Beckfield, Gary Belkin, Erin Betley, Uma Bhandaram, Dare Brawley, Daniel Brenner, Isabela Brown, Omer Cabuk, Steven Cai, Lindsey Campbell, Farren Chan, Helen Chananie, Joe Chavez, Carmen Cheung-Tan, Tahsin Chowdhury, Rodney Chun, Jessica Colon, Jonathan Cruz, Daniel Diaz, Will DiMaggio, Amelia Ding, Maria A. Dombrov, Jenna Dyer, Julia Eiferman, Daphna Ezrachi, Laurian Farrell, Johnluca Fenton, Ellyze Francisco, Paul Gallay, Nadav Gazit, Tyler Gibson, Beth Golub, Geraldine Green, Michael Greenberg, Jack Gross, Annel Hernandez, Mason Hess, Emmanuel Hidalgo, Pauline Ho, Christopher Horng, Nicholas Howard, Carolyn Hubbard, Maggie Jin, Michelle Johnson, Ozge Kaplan, Jack Kelly, Jordan Kipp, Jackie Klopp, Stefan Knust, Maddy Kornhauser, Andrew J. Kruczkiewicz, Nega Lakew, Kevin Lang, Allen Lee, Hellas Lee, Jennifer Leone, Krystle Lewis, Amy Li, Shane Loughran, Johanna R. Lovecchio, Paul Lozito, Giulia Luci, Dionne Ma, Kytt MacManus, John Mays, Jonathon McCoy, Mike Menser, Frank Millan, Jonatta Moore, John Ney, Jimmy Ngo, Michael Nicholas, Eva Nivard, Eleanor Nussbaum, Noah O'Connor, Bryanna O'Malley, Julia Okun, Gianna Parisi, Anthony Perez, Michael Petriello, Ganesh Pillai, Aymee Pinillos, Laura Popa, Ana Porzecanski, Pavithra Priyadarshini Selvakumar, Spiros Rally, Kara Randazzo, Madhury Ray, Sabrina Reveron, Robert Patrick Rosso, Victoria Sanders, Matthew Sandler, Max Scherzer, Jeffrey Schlegelmilch, Kathleen Schmid, Lorraine A. Schneider, Ezra Selove, Liv Sevcenko, Benjamin Shapiro, Daniella Simari, Erica Simon, Abdourahmane Sow, Elijah Spang, Mitchell H. Stripling, Matthew Sullivan, Erika Svendsen, Holli-Anne Tai, Kobe Terrier, Dana R. Thomson, Michael Treglia, Aliya Tuzhilin, Katie Tvauri, Nicholas Venezia, Matthew Walsh, Lydia Weiner, Samuel Whang, Carolyn Wilmore, Joanna Wolska, Betty Wong, Alex Wooledge, Jane Wu, Pablo Yanez Mena, Allan Zaretsky, Chengdong Zhang, Lila Zwonitzer

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