
Preliminary Ten-Year Capital Strategy

Fiscal Years 2020-2029



The City of New York
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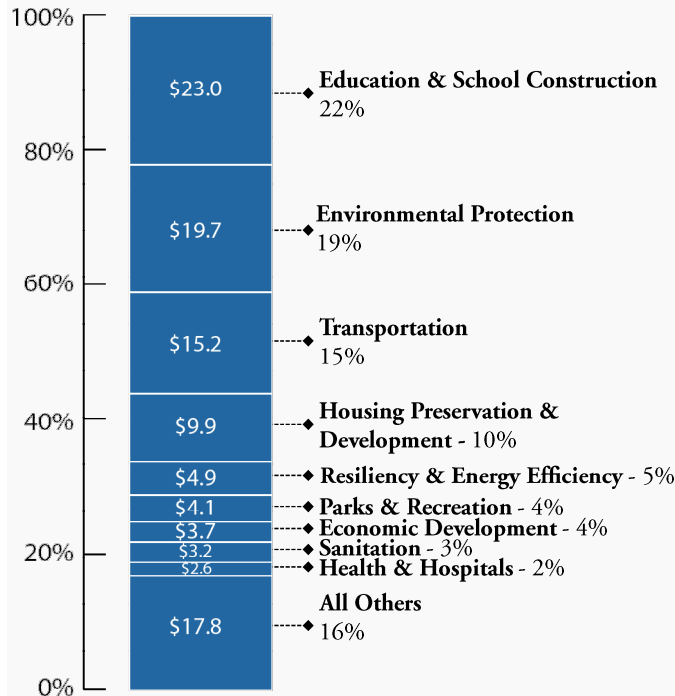
February
2019

***Preliminary Ten-Year
Capital Strategy
Summary***

2020-2029 Preliminary Ten-Year Capital Strategy Overview of \$104.1 Billion in Planned Spending

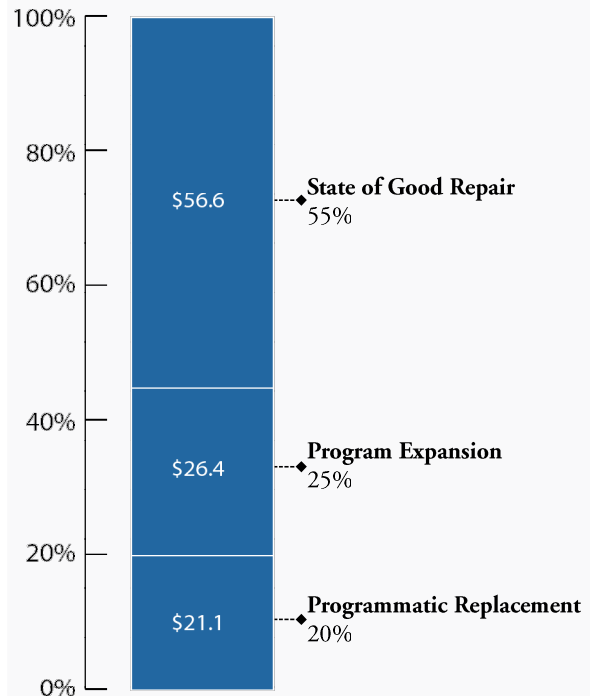
By Agency

Each of the following agencies will be responsible for making capital investments over the next decade.



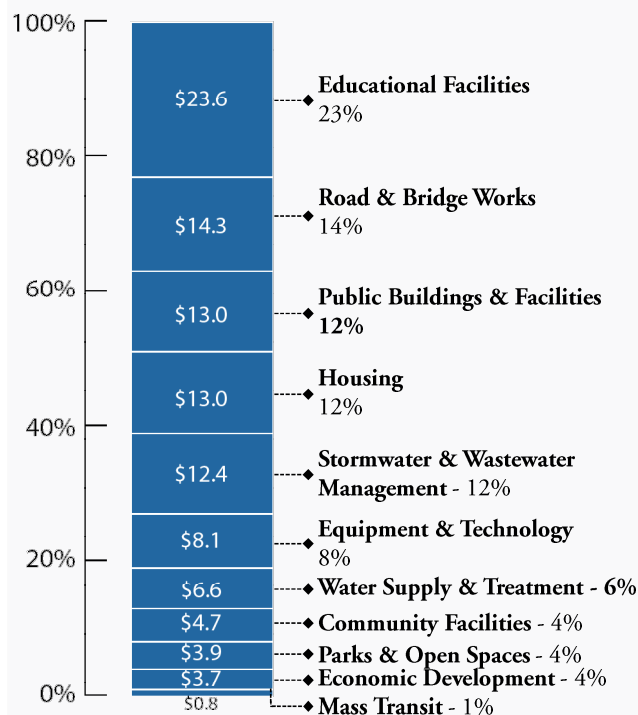
By Lifecycle Category

The City is investing to maintain and replace the assets we have today, while expanding for the New York of tomorrow.



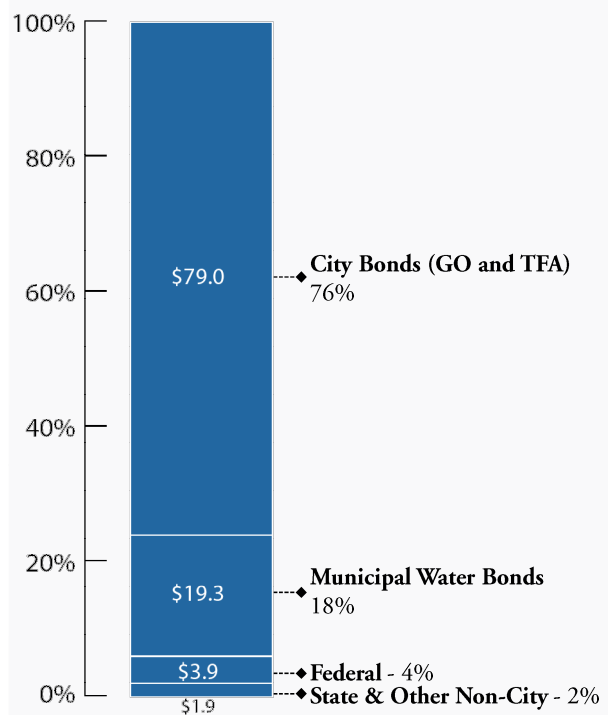
By Service Category

New Yorkers will benefit from investments across a broad range of infrastructure and facility types.



By Funding Source

The City's ambitious capital strategy leverages a mix of City, State, Federal, and other funding sources.



Introduction and Overview

As we work towards the Fiscal Year 2020 Ten-Year Capital Strategy (TYCS) for the City of New York, we are pleased to publish this preliminary strategy that details how we plan to invest \$104.1 billion over the next decade to improve infrastructure, including roads, schools, bridges, water and sewer facilities, and transportation systems in neighborhoods across the five boroughs.

The Preliminary Ten-Year Capital Strategy (PTYCS) is distinct from both capital budget financial documents and other citywide strategic plans, such as OneNYC. Mandated by the New York City Charter, the PTYCS provides a venue for the City to demonstrate the comprehensive infrastructure planning that the City undertakes as part of its responsibility to all New Yorkers, across all neighborhoods, and explain the connection between capital investment and strategic priorities. It is designed to help prioritize investment decisions across all capital agencies and clearly communicate to the public an integrated approach to capital planning across infrastructure types, in line with the growth of the city.

The PTYCS has five main components:

- 1) An **Overview of Spending** (available on the previous page) that shows the allocation of our capital plan across agencies, program types, and lifecycle categories.
- 2) **Guiding Principles** that provide City agencies with a long-term framework to use in designing and developing capital project portfolios. They illustrate how we ensure that capital planning remains fiscally responsible, promotes equity and fairness, and is informed by data and community involvement.
- 3) **Investment Priorities** that help City agencies make capital investments that reflect citywide policy and strategic goals.
- 4) A **Financing Program** section that outlines how the City will support the capital program through long-term borrowing.
- 5) **Program Detail by Agency** sections that provide a comprehensive look into specific capital investments.

The Guiding Principles and Investment Priorities reflect the Mayor's vision for shaping a stronger and fairer city through strategic capital investment decisions. They serve as a guide for capital planning, subsequent capital budgets, and commitment plans over the next decade. By adhering to these principles, we plan for a more socially, environmentally, and fiscally resilient future.

We expanded the Guiding Principles reflected in the previous TYCS to reveal additional ways we do comprehensive capital planning, and have provided examples of how agencies work with them in developing their long-term capital projects. We have also updated the Investment Priorities to recognize the importance of modernizing infrastructure and making additional resiliency investments.

Summary of Guiding Principles

1. **Maintain New York City’s financial responsibility**

The City of New York finances its capital program primarily through issuance of bonds. This document demonstrates the City’s long-term commitment to meeting our legal mandates and enhancing the capacity of our infrastructure to support broad-based economic growth while maintaining sustainable levels of debt service. Maintaining assets in a state of good repair contributes to financial responsibility by accounting for major renewals and mitigating larger repair costs in the future. City agencies commit to financial responsibility by accelerating project procurement and implementation, fostering better interagency project coordination, and establishing more realistic annual budget allocations.

2. **Promote forward-looking, holistic capital planning that anticipates neighborhood needs of tomorrow**

The PTYCS reflects an effort by City agencies to prioritize and implement a coordinated, resilient infrastructure plan that accounts for neighborhood trends; neighborhood-based initiatives; plans for growth, including current and projected population, housing, and employment; and climate change trends. While each agency has its own capital planning process, we work to ensure that, as a City, we are considering the totality of neighborhood needs over time, and that we collaborate on integrated capital plans accordingly. Capital investments are also considered in the context of other policy, regulatory, and expense budget measures to improve quality of life across the city.

3. **Advance a more equitable New York City through capital investment**

In line with becoming the fairest big city in the nation, the City of New York is committed to promoting equity in all neighborhoods across all five boroughs. To pursue this, City agencies are considering historical and future investment trends across neighborhoods, developing better capital need assessment approaches, and coordinating capital investment with relevant City equity initiatives.

4. **Consider community perspectives in capital planning and decision-making**

City agencies are strengthening outreach in order to collect community perspectives and are improving ways to incorporate this public feedback into the planning process, from project conception to design and construction.

Summary of Investment Priorities

The City of New York will advance six overarching capital investment priorities over the next decade. These priorities cut across City agencies and frame decisions regarding the levels of spending specified in this document. They will also serve to guide agencies' project planning moving forward.

1. **Maintain and modernize our infrastructure to ensure a state of good repair**

We will make substantial investments to bring our infrastructure and buildings to a state of good repair, seeking to incorporate modern design standards with an eye towards capitalizing on opportunities to reduce our greenhouse gas emissions. We can more easily sustain and improve quality of life in all neighborhoods when the underlying physical infrastructure that supports the city is robust and durable.

2. **Support growth and preserve affordability in our diverse neighborhoods**

We will continue to invest in housing for low- and moderate-income New Yorkers, while making investments in the streets, parks, and community facilities that make New York City's neighborhoods across all five boroughs attractive places to live and work.

3. **Expand access to education and economic opportunity**

We will make strategic investments in schools, higher education, and industries that will provide quality jobs for New Yorkers, including new funding to deliver 57,000 new school seats. We will nurture stronger conditions for businesses and jobs to thrive in more neighborhoods, increasing the geographic spread of jobs and alleviating pressure on Manhattan transit routes.

4. **Restore and protect our waterfront and address citywide resiliency goals**

We will continue to invest in resilient infrastructure in neighborhoods across all five boroughs, in addition to repairs and improvements to waterfront parks and coastal infrastructure to protect our current and future residents from the effects of climate change.

5. **Build stronger connections between our communities**

We will continue to invest in new public transit options, improve our parks and open spaces, and build better, smarter community facilities that serve our neediest and bring all New Yorkers together.

6. **Promote the health and safety of all New Yorkers**

We will support and strengthen our health and hospitals system over the next decade, while also protecting New Yorkers by modernizing our police, fire, and correctional facilities.

We will include more detail and examples of the Investment Priorities within the Ten-Year Capital Strategy published in connection with the release of the Fiscal Year 2020 Executive Budget.

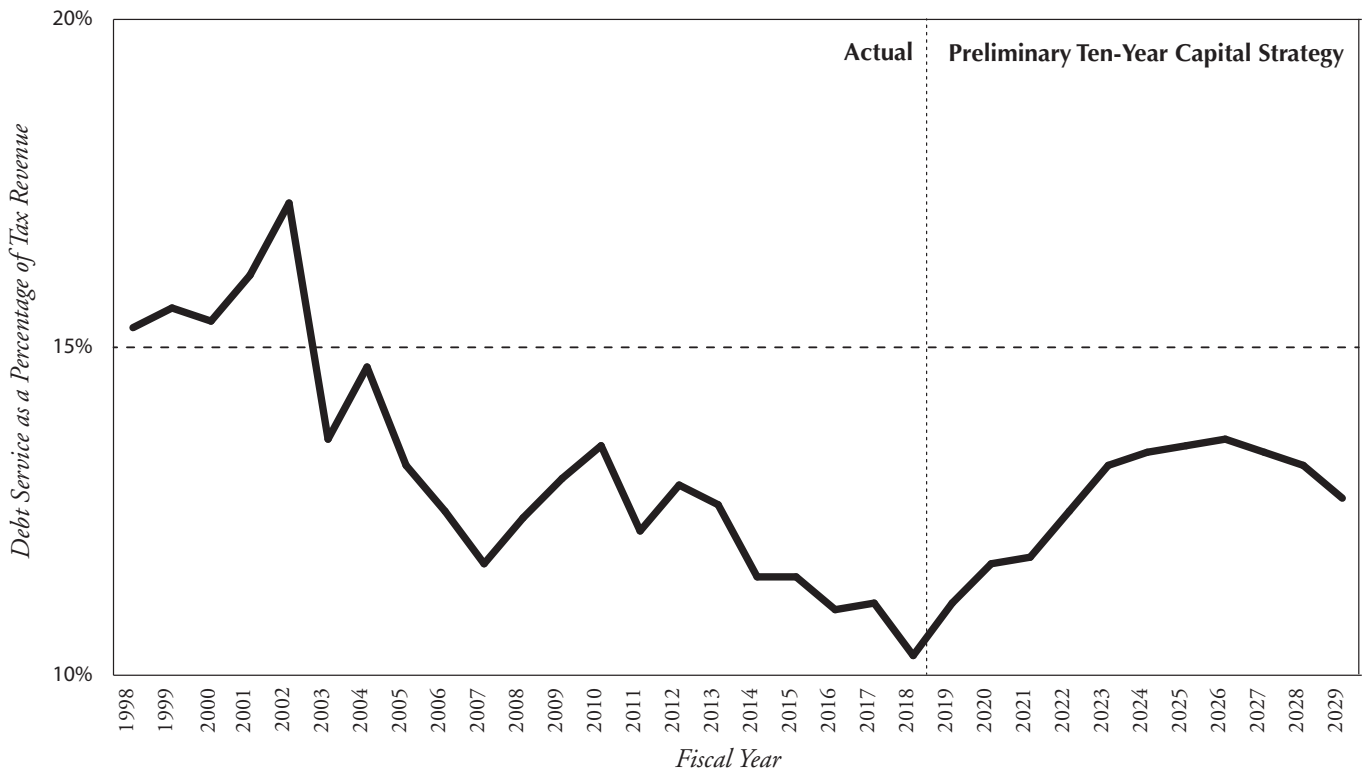
Guiding Principle 1: Maintain New York City's financial responsibility

New York City's capital investments are funded largely by issuance of bonds, which are purchased by financial institutions and New Yorkers alike. The City's strong economy, responsible budget practices, and sustainable levels of debt service put these bonds in high demand.

The debt service ratio as a percentage of taxes has been used by the City and fiscal monitoring agencies since the late 1980s. It is the best measure of debt burden because it puts debt service within the context of the City's own resources. These credit strengths have a real impact on New Yorkers: a strong demand for bonds reduces the costs of maintaining roads, bridges, schools, and other capital investments, and saves taxpayers money.

This PTYCS demonstrates our commitment to meeting legal mandates and enhancing the capacity and quality of our assets. Moreover, it maintains infrastructure that is critical to fostering long-term economic growth and improving quality of life for New Yorkers.

Fiscal Year	Anticipated Debt Service Obligation (\$ in billions)	Debt Service as a Percentage of Tax Revenue
2020	\$7.3	11.7%
2021	\$7.7	11.8%
2022	\$8.3	12.5%
2023	\$9.1	13.2%
2024	\$9.6	13.4%
2025	\$10.0	13.5%
2026	\$10.5	13.6%
2027	\$10.8	13.4%
2028	\$11.1	13.2%
2029	\$11.1	12.7%



Guiding Principle 1: Maintain New York City's financial responsibility

Fostering better interagency project coordination

From better scheduling of construction activity on the City's streets to integrating storm water management plans into parks projects, the City is improving its planning and data-sharing practices to foster more efficient and effective capital investments. For example, the Department of Transportation (DOT) and the Department of Environmental Protection (DEP) coordinate on planning for street reconstruction projects, safety improvements, and sewer and water main upgrades and repairs.

The Department of Design and Construction (DDC) has new Front End Planning Units which further facilitate communication between agencies to share project scoping, discuss state of good repair improvements, and identify project timelines that might benefit from coordinated project delivery. This coordinated work creates cost efficiencies, shortens project timelines and, most importantly, reduces disruption to communities from the construction work.

Coordination with Private Utilities

New York City's streets typically have multiple private and public utilities running beneath them, including public water and sewer services and privately-owned electrical, steam, natural gas and telecommunications cabling. As a result, roadway repairs and improvements, and utility upgrades or repairs, often require coordinated street excavation. Coordinating all the public and private work activities required is critically important, as utility work is among the primary causes of delays to City-sponsored roadway reconstruction work.

New York City is committed to streamlining and centralizing capital work coordination across service providers, including utilities and telecommunication companies. Following on the successful effort to strengthen coordination between public and private entities while revitalizing Lower Manhattan after 9/11, we are strengthening working relationships among capital project planners through monthly scheduling and planning meetings, in addition to separate project-based meetings. We are also sharing digital maps showing locations of facilities and planned projects. Moreover, City agencies and private utilities are piloting joint construction of capital projects with a single contractor, which can yield significant savings by shortening the schedule and eliminating additional coordination needs. We expect that increased coordination will lead to more efficient construction overall, produce cost savings, and cause fewer street disruptions within communities.



Guiding Principle 1: Maintain New York City's financial responsibility

Enhancing capital project procurement and implementation

The City is prioritizing several improvements to procurement and implementation processes, including: a) increasing transparency into the process for vendors and the public; b) ensuring efficiency and transparency in delivery; c) developing innovative design-build programs for large-scale priority projects; d) reducing procurement cycle times; and e) enhancing cost estimation among the nearly \$4 billion in construction procurement that occurs every year. For example, in January 2019, DDC released its strategic plan with key reforms and processes related to procurement and implementation of capital projects. DDC seeks to modernize the contract procurement process, improve evaluation and payment processes, and introduce better project management controls for efficient delivery of projects. DDC's Strategic Plan is available at:

https://www1.nyc.gov/assets/ddc/images/content/pages/press-releases/2019/2019_DDC_Strategic_Plan.pdf

As another example, in April 2017, the Mayor's Office of Contract Services (MOCS) released a new Procurement and Sourcing Solutions Portal (PASSPort) to improve the citywide procurement process. PASSPort is a user-friendly and interactive portal for both vendors and City agencies to find key resources, manage vendor accounts, submit information and track performance. It has replaced the existing paper based system, saving both vendors and City agencies considerable time and effort in doing business with the City.

Design-Build

Currently, nearly all City capital projects require separate procurement for design and construction. The design contract needs to be completed before the construction contract is procured and finalized, and procurement timelines can take up to six months. As the size and complexity of the City's capital portfolio continues to increase, expanding the range of tools available for effective and more tailored project-specific delivery is more critical than ever. To that end, another type of project delivery mechanism is design-build, in which a single contractor is hired to be responsible for both the design and the construction phases of a project. By having a single entity responsible for the project, design and construction planning can be done concurrently, which reduces project delivery schedules, improves cost estimation of materials and resources, and minimizes project risks. To date, the City has procured design-build authority for a limited number of projects. The City is continuing to advocate for the expansion of its design-build authority by improving bidding and project management processes to ensure critical capital projects are delivered within shorter timelines and at lower costs.



Guiding Principle 2: Promote forward-looking, holistic capital planning that anticipates neighborhood needs of tomorrow

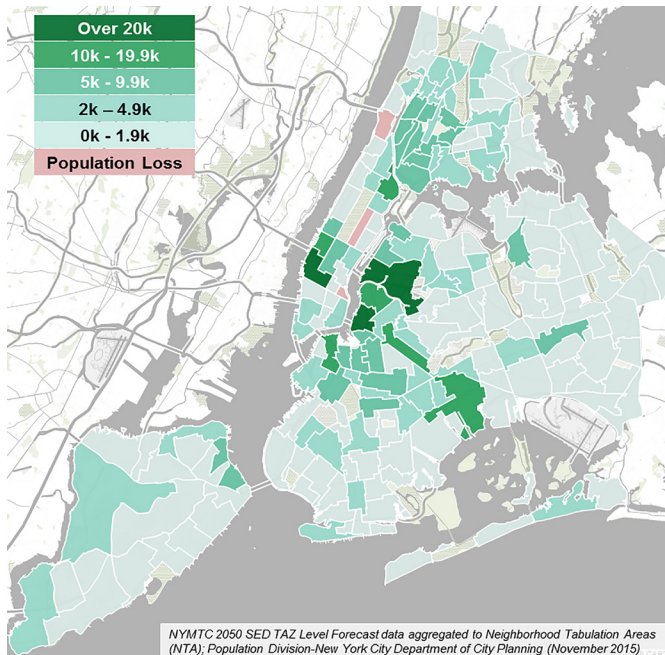
The City takes a needs-based approach to integrated capital planning. City agencies assess their capital needs by incorporating existing condition assessments and projected citywide and neighborhood growth trends.

Integrating neighborhood growth perspectives

New York City has seen rapid growth in recent years – a trend reflected in population, housing, and job growth. City agencies consider these trends when planning infrastructure to address future needs, including at the neighborhood level.

Population Growth: New York City currently has over 8.6 million residents, reflecting an increase of 448,000 residents, or 5.5 percent, since 2010. The population is increasing in every borough, with the Bronx experiencing the largest relative change in population (6.2 percent). Overall population is expected to increase to roughly nine million by 2030, with significant growth expected in Brooklyn, Queens, and the Bronx. Understanding the shifting demographics is key to developing long-term plans that can meet the needs of all New Yorkers.

Projected Population Growth 2010-2030 by Neighborhood Tabulation Area (NTA)



- *Planning for shifting demographics* - Agencies use detailed population projections to plan service needs for select demographic groups. For example, adults over the age of 60 are projected to reach 1.8 million – or 20 percent – of the City’s population by 2030. The Department for the Aging (DFTA) is pursuing a multi-agency “Plan 2025” to ensure that New York City’s rapidly growing senior population benefits from stable and affordable housing, transit accessibility, mental health support through ThriveNYC, and a range of other aging services.

As another example, the School Construction Authority (SCA) is now using updated pupil generation ratios (or “multipliers”) to estimate the number of public school students that could be introduced by new housing development. This input is critical for understanding future school seat demand used in SCA school capacity planning and in City Environmental Quality Reviews of real estate projects seeking City approval or financing. There were two major improvements to the multipliers. They now reflect (1) the most current household and school enrollment trends, and (2) differences among the 32 Community School Districts (CSDs) that were not captured by the borough averages used previously. For instance, previous analyses used to assume that a 1,000-unit new building located anywhere in Brooklyn would produce school seat need for 290 elementary school students. Now, analyses with more granular data would factor in neighborhood differences and estimate school seat need for 70 elementary students given the same-sized building if it were in Greenpoint or Williamsburg, or 380 if it were in East New York. By using updated and more localized data, communities and planners have a far better understanding of how large new developments could affect their local schools.

Guiding Principle 2: Promote forward-looking, holistic capital planning that anticipates neighborhood needs of tomorrow

Housing Growth: With population growth driven by demographic and economic factors, the housing supply must increase in order to help alleviate overcrowding, homelessness, and additional upward pressure on housing prices. In 2017, citywide housing completions exceeded 25,000 units, with additional permits issued for nearly 20,000 new units. This is in addition to a significant number of units that remain under development following 2015 and 2016, when over 55,000 new units were permitted. Housing completions are thus expected to remain at similarly high levels in the next several years.

- *Planning for housing growth* - As technology and information gathering processes improve, we are moving towards a planning process in which City agencies have increasingly detailed information about construction and real estate development activity. This process will ensure that the City's neighborhoods seeing the most housing growth are receiving the appropriate level of service given rapid changes in needs. For example, for its very long-term planning, DEP is collaborating with agency partners involved in the land use process to evaluate and propose potential sewer capacity improvements in areas where significant growth is anticipated in the future, including those being rezoned to allow different types of growth. To do this, DEP is undertaking a comprehensive assessment of updated neighborhood-level data on new residential development, population projections, 311 complaint data, and existing sewer capacity; this will help the City understand impacts on existing infrastructure and capacity. As another example, the Fire Department (FDNY) is using granular data on demographic trends and projected population and housing growth to evaluate new needs for Fire and Emergency Medical Services (EMS) resources and infrastructure.

Guiding Principle 2: Promote forward-looking, holistic capital planning that anticipates neighborhood needs of tomorrow

Ensuring school capacity planning accounts for housing growth

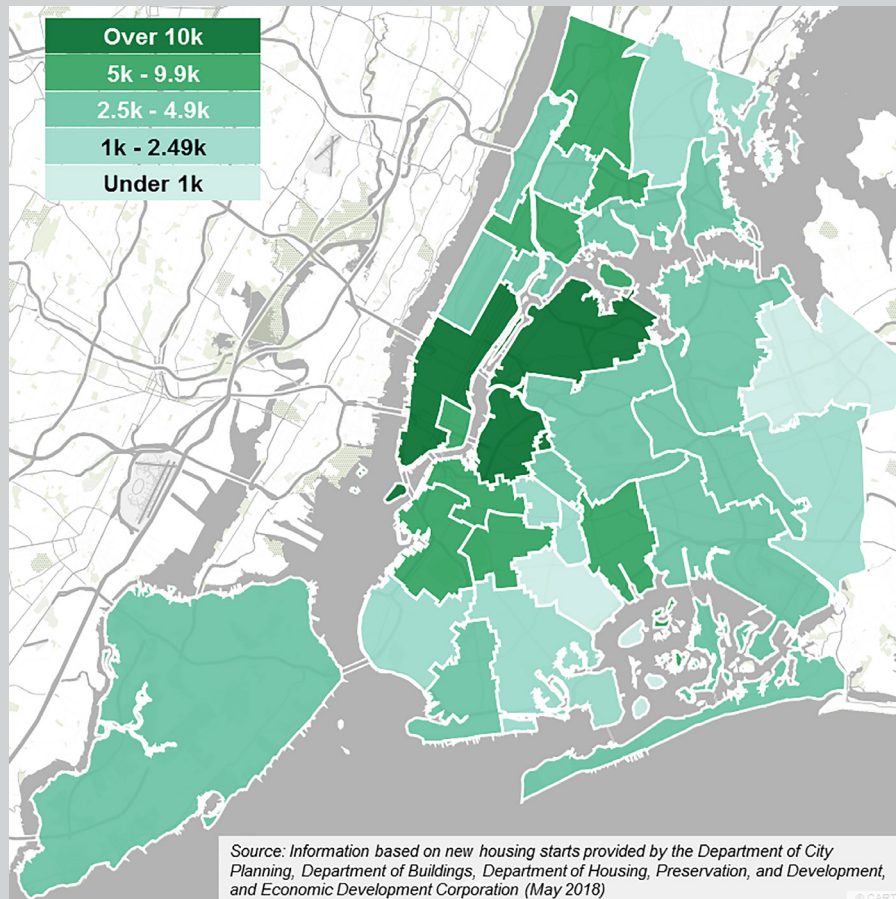
The School Construction Authority (SCA), as part of its capital planning process, relied on likely housing growth projections over the next five to six years to determine how many public school students are likely to enroll in one of the 32 geographic Community School Districts (CSDs), serving elementary through middle school grades.

This approach included several steps: (1) producing a database of housing developments that have been completed since 2010, have permits issued, or have permit applications in progress; (2) generating a list of residential projects that have received or are seeking approvals or financing through City agencies; and (3) adding known information about individual projects to incorporate an estimate of the relative likelihood of projects to be built or under construction within the next five to six years.

The SCA incorporated the list of known developments into its New Capacity planning process, which looks at updated enrollment projections and capacity changes in addition to housing information. The SCA funded \$7.88 billion or 57,000 new school seats across the City through its new FY2020-2024 Five-year Capital Plan – one of the largest components of the City’s Capital Budget.

The City is working on expanding the availability of similar data products to other capital agencies that would benefit from granular planning inputs related to housing development activity, such as FDNY’s new needs assessment and DEP’s drainage and sewer planning. This fits with the City’s efforts to ensure that agencies have a stronger understanding of current and future real estate development activity in the city and how it may affect the demands placed on City services and infrastructure.

Housing Pipeline provided to SCA – housing units by school district 2018-2024

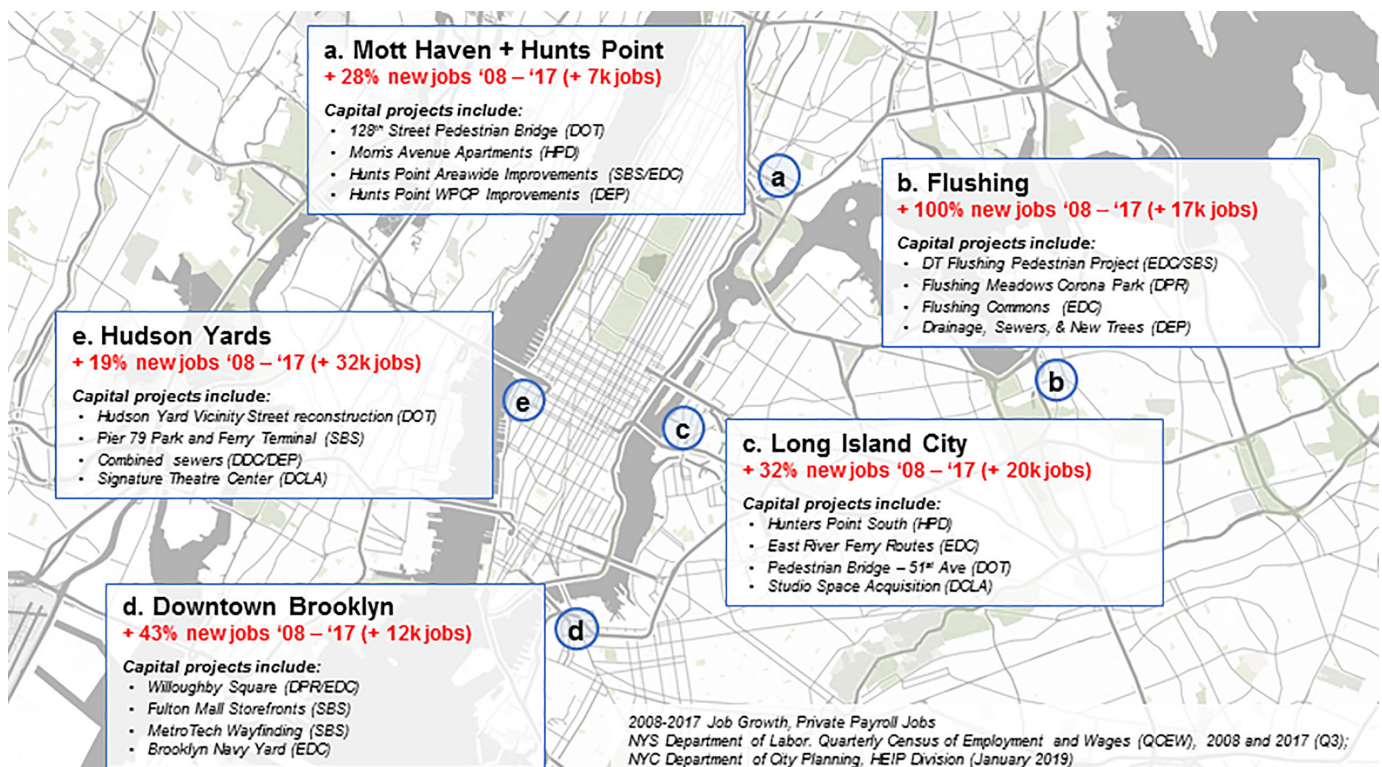


Guiding Principle 2: Promote forward-looking, holistic capital planning that anticipates neighborhood needs of tomorrow

Job Growth: As of 2017, New York City is home to 4.3 million payroll jobs, with the densest concentration of jobs in traditional Central Business Districts (CBDs) like Midtown and Lower Manhattan. Between 2008 and 2017, New York City captured 75% of the 31-county region's net private sector employment gain – an increase of nearly 584,000 jobs. In the upcoming decade, New York City is anticipated to continue to add jobs in significant numbers. Over the past ten years, job growth has shifted across boroughs: from 2008 to 2017, the city's rate of job growth increased most rapidly outside of Manhattan, especially in high transit accessible areas near institutions. In particular, job centers have been emerging in neighborhoods of Brooklyn and Queens along the East River.

- Planning for job growth** - The City is committed to providing supportive capital investment to support existing CBDs and other areas where sustained job growth is expected. Infrastructure improvements to support job growth include improving transit access to jobs, building workforce centers, creating public plazas, and making streetscape and facade improvements for small businesses. For example, EDC is collaborating with multiple agencies on capital projects in Downtown Brooklyn, ranging from improving wayfinding for workers near MetroTech Center and creating new green space at Willoughby Square, to improving storefronts and pedestrian spaces along the commercial corridors of Fulton Street and Flatbush Avenue.

Job Growth and Infrastructure Investment in Select Neighborhoods



Guiding Principle 2: Promote forward-looking, holistic capital planning that anticipates neighborhood needs of tomorrow

The impacts from climate change on our communities are increasing the stress on our infrastructure. City agencies are investing to protect our city from existing and future climate hazards, while minimizing the City’s contributions to global warming. Through the capital planning process, we will seek to prioritize cost-effective investments that address and mitigate these ongoing risks, while recognizing that there are limits on the extent to which capital projects can feasibly reduce climate risks.

This PTYCS will enable the City to design our capital projects to new standards that minimize the City’s greenhouse gas emissions and maximize the resiliency, redundancy, and capacity of City infrastructure to respond quickly after storms and heat waves. This demonstrates our commitment to respond to our changing climate, including major energy efficiency improvements to government facilities, new coastal protections, tree-planting and cooling strategies to mitigate urban heat islands, and green infrastructure to mitigate the impacts of heavy rainfall.

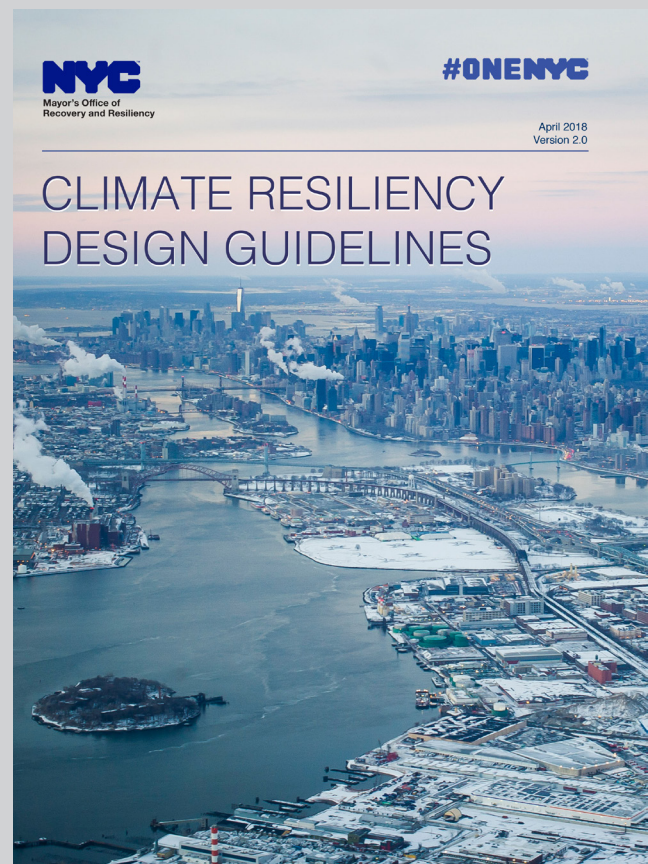
Climate Resiliency Design Guidelines

In April 2017, Mayor de Blasio announced the release of the Climate Resiliency Design Guidelines, which established guidance on how to use climate change science in the planning, design, construction, and renovation of City facilities.

Developed, tested, and continuously improved by the Mayor’s Office of Resiliency, the Climate Resiliency Design Guidelines provide the City’s engineers and architects with the step-by-step instructions necessary to design for projected changes in temperature, precipitation, and sea level. The creation of the Climate Resiliency Design Guidelines was a seminal step towards integrating resiliency as a core principle in the City’s capital program. Continued implementation will make our built environment more resilient to extreme weather and climate change, while promoting the health, safety, and prosperity of all New Yorkers.

The City has tested the application of the Climate Resiliency Design Guidelines to determine the design, cost, and benefit implications from achieving a resilient design standard. Today, City agencies are beginning to integrate the Climate Resiliency Design Guidelines into their standard operating procedures for design and procurement, and taking the first steps toward implementation on capital projects.

The latest version of the Climate Resiliency Design Guidelines is available at www.nyc.gov/resiliency



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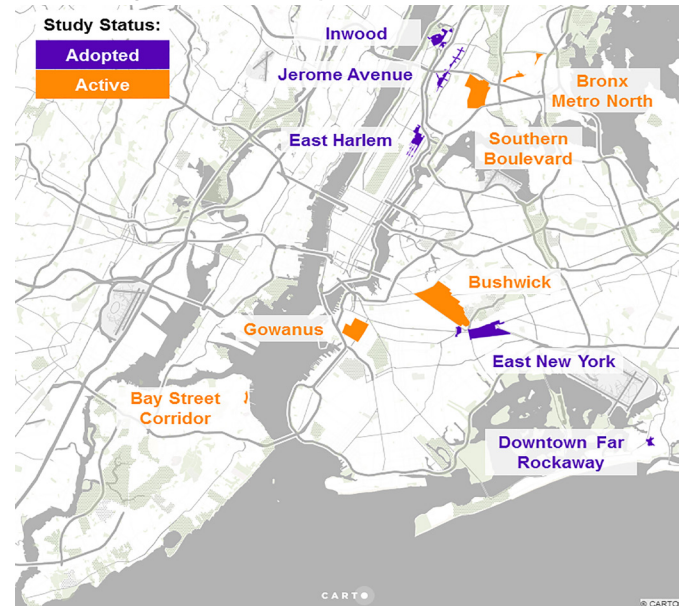
Planning with knowledge of relevant City neighborhood initiatives

City agencies regularly undertake neighborhood-based initiatives to address specific neighborhood needs, often related to growth, economic development, accessibility, health and safety, and other quality-of-life improvements. By coordinating on neighborhood-based initiatives, agencies are able to improve capital project prioritization and sequencing, in addition to pursuing a more coordinated approach to community engagement.

- *Investing in infrastructure in advance of growth* - Given the housing challenge in New York City, the Mayor's housing plan calls for increases in residential density in a variety of transit-rich neighborhoods around the city to stimulate supply of additional housing - especially affordable housing. The City has undertaken a number of integrated neighborhood studies in conjunction with the community and elected officials. These comprehensive, multiyear studies consider a wide range of neighborhood needs, draw deeply on local stakeholder knowledge and perspectives, and involve dozens of city agencies. The resulting integrated neighborhood plans typically contain initiatives addressing not just housing, but economic development, education, health, safety, and quality of life. Given the expected impact of increased populations on infrastructure, additional capital investment helps ensure that these neighborhoods thrive. To expedite capital planning, the City has established a \$1 billion Neighborhood Development Fund (NDF) that supplements existing capital agency funds and helps reassure neighborhoods that the City is committed to growing infrastructure and public amenities in areas of significant housing growth. NDF investments include \$10 million to create a new community center in East New York, \$25 million for renovations to La Marqueta in East Harlem, and \$26 million for renovation and expansion of Grant Park near Jerome Avenue in the Bronx. The NDF has funded substantial infrastructure in connection with five adopted integrated neighborhood plans in this Administration: East New York, Downtown Far Rockaway, East Harlem, Jerome Avenue and Inwood. These neighborhoods -

and others currently being studied - can be seen in the map below. The status of City commitments to these neighborhoods can be found at: <https://www1.nyc.gov/site/operations/performance/neighborhood-rezoning-commitments-tracker.page>.

Select Neighborhood Study Areas



- *Removing impediments to housing* - Housing development on some sites is difficult because of physical obstacles such as existing structures, environmental contamination, or lack of infrastructure. The City created the \$512 million Housing Infrastructure Fund (HIF) to help address these impediments and unlock the potential for more affordable housing. The allocation process considers site readiness, project timeline, number of affordable units, availability of other funding sources, and level of community support. For example, the City is using HIF funds towards Hunter's Point South in Long Island City to support increased construction costs resulting from concurrent school construction, existing utilities, and rail tunnels beneath publicly-owned land. Once complete in 2022, the Hunter's Point South project will result in the creation of nearly 1,200 units of mixed-income housing, including over 700 permanently-affordable units.

Guiding Principle 3: Advance a more equitable NYC through supportive capital investment

The City of New York is committed to pursuing equity through its capital decision-making in neighborhoods across all five boroughs.

Considering historical and future investment trends across various geographic lenses

This PTYCS advances our equity agenda by understanding and addressing the needs of different neighborhoods and ensuring that sufficient investment is planned in areas where New Yorkers need it most over the next decade. We will continue to work towards equity by building and maintaining more affordable housing, improving neglected parks, transforming business districts to create opportunity, ensuring clean air and water, improving schools, connecting communities, and easing commutes across the five boroughs with ferry service and improved public transit.

One way the City pursues equity is in its focus on underserved transit areas. For example, 60 percent of workers living in the Bronx rely on public transportation to commute to work, and in 2017 the borough carried 25% of the city's bus ridership. However, only three of the 16 existing Select Bus Service (SBS)

routes are located in the Bronx. Mayor de Blasio has announced new goals to significantly improve bus speeds and ridership. DOT will collaborate with New York City Transit (NYCT) on the redesign of bus networks citywide, beginning in the Bronx and building 10 to 15 miles of dedicated bus lanes each year. Further, DOT will increase the pace of transit signal priority (TSP) where buses get more green lights and work with the Police Department (NYPD) to increase towing of parked vehicles in bus lanes. With these actions, the City intends to reverse the decline in bus ridership and improve bus speeds by 25%. This aggressive goal also includes continued advocacy for additional bus lane enforcement cameras and the continuation of the expansion of the SBS program. Capital projects in support of existing SBS routes continue in multiple locations to further improve and encourage bus ridership. In selecting new SBS routes, DOT and NYCT weigh four factors, including whether neighborhoods are currently underserved by transit, require additional capacity due to growth, face difficult trips to work, and currently face subway crowding.

Brownsville Neighborhood Plan

The Brownsville Plan is the result of a year-long collaborative, community-driven planning process to realize more equitable health, social, and economic outcomes for the residents of Brownsville, Brooklyn. Many of the challenges that Brownsville faces are all too common in American cities due in part to historical patterns of residential racial segregation and income inequality. Seventy-eight percent of Brownsville residents are black, 19 percent are Hispanic, and one in three residents is foreign-born. Led by HPD, the Brownsville planning process solicited input from the local Community Board, more than 30 neighborhood organizations, 500 residents, elected officials, and 20 different City agencies.

The implementation of the Brownsville Plan will result in the creation of over 2,500 new affordable homes, representing more than \$1 billion of investment in housing in the neighborhood. New development on City-owned land in Brownsville will support the goals of improving health, safety, community economic development, and the arts in the form of a new cultural center, a new center for innovation and entrepreneurship, new neighborhood retail, and space for community organizations, all paired with affordable housing. In addition to housing, the Brownsville Plan coordinates over \$150 million in additional City investment, including renovations of Brownsville's parks, improvements to the open spaces on New York City Housing Authority (NYCHA) developments, a new community center for teenagers at the NYCHA Brownsville Houses, and a new Neighborhood Health Action Center.

Much of this work will be complete or underway within the next five years, with regular community updates from HPD and its sister agencies. Visit nyc.gov/Brownsville to see the full plan and progress updates.



FIRST ANNUAL PROGRESS REPORT - JULY 2018

Guiding Principle 3: Advance a more equitable NYC through supportive capital investment

Driving consistency in capital need assessment approach across all boroughs and neighborhoods

City agencies have developed robust new methods for assessing the condition, lifecycle, and required maintenance for capital assets across the city. City agencies are working towards a more consistent, data-driven approach to assessing asset condition and prioritizing state-of-good-repair and modernization projects. For example, in 2016, the Department of Parks and Recreation (DPR) initiated its own needs assessment program to effectively plan for the agency's vast system needs and prioritize state-of-good repair funding requests. Focusing on four pilot asset types (synthetic turf fields, retaining walls, recreation centers and comfort stations), the agency has established a small assessment team to consistently inventory, inspect, determine scope and cost estimates, and prioritize projects and funding requests. As a result, DPR has used the information collected to successfully advocate for funding to address asset conditions.

DOT Capital Prioritization Framework

Since 2014, DOT has undertaken an effort to collect and evaluate nearly twenty metrics on all proposed capital projects within eight broad categories: equity, growth, safety, resiliency, public realm, sustainability, mobility, and asset management. Based on these metrics, DOT develops a prioritization framework that assigns a weighted score to each proposed capital project. DOT continues to refine its metrics and prioritization framework. For example, in 2018, DOT refined metrics related to growth and equity using updated population, socioeconomic, and housing data to align with the City's strategic priorities. The equity-focused metrics include areas with long commute times and current high-poverty areas.

Planning with knowledge of relevant City equity initiatives

The City of New York is committed to making New York City the fairest big city in the United States, and this includes making sure that individual capital projects advance broader equity goals. For example, HPD is partnering with the Housing Development Corporation (HDC), New York Public Library (NYPL), and EDC to redevelop the site of the Inwood Library. City agencies led an extensive community engagement and neighborhood planning exercise to gather feedback from Inwood residents, conducting three workshops and four Community Board presentations, and releasing a questionnaire available in multiple languages. Based on this feedback, City agencies released a Community Visioning Report to guide the design and scope of the development, in addition to the selection of a development team that was most responsive to the community's priorities for the Inwood Library site. This project includes the construction of a new building containing a modern library branch, 175 units of deeply affordable apartments, and an onsite Activities, Culture, Training Center.

Guiding Principle 3: Advance a more equitable NYC through supportive capital investment

Addressing health inequities through neighborhood-specific initiatives

Not all New Yorkers have the same opportunity to lead a healthy life, perpetuating long-standing racial and socioeconomic inequities in health outcomes. The Department of Health and Mental Hygiene (DOHMH) is committed to addressing these inequities by promoting collaboration among policymakers, community groups, health professionals, researchers, and residents.

DOHMH and partners are confronting the root causes of health inequity by creating neighborhood-level change guided by the health equity goals outlined in Take Care New York 2020 (TCNY2020). Two initiatives demonstrate how programmatic changes, supported by capital investments to improve existing facilities, can promote healthier neighborhoods:

- *Neighborhood Health Action Centers* are DOHMH buildings where healthcare services, community-based organizations and other service providers share a location in order to provide primary care, create space for community organizing and planning, and connect residents to neighborhood-based social services. These Action Centers focus on community health needs, including critical issues such as high premature mortality rates, and improve linkages between community organizations. In 2018, over 42,000 people visited the Action Centers (located in East Harlem, Brownsville, and Tremont).
- The *Neighborhood Health Initiative (NHI)* was a DOHMH effort to build authentic shared leadership and trust between local government and community partners to confront the root causes of health inequity. Between 2016 and 2018, eight partners from neighborhoods with high health inequities were funded to convene community members and identify avenues toward better community health.



Guiding Principle 4: Consider community perspectives in capital planning and decision-making

New Yorkers have many avenues to provide feedback to City agencies, including surveys, town halls, community boards, and 311. This PTYCS reflects how City agencies are developing new processes to ensure that these perspectives are considered within capital project planning, prioritization, design, and implementation.

Considering public feedback within individual agency planning cycles

City agencies are increasingly using community feedback to establish need, influence project planning, and validate existing assumptions at different project stages (e.g., annual budget process, scoping, design, implementation). This helps ensure that projects reflect public concerns and respond to community needs. Feedback also helps planners understand community views on existing infrastructure, which helps improve future project planning and delivery.

Parks Without Borders

The Parks Without Borders program is making parks more open, welcoming, and beautiful by improving entrances, edges, and park-adjacent spaces. In winter 2015-16, DPR asked New Yorkers to help select eight park projects which would most benefit from this design approach. During the three-month comment period, DPR actively engaged New Yorkers through online surveys and dozens of workshops and presentations. After this community input, DPR invested \$40 million of Parks Without Borders funding in eight projects that had the strongest community support, the right physical conditions, and the ability to benefit most from this innovative design approach. These projects (in Van Cortlandt Park, Virginia Park, Fort Greene Park, Prospect Park, Jackie Robinson Park, Seward Park, Flushing Meadows Corona Park, and Faber Park) are currently scheduled to open in 2020.



Community Board Budget Requests

Every year, the City's 59 Community Boards are invited to submit their prioritized capital and operational needs to City agencies, who evaluate the requests and then respond during the same budget year. There are over 3,500 requests submitted each year; agencies use these requests to help identify neighborhood specific and citywide issues, inform public outreach and engagement strategies, and help evaluate state of good repair priorities. For example, based on comprehensive community outreach during the Jerome Avenue Neighborhood Study and community board budget requests, DPR has planned significant capital improvements to Corporal Irwin Fischer Park in the Bronx.



Guiding Principle 4: Consider community perspectives in capital planning and decision-making

Strengthening our ability to collect and assess community perspectives

City agencies are continually working to improve methods of collecting different types of feedback from the community about local needs and project priorities.

- *Using technology to facilitate direct conversations on capital project prioritization* - Since 2015, DOT has used its Street Ambassador Program to expand public engagement around its Street Improvement Projects. The Ambassadors engaged the community at events, parks, and busy streets using smartphones to collect information regarding street and safety improvements. To date, they have conducted nearly 32,000 conversations, particularly with groups that are traditionally underrepresented at public meetings. DOT uses this information to help prioritize specific street and safety improvements.
- *Giving communities tools and information to help advocate for their capital needs* - City agencies strive to provide information in accessible formats to ensure that communities are able to participate meaningfully in planning processes. For example, DCP has created the Community District Profiles, an interactive web tool that makes detailed data about community districts more accessible. Members of the public and City agencies alike have access to easy-to-use maps and graphs that show key socioeconomic, demographic, and select service performance indicators for each community district. Information about the built environment for each district is now available in a single place; for example, zoning, land use, facilities, and existing and planned projects can be found alongside information about flood risk. You can access the Community District Profiles at <https://communityprofiles.planning.nyc.gov/>.
- *Aligning different types of community data to improve operational and capital planning* - The City's 311 process collects complaints and information related to non-emergency services and tracks responses and response rates. In FY2018, City agencies received 42 million inquiries via phone, mobile app, Twitter, and the web. They use this data to improve operational efficiencies, understand citywide and neighborhood-specific trends, and prioritize long-term investments in infrastructure, equipment, and resources to help mitigate future issues. For example, at the Department of Sanitation (DSNY) local district supervisors use 311 data, Rapid Snow Condition Reports, and community board budget requests to evaluate the effectiveness of plow routes, plan future operations and allocate additional capital resources as necessary, such as the need for small haulsters to address snow plowing on narrow streets.
- *Helping the community identify locations for capital development* - The Department of Small Business Services (SBS) partners with local community organizations and small business stakeholders in conducting Neighborhood 360° Commercial District Needs Assessments (CDNA). This analysis reviews storefront and retail mix, considers merchant and consumer surveys, and assesses streetscape conditions that could impact the local economy. Recommendations include participation in programs to support merchants and consumers, and a range of streetscape enhancements supported by City-funded Neighborhood 360° grants. SBS has completed CDNAs in ten neighborhoods, awarding more than \$8 million in grant funding from FY17 through FY20 to 12 local community-based organizations in six of these neighborhoods to date.

Closing

Comprehensive planning is not just about the projects that are funded, but equally about the process and principles that guide our approach to ensure that city infrastructure meets our dynamic long-term needs. This also includes proactively collaborating across all capital agencies to consider overall neighborhood impact; driving consistency and quality in planning inputs and assumptions; sharing best practices and technology; regularly and actively coordinating in project planning and delivery; increasing public transparency in decision making; and making continuous process improvements to realize potential cost efficiencies and time savings. By considering financial responsibility, neighborhood needs of today and tomorrow, equity, and community perspectives, we pursue integrated capital planning to shape a stronger and fairer city for all New Yorkers.

Distribution of the All Funds Preliminary Ten-Year Capital Strategy 2020-2029

Total Program: \$104,095

(\$ in millions)

<u>State of Good Repair</u>	<u>\$56,575</u>	<u>Program Expansion</u>	<u>\$26,381</u>	<u>Programmatic Replacement</u>	<u>\$21,139</u>
• Reconstruction & Rehabilitation of Schools	\$14,238	• New School Construction	\$8,814	• Upgrade of Water Pollution Control Plants	\$5,120
• East River & Other Bridge Reconstruction	7,938	• New and Special Needs Housing	5,374	• Water Main Replacement & Dam Safety Program	2,384
• Housing Preservation & Rehabilitation	7,578	• Neighborhood Revitalization & Community Development	2,328	• Citywide Information Systems & Equipment	2,384
• Reconstruction & Resurfacing of Streets & Highways	6,133	• Construction of the Third Water Tunnel	2,218	• Water Quality Mandates & Preservation	2,040
• Resiliency, Energy Efficiency & Sustainability	4,887	• Augmentation of Sewers	1,739	• Reconstruction & Renovation of Court Facilities	1,980
• Reconstruction of Recreational Spaces	3,870	• Industrial, Commercial, Waterfront & Market Development	1,296	• Purchase of Sanitation Equipment	1,798
• Rehabilitation of Hospitals & Health Clinics	2,253	• Water Quality Preservation	1,104	• Firefighting Equipment & Vehicles	887
• Rehabilitation of Public Buildings & Systems	1,503	• Sewer Extensions to Accommodate New Development	1,006	• Design & Construction of New Jail Facilities	766
• Rehabilitation of Libraries & Cultural Institutions	1,404	• Green Infrastructure	721	• Medical Equipment & Systems	752
• Sanitation Garages & Facilities	1,258	• Water Main Construction	546	• Replacement of DEP Facilities & Equipment	618
• Social Services Facility & Technology Upgrades	978	• Water Pollution Improvements	304	• Police Vehicles & Equipment	503
• Renovation of Police Facilities	958	• Improvements to Cultural & Recreational Facilities	267	• Transit System Rehabilitation	429
• Replacement of Failing Sewer Components	886	• Bluebelt Program	265	• Sewer Components	393
• Correctional Facilities Building Systems & Infrastructure Repair	757	• Solid Waste Management	117	• Ferry Boats and Terminals	382
• Upgrades to Traffic Systems	572	• Others	282	• Social Services Management Systems & Equipment	234
• Reconstruction & Rehabilitation of CUNY Facilities	534			• Correctional Equipment	195
• Fire House Renovations	397			• Others	274
• Water for the Future & Filtration Avoidance	321				
• Others	110				

Funding for the Preliminary Ten-Year Capital Strategy by Agency Program

(\$ in 000's)

	FY20-23		FY20-29	
	City Funds	All Funds	City Funds	All Funds
Education	\$13,020,044	\$13,771,406	\$21,710,132	\$23,023,944
Housing	4,617,211	4,745,218	9,599,840	9,919,847
Water Pollution Control	4,740,667	4,910,729	7,831,937	8,184,518
Bridges	4,551,417	4,863,320	7,617,694	7,962,738
Resiliency, Technology & Equipment	3,834,605	4,306,230	6,697,843	7,169,468
Highways	3,280,624	3,747,076	5,497,654	6,133,187
Water Mains	2,316,700	2,316,723	4,300,469	4,300,492
Sewers	2,352,695	2,362,905	4,254,917	4,265,127
Parks and Recreation	3,270,347	3,567,370	3,730,403	4,128,571
Economic Development	3,055,576	3,284,666	3,423,610	3,652,700
Subtotal-Major Agency Programs	\$45,039,886	\$47,875,643	\$74,664,499	\$78,740,592
Sanitation	\$1,657,258	\$1,665,596	\$3,164,744	\$3,173,082
Housing Authority	1,487,122	1,487,122	3,033,531	3,033,531
Hospitals	1,010,852	2,089,243	1,479,471	2,557,862
Water Supply	955,575	955,575	2,255,183	2,255,183
Courts	1,175,223	1,177,535	1,977,284	1,979,596
Correction	1,529,322	1,538,049	1,799,300	1,808,027
Public Buildings	1,137,174	1,137,174	1,535,765	1,535,765
Police	1,111,693	1,128,016	1,445,255	1,461,578
Fire	616,173	687,548	1,213,164	1,284,539
Cultural Affairs	726,510	727,510	765,560	766,560
DEP Equipment	401,415	401,983	661,584	662,152
Homeless Services	460,187	460,187	628,777	628,777
Health	414,884	422,691	592,315	611,133
Traffic	176,331	287,996	350,914	607,131
CUNY	439,434	443,815	589,296	593,677
Transit	188,550	188,550	428,550	428,550
Ferries	252,806	376,920	258,398	382,512
Admin For Children's Services	226,431	253,182	299,163	330,824
Queens Libraries	282,264	282,512	287,293	287,541
Brooklyn Libraries	241,629	241,629	246,430	246,430
NY Branch Libraries	210,039	210,039	240,469	240,469
Human Resources	84,594	118,436	134,848	201,737
Real Estate	116,406	116,406	142,836	142,836
Transportation Equipment	64,033	65,384	74,867	76,218
Aging	34,857	34,857	54,363	54,363
NY Research Library	1,864	1,864	3,903	3,903
Total	\$15,002,626	\$16,499,819	\$23,663,263	\$25,353,976
Grand Total	\$60,042,512	\$64,375,462	\$98,327,762	\$104,094,568

Preliminary Ten-Year Capital Strategy Fiscal Years 2020-2029

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				Parks	116
				Energy Efficiency and Citywide Equipment	120
				Citywide Total	127

Financing Program

The City financing program projects \$53.9 billion of long-term borrowing for the period fiscal years 2019 through 2023 to support the current City capital program, excluding \$737 million planned to be issued for education purposes through Building Aid Revenue Bonds (BARB). The portion of the capital program not financed by the New York City Municipal Water Finance Authority (NYW or the Authority) will be split between

General Obligation (GO) bonds of the City and Future Tax Secured (FTS) bonds of the New York City Transitional Finance Authority (TFA). Given the TFA is near its statutory limit on BARB debt outstanding, the financing program reflects BARB issuance so as to remain under the limit.

Figures below do not include state funded financing for education capital purposes through BARBs:

2019–2023 Financing Program

(\$ in millions)

	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>	<i>Total</i>
City General Obligation Bonds	\$2,300	\$4,040	\$4,650	\$5,280	\$5,500	\$21,770
TFA FTS Bonds ⁽¹⁾	3,900	4,040	4,650	5,280	5,500	23,370
Water Authority Bonds ⁽²⁾	1,701	1,652	1,667	1,752	1,993	8,765
Total	\$7,901	\$9,732	\$10,967	\$12,312	\$12,993	\$53,905

(1) TFA FTS Bonds do not include BARBs issued for education capital purposes. TFA expects to continue to issue BARBs under the current legislative authorization. For amounts, see the Transitional Finance Authority section below.

(2) Includes commercial paper and revenue bonds issued for the water and sewer system's capital program. Figures do not include bonds that defease commercial paper or refunding bonds. Does not include bonds to fund reserves or cost of issuance.

Financing Program

Overview of the Financing Program

The following three tables show statistical information on debt issued and expected to be issued by the financing entities described above, other than BARBs to be issued by the TFA.

2019–2023 Debt Outstanding

(\$ in millions at year end)

	2019	2020	2021	2022	2023
City General Obligation Bonds	\$38,765	\$40,563	\$42,984	\$45,878	\$48,827
TFA FTS Bonds ⁽¹⁾	37,938	40,583	43,711	47,369	51,151
TSASC Bonds	1,053	1,023	993	966	938
Conduit Debt	1,128	1,067	1,002	935	843
Total	\$78,884	\$83,236	\$88,690	\$95,148	\$101,759
Water Authority Bonds	\$30,684	\$31,934	\$33,186	\$34,492	\$36,041

(1) Figures above do not include state funded financing for education capital purposes through the TFA BARBs.

2019–2023 Annual Debt Service Costs

(\$ in millions, before prepayments)

	2019	2020	2021	2022	2023
City General Obligation Bonds	\$3,841	\$4,202	\$4,328	\$4,661	\$5,022
TFA FTS Bonds ⁽¹⁾	2,773	3,015	3,203	3,549	3,915
TSASC Bonds	72	82	82	76	76
Conduit Debt	123	128	127	127	148
Total Debt Service	\$6,809	\$7,427	\$7,740	\$8,413	\$9,161
Water Authority Bonds ⁽²⁾	\$1,667	\$1,878	\$1,981	\$2,103	\$2,211

(1) Figures above do not include state funded financing for education capital purposes through the TFA BARBs.

(2) Includes First Resolution debt service and Second Resolution debt service net of subsidy payments from the NYS Environmental Facilities Corporation.

2019–2023 Debt Burden

	2019	2020	2021	2022	2023
Total Debt Service ⁽¹⁾ as % of:					
a. Total Revenue	7.3%	8.0%	8.1%	8.6%	9.2%
b. Total Taxes	11.1%	11.7%	11.8%	12.5%	13.2%
c. Total NYC Personal Income	1.0%	1.1%	1.1%	1.2%	1.2%
Total Debt Outstanding ¹ as % of:					
a. Total NYC Personal Income	12.0%	12.3%	12.7%	13.2%	13.7%

(1) Total Debt Service and Debt Outstanding include GO, conduit debt and TFA bonds other than BARBs.

Financing Program

The financing of the City capital program is split among GO, TFA FTS, NYW, and TFA BARB bond issuance. The City and TFA FTS expect to issue \$21.8 billion and \$23.4 billion, respectively, during the plan period. The City issuance supports 40 percent of the total, while TFA FTS issuance supports 43 percent of the total. NYW will issue approximately \$8.8 billion.

The City, TFA, and NYW have enjoyed continued strong investor demand which has allowed the City capital program to be financed at reasonable interest rates. All of the issuers financing the City capital program have maintained credit ratings in the AA category or better by Moody's, Standard & Poor's, and Fitch, as indicated in the table below.

<i>Issuer</i>	Ratings		
	<i>Moody's</i>	<i>Standards and Poor's</i>	<i>Fitch</i>
NYC GO	Aa2	AA	AA
TFA Senior	Aaa	AAA	AAA
TFA Subordinate	Aa1	AAA	AAA
TFA BARBs	Aa2	AA	AA
NYW First Resolution	Aa1	AAA	AA+
NYW Second Resolution	Aa1	AA+	AA+
EFC Senior SRF Bonds	Aaa	AAA	AAA
EFC Subordinated SRF Bonds	Aaa	AAA	AAA

Federal Tax Legislation

The enactment of the Tax Cut and Jobs Act in December 2017 (2017 Tax Act) brought changes in the tax code that affect the City's financing program. Most notably, issuers of tax-exempt debt are now prohibited from refinancing their debt on a tax-exempt basis more than 90 days from the maturity or optional redemption date of such debt. However, it will continue to be possible to refinance debt more than 90 days from the maturity or optional redemption date on a taxable basis. Since the enactment of the 2017 Tax Act, the City, TFA, and NYW have undertaken a number of refunding transactions, which are discussed below.

While the limitation on refinancing mentioned above impacts the supply of tax-exempt debt, other elements of the 2017 Tax Act also impact the demand for tax-exempt debt. The small decreases in top marginal tax rates for individuals should negatively impact demand for tax-exempt debt. However, the new caps in deductions for state and local taxes should have the opposite effect, mitigating the negative impact of lower marginal tax rates. Given that this legislation was recently enacted, the impact of it is still developing.

Financing Program

New York City General Obligation Bonds

Since July 1, 2018, the City has issued \$1.2 billion in GO bonds for capital purposes and \$831 million in GO refunding bonds. The dates and principal amounts are as follows:

<i>Series</i>	<i>(N)ew \$/ (R)efunding</i>	<i>Issue Date</i>	<i>Tax Exempt Amount</i>	<i>Taxable Amount</i>	<i>Total Par Amount</i>
2019 ABC	R	8/22/2018	\$771	\$60	\$831
2019 D	N	12/18/2018	850	350	1,200
Total			\$1,621	\$410	\$2,031

The GO refunding transaction the City completed earlier in fiscal year 2019 generated just under \$100 million of debt service savings during the financial plan period.

In addition to the total issuance mentioned above, the City took steps to manage its outstanding floating rate debt. The City reoffered three subseries of floating rate bonds amounting to approximately \$195 million. Of those reoffered issues, two subseries of tax-exempt variable rate demand bonds amounting to approximately \$110 million and one subseries of tax-exempt index rate bonds amounting to approximately \$85 million were converted to fixed rates.

The City plans to issue GO bonds for capital purposes of approximately \$2.3 billion, \$4.0 billion, \$4.7 billion, \$5.3 billion, and \$5.5 billion in fiscal years 2019 through 2023, respectively.

Currently the debt service for the City, TFA FTS, and City appropriation debt, or conduit debt, excluding the effect of prepayments, is 7.3 percent of the City's total budgeted revenues in fiscal year 2019. That ratio is projected to rise to 9.2 percent in fiscal year 2023. As a percentage of tax revenues, the debt service ratio is 11.1 percent in fiscal year 2019 and is projected to increase to 13.2 percent in fiscal year 2023.

Financing Program

New York City Related Issuers - Variable Rate Debt

Floating rate bonds have been a reliable source of cost savings in the City financing program. In considering the proportion of the City's debt which is in variable rather than fixed rates, it is useful to consider all sources of financing with the exception of NYW, which is typically considered separately for such purposes. Included would be City GO bonds as well as TFA FTS, TSASC bonds and conduit debt. The City and its related entities have approximately \$10.6 billion of floating rate exposure.

Despite changes in the floating rate market, the City and other issuers supporting the City capital program have maintained floating rate exposure to minimize interest costs. The City and related financing entities have managed bank facility expirations by obtaining renewals from existing providers or replacement facilities from new providers. In addition, the City and related financing entities have explored new floating rate structures not requiring bank facilities. The City and TFA have entered into private placements and public offerings of index floating rate bonds bearing all-in costs comparable to variable rate demand bonds with bank facilities. The City and TFA continue to explore these and other debt instruments which confer the benefit of floating rate exposure.

The City has not entered into any new interest rate swaps to date in fiscal year 2019; the TFA has no outstanding swaps. The total notional amount of GO swaps outstanding as of December 31, 2018 was \$1.10 billion, on which the termination value was negative \$55.2 million. This is the theoretical amount which the City would pay if all of the swaps terminated under market conditions as of December 31, 2018.

Recently, it has become apparent that the quotes to set the London Inter-bank Offered Rate (LIBOR) may not be provided following the end of calendar year 2021, which would impact instruments indexed to LIBOR. The City, TFA, and NYW have \$2.4 billion of outstanding floating rate notes, all of which are indexed to the tax-exempt SIFMA rate. For all \$1.5 billion of outstanding swaps between GO and NYW, the payments received are based on a percentage of LIBOR; these swaps are scheduled to still be in effect after 2021. Relative to their total debt portfolios, the City and its related issuers have very limited exposure to LIBOR. In the United States, the Federal Reserve convened the Alternative Reference Rates Committee which developed the Secured Overnight Financing Rate as an alternative benchmark rate to LIBOR. The City and its related issuers are monitoring all developments related to the likely LIBOR discontinuation and transition to an alternative index.

The following table shows the City's and its related issuers' floating rate exposure. Floating rate exposure is of note because certain events can cause unexpected increased costs. Those events would include rising interest rates, reductions in tax rates in the tax code (in the case of tax-exempt debt), and the deterioration of the City's credit. Additionally, the deterioration of the credit of a related City financing issuer or of a liquidity provider can also have an impact on net interest costs. By contrast, the cost of outstanding fixed rate debt does not increase if any of the previously mentioned events takes place. On the other hand, fixed rate borrowing locks in a higher borrowing cost if interest rates do not change materially or if they decline. Overall, floating rate exposure benefits the City because it reduces the cost of financing. In short, interest costs on short-term debt are almost always lower than long term debt. The City has assumed floating rate exposure using a variety of instruments including tax exempt floating rate debt, basis swaps, and synthetic fixed rate debt. The basis swaps and synthetic fixed rate debt provide exposure to decreases in marginal tax rates in the tax code but are largely insensitive to changes in interest rates and changes in the City's credit. Given that those instruments provide only limited floating rate exposure, they are counted as variable rate exposure at less than the full amount of par or notional amount. Instruments that provide exposure only to changes in the tax code are counted at 25 percent of par or notional amount in the table below. As noted previously, because the small reduction in the individual tax rates is mitigated by new caps on certain tax deductions, the 2017 Tax Act should not result in a significant adverse impact on tax-exempt short-term rates, which influence interest paid on floating rate bonds and the economics on swap transactions to which the City is a party.

Financing Program

NYC Floating-Rate Exposure⁽¹⁾

	(\$ in millions)				
	<i>GO</i>	<i>TFA</i>	<i>Conduit</i>	<i>TSASC</i>	<i>Total</i>
Floating Rate Bonds	\$6,014	\$4,294	\$30	\$0	\$10,338
Synthetic Fixed	150	0	31	0	181
Enhanced Basis Swap	125	0	0	0	125
Total Floating-Rate	\$6,289	\$4,294	\$61	\$0	\$10,644
Total Debt Outstanding	\$38,765	\$37,938	\$1,128	\$1,053	\$78,884
% of Floating-Rate / Total Debt Outstanding					13.5%
Total Floating-Rate Less \$7.2 Billion Balance in General Fund (Floating-Rate Assets)					3,456
% of Net Floating Rate / Total Debt Outstanding					4.4%

(1) End of Fiscal Year 2019 Debt Outstanding as of the February 2019 Financial Plan excluding NYW, HYIC, and TFA BARBs.

The 13.5 percent floating rate exposure, including the risk from the synthetic fixed rate swaps and the basis swaps, is even more manageable after taking into account the 10 year average balance of \$7.2 billion of short-term assets in the City's General Fund which are an offset to these floating rate liabilities. Net of these floating rate assets, the floating rate exposure of the City, excluding NYW, is 4.4 percent of its outstanding debt. Moreover, the City uses conservative assumptions in budgeting expenses from floating rate instruments.

During fiscal year 2019, short-term interest rates have been 1.49 percent on average for tax-exempt floating rate debt. These rates have continued to provide attractive financing costs relative to long term fixed-rate debt. Tax-exempt floating rate debt has traded recently at rates that are approximately 200 basis points lower than those for long term fixed-rate debt, resulting in an annual savings of over \$200 million.

The New York City Municipal Water Finance Authority

The New York City Municipal Water Finance Authority (NYW) was created in 1985 to finance capital improvements to the City's water and sewer system. Since its first bond sale in November 1985, the Authority has sold \$68.0 billion in bonds. These bond issuances included a combination of general (first) resolution, second general resolution and subordinated special resolution crossover refunding water and sewer system revenue bonds.

Of the aggregate bond par amount sold, \$31.1 billion is outstanding, \$26.1 billion, including \$665.4 million of special resolution crossover bonds, was refinanced, \$5.0 billion was defeased with Authority funds prior to maturity, and \$5.9 billion was retired with revenues as it matured. In addition to this long-term debt, NYW uses bond anticipation notes (BANs) issued to the New York State Environmental Facilities Corporation (EFC) and a commercial paper program as a source of flexible short-term financing. As of February 2019, \$27.6 million of BAN draws are outstanding. The Authority is authorized to draw up to \$600 million of commercial paper notes, including up to \$400 million of the Extendible Municipal Commercial Paper. Currently, the Authority has no commercial paper outstanding, and does not expect to issue commercial paper for the remainder of the fiscal year.

Financing Program

NYW's outstanding debt also includes floating rate bonds, which have been a reliable source of cost effective financing. NYW has \$5.1 billion of floating rate bonds or 16.5 percent of its outstanding debt, including \$401 million, which was swapped to a fixed rate. NYW's floating rate exposure primarily consists of tax-exempt floating rate debt supported by liquidity facilities. NYW's exposure also includes \$500 million of privately placed tax-exempt index rate bonds, which pay interest based on a specified index. Index rate bonds do not require liquidity facilities, however, they provide for an increased rate of interest commencing on an identified step up date if the bonds are not converted or refunded. Through the step up date, the bonds have an all-in cost similar to floating rate bonds supported by liquidity facilities.

NYW is a party to two interest rate exchange agreements (swaps) with a total notional amount of \$401 million. Under these agreements, the Authority pays a fixed interest rate of 3.439% in

exchange for a floating rate based on 67% of one-month LIBOR. As of December 31, 2018, the mark-to-market value of the swaps was negative \$86.3 million. This is the theoretical amount which NYW would pay if both swaps were terminated as of December 31, 2018.

NYW participates in the State Revolving Fund (SRF) program administered by the EFC. The SRF provides a source of long-term below-market interest rate borrowing, subsidized by federal capitalization grants, state matching funds, and other funds held by EFC.

Summarized in the following table are the issuances that have closed to date in fiscal year 2019. The proceeds of the bonds were applied to pay the cost of improvements to the system or paid principal and interest on certain of the Authority's outstanding debt and paid the costs of issuance.

NYW Issuance

<i>Series</i>	<i>(N)ew \$/ (R)efunding</i>	<i>Issue Date</i>	<i>Par Amount</i>	<i>True Interest Cost (TIC)</i>	<i>Longest Maturity</i>
2019 Series 1 ⁽¹⁾	R	8/2/2018	\$319,715,000	1.44% ⁽²⁾	2037
2019 AA	R	8/21/2018	\$264,035,000	2.19%	2024
2019 BB	N	9/16/2018	\$100,000,000	VAR	2051
2019 Series 2 and 3 ⁽¹⁾	N	11/29/2018	\$485,144,000	2.20% ⁽²⁾	2048
2019 CC	N	12/12/2018	\$300,000,000	VAR	2051
2019 DD	N	1/24/2019	\$475,000,000	3.93%	2049

(1) Bonds issued to EFC

(2) Reflects the Effective Interest Cost, which includes the benefit from the EFC subsidy and does not account for cost of annual fees for administration.

Financing Program

NYW expects to issue \$526 million of additional new money bonds or notes over the remainder of fiscal year 2019. During the period from 2020 to 2023, NYW expects to sell an average of approximately \$1.9 billion of new money bonds per year. Of this amount, NYW plans to issue \$300 million bonds annually to EFC, taking advantage of the interest rate subsidy available for qualifying projects, and minimizing the overall costs of its financing program. NYW expects to issue approximately 90 percent of its new debt per year as fixed rate debt with the remainder issued as floating rate debt, subject to market conditions.

The New York City Transitional Finance Authority

The TFA is a public authority of New York State created by the New York Transitional Finance Authority Act in 1997. The

TFA was created to issue debt, primarily secured with the City's personal income tax, to fund a portion of the capital program of the City. The TFA was originally authorized to issue up to \$7.5 billion of bonds and notes. On September 13, 2001, the TFA was given statutory authority to borrow \$2.5 billion to finance costs related to the September 11th terrorist attack on the City. Currently, TFA is permitted to have \$13.5 billion of debt outstanding and any amounts over and above that level are subject to the City's remaining debt incurring power under the State constitutional debt limit.

Since July 1, 2018, the TFA has issued approximately \$2.9 billion in bonds for capital purposes. The dates and principal amounts are as follows:

NYC TFA Issuance

(\$ in millions)

<i>Series</i>	<i>(N)ew \$/ (R)efunding</i>	<i>Issue Date</i>	<i>Tax Exempt Amount</i>	<i>Taxable Amount</i>	<i>Total Par Amount</i>
2019 A	N	8/10/2018	\$1,050	\$300	\$1,350
2019 B	N	9/25/2018	1,025	500	1,525
Total			\$2,075	\$800	\$2,875

Additionally, the TFA converted approximately \$150 million of floating rate bonds to a fixed rate mode.

The TFA plans to issue TFA FTS bonds for capital purposes of approximately \$3.9 billion, \$4.0 billion, \$4.7 billion, \$5.3 billion, and \$5.5 billion in years 2019 through 2023, respectively.

In April 2006, the State enacted legislation authorizing issuance by the TFA of an additional \$9.4 billion of bonds to be used to fund capital costs for the Department of Education. This legislation also provided for the assignment to TFA of State building aid that had previously been paid directly to the City. The TFA currently has approximately \$8.1 billion of BARBs

outstanding which fund the capital program of the Department of Education. The financing program reflects BARB issuance projections to remain under the statutory cap. The TFA plans to issue BARBs of approximately \$500 million, \$103 million, \$31 million, \$78 million, and \$25 million in fiscal years 2019 through 2023, respectively, totaling \$737 million over the plan period.

Since July 1, 2018, TFA has issued \$500 million in BARBs for capital purposes and approximately \$2 billion for refunding purposes. The refunding transactions generated just under \$350 million of savings within the financial plan.

NYC TFA BARB Issuance

(\$ in millions)

<i>Series</i>	<i>(N)ew \$/ (R)efunding</i>	<i>Issue Date</i>	<i>Tax Exempt Amount</i>	<i>Taxable Amount</i>	<i>Total Par Amount</i>
2019 S-1	N	7/26/2018	\$500	\$0	\$500
2019 S-2	R	7/26/2018	429	115	544
2019 S-3	R	10/25/2018	1,218	194	1,412
Total			\$2,147	\$308	\$2,456

Financing Program

Hudson Yards Infrastructure Corporation

Hudson Yards Infrastructure Corporation (HYIC), a not-for-profit local development corporation, was established to provide financing for infrastructure improvements to facilitate economic development on Manhattan's far west side. Improvements include the extension of the No. 7 subway line west and south, construction of a park, as well as the acquisition of development rights over the MTA rail yards.

In December 2006, HYIC issued its first series of bonds in the principal amount of \$2 billion. HYIC completed its second issuance of \$1 billion of bonds in October 2011. Principal on the HYIC bonds is being repaid from revenues generated by this new development, notably payments-in-lieu-of-property taxes (PILOT) on the commercial development and various developer payments. To the extent these revenues are not sufficient to cover interest payments, the City has agreed to make interest support payments (ISP) to HYIC subject to appropriation.

In May 2017, HYIC issued approximately \$2.1 billion of refunding bonds which refinanced all of its initial \$2 billion bond issue and a portion of its second bond issue under a new legal structure. This refinancing allowed HYIC to remit approximately \$110 million of accumulated revenues for City benefit in 2017. Moreover, the refunding enabled HYIC to transfer to the City in the future any excess revenues over and above amounts needed for HYIC debt service.

In August 2018, the City Council approved an additional \$500 million of bond issuance supported by ISP to finance additional infrastructure improvements to expand the Hudson Park & Boulevard from W. 36th Street to W. 39th Street. HYIC has obtained financing for the additional infrastructure investments in the form of a bank loan at short term interest rates.

Given the ongoing development in the Manhattan's far west side, revenues received by HYIC have accelerated. Collections of PILOT revenue and tax equivalency payments continue to increase. Additionally, since the beginning of fiscal year 2019, HYIC received approximately \$50 million from payments in lieu of mortgage recording tax and district improvement bonus. The No. 7 Subway extension was constructed by the MTA and began service in September 2015. The secondary entrance to this station located at W. 35th Street and Hudson Boulevard East opened in September 2018.

Phase I of the Hudson Park and Boulevard opened to the public in August 2015 and is managed by the Hudson Yards Hell's Kitchen Alliance Business Improvement District. Expenditures for land acquisition for Phase II of the Hudson Park and Boulevard will commence in the second half of calendar year 2019.

Program Detail by Agency

Department of Transportation

The Department of Transportation (DOT) is responsible for the safe and efficient movement of people and goods in New York City. To fulfill this mission, DOT builds and maintains streets, sidewalks, highways, bridges, and municipal parking facilities; maintains and operates municipal ferry systems and monitors private ferry systems; monitors private bus companies; promotes the use of sustainable modes of transportation; participates in traffic regulation efforts; and serves as an advocate for better, safer and more accessible transportation.

Although future demands on the transportation network will depend on a host of economic, demographic, and social trends that are difficult to predict, all indicators point to an increasing transportation demand. Increasing congestion on the City's highways will further exacerbate the difficulties of goods movement, as most goods are shipped into the City via trucks. In the face of these trends the challenge will be to channel as much of this rising demand into mass transit as possible, while still maintaining a viable and safe local street system. Simultaneously, the City must maintain its aging bridge and arterial network so that vital transportation links do not become structurally deficient or congested, and to limit pollution-causing bottlenecks, which can impede the City's economic growth.

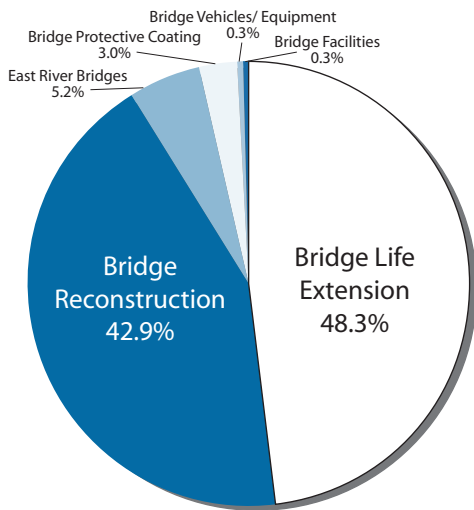
Capital Program Goals

- Provide safe and efficient travel throughout the City by rehabilitating deficient bridges and performing work necessary to keep bridges in a state of good repair;
- Provide streets in good repair;
- Promote the safety of pedestrians, bicyclists, and drivers;
- Improve the flow of traffic and minimize congestion;
- Maintain and improve safety on City streets by providing adequate lighting, adding and upgrading intersection signalization, installing lane markings, and traffic calming measures;
- Protect the public from excessive amounts of motor vehicle pollution;
- Provide public transportation that is accessible, reliable, and clean; and
- Ensure the safe and efficient operation of ferries and ferry terminals.

Preliminary Ten-Year Capital Strategy

The Preliminary Ten-Year Capital Strategy provides approximately \$15.2 billion to the Department, with Bridges and Highways receiving the bulk of funding, totaling approximately \$14.1 billion.

Department of Transportation - Bridges



Bridges

	(in millions)
• Bridge Life Extension	\$3,848.4
• Bridge Reconstruction	3,415.8
• East River Bridges	412.7
• Bridge Protective Coating	239.8
• Bridge Vehicles/Equipment	24.7
• Bridge Facilities	21.3
TOTAL	\$7,962.7

The Preliminary Ten-Year Capital Strategy provides \$8.0 billion in the Bridge Program for the reconstruction and upgrade of the City’s bridge system. The Preliminary Ten-Year Capital Strategy includes funding for work on the four East River Bridges and approximately 100 other bridge structures. The first four years of this Preliminary Ten-Year Capital Strategy provides \$4.9 billion to the Bridge Program, of which \$980.3 million is planned to be committed in FY 2020. The total commitment reflects the high priority accorded to restoring and maintaining these essential links in the City’s transportation system.

Bridge Life Extension

The Preliminary Ten-Year Capital Strategy provides \$3.8 billion for rehabilitative work on approximately 40 bridge structures currently rated “fair” or “good” that require an upgrade to their current condition, in addition to component rehabilitation work on various bridges. These projects include \$421.5 million for the Trans-Manhattan Expressway and \$132.9 million for Grand Street over Newtown Creek.

Bridge Reconstruction

The Preliminary Ten-Year Capital Strategy provides \$3.4 billion to reconstruct approximately 60 bridge structures currently rated “fair” or “good,” including \$1.6 billion for Brooklyn-Queens Expressway (BQE) bridges from Sands Street to Atlantic Avenue and \$307.0 million for the Shore Road Bridge over Hutchinson River.

East River Bridges

The Preliminary Ten-Year Capital Strategy provides \$412.7 million for rehabilitative work on the East River Bridges. Funds for these projects include repairs and painting work on the Williamsburg Bridge totaling \$300.2 million and reconstruction work on the Queensboro Bridge totaling \$61.2 million.

Bridge Protective Coating

The Preliminary Ten-Year Capital Strategy provides \$239.8 million for protective coating treatment on bridge structures. This program includes \$14.3 million for various bridges in Staten Island and \$8.5 million for West 207th Bridge over Harlem River.

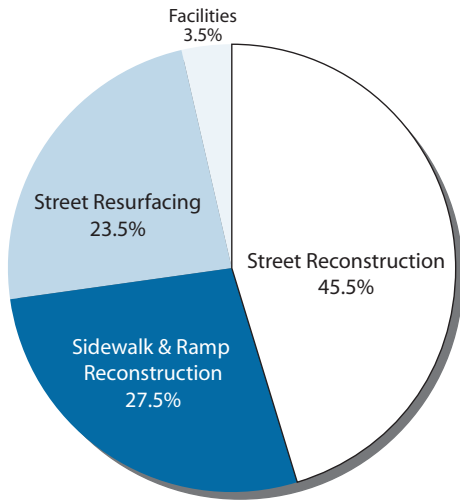
Bridge Facilities, Equipment and Vehicles

The Preliminary Ten-Year Capital Strategy provides \$24.7 million for the purchase of equipment and vehicles and \$21.3 million for bridge facilities.

Department of Transportation - Bridges

Project Type: BR and HB		(\$ in 000's)										
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
East River Bridges												
City		79,101	45,714	30,863	257,000	0	0	0	0	0	0	412,678
Fair Bridges												
City		320,502	815,263	650,917	901,940	420,459	59,264	0	0	0	0	3,168,345
Federal		75,889	0	0	122,434	33,141	0	0	0	0	0	231,464
State		13,000	0	0	0	0	0	0	0	0	0	13,000
Private		1,951	0	0	0	0	0	0	0	0	0	1,951
Useful Life Extension and Miscellaneous Work												
City		25	58	0	0	0	0	0	0	0	0	83
Useful Life Extension												
City		405,112	196,323	201,874	513,134	601,700	217,694	119,631	372,329	542,012	579,991	3,749,800
Federal		41,139	3,160	54,136	0	0	0	0	0	0	0	98,435
State		194	0	0	0	0	0	0	0	0	0	194
Bridge Painting												
City		31,970	21,946	25,000	32,000	32,000	32,000	32,919	32,000	0	0	239,835
Poor Bridges												
City		994	0	0	0	0	0	0	0	0	0	994
Equipment for Bridge Maintenance												
City		1,553	600	600	600	600	600	516	531	0	0	5,600
Bridge Facilities												
City		475	198	5,164	414	428	441	455	469	6,490	6,764	21,298
Bridge Vehicles												
City		8,400	1,623	1,017	1,037	1,071	1,107	1,141	1,177	1,221	1,267	19,061
Project Type Total by Source of Funds												
City		848,132	1,081,725	915,435	1,706,125	1,056,258	311,106	154,662	406,506	549,723	588,022	7,617,694
Federal		117,028	3,160	54,136	122,434	33,141	0	0	0	0	0	329,899
State		13,194	0	0	0	0	0	0	0	0	0	13,194
Private		1,951	0	0	0	0	0	0	0	0	0	1,951
Project Type Total												
All Funds		980,305	1,084,885	969,571	1,828,559	1,089,399	311,106	154,662	406,506	549,723	588,022	7,962,738

Department of Transportation - Highways



Street Resurfacing

The Preliminary Ten-Year Capital Strategy funds the resurfacing of 6,300 lane miles of primary streets and arterial highways at a ten-year cost of \$1.4 billion.

Facility Reconstruction

A total of \$213.4 million is allocated in the Preliminary Ten-Year Capital Strategy for the design and reconstruction of highway maintenance and repair yards, other Department facilities, and miscellaneous renovations and upgrades.

Highways

	(in millions)
• Street Reconstruction	\$2,790.2
• Sidewalk & Ramp Reconstruction	1,687.7
• Street Resurfacing	1,441.9
• Facilities	213.4
TOTAL	\$6,133.2

The Preliminary Ten-Year Capital Strategy provides \$6.1 billion to the Highways program for the rehabilitation of City streets.

Street Reconstruction

Total funding in the Preliminary Ten-Year Capital Strategy for street reconstruction is \$2.8 billion. This work includes \$266.5 million to improve drainage conditions in Southeast Queens and \$945.3 million for Vision Zero projects implemented, Citywide.

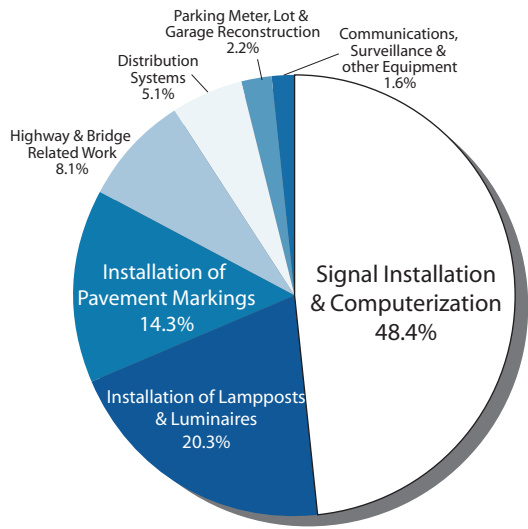
Sidewalk and Ramp Reconstruction

For the ten-year period, sidewalks will be reconstructed throughout the City, at a cost of \$463.4 million. Additionally, \$1.2 billion is provided to install and reconstruct pedestrian ramps throughout the City.

Department of Transportation - Highways

Project Type: HW	(\$ in 000's)											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total	
Facility Reconstruction												
City	36,541	29,864	49,100	23,178	50,448	5,442	5,611	5,785	0	0	205,969	
Federal	2,641	4,511	290	0	0	0	0	0	0	0	7,442	
Local Street Reconstruction												
City	2,727	9,627	8,911	0	73	0	0	0	0	0	21,338	
Federal	433	0	0	41	0	0	0	0	0	0	474	
State	87	0	300	1	0	0	0	0	0	0	388	
Pedestrian Ramp Construction												
City	190,049	120,449	127,220	128,056	108,801	107,801	107,801	107,801	110,333	113,027	1,221,338	
Federal	0	107	34	1,920	0	0	861	0	0	0	2,922	
Primary Street Reconstruction												
City	377,662	445,794	669,450	380,583	194,353	29,821	53,213	37,412	36,615	38,164	2,263,067	
Federal	72,579	124,121	32,277	106,804	20,176	31,628	27,383	8,512	0	0	423,480	
State	4,582	22,908	12,259	22,927	0	0	0	0	0	0	62,676	
Private	7,260	0	0	31	0	0	0	0	0	0	7,291	
Primary Street Resurfacing												
City	134,869	131,451	141,971	134,810	137,130	141,589	145,979	150,504	156,506	162,785	1,437,594	
Federal	336	1,538	2,430	0	0	0	0	0	0	0	4,304	
State	0	3	0	0	0	0	0	0	0	0	3	
Sidewalk Reconstruction												
City	23,283	26,679	49,227	39,123	36,388	35,188	28,699	35,188	36,514	38,059	348,348	
Federal	2	1,522	0	0	0	0	14,421	0	0	0	15,945	
State	0	0	260	0	0	0	0	0	0	0	260	
Private	11,062	11,062	11,062	11,062	11,062	11,062	9,470	11,062	11,479	11,965	110,348	
Project Type Total by Source of Funds												
City	765,131	763,864	1,045,879	705,750	527,193	319,841	341,303	336,690	339,968	352,035	5,497,654	
Federal	75,991	131,799	35,031	108,765	20,176	31,628	42,665	8,512	0	0	454,567	
State	4,669	22,911	12,819	22,928	0	0	0	0	0	0	63,327	
Private	18,322	11,062	11,062	11,093	11,062	11,062	9,470	11,062	11,479	11,965	117,639	
Project Type Total												
All Funds	864,113	929,636	1,104,791	848,536	558,431	362,531	393,438	356,264	351,447	364,000	6,133,187	

Department of Transportation - Traffic



Traffic

	(in millions)
• Signal Installation and Computerization	\$293.9
• Installation of Lampposts and Luminaires	123.1
• Installation of Pavement Markings	87.1
• Highway and Bridge Related Work	49.0
• Distribution Systems	30.9
• Parking Meter, Lot and Garage Reconstruction	13.1
• Communications, Surveillance and other Equipment	10.0
TOTAL	\$607.1

The Preliminary Ten-Year Capital Strategy provides \$607.1 million for Traffic programs.

Signal Installation and Computerization

The Preliminary Ten-Year Capital Strategy provides \$293.9 million for signal installation and computerization. This includes \$61.8 million to install accessible pedestrian signals.

Installation of Lampposts and Luminaires

The Preliminary Ten-Year Capital Strategy provides \$123.1 million for the installation of lampposts and luminaires.

Installation of Pavement Markings

The Preliminary Ten-Year Capital Strategy provides funding of \$87.1 million for the installation of thermoplastic reflectorized pavement markings to be done in conjunction with the Department's in-house resurfacing program.

Highway and Bridge Related Work

The Preliminary Ten-Year Capital Strategy provides \$49.0 million for the installation of signals, streetlights, and lane markings associated with the Highway Reconstruction and Bridge Programs.

Replacement of Electrical Distribution Systems

To reduce lighting outages, the Preliminary Ten-Year Capital Strategy will replace wire/conduit for traffic related electrical distribution systems throughout the City's roadway and park lighting systems, at a total cost of \$30.9 million.

Parking Meter, Lot and Garage Reconstruction

The Preliminary Ten-Year Capital Strategy provides \$13.1 million for parking meters and facilities.

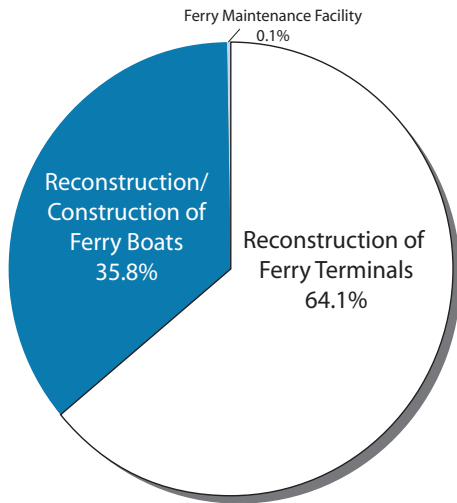
Communications, Surveillance and other Equipment

The Preliminary Ten-Year Capital Strategy provides \$10.0 million for purchase and installation of electric vehicle charging stations.

Department of Transportation - Traffic

Project Type: TF	(\$ in 000's)										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Traffic Work in Conjunction with Fair Bridges											
City	713	0	0	0	0	0	0	0	0	0	713
Communications, Surveillance Equipment											
City	8,000	2,000	0	0	0	0	0	0	0	0	10,000
Highway Drawdown Program											
City	1,905	2,812	1,028	1,352	2,040	0	0	0	0	0	9,137
Federal	0	247	0	0	0	0	1,552	0	0	0	1,799
Installation of Lampposts and Luminaires											
City	15,179	12,746	905	15	72	55	0	31	32	34	29,069
Federal	0	0	2,354	0	0	0	0	0	0	0	2,354
State	5,418	9,395	2,856	7,500	22,000	7,500	22,000	7,500	0	7,500	91,669
Parking Meters, Lots and Garages											
City	0	0	6,455	3,415	493	507	523	539	559	583	13,074
Installation of Pavement Markings											
City	53	0	10,804	0	10,805	0	10,805	0	26,992	27,677	87,136
Traffic Work in Conjunction with Highway Reconstruction											
City	671	57	9,234	3,538	10,430	3,066	2,016	2,079	2,157	2,249	35,497
Federal	821	0	1,000	0	0	0	0	0	0	0	1,821
State	24	0	0	0	0	0	0	0	0	0	24
Replacement of Electrical Distribution Systems											
City	0	0	589	0	0	0	0	0	0	0	589
Federal	0	0	5,295	0	0	0	0	0	0	0	5,295
State	0	5,000	50	5,000	0	5,000	0	5,000	0	5,000	25,050
Signal Installation and Computerization											
City	33,917	22,480	28,756	9,707	10,098	7,103	0	17,196	17,843	18,599	165,699
Federal	6,840	2,678	7,487	0	0	0	0	0	0	0	17,005
State	9,521	7,150	12,529	20,500	0	20,500	0	20,500	0	20,500	111,200
Project Type Total by Source of Funds											
City	60,438	40,095	57,771	18,027	33,938	10,731	13,344	19,845	47,583	49,142	350,914
Federal	7,661	2,925	16,136	0	0	0	1,552	0	0	0	28,274
State	14,963	21,545	15,435	33,000	22,000	33,000	22,000	33,000	0	33,000	227,943
Project Type Total											
All Funds	83,062	64,565	89,342	51,027	55,938	43,731	36,896	52,845	47,583	82,142	607,131

Department of Transportation - Ferries



Reconstruction of Ferry Terminals

The Preliminary Ten-Year Capital Strategy includes \$245.3 million for the rehabilitation and renovation work to ferry terminal buildings, slips, and racks.

Reconstruction/Construction of Ferry Boats

The Preliminary Ten-Year Capital Strategy provides \$136.8 million for various projects associated with the Department of Transportation-operated ferry boats.

Reconstruction of Ferry Maintenance Facility

Funding of \$0.4 million is included for general construction work at the ferry maintenance facility.

Ferries

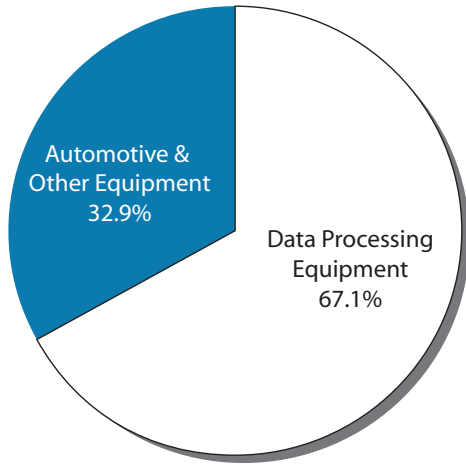
	(in millions)
• Reconstruction of Ferry Terminals	\$245.3
• Reconstruction/Construction of Ferry Boats	136.8
• Ferry Maintenance Facility	0.4
TOTAL	\$382.5

The Preliminary Ten-Year Capital Strategy for Ferries provides a total of \$382.5 million for the reconstruction, construction and improvement of various ferry vessels and facilities.

Department of Transportation - Ferries

Project Type: FA	(\$ in 000's)										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Reconstruction of Ferry Boats											
City	6,428	24,397	25,302	17,178	0	808	726	1,301	1,350	1,407	78,897
Federal	227	4,762	45,753	0	0	0	0	0	0	0	50,742
State	3,865	0	3,271	0	0	0	0	0	0	0	7,136
Ferry Maintenance Facility Construction											
City	39	0	400	0	0	0	0	0	0	0	439
Reconstruction of Ferry Terminal Facilities											
City	73,787	55,569	46,261	3,445	0	0	0	0	0	0	179,062
Federal	42,020	8,676	2,796	11,801	0	0	0	0	0	0	65,293
State	0	406	537	0	0	0	0	0	0	0	943
Project Type Total by Source of Funds											
City	80,254	79,966	71,963	20,623	0	808	726	1,301	1,350	1,407	258,398
Federal	42,247	13,438	48,549	11,801	0	0	0	0	0	0	116,035
State	3,865	406	3,808	0	0	0	0	0	0	0	8,079
Project Type Total											
All Funds	126,366	93,810	124,320	32,424	0	808	726	1,301	1,350	1,407	382,512

Department of Transportation - Equipment



The Preliminary Ten-Year Capital Strategy provides \$76.2 million for the purchase of computer equipment for office automation, data processing, engineering support and vehicles and equipment for DOT field forces and.

Equipment

	(in millions)
• Data Processing Equipment	\$51.1
• Automotive and Other Equipment	25.1
TOTAL	\$76.2

Department of Transportation - Equipment

Project Type: TD											
	(\$ in 000's)										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Data Processing Equipment											
City	13,526	10,219	10,458	6,066	4,809	1,577	1,207	1,039	1,078	1,124	51,103
Federal	3	0	0	0	0	0	0	0	0	0	3
Automotive and Other Equipment											
City	9,947	8,196	5,621	0	0	0	0	0	0	0	23,764
Federal	1,348	0	0	0	0	0	0	0	0	0	1,348
Project Type Total by Source of Funds											
City	23,473	18,415	16,079	6,066	4,809	1,577	1,207	1,039	1,078	1,124	74,867
Federal	1,351	0	0	0	0	0	0	0	0	0	1,351
Project Type Total											
All Funds	24,824	18,415	16,079	6,066	4,809	1,577	1,207	1,039	1,078	1,124	76,218
Transportation Total	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Total by Source of Funds											
City	1,777,428	1,984,065	2,107,127	2,456,591	1,622,198	644,063	511,242	765,381	939,702	991,730	13,799,527
Federal	244,278	151,322	153,852	243,000	53,317	31,628	44,217	8,512	0	0	930,126
State	36,691	44,862	32,062	55,928	22,000	33,000	22,000	33,000	0	33,000	312,543
Private	20,273	11,062	11,062	11,093	11,062	11,062	9,470	11,062	11,479	11,965	119,590
All Funds	2,078,670	2,191,311	2,304,103	2,766,612	1,708,577	719,753	586,929	817,955	951,181	1,036,695	15,161,786

Transit Authority

New York City Transit (NYCT) is the largest agency in the Metropolitan Transportation Authority (MTA) regional transportation network. The MTA is the largest regional transit provider in North America and New York City Transit (NYCT) operates the most extensive public transportation system in the country, serving over 2.3 billion subway, bus and paratransit passengers each year, in addition to a 21-station rail system on Staten Island known as MTA Staten Island Railway. NYCT maintains a fleet of 6,546 subway cars, 472 passenger stations in four boroughs, and over 660 miles of subway. It operates 24 hours a day, 365 days a year. In addition, NYCT operates a fleet of 4,459 buses on 235 routes on over 2,000 route miles throughout the City. Through 2017, subway ridership was 1.7 billion annually.

Since 1982, NYCT has implemented six multi-year capital reconstruction programs to restore the system to a state of good repair and normal replacement, with an emphasis on service and a well-maintained fleet. The transit system currently benefits from a twelve-month moving average subway car reliability of 121,116 miles between failures. The five year 2015-2019 Capital Program, approved by the MTA Board in April 2016 and most recently amended in May 2018, includes \$33.3 billion for all MTA agencies, \$16.7 billion of which would be invested in the NYCT core system, and \$1.7 billion for NYCT network expansion. The 2015-2019 Capital Program includes a City contribution of \$2.7 billion, consisting of \$2.1 billion to be funded with proceeds of City general obligation bonds and \$600.0 million to be funded through alternative non tax levy revenue sources. The City general obligation bond funding includes \$164.0 million for the capital needs of the Subway Action Plan.

The Metropolitan Transportation Authority Bus Company (MTABC) provides local and express bus service to supplement the NYCT system in areas previously served by private bus companies franchised by the City. With a fleet of 1,298 buses, the MTABC serves over 122 million riders per year, operating 24 hours a day, 365 days a year. MTABC's operating costs are subsidized by the City.

Capital Program Goals

The five year 2015-2019 MTA Capital Program for NYCT includes subway station rehabilitations, improvements in the subway's signals, communications, track maintenance and replacement of train cars and buses. More specifically, the improvements will ensure safety, reliability and performance by improving infrastructure and facilities. The Capital Program includes the purchase of 460 new subway cars for \$1.5 billion which will replace 440 B Division cars reaching the end of their useful lives, as well as 20 open gangway prototype cars. The Capital Program also includes the purchase of 1,441 new buses for \$1.1 billion. These new buses are part of NYCT's normal replacement cycle and will replace existing fleets that are approaching the end of their useful lives. The remaining \$14.1 billion is budgeted for system-wide infrastructure and other upgrades.

The 2015-2019 MTA Capital Program for MTABC includes a total of \$376.0 million to replace 335 buses and to upgrade facilities and equipment at MTABC depots.

Preliminary Ten-Year Capital Strategy

In the Preliminary Ten-Year Capital Strategy, the City will contribute \$428.6 million to the MTA, including \$350.0 million for ongoing NYCT track improvements and rehabilitation and \$78.6 million for other subway and bus projects. Additional City funds for the 2015-2019 MTA Capital Program shall be provided concurrently with additional State funds.

Transit Authority - MTA Bus Company

Project Type: MT		(\$ in 000's)										
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
<i>MTABC Related Capital Purchases</i>												
City		14,275	14,275	0	0	0	0	0	0	0	0	28,550
<i>Project Type Total by Source of Funds</i>												
City		14,275	14,275	0	0	0	0	0	0	0	0	28,550
<i>Project Type Total</i>												
All Funds		14,275	14,275	0	0	0	0	0	0	0	0	28,550

Transit Authority - Transit

Project Type: T	(\$ in 000's)											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total	
Miscellaneous Projects for New York City Transit City	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	50,000
IFA Trackwork Project for New York City Transit City	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	35,000	350,000
Project Type Total by Source of Funds City	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	400,000
Project Type Total All Funds	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	400,000
Transit Authority Total	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total	
Total by Source of Funds												
City	54,275	54,275	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	428,550
Federal	0	0	0	0	0	0	0	0	0	0	0	0
State	0	0	0	0	0	0	0	0	0	0	0	0
Private	0	0	0	0	0	0	0	0	0	0	0	0
All Funds	54,275	54,275	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	428,550

Department of Environmental Protection

The Department of Environmental Protection (DEP) protects the environmental health and welfare of the City's residents and natural resources. The Department manages the City's water supply system, including upstate water collection and downstate distribution; collects, treats, and disposes of waste and storm water; regulates the discharge of pollutants into the City's air; responds to emergencies involving hazardous materials; manages programs to clean up sites contaminated with hazardous waste and asbestos; enforces the City's noise code; and promotes water and energy conservation.

DEP manages over 2,000 square miles of watershed in upstate New York from which the City and nine upstate counties draw their supply of drinking water. In addition to a system of dams, reservoirs, aqueducts, and water tunnels, DEP maintains approximately 7,000 miles of water mains, which distribute water throughout the five boroughs, and 7,400 miles of sewers, which collect waste and storm water and transport it to 14 wastewater treatment plants (WWTPs). The Department also operates facilities and equipment to maintain and support these systems.

Capital Program Goals

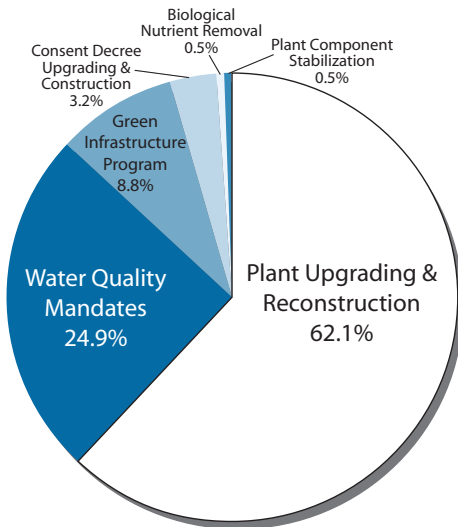
- To maintain the quality of water in the City's watersheds and, where necessary, treat the supply to ensure that it continues to be of high quality;
- To maintain and improve the transmission and distribution capacity of the City's water supply system;
- To improve the quality of the surrounding waters by upgrading the City's sewage treatment facilities and by reducing pollution caused by combined sewer overflows (CSOs); and
- To contain sanitary sewage and prevent flooding by replacing failing sewers and extending service to underserved areas of the City.

Preliminary Ten-Year Capital Strategy

DEP's Capital Program, relating to the City's water and sewer system, is financed by the New York City Municipal Water Finance Authority and paid for by water and sewer charges collected through the New York City Water Board. The Preliminary Ten-Year Capital Strategy includes \$19.7 billion for DEP programs.

The water and sewer system is currently facing significant costs related to maintaining a state of good repair and improving its system. This Preliminary Ten-Year Capital Strategy for the City's water and sewer system seeks to balance necessary investment in this vital service with as moderate an impact on City water and sewer ratepayers as can be achieved.

Department of Environmental Protection - Water Pollution Control



Water Pollution Control

To improve the quality of the City’s waterways and to comply with the mandates imposed by the Clean Water Act, the Preliminary Ten-Year Capital Strategy provides approximately \$8.2 billion towards wastewater treatment programs.

	(in millions)
• Plant Upgrading & Reconstruction	\$5,079.9
• Water Quality Mandates	2,040.0
• Green Infrastructure Program	720.8
• Consent Decree Upgrading and Construction	263.4
• Biological Nutrient Removal	40.2
• Plant Component Stabilization	40.2
TOTAL	\$8,184.5

Plant Upgrading and Reconstruction

The Preliminary Ten-Year Capital Strategy provides nearly \$5.1 billion for the reconstruction or replacement of components at in-City wastewater treatment facilities or related conveyance infrastructure to ensure their continuous and reliable operation. \$2.2 billion will fund upgrades and state of good repair work at WWTPs, such as the replacement of several main sewage pumps (\$546.2 million) and the reconstruction of numerous sewage force mains (\$225.0 million). In addition, the Department has allocated \$731.7 million for energy efficiency and resiliency upgrades at WWTPs, \$548.5 million for Job Order Contracts (JOCs) that address small capital improvements, and \$373.1 million for wastewater pumping stations across the five boroughs.

Water Quality Mandates

The Preliminary Ten-Year Capital Strategy provides \$2.0 billion for the optimization of existing and construction of new traditional sewer overflow controls, such as holding tanks, tunnels, and disinfection facilities, to prevent the release of CSO into harbor waters.

Green Infrastructure Program

The Preliminary Ten-Year Capital Strategy provides nearly \$720.8 million for green infrastructure projects such as bioswales, tree pits, and constructed wetlands, as well as a program that provides grant funding for the construction of rainwater capture facilities, such as green roofs and permeable pavement.

Consent Decree Upgrading and Construction

The Preliminary Ten-Year Capital Strategy provides \$263.4 million to address mandates, including \$260.6 million allocated to projects that will reduce residual chlorine released into harbor waters from WWTPs.

Biological Nutrient Removal

The Preliminary Ten-Year Capital Strategy provides \$40.2 million for projects to reduce the amount of nitrogen discharged into Jamaica Bay and the Long Island Sound.

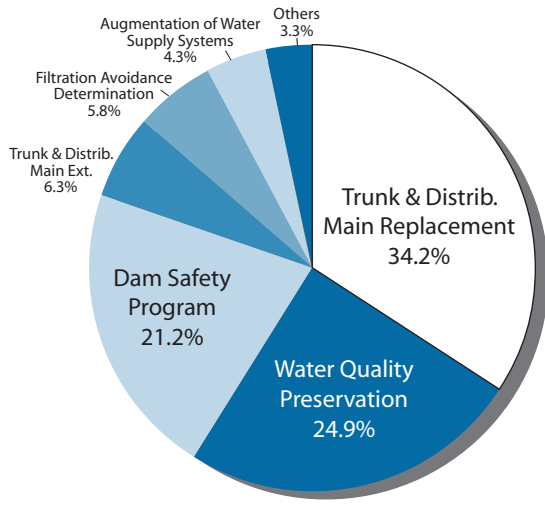
Plant Component Stabilization

The Preliminary Ten-Year Capital Strategy provides \$40.2 million to stabilize in-City wastewater treatment facilities that are in need of system-wide reconstruction to ensure their continued compliance with State permit requirements. There is \$20.6 million for the remaining construction costs of a new cogeneration plant at the North River WWTP, which will be more energy-efficient than the existing cogeneration facility and will assist the City in reaching its OneNYC carbon emission reduction goals.

Department of Environmental Protection - Water Pollution Control

Project Type: WP	(\$ in 000's)											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total	
Biological Nutrient Removal												
City	25,148	15,100	0	0	0	0	0	0	0	0	0	40,248
Green Infrastructure Program												
City	329,867	253,181	82,677	18,500	1,500	33,000	1,290	750	0	0	0	720,765
Consent Decree Upgrading and Construction												
City	23,392	49,445	21,970	110,711	56,788	1,076	0	0	0	0	0	263,382
Plant Upgrading and Reconstruction												
City	502,132	781,852	646,884	1,009,662	458,943	441,120	485,615	85,560	93,105	237,943	0	4,742,816
Federal	170,062	0	0	0	0	0	0	0	167,056	0	0	337,118
Plant Component Stabilization												
City	20,736	2,300	0	0	0	0	0	0	1,718	0	0	24,754
Federal	0	0	0	0	0	0	0	0	15,463	0	0	15,463
Water Quality Mandates												
City	140,342	202,600	248,252	255,916	294,750	113,428	355,000	163,000	146,684	120,000	0	2,039,972
Project Type Total by Source of Funds												
City	1,041,617	1,304,478	999,783	1,394,789	811,981	588,624	841,905	249,310	241,507	357,943	0	7,831,937
Federal	170,062	0	0	0	0	0	0	0	182,519	0	0	352,581
Project Type Total												
All Funds	1,211,679	1,304,478	999,783	1,394,789	811,981	588,624	841,905	249,310	424,026	357,943	0	8,184,518

Department of Environmental Protection - Water Mains, Sources and Treatment



Water Mains, Sources and Treatment

The Preliminary Ten-Year Capital Strategy provides approximately \$4.3 billion for the protection and upkeep of the City's source water supply and water distribution systems.

(in millions)

• Trunk and Distribution Main Replacement	\$1,472.6
• Water Quality Preservation	1,069.7
• Dam Safety Program	911.7
• Trunk and Distribution Main Extension	273.0
• Filtration Avoidance Determination	251.3
• Augmentation of Water Supply Systems	186.8
• Extensions to Accommodate New Development	37.8
• Croton Filter Project	34.7
• Water for the Future Program	24.7
• Bluebelt Program	24.1
• Miscellaneous Improvements Upstate	14.1
TOTAL	\$4,300.5

Trunk and Distribution Main Replacement

The Preliminary Ten-Year Capital Strategy includes the replacement of distribution and trunk mains at a total cost of \$1.5 billion. This includes \$972.6 million for various state-of-good-repair projects to replace aging water mains. In addition, \$141.0 million will allow for contracts for emergency responses leading to immediate reconstruction and rehabilitation of water mains and \$129.3 million will fund projects in partnership with DOT priority programs including Vision Zero, Great Streets, and Select Bus Service.

Water Quality Preservation

The Preliminary Ten-Year Capital Strategy calls for improvements to the upstate watershed totaling \$1.1 billion, including \$210.0 million for the inspection and repair of the Catskill Aqueduct Pressure Tunnels, \$135.0 million for the reconstruction of the New Croton Dam, and \$125.0 million for the rehabilitation of the Catskill Aqueduct between the Kensico and Hillview Reservoirs.

Dam Safety Program

The Preliminary Ten-Year Capital Strategy includes \$911.7 million for reconstruction of dams, bridges, and roadways in the Croton, Catskill, and Delaware watersheds. This includes \$772.0 million for the rehabilitation of the Ashokan Reservoir, Olive Bridge Dam, and Dividing Weir Bridge and \$72.0 million for the replacement of two City-owned upstate bridges.

Department of Environmental Protection - Water Mains, Sources and Treatment

Trunk and Distribution Main Extension

The Preliminary Ten-Year Capital Strategy includes \$273.0 million for the extension of distribution and trunk mains.

Filtration Avoidance Determination

The Preliminary Ten-Year Capital Strategy includes \$251.3 million for the continuation of various Filtration Avoidance Determination (FAD) measures in the upstate watershed, including \$123.4 million for land acquisition, \$61.8 million for the implementation of agriculture and forestry best practices, and \$52.2 million for stream management.

Augmentation of Water Supply Systems

The Preliminary Ten-Year Capital Strategy provides \$186.8 million to increase capacity of the existing water main system.

Extensions to Accommodate New Development

The Preliminary Ten-Year Capital Strategy provides \$37.8 million to continue the program to construct additional segments or extensions of water mains into underserved areas.

Croton Filter Project

The Preliminary Ten-Year Capital Strategy includes \$34.7 million to complete a filtration plant for the Croton water supply, which commenced operation in 2015.

Water for the Future

The Preliminary Ten-Year Capital Strategy provides \$24.7 million to fund projects associated with the repair and temporary shutdown of the Delaware Aqueduct to address leakage.

Bluebelt Program

The Preliminary Ten-Year Capital Strategy provides \$24.1 million for water main projects associated with the Bluebelt Program, a cost effective stormwater management system that connects natural drainage corridors, such as streams and wetlands, to conventional storm sewers to reduce local flooding.

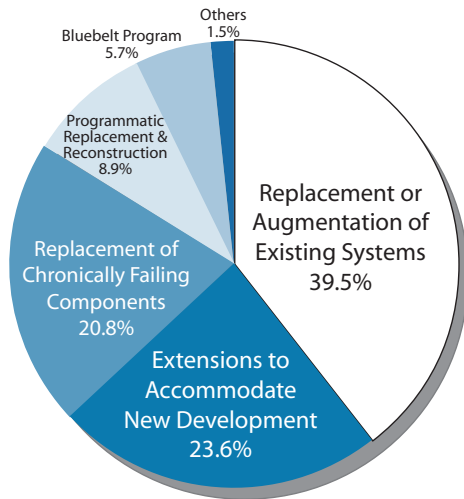
Miscellaneous Improvements Upstate

The Preliminary Ten-Year Capital Strategy provides \$14.1 million for various projects in the City's upstate watersheds.

Department of Environmental Protection - Water Mains, Sources and Treatment

Project Type: WM	(\$ in 000's)										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Augmentation of Water Supply Systems											
City	58,584	33,862	23,493	69,142	0	0	1,713	0	0	0	186,794
Bluebelt Program											
City	3,290	10,139	7,176	0	3,488	0	0	0	0	0	24,093
Croton Filter Project											
City	11,165	0	125	23,386	0	0	0	0	0	0	34,676
Dam Safety Program											
City	6,800	24,500	20,432	265,000	0	10,000	68,000	394,000	123,000	0	911,732
Extensions											
City	1,673	7,038	27,599	1,477	0	0	0	0	0	0	37,787
Filtration Avoidance Determination											
City	119,904	50,304	37,253	23,103	187	20,250	299	0	0	0	251,300
Miscellaneous Improvements Upstate											
City	6,990	5,100	2,000	0	0	0	0	0	0	0	14,090
Trunk and Distribution Main Extension											
City	12,090	36	41,877	33,662	0	0	13,970	104,359	33,500	33,500	272,994
Trunk and Distribution Main Replacement											
City	227,533	134,218	148,359	134,789	158,833	176,110	85,619	37,167	197,455	172,455	1,472,538
Private	0	0	23	0	0	0	0	0	0	0	23
Water For The Future											
City	22,737	2,000	0	0	0	0	0	0	0	0	24,737
Water Quality Preservation											
City	167,139	57,100	118,985	376,640	128,239	179,250	1,500	1,000	7,500	32,375	1,069,728
Project Type Total by Source of Funds											
City	637,905	324,297	427,299	927,199	290,747	385,610	171,101	536,526	361,455	238,330	4,300,469
Private	0	0	23	0	0	0	0	0	0	0	23
Project Type Total											
All Funds	637,905	324,297	427,322	927,199	290,747	385,610	171,101	536,526	361,455	238,330	4,300,492

Department of Environmental Protection - Sewers



Sewers

The Preliminary Ten-Year Capital Strategy provides \$4.3 billion to replace existing sewers in areas requiring increased capacity, to extend sewers to unserved or underserved areas, and to replace failing, flawed, or collapsed sewer mains.

(in millions)

• Replacement or Augmentation of Existing Systems	\$1,684.5
• Extensions to Accommodate New Development	1,005.7
• Replacement of Chronically Failing Components	886.5
• Programmatic Replacement and Reconstruction	380.2
• Bluebelt Program	241.1
• Programmatic Response to Regulatory Mandates	54.4
• Trunk and Distribution Main Replacement	12.6
TOTAL	\$4,265.1

Replacement or Augmentation of Existing Systems

The Preliminary Ten-Year Capital Strategy provides \$1.7 billion to increase capacity of the existing system. This includes \$895.6 million for the buildout of sewers in Southeast Queens to mitigate flooding in the area and \$261.6 million for various state-of-good-repair upgrades to sewers, Citywide.

Extensions to Accommodate New Development

The Preliminary Ten-Year Capital Strategy provides \$1.0 billion to continue the program to construct additional segments or extensions of sewers into underserved areas. Priority is given to areas that are presently served only by septic systems and sanitary drains and to areas that are experiencing flooding problems because no storm sewers exist.

Replacement of Chronically Failing Components

The Preliminary Ten-Year Capital Strategy provides \$886.5 million for the replacement of malfunctioning or collapsed cement pipe combined sewers, including \$599.5 million to fund emergency sewer work across the City.

Programmatic Replacement and Reconstruction

The Preliminary Ten-Year Capital Strategy includes \$380.2 million for the construction of storm sewers to alleviate flooding.

Bluebelt Program

The Preliminary Ten-Year Capital Strategy includes \$241.1 million for a comprehensive stormwater management plan that reduces local flooding.

Programmatic Response to Regulatory Mandates

The Preliminary Ten-Year Capital Strategy includes \$54.4 million for High Level Storm Sewers to limit CSO events and alleviate street flooding.

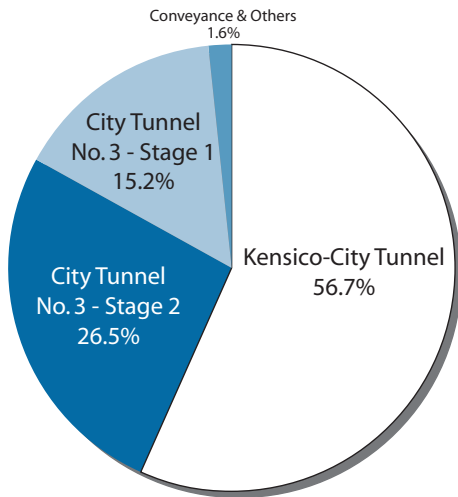
Trunk and Distribution Main Replacement

The Preliminary Ten-Year Capital Strategy includes \$12.6 million for the replacement and reconstruction of trunk sewers throughout the City.

Department of Environmental Protection - Sewers

Project Type: SE		(\$ in 000's)										
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Replacement or Augmentation of Existing Systems												
	City	344,383	479,853	231,208	222,507	219,068	47,649	93,203	9,000	13,500	23,958	1,684,329
	Private	207	0	0	0	0	0	0	0	0	0	207
Bluebelt Program												
	City	28,638	105,859	37,627	10,000	30,396	10,000	10,000	0	0	0	232,520
	Federal	0	8,613	0	0	0	0	0	0	0	0	8,613
Extensions to Accommodate New Development												
	City	125,255	48,457	84,972	91,219	97,649	117,964	65,910	90,641	141,816	141,816	1,005,699
Programmatic Response to Regulatory Mandates												
	City	54,384	0	61	0	0	0	0	0	0	0	54,445
Programmatic Replacement and Reconstruction												
	City	487	30,671	1,657	0	0	193,408	0	50,000	52,000	52,000	380,223
Replacement of Chronically Failing Components												
	City	99,252	146,385	146,387	52,209	65,547	56,884	47,500	58,313	107,000	107,000	886,477
Trunk and Distribution Main Replacement												
	City	6,818	4,233	173	0	0	0	0	0	0	0	11,224
	Private	1,358	0	32	0	0	0	0	0	0	0	1,390
Project Type Total by Source of Funds												
	City	659,217	815,458	502,085	375,935	412,660	425,905	216,613	207,954	314,316	324,774	4,254,917
	Federal	0	8,613	0	0	0	0	0	0	0	0	8,613
	Private	1,565	0	32	0	0	0	0	0	0	0	1,597
Project Type Total												
	All Funds	660,782	824,071	502,117	375,935	412,660	425,905	216,613	207,954	314,316	324,774	4,265,127

Department of Environmental Protection - Water Supply



Water Supply

The Preliminary Ten-Year Capital Strategy provides \$2.3 billion for the construction of the Kensico-Eastview Connection Tunnel, the completion of work on Stage 2 of City Water Tunnel No. 3, and the modification of chambers at the Hillview Reservoir.

	(in millions)
• Kensico-City Tunnel	\$1,279.7
• City Tunnel No. 3 - Stage 2	596.6
• City Tunnel No. 3 - Stage 1	342.0
• Conveyance	34.5
• Miscellaneous Programs	1.0
• City Tunnel No. 1	1.0
• Water for the Future	0.5
TOTAL	\$2,255.2

Kensico-City Tunnel

The Preliminary Ten-Year Capital Strategy provides \$1.3 billion for the design and construction of a Kensico-Eastview Connection Tunnel. The Kensico-City Tunnel will connect the Kensico Reservoir to the Catskill/Delaware Ultraviolet Light Facility and provide critical redundancy in the City’s water supply system.

City Tunnel No. 3 - Stage 2

The Preliminary Ten-Year Capital Strategy provides \$596.6 million to complete construction of City Tunnel No. 3 - Stage 2. Completion of the final section of Stage 2, which runs through Brooklyn and Queens, will provide the ability to bypass City Tunnels No. 1 and 2 and allow for inspection and any needed repairs for the first time since they were put into operation.

City Tunnel No. 3 - Stage 1

The Preliminary Ten-Year Capital Strategy provides \$342.0 million for the rehabilitation of equipment at the Hillview Reservoir.

Conveyance

The Preliminary Ten-Year Capital Strategy provides \$34.5 million for additional work associated with the construction of the Rondout West Branch Bypass Tunnel. The tunnel will bypass leaking portions of the Delaware Aqueduct and ensure the dependability of the City’s water supply system.

Miscellaneous Programs

The Preliminary Ten-Year Capital Strategy provides \$1.0 million for miscellaneous work associated with the water supply system.

City Tunnel No. 1

The Preliminary Ten-Year Capital Strategy provides \$1.0 million to begin repairs at various facilities associated with City Tunnel No. 1. Providing service primarily throughout Manhattan, City Tunnel No. 1 has been in continuous operation since its construction in 1917.

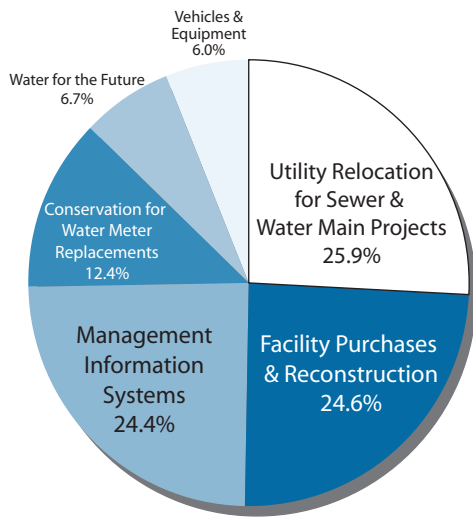
Water for the Future

The Preliminary Ten-Year Capital Strategy provides \$0.5 million to fund projects associated with increasing the capacity of the Upper Catskill Aqueduct.

Department of Environmental Protection - Water Supply

Project Type: W	(\$ in 000's)											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total	
<i>Conveyance</i>												
City	1,000	27,473	6,000	0	0	0	0	0	0	0	0	34,473
<i>Kensico-City Tunnel</i>												
City	25,000	97,000	0	24,069	933,608	0	200,000	0	0	0	0	1,279,677
<i>Miscellaneous Programs</i>												
City	1,000	0	0	0	0	0	0	0	0	0	0	1,000
<i>City Tunnel No. 1, Reconstruction</i>												
City	0	0	965	0	0	0	0	0	0	0	0	965
<i>City Tunnel No. 3, Stage 1</i>												
City	21,000	0	128,000	30,000	143,000	20,000	0	0	0	0	0	342,000
<i>City Tunnel No. 3, Stage 2</i>												
City	260,403	1,483	306,500	25,200	0	1,500	0	0	1,500	0	0	596,586
<i>Water For The Future</i>												
City	0	0	482	0	0	0	0	0	0	0	0	482
<i>Project Type Total by Source of Funds</i>												
City	308,403	125,956	441,947	79,269	1,076,608	21,500	200,000	0	1,500	0	0	2,255,183
<i>Project Type Total</i>												
All Funds	308,403	125,956	441,947	79,269	1,076,608	21,500	200,000	0	1,500	0	0	2,255,183

Department of Environmental Protection - Equipment



Equipment & Miscellaneous Programs

The Preliminary Ten-Year Capital Strategy provides \$662.2 million for the following programs: water meter installation and automatic meter reading systems, facility purchases and reconstruction, payments for gas utility line relocation, and equipment purchases, including laboratory instruments, vehicles, and computers.

(in millions)

• Utility Relocation for Sewer and Water Main Projects	\$171.6
• Facility Purchases and Reconstruction	163.3
• Management Information Systems	161.4
• Conservation for Water Meter Replacements	81.8
• Water for the Future	44.4
• Vehicles and Equipment	39.7
TOTAL	\$662.2

Utility Relocation for Sewer and Water Main Projects

The Preliminary Ten-Year Capital Strategy provides \$171.6 million for the City's cost sharing agreement with various gas utilities. The City is required to pay 51% of gas utility relocation work that is impacted by water and sewer construction projects.

Facility Purchases and Reconstruction

The Preliminary Ten-Year Capital Strategy provides \$163.3 million for the reconstruction and rehabilitation of various water and sewer field operations facilities and DEP administrative offices.

Management Information Systems

The Preliminary Ten-Year Capital Strategy provides \$161.4 million for agency-wide improvements in DEP's management information systems, including the installation of a new centralized security system.

Conservation for Water Meter Replacements

The Preliminary Ten-Year Capital Strategy provides \$81.8 million for the installation and replacement of water meters in residential and commercial properties.

Water for the Future

The Preliminary Ten-Year Capital Strategy provides \$44.4 million for additional water conservation measures in preparation for the repair and temporary shutdown of the Delaware Aqueduct.

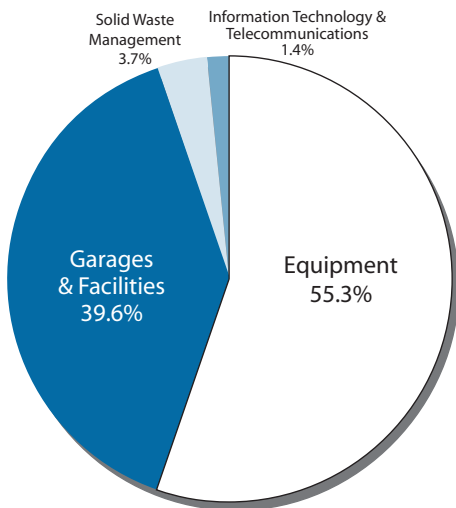
Vehicles and Equipment

The Preliminary Ten-Year Capital Strategy provides \$39.7 million for the systematic replacement of vehicles and equipment used for water and sewer field operations, plant maintenance, upstate maintenance, and customer service operations.

Department of Environmental Protection - Equipment

Project Type: EP	(\$ in 000's)											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total	
Conservation for Water Meter Replacements												
City	24,049	9,072	10,541	8,156	10,000	0	0	0	10,000	10,000	81,818	
Management Information Systems												
City	8,580	4,520	45,553	42,025	20,125	20,000	10,000	10,000	0	0	160,803	
Federal	568	0	0	0	0	0	0	0	0	0	568	
Facility Purchases and Reconstruction												
City	23,563	12,000	54,100	3,900	18,000	50,500	1,200	0	0	0	163,263	
Utility Relocation for SE and WM Projects												
City	14,291	10,247	12,067	43,997	45,000	46,000	0	0	0	0	171,602	
Vehicles and Equipment												
City	16,821	5,788	7,142	628	1,000	4,344	2,000	2,000	0	0	39,723	
Water for the Future												
City	19,088	25,287	0	0	0	0	0	0	0	0	44,375	
Project Type Total by Source of Funds												
City	106,392	66,914	129,403	98,706	94,125	120,844	13,200	12,000	10,000	10,000	661,584	
Federal	568	0	0	0	0	0	0	0	0	0	568	
Project Type Total												
All Funds	106,960	66,914	129,403	98,706	94,125	120,844	13,200	12,000	10,000	10,000	662,152	
Environmental Protection Total	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total	
Total by Source of Funds												
City	2,753,534	2,637,103	2,500,517	2,875,898	2,686,121	1,542,483	1,442,819	1,005,790	928,778	931,047	19,304,090	
Federal	170,630	8,613	0	0	0	0	0	0	182,519	0	361,762	
State	0	0	0	0	0	0	0	0	0	0	0	
Private	1,565	0	55	0	0	0	0	0	0	0	1,620	
All Funds	2,925,729	2,645,716	2,500,572	2,875,898	2,686,121	1,542,483	1,442,819	1,005,790	1,111,297	931,047	19,667,472	

Department of Sanitation



The Department of Sanitation (DSNY) is responsible for keeping the City clean by collecting and disposing of garbage through export; collecting and processing recyclable materials; cleaning the streets of litter, snow, and ice; removing debris from vacant lots; and tagging and removing derelict vehicles. In addition, the Department enforces compliance with the Health and Administrative Codes to prevent illegal dumping and to ensure proper operation of solid waste transfer stations and safe disposal of hazardous, medical, and asbestos waste.

The Department collects approximately 12,000 tons of residential and institutional refuse and recyclables a day. The Department utilizes over 5,400 vehicles for its operations and also operates 59 local sanitation garages from which it dispatches all community collection, cleaning, and recycling services.

Capital Program Goals

- To upgrade capital assets and address facilities' needs;
- To maintain an adequate and reliable fleet; and
- To implement an efficient and economically viable long-term waste disposal strategy that maximizes flexibility and access to available disposal alternatives, and minimizes negative environmental impacts.

Preliminary Ten-Year Capital Strategy

In an effort to provide adequate collection, cleaning, recycling, and waste export services to New York City and to meet the Department's capital goals, the Preliminary Ten-Year Capital Strategy responds to projected needs in four primary areas.

	(in millions)
• Equipment	\$1,755.0
• Garages and Facilities	1,257.6
• Solid Waste Management	117.0
• Information Technology & Telecommunications	43.5
TOTAL	\$3,173.1

Department of Sanitation

Equipment

The Preliminary Ten-Year Capital Strategy provides \$1.8 billion for equipment acquisition. To perform its day-to-day and emergency operations effectively, the Department must maintain an adequate and reliable fleet of vehicles.

Garages and Facilities

The Preliminary Ten-Year Capital Strategy provides \$1.3 billion for the construction and reconstruction of garages and other facilities. This includes \$256.6 million for construction of a new Bronx 9/10/11 Garage, \$199.7 million for construction of a new Manhattan 6/6A/8 Garage, \$143.8 million for construction of a new Staten Island 1/3 Garage, and \$142.6 million for the construction of a new Queens 1 Garage. The Strategy also includes funding for the rehabilitation of existing facilities to address safety issues, as well as funding for the reconstruction of salt sheds and tent structures to cover exposed salt.

Solid Waste Management

The Preliminary Ten-Year Capital Strategy provides \$117.0 million for Solid Waste Management for construction and reconstruction of marine transfer stations, other solid waste infrastructure, composting sites, and related equipment.

Information Technology and Telecommunications

The Preliminary Ten-Year Capital Strategy provides \$43.5 million for information technology and telecommunications projects. DSNY's information technology and telecommunications infrastructure is vital to the Department's support and management functions.

Department of Sanitation

Project Type: S	(\$ in 000's)											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total	
Garages and Facilities												
City	345,871	66,894	187,564	294,889	215,677	38,355	25,000	25,000	25,000	25,000		1,249,250
Federal	8,338	0	0	0	0	0	0	0	0	0		8,338
Equipment												
City	181,874	189,437	176,261	162,875	164,487	168,471	170,137	173,446	180,384	187,599		1,754,971
Information Technology and Communications												
City	9,656	3,500	3,500	3,500	4,607	3,500	3,609	3,720	3,869	4,024		43,485
Solid Waste Management												
City	18,913	6,536	0	5,988	54,529	6,408	4,070	6,597	6,861	7,136		117,038
Project Type Total by Source of Funds												
City	556,314	266,367	367,325	467,252	439,300	216,734	202,816	208,763	216,114	223,759		3,164,744
Federal	8,338	0	0	0	0	0	0	0	0	0		8,338
Project Type Total												
All Funds	564,652	266,367	367,325	467,252	439,300	216,734	202,816	208,763	216,114	223,759		3,173,082

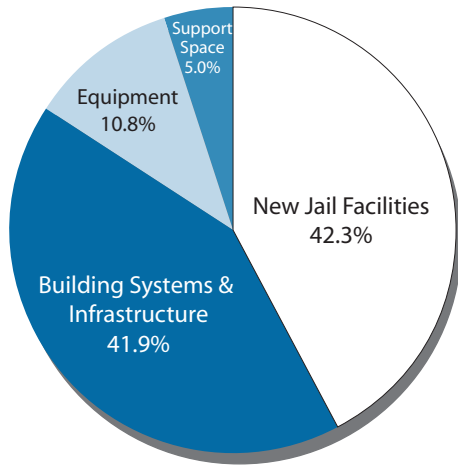
Department of Correction

The Department of Correction (DOC) provides custody, care, and control of detainees awaiting trial or sentencing, convicted offenders sentenced to one year or less, convicted offenders awaiting transfer to State correctional facilities, State prisoners with court appearances in New York City, and parole violators awaiting parole revocation hearings.

Capital Program Goals

- To ensure capacity is available to meet the security, programmatic, health, and safety needs of the existing and projected population;
- To ensure DOC staff have appropriate facilities, training and equipment to provide safety and security for staff and inmates;
- To ensure support areas provide sufficient space for educational, health and administrative services and to maintain kitchen facilities and fire/life safety systems;
- To maintain appropriate replacement cycles of vehicles, security equipment, fencing, and communication equipment; and
- To maintain infrastructure and building systems to ensure the preservation of the physical plant.

Department of Correction



Preliminary Ten-Year Capital Strategy

The Preliminary Ten-Year Capital Strategy provides \$1.8 billion to ensure sufficient capacity and support space as well as to upgrade equipment, vehicles, and necessary systems.

	(in millions)
• New Jail Facilities	\$765.6
• Building Systems and Infrastructure	756.9
• Equipment	194.5
• Support Space	91.0
TOTAL	\$1,808.0

New Jail Facilities

The Preliminary Ten-Year Capital Strategy provides \$765.6 million for the design and construction of new jail facilities.

Building Systems and Infrastructure

The Preliminary Ten-Year Capital Strategy provides \$756.9 million for state of good repair of infrastructure, including \$166.7 million for the upgrade of the fire/life safety systems. It also provides \$70.1 million for ADA compliance; \$52.5 million for heating, air conditioning and ventilation; \$52.1 million for electrical work; \$32.7 million for plumbing; \$21.7 million for perimeter security and fencing; and \$360.9 million for other state of good repair work.

Equipment

The Preliminary Ten-Year Capital Strategy provides \$194.5 million for equipment replacement, including \$52.3 million for vehicles; \$38.4 million for network and information technology equipment; \$36.2 million for radio equipment replacement; \$31.1 million for generators; \$21.8 million for the replacement of food service and security equipment; and \$14.7 million for security equipment including cameras.

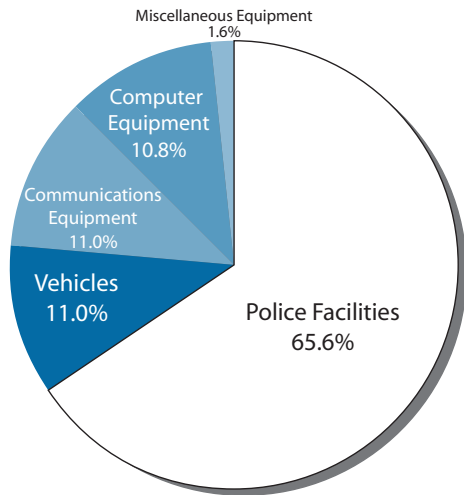
Support Space

The Preliminary Ten-Year Capital Strategy provides \$91.0 million to improve and construct support facilities and perimeter fencing. This allocation includes \$90.0 million for a new training academy and \$1.0 million for perimeter security and fencing.

Department of Correction

Project Type: C		(\$ in 000's)										
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Support Space												
	City	90,500	500	0	0	0	0	0	0	0	0	91,000
Equipment												
	City	26,586	18,311	10,599	11,092	15,703	15,599	20,790	24,569	24,496	26,796	194,541
New Jail Facilities												
	City	765,627	0	0	0	0	0	0	0	0	0	765,627
Building Systems and Infrastructure												
	City	321,093	123,770	115,055	46,189	25,036	27,256	23,394	20,984	22,879	22,476	748,132
	Federal	8,727	0	0	0	0	0	0	0	0	0	8,727
Project Type Total by Source of Funds												
	City	1,203,806	142,581	125,654	57,281	40,739	42,855	44,184	45,553	47,375	49,272	1,799,300
	Federal	8,727	0	0	0	0	0	0	0	0	0	8,727
Project Type Total												
	All Funds	1,212,533	142,581	125,654	57,281	40,739	42,855	44,184	45,553	47,375	49,272	1,808,027

Police Department



The principal mission of the Police Department is to maintain public safety and security, respond to calls for emergency aid, and to conduct investigations of criminal activity.

To achieve its principal mission, the Police Department has 77 precincts categorized into eight patrol boroughs. In addition to the patrol boroughs, there are 12 Transit Districts and 9 Police Service Areas. Transit Districts are responsible for the public safety and security of all 27 subway lines and 472 subway stations, and Police Service Areas are responsible for the public safety and security of the New York City Housing Authority's 334 public housing developments. Other specialized units include the Special Operations Division (Emergency Services Unit, Bomb Squad, etc.), and the Intelligence and Counterterrorism Bureau.

The Police Department also conducts traffic control and parking enforcement through the Traffic Enforcement Division, and provides security in NYC's schools through the School Safety Division.

In order to properly carry out operations, the Police Department occupies over 200 facilities including precincts, Transit Districts, Police Service Areas, highway units, anti-crime units, mounted troops, aviation unit, administrative buildings, training and storage facilities.

Capital Program Goals

- To maintain safe and proper replacement cycles for all equipment necessary for policing activities (vehicles and communications and computer equipment);
- To maintain facilities and building systems; and
- To enhance policing efforts by upgrading and purchasing new equipment.

Preliminary Ten-Year Capital Strategy

The Preliminary Ten-Year Capital Strategy provides \$1.5 billion to renovate buildings and upgrade equipment and necessary systems. The five categories in this Strategy focus on the replacement and upgrade of existing facilities and equipment.

(in millions)

• Police Facilities	\$958.1
• Vehicles	160.7
• Communications Equipment	160.6
• Computer Equipment	159.5
• Miscellaneous Equipment	22.7
TOTAL	\$1,461.6

Police Department

Police Facilities

The Preliminary Ten-Year Capital Strategy includes \$423.6 million for the construction of a new consolidated Property Clerk warehouse facility, \$275.5 million for the renovation of police facilities, Citywide, \$239.3 million for the renovation of the Rodman's Neck Firearms Training Facility, and \$19.6 million for the renovation of locker rooms.

Vehicles

The Department will replace operational and support vehicles, including \$27.8 million for twelve-passenger vans, \$27.1 million for medium tow trucks, \$20.3 million for radio emergency patrol trucks, and \$85.4 million for other vehicles.

Communications Equipment

The Department will focus on maintaining lifecycle replacements for all communications equipment to ensure that members of the Department can communicate with each other as well as other first responders efficiently and effectively. Equipment in this category includes \$51.5 million for the replacement of radio systems, \$47.0 million for portable radios, Citywide, \$31.9 million for core radio infrastructure upgrades, and \$30.2 million for other communications equipment.

Computer Equipment

The Department will replace and upgrade computer equipment, including \$65.5 million for the purchase and upgrade of servers and storage equipment as a part of phase two of the Sustainable Technology Initiative, \$20.1 million to enhance its local and wide area networks, \$20.0 million to upgrade the NYPD data warehouse, and \$53.9 million for other computer equipment.

Miscellaneous Equipment

The Preliminary Ten-Year Capital Strategy also provides \$22.7 million for a diverse range of support equipment such as diesel marine engines, forensic imaging equipment, and other equipment essential to preserving public safety.

Police Department

Project Type: PO		(\$ in 000's)										
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Communications Equipment												
	City	55,845	13,456	17,140	10,000	11,000	10,741	11,636	10,750	10,000	10,000	160,568
Computer Equipment												
	City	40,446	6,297	34,281	11,354	6,081	6,000	12,000	11,000	14,500	17,500	159,459
Miscellaneous Equipment												
	City	5,305	1,739	3,462	2,851	364	270	103	300	4,246	4,056	22,696
Police Facilities												
	City	254,782	414,203	167,802	13,000	14,500	14,500	14,500	14,500	17,000	17,000	941,787
	Federal	16,323	0	0	0	0	0	0	0	0	0	16,323
Vehicles												
	City	29,581	6,426	4,257	19,466	8,932	18,063	19,177	24,772	15,221	14,850	160,745
Project Type Total by Source of Funds												
	City	385,959	442,121	226,942	56,671	40,877	49,574	57,416	61,322	60,967	63,406	1,445,255
	Federal	16,323	0	0	0	0	0	0	0	0	0	16,323
Project Type Total												
	All Funds	402,282	442,121	226,942	56,671	40,877	49,574	57,416	61,322	60,967	63,406	1,461,578

Courts

Pursuant to New York State Law, localities are responsible for the provision of adequate and sufficient court facilities. To comply with this mandate, New York City is required to submit a court facilities capital plan to the State for approval. Periodically the plan is amended to reflect changes in priorities and affordability.

Capital Program Goals

- To construct new court facilities which meet the needs of the court system; and
- To reconstruct and renovate existing court facilities to ensure continued usefulness.

Preliminary Ten-Year Capital Strategy

The Preliminary Ten-Year Capital Strategy provides \$2.0 billion to renovate and upgrade court facilities in all five boroughs.
(in millions)

• Reconstruction/Renovation of Court Facilities	\$1,979.6
TOTAL	\$1,979.6

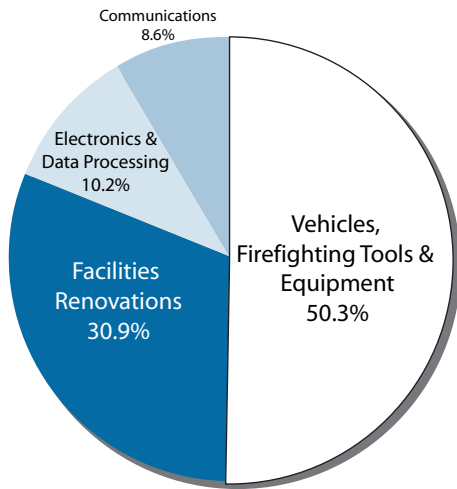
Reconstruction/Renovation of Court Facilities

The Preliminary Ten-Year Capital Strategy provides \$2.0 billion for citywide renovation and improvements to court facilities. This includes \$1.4 billion for infrastructure and operational improvements; \$255.3 million for fire/life safety work; \$75.5 million for electrical upgrades; \$73.2 million for elevator upgrades; \$64.1 million for HVAC improvements; and \$63.1 million for exterior renovations.

Courts

Project Type: CO		(\$ in 000's)										
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Reconstruction/Renovation of Court Facilities												
City		445,351	359,964	212,594	157,314	260,458	152,202	127,452	92,304	83,159	86,486	1,977,284
State		2,005	307	0	0	0	0	0	0	0	0	2,312
Project Type Total by Source of Funds												
City		445,351	359,964	212,594	157,314	260,458	152,202	127,452	92,304	83,159	86,486	1,977,284
State		2,005	307	0	0	0	0	0	0	0	0	2,312
Project Type Total												
All Funds		447,356	360,271	212,594	157,314	260,458	152,202	127,452	92,304	83,159	86,486	1,979,596

Fire Department



The Fire Department is responsible for protecting the lives and property of the citizens and visitors of New York City while responding to fire, medical and other emergencies, and investigating building hazards. The Fire Department extinguishes fires, promotes fire prevention awareness, investigates suspicious fires, provides ambulance and medical emergency services, and conducts building safety inspections. The Department currently has 357 fire units that provide fire, rescue and emergency medical services. The agency also promotes fire prevention through public outreach and enforcement of New York City's Fire Code. The Department's Fire Marshals investigate fires and apprehend arsonists. The Bureau of Emergency Medical Services (EMS), assisted by the Certified First Responder (CFR) trained personnel responding from engine companies, provides pre-hospital emergency medical care and ambulance transport, where required.

To support these activities, the Department has 218 firehouses, 35 EMS stations, and about 40 support facilities including Department headquarters, training academies at Randall's Island and Fort Totten, repair operations facilities, communications offices, and fire investigation bases.

Capital Program Goals

- To ensure emergency equipment is in optimal service condition;
- To maintain the Department's facilities in safe condition; and
- To enhance emergency response capability.

Preliminary Ten-Year Capital Strategy

The Preliminary Ten-Year Capital Strategy provides \$1.3 billion for the acquisition of emergency vehicles and firefighting equipment, the rehabilitation of existing facilities, and communication and computer systems to maintain fire-fighting capability and to provide emergency medical assistance.

(in millions)

• Vehicles, Firefighting Tools and Equipment	\$646.4
• Facilities Renovation	397.2
• Electronics and Data Processing	130.5
• Communications	110.4
TOTAL	\$1,284.5

Fire Department

Vehicles, Firefighting Tools, and Equipment

The Department is mandated to procure front-line vehicles on a predetermined replacement cycle, typically 11-12 years. The Preliminary Ten-Year Capital Strategy provides \$646.4 million for both mandated and support vehicle replacement and necessary fire-fighting tools and equipment.

Facilities Renovation

The average age of the Fire Department's 218 firehouses is approximately 87 years, with approximately 14 percent built prior to 1900. The Preliminary Ten-Year Capital Strategy includes \$362.1 million to replace building components within individual Fire and EMS facilities, consisting of electrical systems, apparatus floors, apparatus doors, roof replacement/waterproofing, boilers, kitchens, windows, bathrooms and other associated work. The Preliminary Ten-Year Capital Strategy also includes \$35.1 million for the design and construction of new FDNY facilities including EMS Station 17, located in the borough of the Bronx, and Engine Company 268 located within the borough of Queens.

Electronic Data Processing

The Preliminary Ten-Year Capital Strategy provides \$63.0 million for the replacement/upgrade of equipment components that are approaching the end of useful life, \$62.2 million for the upgrade of the 911 communications system infrastructure, and \$5.3 million upgrades to administrative systems and applications.

Communications

The Preliminary Ten-Year Capital Strategy provides \$81.3 million for the replacement of conduit and wiring in the inundation zones for the Department's outside cable plant that was damaged during Hurricane Sandy, \$15.3 million for radio and telecommunication equipment upgrades, and \$13.8 million for cabling and components to support the Department's fire alarm box network.

Fire Department

Project Type: F											
(\$ in 000's)											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Communications											
City	8,669	12,150	8,252	700	700	700	1,000	1,000	3,000	3,000	39,171
Federal	26,192	45,073	0	0	0	0	0	0	0	0	71,265
Electronics and Data Processing											
City	49,467	15,540	22,500	3,500	3,500	3,500	3,500	3,500	9,794	15,663	130,464
New Facilities and Renovations											
City	28,179	100,176	38,734	25,000	25,000	25,000	30,000	30,000	40,000	55,000	397,089
Federal	0	110	0	0	0	0	0	0	0	0	110
Vehicles, Firefighting Tools and Equipment											
City	93,768	52,958	48,615	107,965	83,007	85,357	81,111	51,320	28,204	14,135	646,440
Project Type Total by Source of Funds											
City	180,083	180,824	118,101	137,165	112,207	114,557	115,611	85,820	80,998	87,798	1,213,164
Federal	26,192	45,183	0	0	0	0	0	0	0	0	71,375
Project Type Total											
All Funds	206,275	226,007	118,101	137,165	112,207	114,557	115,611	85,820	80,998	87,798	1,284,539

Department of Education

The New York City public school system, with approximately 1,400 public school buildings and support facilities (including City-owned space and leased facilities), served over one million pupils in the 2016-2017 school year. This vast operation has a complex mandate: to impart basic educational skills and vocational training; to provide pupils with meals, health services and recreation; to provide special educational services to students with disabilities; and to function as a focal point in the City's neighborhoods.

Since July 1989, the School Construction Authority (SCA) has been responsible for acquiring new school sites, and for the design and construction of capital projects. The legislation that established the SCA exempted the Department of Education (DOE) and the Authority from the City's line-by-line annual Capital Budget. Instead, the City provides a five-year lump-sum allocation for education capital expenditures, and the DOE determines how the funds will be used, subject to scope approval by the City. The Preliminary Ten-Year Capital Strategy determines the funding levels available to the Department.

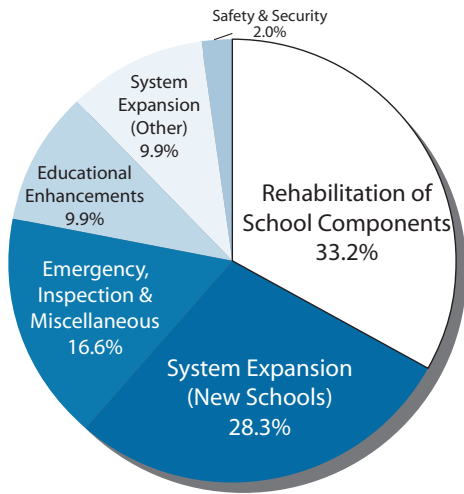
The first year of the FY20-29 Preliminary Ten-Year Capital Strategy is also the first year of the Department of Education's FY20-24 Five-Year Capital Plan.

The capital program's primary objectives are to address deterioration of the physical plant and provide additional capacity. Multiple solutions to overcrowding - both capital and non-capital - will be required.

Capital Program Goals

- To halt and reverse the deterioration of school buildings;
- To relieve overcrowding;
- To restore the system to a state of good repair and maintain facilities;
- To produce a school system that meets all building and fire code requirements and brings the DOE into compliance with federal, state, and local mandates;
- To continue the removal of all of the Transportable Classroom Units (TCUs) across the City;
- To create a physical plant that provides appropriate space for current educational programs and is flexible enough to meet the needs of new educational initiatives, changes in education-related technology, and fluctuating enrollments;
- To guarantee security within schools in order to provide a safe learning environment;
- To provide state-of-the-art technology; and
- To rejuvenate the City's sports programs through the rehabilitation of athletic fields.

Department of Education



Preliminary Ten-Year Capital Strategy

The Preliminary Ten-Year Capital Strategy provides the Department with a lump-sum allocation of \$23.0 billion to spend on school-related capital projects. Funding is distributed across seven broad categories of capital work in the following manner:

	(in millions)
• Rehabilitation of School Components	\$7,644.2
• System Expansion - New Schools	6,515.9
• Emergency, Inspection, and Miscellaneous	3,830.3
• Educational Enhancements	2,285.8
• System Expansion - Other	2,270.1
• Safety and Security	477.6
TOTAL	\$23,023.9

Rehabilitation of School Components

The Preliminary Ten-Year Capital Strategy provides \$7.6 billion to rehabilitate, replace and upgrade building components. The Department will use funds to maintain roofs and parapets, resurface floors, install new windows, re-develop playgrounds, and remove asbestos and lead paint.

System Expansion

To address the shortage of seating in public schools, the Preliminary Ten-Year Capital Strategy provides \$8.8 billion for system expansion. Of this amount, \$6.5 billion will support the construction of new school buildings. An additional \$2.3 billion is allocated for the build out of leased space, building additions, and new athletic fields and playgrounds.

Emergency, Inspection and Miscellaneous

The Preliminary Ten-Year Capital Strategy provides \$3.8 billion for other miscellaneous capital improvements, including federally funded disaster relief, administrative costs, emergency projects, research and development, and prior plan completion costs.

Educational Enhancements

The Preliminary Ten-Year Capital Strategy designates \$2.3 billion to capital improvements associated with recent programmatic needs. The Department will provide computers for teachers and students. Funds will also be used to purchase educational software, upgrade networks, and re-wire schools for enhanced internet access. To further its science education program, the Department will upgrade and replace science labs citywide.

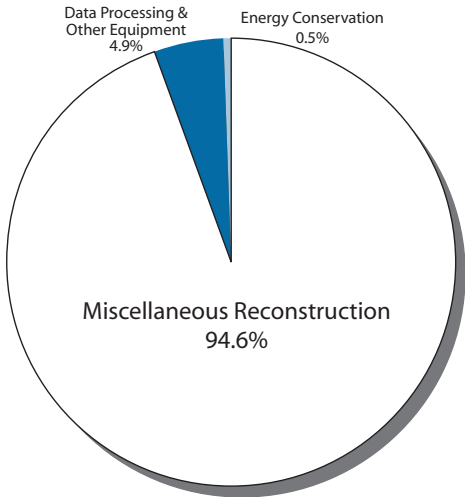
Safety and Security

The Preliminary Ten-Year Capital Strategy provides \$477.6 million for security systems, emergency lighting and code compliance.

Department of Education

Project Type: E	(\$ in 000's)											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total	
Emergency, Inspection and Miscellaneous												
City	637,614	339,885	331,460	331,410	250,971	318,605	378,326	329,494	342,674	356,380	3,616,819	
Federal	7,282	0	0	0	0	0	0	0	0	0	7,282	
State	0	147,165	0	0	59,029	0	0	0	0	0	206,194	
Educational Enhancements												
City	395,580	298,814	365,140	360,840	306,803	68,530	115,881	92,560	96,262	100,113	2,200,523	
State	0	45,076	0	0	40,247	0	0	0	0	0	85,323	
Rehabilitation of School Components												
City	971,880	463,934	700,040	787,120	619,166	774,273	674,790	714,166	742,733	772,442	7,220,544	
State	0	262,486	0	0	161,124	0	0	0	0	0	423,610	
Safety and Security												
City	70,990	66,454	66,350	68,400	54,962	12,592	5,003	37,780	39,291	40,863	462,685	
State	0	1,946	0	0	13,008	0	0	0	0	0	14,954	
System Expansion (New Schools)												
City	678,290	1,200,525	1,622,850	1,350,230	1,386,974	0	0	0	0	0	6,238,869	
State	0	54,245	0	0	222,776	0	0	0	0	0	277,021	
System Expansion (Other)												
City	745,170	310,208	340,480	516,380	58,454	0	0	0	0	0	1,970,692	
State	0	233,162	0	0	66,266	0	0	0	0	0	299,428	
Project Type Total by Source of Funds												
City	3,499,524	2,679,820	3,426,320	3,414,380	2,677,330	1,174,000	1,174,000	1,174,000	1,220,960	1,269,798	21,710,132	
Federal	7,282	0	0	0	0	0	0	0	0	0	7,282	
State	0	744,080	0	0	562,450	0	0	0	0	0	1,306,530	
Project Type Total												
All Funds	3,506,806	3,423,900	3,426,320	3,414,380	3,239,780	1,174,000	1,174,000	1,174,000	1,220,960	1,269,798	23,023,944	

City University



New York City’s intellectual resources are unmatched by those of any other city in the country. The City University of New York (CUNY), with a fiscal year 2019 enrollment of 274,073 degree students, primarily serves City residents; however, it also attracts students from all over the world. Divided into colleges and graduate schools, CUNY facilities are distributed throughout the five boroughs and range in curricula from liberal arts to law and medicine. CUNY operates 25 institutions in the City and is comprised of eleven senior colleges, seven community colleges, an honors college, a school of public health, a graduate school, a graduate school of journalism, a law school, a school of professional studies, and a school of labor and urban studies.

Changes in enrollment patterns may have a significant impact on future plant use and capital needs. From fiscal year 2014 to 2019, degree enrollment at CUNY colleges increased from 269,897 to 274,073. Furthermore, CUNY plans to enroll approximately 25,000 students in its Accelerated Study Associates Program (ASAP) this academic year (2018-2019). The additional services provided to and the full-time enrollment commitment by students requires investment in the university’s facilities.

Capital Program Goals

- Rehabilitate and upgrade existing facilities;
- Strengthen fire protection, life safety, and health facilities on the campuses;
- Provide accessibility for the physically disabled; and
- Modernize campus plants to increase efficiency.

Preliminary Ten-Year Capital Strategy

The Preliminary Ten-Year Capital Strategy totals \$593.7 million. The City funds its share of the University’s large construction projects through its Preliminary Ten-Year Capital Strategy. The State of New York funds a majority of the work associated with the senior colleges. The community college projects are funded jointly by the City and the State. In some cases, the City also independently funds some senior and community college-related work. In this Preliminary Ten-Year Capital Strategy, CUNY emphasizes critical rehabilitation, including the betterment of electrical, mechanical, heating, ventilation, and air-conditioning systems; interiors and exteriors of buildings, roofs and windows; security systems; and access for the disabled.

	(in millions)
• Miscellaneous Reconstruction	\$561.7
• Data Processing and Other Equipment	29.2
• Energy Conservation	2.8
TOTAL	\$593.7

Miscellaneous Reconstruction

The Preliminary Ten-Year Capital Strategy provides \$561.7 million for the replacement or rehabilitation of roofs, windows, elevators, and exterior and interior renovations. Of the total amount, \$14.9 million will support the upgrade of a 40-year-old performing arts spaces with new lighting and audio systems, lobby upgrades, egress, and mechanical systems at Kingsborough Community College. Additionally, \$8.5 million allocated in a prior plan continues to support the expansion of the nationally-acclaimed Accelerated Study Associates Program (ASAP) to address its space needs for office and administrative staff that support the program at BMCC, Hostos, Bronx CC, Queensborough, Kingsborough, LaGuardia, the College of Staten Island, Medgar Evers, and the New York City College of Technology.

Data Processing and Other Equipment

The Preliminary Ten-Year Capital Strategy provides \$29.2 million for the purchase of computer, laboratory and other equipment.

Energy Conservation

The Preliminary Ten-Year Capital Strategy provides \$2.8 million for the reduction of energy consumption by replacing old devices with new energy efficient ones.

City University

Project Type: HN	(\$ in 000's)											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total	
Data Processing and Other Equipment												
City	23,090	1,139	4,900	56	0	0	0	0	0	0	0	29,185
Energy Conservation Projects												
City	0	1,597	1,228	0	0	0	0	0	0	0	0	2,825
Federal, State and Local Mandates												
City	5	0	0	0	0	0	0	0	0	0	0	5
New School Construction												
City	0	57	13,875	13,875	0	0	0	0	0	0	0	27,807
Miscellaneous Reconstruction												
City	164,611	91,430	74,143	49,296	23,506	23,622	24,354	25,109	26,113	27,158	0	529,342
Federal	4,252	0	0	0	0	0	0	0	0	0	0	4,252
State	64	65	0	0	0	0	0	0	0	0	0	129
Security Systems												
City	0	0	132	0	0	0	0	0	0	0	0	132
Project Type Total by Source of Funds												
City	187,706	94,223	94,278	63,227	23,506	23,622	24,354	25,109	26,113	27,158	0	589,296
Federal	4,252	0	0	0	0	0	0	0	0	0	0	4,252
State	64	65	0	0	0	0	0	0	0	0	0	129
Project Type Total												
All Funds	192,022	94,288	94,278	63,227	23,506	23,622	24,354	25,109	26,113	27,158	0	593,677

Department of Health and Mental Hygiene

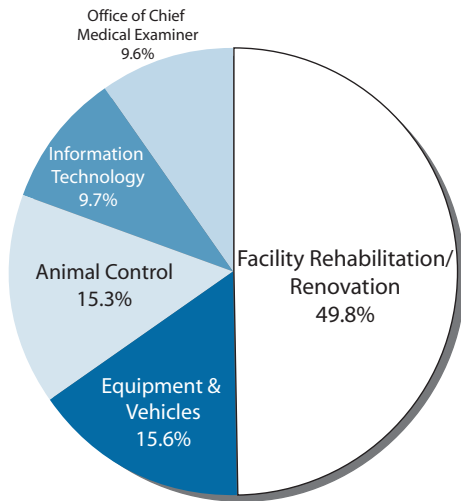
The Department of Health and Mental Hygiene (DOHMH) is an integral component of public safety by preserving core public health infrastructure and protecting New Yorkers from existing and emerging threats, both natural and human-made. DOHMH currently maintains public health facilities in all five boroughs, and operates the Public Health Laboratory. Community-based services are provided through District Public Health Offices, immunization clinics, tuberculosis test centers, and sexually transmitted disease clinics. DOHMH provides HIV/AIDS prevention and support services; health services at approximately 1,800 schools; mental health, developmental disability services, and chemical dependency prevention and treatment, and counseling services; early intervention services to developmentally delayed infants and toddlers; and prevention and control services that address non-communicable diseases such as heart disease, tobacco dependency, cancer and diabetes. DOHMH also issues reports on health conditions and community health assessments, as well as birth and death certificates; investigates and eliminates environmental health hazards such as pests and lead poisoning; and inspects restaurants and day care facilities. DOHMH inspects all food service establishments in NYC (including food carts, work place cafeterias, school lunchrooms, and both fast food and sit-down restaurants). The Department also plays an important role in animal care and control – specifically in funding their capital improvement needs.

The Department's Preliminary Ten-Year Capital Strategy includes funds for the Office of the Chief Medical Examiner (OCME). OCME investigates all deaths in New York City occurring from criminal violence, by accident, by suicide, suddenly when in apparent health, or in any unusual or suspicious manner.

Capital Program Goals

- To ensure that Department facilities are in compliance with applicable codes, rules, and regulations;
- To promote effective service delivery by renovating facilities requiring immediate repair and maintaining quality conditions in these facilities;
- To provide effective service delivery by investing in technology for automation and basic infrastructure; and
- To meet legal mandates for animal care and control.

Department of Health and Mental Hygiene



Preliminary Ten-Year Capital Strategy

The focus of the Preliminary Ten-Year Capital Strategy is to identify, prioritize and support immediate needs for code compliance and other renovations at the City’s public health facilities and technology investments that are essential in providing critical public health services.

	(in millions)
• Facility Rehabilitation/Renovation	\$304.2
• Equipment and Vehicles	95.5
• Animal Care	93.4
• Information Technology	59.5
• Office of Chief Medical Examiner	58.5
TOTAL	\$611.1

Facility Rehabilitation and Renovation

The Preliminary Ten-Year Capital Strategy provides \$148.5 million for laboratory improvement and renovation. Funding of \$120.0 million is provided for the renovation of various City-owned public health facilities. The Preliminary Ten-Year Capital Strategy reflects a commitment to assessing, maintaining, and improving conditions throughout the agency’s facilities portfolio.

Equipment and Vehicles

Funding of \$95.5 million is provided in the Preliminary Ten-Year Capital Strategy for the purchase of equipment and vehicles to maintain and improve public health services.

Animal Care

Funding of \$93.4 million is provided in the Preliminary Ten-Year Capital Strategy to improve animal welfare. This includes two new full-service animal care centers in the Bronx and Queens, upgrades to the Brooklyn animal care center and other animal welfare investments.

Information Technology

The Preliminary Ten-Year Capital Strategy provides \$59.5 million to purchase technology to maintain and improve services. This includes \$33.2 million to gradually replace the agency’s personal computers and network servers.

Office of Chief Medical Examiner

The Preliminary Ten-Year Capital Strategy provides \$58.5 million for OCME projects, including IT upgrades and laboratory equipment.

Department of Health and Mental Hygiene

Project Type: HL		(\$ in 000's)										
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Administration												
	City	7,534	0	0	0	0	0	0	0	0	0	7,534
Animal Care												
	City	18,880	27,193	47,312	0	0	0	0	0	0	0	93,385
OCME												
	City	10,657	7,753	6,175	5,545	6,906	6,976	5,901	3,628	2,429	2,527	58,497
Information Technology												
	City	6,452	3,168	3,360	4,765	6,580	5,600	6,094	6,717	0	0	42,736
	State	1,691	1,358	1,440	1,613	2,820	2,400	2,612	2,879	0	0	16,813
Equipment and Vehicles												
	City	45,600	12,807	3,037	6,997	10,278	8,088	5,251	1,458	0	0	93,516
	State	1,105	0	300	300	0	300	0	0	0	0	2,005
Laboratories												
	City	1,000	0	0	0	0	0	0	0	0	0	1,000
Clinic Renovation and Rehabilitation												
	City	40,339	71,529	51,233	33,548	10,387	13,890	16,767	14,000	21,546	22,408	295,647
Project Type Total by Source of Funds												
	City	130,462	122,450	111,117	50,855	34,151	34,554	34,013	25,803	23,975	24,935	592,315
	State	2,796	1,358	1,740	1,913	2,820	2,700	2,612	2,879	0	0	18,818
Project Type Total												
	All Funds	133,258	123,808	112,857	52,768	36,971	37,254	36,625	28,682	23,975	24,935	611,133

Health and Hospitals Corporation

Health and Hospitals Corporation (HHC) was established in 1969 as the successor to the former Department of Hospitals to provide greater flexibility in the operation of the municipal hospital system. HHC operates eleven acute care hospitals, six Diagnostic and Treatment Centers, five long-term care facilities, a certified home health care agency, and more than 70 community health clinics, throughout the five boroughs. Through its wholly owned subsidiary, MetroPlus, HHC operates a health plan which has approximately 500,000 Medicaid, Medicare, Child Health Plus, Family Health Plus, HIV Special Needs Plan, and Qualified Health Plan enrollees.

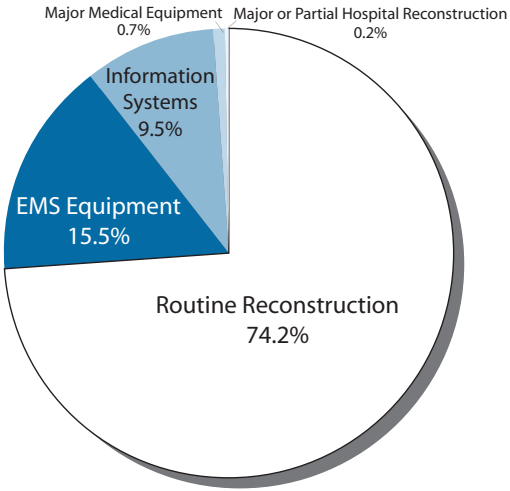
Capital Program Goals

Health and Hospitals Corporation is continuing to modernize many of its hospitals and facilities across the City with \$2.6 billion in the current capital plan. This Preliminary Ten-Year Capital Strategy includes projects to address the following criteria:

- Implement Electronic Medical Records (EMR), revenue cycle management, and other IT upgrades throughout the system;
- Satisfy regulatory requirements and/or correct code deficiencies;
- Rehabilitate building components and systems to improve safety, patient comfort, and operations;
- Replace medical equipment;
- Establish primary care clinics in underserved areas; and
- Replace aging ambulance fleet for the FDNY/EMS.

The funding of HHC's capital plan is accomplished through a combination of City General Obligation bonds and Transitional Finance Authority (TFA) bonds.

Health and Hospitals Corporation



Preliminary Ten-Year Capital Strategy

The Preliminary Ten-Year Capital Strategy for Health and Hospitals Corporation focuses on the improvement of facilities to comply with regulatory requirements and to address customer satisfaction, market demands and community health care needs.

	(in millions)
• Routine Reconstruction	\$1,896.7
• Emergency Medical Services Equipment	396.8
• Information Systems	242.3
• Major Medical Equipment	16.9
• Major or Partial Hospital Reconstruction	5.2
TOTAL	\$2,557.9

Routine Reconstruction

The Preliminary Ten-Year Capital Strategy breakdown is as follows: \$1.1 billion of federal funds and \$819.6 million of City funds.

\$1.1 billion of federal funding is associated with reconstruction for Hurricane Sandy related damage and mitigation work. HHC's is also making a \$95.0 million investment in primary care expansion in underserved areas.

Emergency Medical Services Equipment

The Preliminary Ten-Year Capital Strategy provides \$396.8 million for the purchase of FDNY/EMS ambulances.

Information Technology Systems

The Preliminary Ten-Year Capital Strategy provides \$242.3 million for the replacement of the revenue cycle management and the electronic medical record systems, as well as the implementation of other major IT projects such as the upgrade of network infrastructure, biomedical equipment, and radiology imaging systems.

Major Medical Equipment

The Preliminary Ten-Year Capital Strategy includes \$16.9 million for the purchase of a variety of medical equipment.

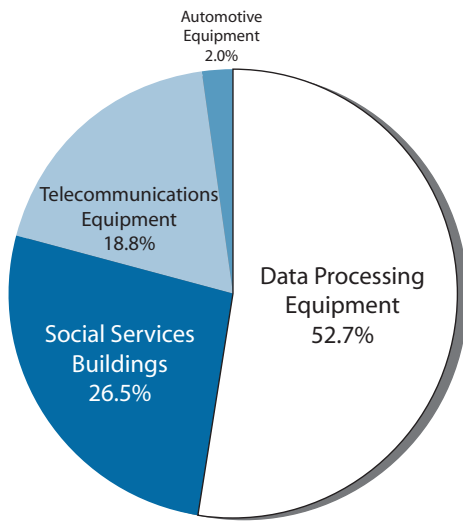
Major of Partial Hospital Reconstruction

The Preliminary Ten-Year Capital Strategy includes \$5.2 million for the completion of an Ambulatory Care Pavilion at Queens Hospital Center, the modernization of inpatient/ambulatory care facilities at Coney Island Hospital, and the modernization of Harlem Hospital.

Health and Hospitals Corporations

Project Type: HO		(\$ in 000's)										
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Information Systems												
	City	191,724	49,439	1,142	0	0	0	0	0	0	0	242,305
Emergency Medical Services Equipment												
	City	30,188	33,075	59,220	29,083	27,856	34,967	38,339	68,652	40,076	34,816	396,272
	Federal	417	139	0	0	0	0	0	0	0	0	556
Major Medical Equipment												
	City	16,130	0	0	0	0	0	0	0	0	0	16,130
	Federal	556	185	0	0	0	0	0	0	0	0	741
Major or Partial Hospital Reconstruction												
	City	793	1,500	2,887	0	0	0	0	0	0	0	5,180
Routine Reconstruction												
	City	185,405	205,315	143,162	61,789	25,000	25,000	25,113	25,000	57,322	66,478	819,584
	Federal	418,192	281,709	189,995	187,198	0	0	0	0	0	0	1,077,094
Project Type Total by Source of Funds												
	City	424,240	289,329	206,411	90,872	52,856	59,967	63,452	93,652	97,398	101,294	1,479,471
	Federal	419,165	282,033	189,995	187,198	0	0	0	0	0	0	1,078,391
Project Type Total												
	All Funds	843,405	571,362	396,406	278,070	52,856	59,967	63,452	93,652	97,398	101,294	2,557,862

Human Resources Administration



The Department of Social Services (DSS)/ Human Resources Administration (HRA) provides a range of programs and services that help families and individuals achieve self-sufficiency. Eligible participants receive Cash Assistance, Medical Assistance, Supplemental Nutrition Benefits (Food Stamps), and employment and support services. HRA also provides shelter, housing, homecare, and other support services to domestic violence survivors, people living with HIV/AIDS, and vulnerable or elderly adults.

Capital Program Goals

- Maintain, renovate, and improve social service facilities throughout the City;
- Enhance the Department’s computer network infrastructure for the continued development of connectivity between and among DSS facilities and service providers; and
- Upgrade, maintain, and acquire telecommunications and information systems equipment to improve Department operations.

Preliminary Ten-Year Capital Strategy

A primary focus of the Preliminary Ten-Year Capital Strategy is to improve employee productivity and the delivery of client services through implementation of the Re-engineering Project. The Strategy includes technological upgrades to HRA offices serving the public, as well as routine upgrades of computer, printer and server systems to meet the needs of the Department’s many programs and services. In addition to this project, HRA will continue to maintain, upgrade, and operate its locations throughout New York City.

	(in millions)
• Data Processing Equipment	\$106.2
• Social Services Buildings	53.6
• Telecommunications Equipment	37.9
• Automotive Equipment	4.0
TOTAL	\$201.7

Human Resources Administration

Data Processing Equipment

The Preliminary Ten-Year Capital Strategy provides \$106.2 million for the continued emphasis on imaging and database management of records, and the maintenance and upgrade of computer equipment and software for greater efficiency in caseload tracking, reporting, and intra- and inter-agency communications.

Social Services Buildings

The Preliminary Ten-Year Capital Strategy provides \$53.6 million for improvements to maintain the structural integrity of HRA's facilities, including compliance with building fire and safety standards, necessary improvements for HVAC, masonry, roofing, electrical and plumbing work.

Telecommunications Equipment

The Preliminary Ten-Year Capital Strategy provides \$37.9 million to improve connectivity among agency personnel and contract service providers. This includes updates to various HRA-managed systems including HRA's interactive voice response systems, an extensive network of servers and data storage systems, and routine replacement of workstation equipment.

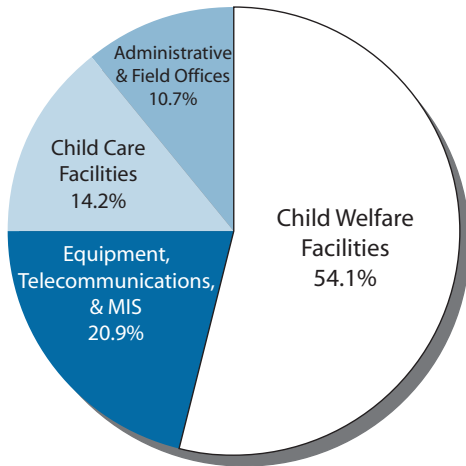
Automotive Equipment

The Preliminary Ten-Year Capital Strategy provides \$4.0 million to replace vans and trucks utilized in both programmatic support and agency internal operations.

Human Resources Administration

Project Type: HR		(\$ in 000's)										
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Telecommunications Equipment												
City		3,503	724	2,611	1,563	2,762	2,507	2,554	2,549	100	0	18,873
Federal		2,068	455	1,865	1,116	1,945	1,791	1,824	1,790	71	0	12,925
State		1,045	244	853	510	930	819	834	863	33	0	6,131
Data Processing Equipment												
City		35,639	9,168	5,351	1,930	3,088	2,898	2,957	2,517	2,198	2,182	67,928
Federal		7,891	1,965	3,025	1,189	2,080	1,952	1,991	1,695	1,480	1,470	24,738
State		4,340	1,077	1,650	649	1,134	1,065	1,086	925	807	802	13,535
Social Services Buildings												
City		9,236	4,310	4,747	4,166	4,416	4,012	4,105	3,702	3,430	3,463	45,587
Federal		0	1,249	405	413	763	440	453	467	486	506	5,182
State		0	705	221	225	415	240	247	255	265	276	2,849
Automotive Equipment												
City		866	287	252	241	220	111	114	118	123	128	2,460
Federal		34	75	170	162	148	75	42	43	83	86	918
State		18	41	93	89	81	41	77	79	45	47	611
Project Type Total by Source of Funds												
City		49,244	14,489	12,961	7,900	10,486	9,528	9,730	8,886	5,851	5,773	134,848
Federal		9,993	3,744	5,465	2,880	4,936	4,258	4,310	3,995	2,120	2,062	43,763
State		5,403	2,067	2,817	1,473	2,560	2,165	2,244	2,122	1,150	1,125	23,126
Project Type Total												
All Funds		64,640	20,300	21,243	12,253	17,982	15,951	16,284	15,003	9,121	8,960	201,737

Administration for Children's Services



The Administration for Children's Services (ACS) provides services to protect and advance the interests of New York City's children. ACS investigates allegations of abuse and neglect, provides preventive services, and when necessary, foster care and adoption services. Services also include subsidized child care and early childhood education through its EarlyLearn system, as well as detention services to juveniles remanded to ACS custody by the courts.

The Agency is responsible for approximately 470 facilities including the ACS Children's Center, child care centers, secure and non-secure detention facilities, and a network of program field offices and administrative sites.

Capital Program Goals

- Renovate and maintain child care facilities;
- Renovate juvenile detention and placement facilities;
- Upgrade children's service facilities to serve vulnerable families and children;
- Upgrade telecommunications, computer technology, and data management systems; and
- Upgrade field and central office facilities;

Preliminary Ten-Year Capital Strategy

The primary focus of the Preliminary Ten-Year Capital Strategy is to continue to improve the infrastructure of ACS facilities and to continue to improve the agency's management information systems. Major projects include the creation of a state of the art training space for the Workforce Institute, upgrading the agency computer network and data management systems, and renovations for daycare facilities and juvenile justice detention facilities.

	(in millions)
• Child Welfare Facilities	\$179.1
• Equipment, Telecommunications & MIS	69.3
• Child Care Facilities	47.0
• Administrative & Field Offices	35.4
TOTAL	\$330.8

Child Welfare Facilities

The Preliminary Ten-Year Capital Strategy provides \$179.1 million for the renovation of child welfare facilities including juvenile detention facilities.

Equipment, Telecommunications, & MIS

The Preliminary Ten-Year Capital Strategy provides \$69.3 million for information technology and telecommunications.

Child Care Facilities

The Preliminary Ten-Year Capital Strategy provides \$47.0 million for the construction and renovation of daycare centers throughout the City.

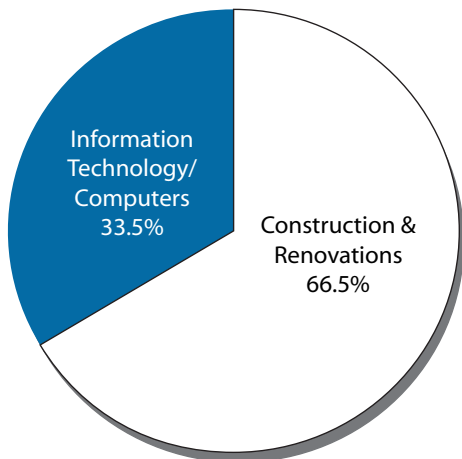
Administrative & Field Offices

The Preliminary Ten-Year Capital Strategy provides \$35.4 million for the construction and renovation of central and field offices.

Children's Services

Project Type: CS		(\$ in 000's)										
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Child Welfare Facilities												
City		106,766	19,262	14,368	1,934	3,000	3,000	1,528	1,611	8,951	9,309	169,729
Federal		132	0	288	894	0	0	705	744	0	0	2,763
State		321	0	688	2,133	0	0	1,685	1,776	0	0	6,603
Day Care Facilities												
City		11,484	5,857	20,251	1,267	1,444	1,622	2,491	2,576	0	0	46,992
Equipment												
City		3,402	5,961	7,304	8,890	8,862	10,628	7,345	3,274	0	0	55,666
Federal		677	1,330	1,165	804	0	0	0	0	0	0	3,976
State		1,601	3,316	2,831	1,912	0	0	0	0	0	0	9,660
Social Service Buildings												
City		7,134	5,779	4,246	2,526	1,942	0	2,529	2,620	0	0	26,776
Federal		1,055	1,488	0	0	0	0	0	0	0	0	2,543
State		2,489	3,627	0	0	0	0	0	0	0	0	6,116
Project Type Total by Source of Funds												
City		128,786	36,859	46,169	14,617	15,248	15,250	13,893	10,081	8,951	9,309	299,163
Federal		1,864	2,818	1,453	1,698	0	0	705	744	0	0	9,282
State		4,411	6,943	3,519	4,045	0	0	1,685	1,776	0	0	22,379
Project Type Total												
All Funds		135,061	46,620	51,141	20,360	15,248	15,250	16,283	12,601	8,951	9,309	330,824

Department For The Aging



The Department for the Aging (DFTA) administers a wide range of programs that enable older adults to maintain their independence and improve their quality of life. Services include congregate and home delivered meals, home care, employment counseling and placement, social and legal services, health promotion activities, transportation, caregiver services, and emergency preparedness. The Department also serves as an advocate for the City's elderly population through legislative activity and public policy initiatives.

Capital Program Goals

- Rehabilitation of existing facilities that provide services for older adults;
- Targeted improvements to senior centers throughout the City; and
- Information technology upgrades.

Preliminary Ten-Year Capital Strategy

The Department's primary objectives for senior center improvements include: structural repairs, interior renovations, and improvements to handicapped accessibility. The Department is also committed to ensuring high-speed Internet connections are available at all DFTA-funded senior centers.

(in millions)

• Construction and Renovations	\$36.2
• Information Technology/ Computers	18.2
TOTAL	\$54.4

Construction and Renovations

The Preliminary Ten-Year Capital Strategy provides \$36.2 million to complete renovations and upgrades for the various senior centers around the City. Funds are also provided to ensure the agency's fire and safety infrastructure meet standards, and that necessary improvements for HVAC, masonry, roofing, electrical, plumbing are completed.

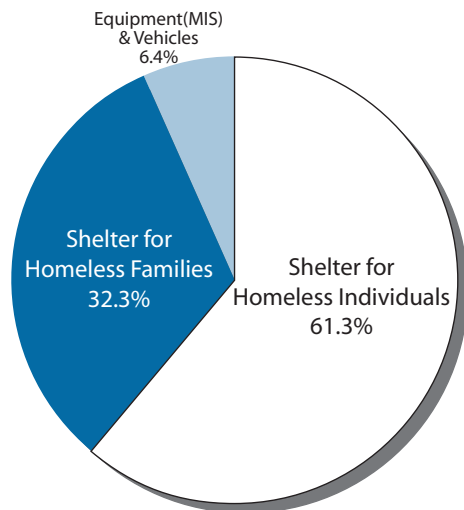
Information Technology and Computers

The Preliminary Ten-Year Capital Strategy provides \$18.2 million for the technology needs of the agency as well as technology improvements for the agency's contractors and service providers.

Department for the Aging

Project Type: AG		(\$ in 000's)										
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
<i>Data Processing and Information Technology</i>	City	10,907	3,329	3,329	0	0	0	597	0	0	0	18,162
<i>Department for the Aging Building Reconstruction</i>	City	2,631	2,185	7,010	5,466	7,634	6,287	2,258	1,669	520	541	36,201
<i>Project Type Total by Source of Funds</i>	City	13,538	5,514	10,339	5,466	7,634	6,287	2,855	1,669	520	541	54,363
<i>Project Type Total</i>	All Funds	13,538	5,514	10,339	5,466	7,634	6,287	2,855	1,669	520	541	54,363

Department of Homeless Services



The Department of Homeless Services provides homeless families and individuals with transitional housing and services to enable return to independent living. The Department also provides homelessness prevention services and outreach services to people living in public places. The Department works with other City agencies to develop permanent and transitional housing.

Capital Program Goals

- Ensure all facilities are in compliance with all applicable health and safety standards;
- Rehabilitate and renovate transitional facilities for homeless families and singles; and
- Upgrade and expand IT networks to effectively manage and disseminate timely information.

Preliminary Ten-Year Capital Strategy

The Preliminary Ten-Year Capital Strategy totals \$628.8 million, which includes \$588.3 million for transitional housing for homeless individuals and families, and \$40.5 million for IT & Equipment needs.

	(in millions)
• Shelter for Homeless Individuals	\$385.2
• Shelter for Homeless Families	203.1
• Equipment (MIS) and Vehicles	40.5
TOTAL	\$628.8

Shelter for Homeless Individuals & Families

The major goal of the Preliminary Ten-Year Capital Strategy is the comprehensive upgrades and renovations across shelters and expansion of transitional housing for homeless families and single adults, in continuation with the Mayor's Turning the Tide on Homelessness plan. The Preliminary Ten-Year Capital Strategy allocates 91 percent of funding to the rehabilitation of existing facilities and the construction of new facilities. The major priorities for the agency continue to be fire safety, interior and exterior building stabilization, as well as major internal power system improvements. Major projects include the exterior and interior upgrades at Bellevue-30th Street intake center, roof/ façade at Fort Washington Armory, boiler and electrical upgrade at Regent Family Residence, and roof, boiler and plumbing system at Pamoja House.

Equipment (MIS)

The Department's MIS strategy provides funding to meet the ongoing technology needs of the agency, including developing application system, defect corrections and developing critical enhancements. These programs respond to both policy and legal mandate around network infrastructure that improve data collection, case management, shelter compliance and adequate reporting tools. Nine major projects addresses different facets of the agency's internal and external case, client and partner management system needs.

Purchase of Vehicles

The Department's Equipment strategy involves a continuation of funding for the purchase and replacement of Department vehicles. These vehicles facilitate the transportation of clients between intake locations and placement shelters. They are also used to assist clients in moving into permanent housing.

Department of Homeless Services

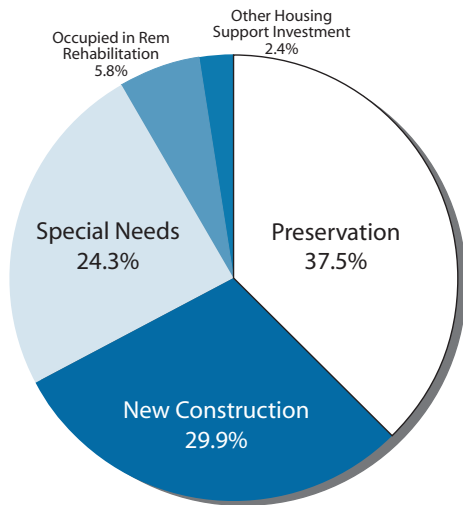
Project Type: HH	(\$ in 000's)											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total	
Shelters for Homeless Individuals												
City	91,841	90,209	84,035	20,498	20,750	10,750	0	22,854	21,884	22,359	385,180	
Equipment												
City	20,823	3,310	5,832	6,196	0	0	0	0	1,884	2,360	40,405	
Shelters for Homeless Families												
City	20,451	37,180	21,934	57,810	32,832	10,750	22,167	0	0	0	203,124	
Social Services Buildings												
City	37	0	0	0	0	0	0	0	0	0	37	
Purchase of Vehicles												
City	8	23	0	0	0	0	0	0	0	0	31	
Project Type Total by Source of Funds												
City	133,160	130,722	111,801	84,504	53,582	21,500	22,167	22,854	23,768	24,719	628,777	
Project Type Total												
All Funds	133,160	130,722	111,801	84,504	53,582	21,500	22,167	22,854	23,768	24,719	628,777	

Housing Preservation & Development

The Department of Housing Preservation and Development (HPD) preserves, upgrades, and assists in the expansion of the City's affordable housing stock. Its primary goals are: to spur the preservation and development of affordable housing through direct investment and the provision of loans; to maximize neighborhood ownership and management of housing by generating local participation in disposition and development programs; and to enforce compliance with housing quality standards. HPD's budget is structured to meet the goals of the City's "Housing New York" plan (HNY), with a goal of creating and preserving a total of 300,000 units Citywide from 2014-2026. The HNY plan was expanded and accelerated in Fall 2017 from a previously announced goal of funding 200,000 units Citywide by 2024.

This Preliminary Ten-Year Capital Strategy funds various new construction, preservation, supportive housing and disposition programs. The City is continuing efforts to prevent the abandonment of privately-owned buildings and avert their entry into City ownership by providing financial and technical assistance to private landlords. Furthermore, the City maintains its commitment to provide new housing opportunities, particularly through existing new construction programs.

Housing Preservation & Development



Capital Program Goals

Housing New York is a five-borough, 12-year strategy to address the City’s affordable housing crisis. The plan, updated with the release of Housing New York 2.0 in Fall 2017, outlines key initiatives to achieve HPD’s goal of building or preserving 300,000 units of affordable housing by 2026. HPD will do this by:

- Fostering diverse, livable neighborhoods;
- Preserving the affordability and quality of the existing housing stock;
- Building new affordable housing for all New Yorkers;
- Promoting homeless, senior, supportive and accessible housing; and
- Refining City financing tools and expanding funding sources for affordable housing.

Preliminary Ten-Year Capital Strategy

The Preliminary Ten-Year Capital Strategy provides \$9.9 billion for HPD in support of its capital program goals from 2020-2029. Of this amount, \$9.6 billion represents Mayoral City Capital and Elected-official funding, while approximately \$320.0 million will be leveraged in Federal funds. Additional funding will be leveraged from the New York City Housing Development Corporation (HDC) and private sources in support of housing plan goals.

	(in millions)
• Preservation	\$3,722.5
• New Construction	2,967.1
• Special Needs	2,408.6
• Occupied In Rem Rehabilitation	580.0
• Other Housing Support Investment	241.6
TOTAL	\$9,919.8

Preservation

The Preliminary Ten-Year Capital Strategy provides \$3.7 billion for preservation projects. Funding will support activities to preserve existing affordable housing stock while creating long-term affordability.

Housing Preservation & Development

New Construction

The Preliminary Ten-Year Capital Strategy provides \$3.0 billion to finance new construction activities. Funding will support construction of new units serving low, moderate, and middle income New Yorkers throughout the five boroughs.

Special Needs Housing

The Preliminary Ten-Year Capital Strategy provides \$2.4 billion for the construction and preservation of housing for seniors, persons with disabilities, and formally homeless households throughout the five boroughs.

Occupied In Rem Rehabilitation

The Preliminary Ten-Year Capital Strategy provides \$580.0 million to fund the rehabilitation and disposition of City-owned housing units, which will be rehabilitated and then sold or rented to low, moderate and middle income households.

Other Housing Support Investment

The Preliminary Ten-Year Capital Strategy provides \$241.6 million for Other Housing Support Investments funding a variety of HPD initiatives. This includes the demolition of unsafe buildings, costs associated with development in urban renewal areas, computer-based productivity initiatives, and other infrastructure support.

Housing Preservation & Development

Project Type: HD	(\$ in 000's)											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total	
New Housing Construction												
City	420,574	452,131	409,407	270,932	274,411	189,658	206,133	238,298	247,829	257,742	2,967,115	
Federal	0	0	0	7	0	0	0	0	0	0	7	
Other Housing Support Investment												
City	19,975	22,647	19,068	20,979	22,929	33,045	24,336	25,178	26,184	27,232	241,573	
Occupied In Rem Rehabilitation												
City	81,489	62,422	49,919	50,917	51,935	52,974	54,616	56,309	58,561	60,903	580,045	
Preservation												
City	430,506	492,378	462,324	420,126	414,472	280,912	289,621	298,599	310,543	322,965	3,722,446	
Special Needs Housing												
City	283,527	275,116	233,774	139,000	138,000	190,542	196,449	202,540	210,644	219,069	2,088,661	
Federal	32,000	32,000	32,000	32,000	32,000	32,000	32,000	32,000	32,000	32,000	320,000	
Project Type Total by Source of Funds												
City	1,236,071	1,304,694	1,174,492	901,954	901,747	747,131	771,155	820,924	853,761	887,911	9,599,840	
Federal	32,000	32,000	32,000	32,007	32,000	32,000	32,000	32,000	32,000	32,000	320,007	
Project Type Total												
All Funds	1,268,071	1,336,694	1,206,492	933,961	933,747	779,131	803,155	852,924	885,761	919,911	9,919,847	

Housing Authority

The New York City Housing Authority (NYCHA), created in 1934, operates and maintains decent, safe, and affordable housing for low- and moderate- income families.

The New York City Housing Authority owns and operates the nation's largest public housing program, with 316 developments (173,762 apartments in 2,351 residential buildings), housing over 380,000 tenants throughout the City. The Authority also operates the Leased Housing (Section 8) Program, with approximately 86,216 rented apartments housing 193,103 residents. Approximately 25,000 private landlords participate in the Section 8 program.

The Preliminary Ten-Year Capital Strategy focuses capital funding on building exteriors upgrades such as roof work and building systems including funding for elevators and instantaneous hot water heaters.

Capital Program Goals

- To preserve and modernize building exteriors and systems in order to maintain decent, safe, and sanitary housing for residents

Preliminary Ten-Year Capital Strategy

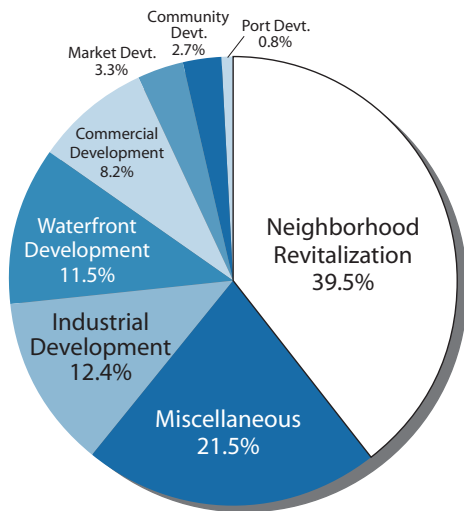
The Preliminary 2020-2029 Ten-Year Capital Strategy provides \$3.0 billion primarily for building exteriors and building systems upgrades and replacement. Major areas of planned work include roof replacement, lead abatement, pest mitigation, elevator rehabilitation, upgrades to heating components and other construction projects.

	(in billions)
• Low to Moderate Income Public Housing Upgrade & Replacement	\$3.0
TOTAL	\$3.0

Housing Authority

Project Type: HA		(\$ in 000's)										
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Low to Moderate Income Public Housing Construction												
City		10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	0	0	80,000
Low to Moderate Income Public Housing Upgrade												
City		419,122	326,000	376,000	326,000	326,000	326,000	326,465	327,944	200,000	0	2,953,531
Project Type Total by Source of Funds												
City		429,122	336,000	386,000	336,000	336,000	336,000	336,465	337,944	200,000	0	3,033,531
Project Type Total												
All Funds		429,122	336,000	386,000	336,000	336,000	336,000	336,465	337,944	200,000	0	3,033,531

Department of Small Business Services



The Department of Small Business Services (SBS) provides business assistance directly to the public and administers other City economic development initiatives. Under contract with SBS, the New York City Economic Development Corporation (NYCEDC) coordinates the City’s commercial, industrial, market, waterfront, and intermodal transportation development projects. Additionally, SBS contracts with, and the City allocates capital resources for, the Brooklyn Navy Yard Development Corporation (BNYDC) and the Trust for Governors Island (TGI) for the purposes of economic development.

Capital Program Goals

- To assist neighborhood revitalization through physical improvement of public areas, including street and sidewalk reconstruction, new public lighting, landscaping and other public amenities as well as through assistance in the development of cultural resources and other community facilities;
- To stimulate commercial development through the improvement and management of City assets, as well as construction and rehabilitation of infrastructure, public open space, and amenities;
- To upgrade infrastructure in the City’s industrial areas;
- To enhance the City’s waterfront by rehabilitating and improving the City’s piers, as well as by creating a balanced mix of multi-use projects, which include commercial, industrial, retail and recreational developments;
- To improve the intermodal transport of goods through the construction, modernization and integration of port, rail and aviation facilities; and
- To provide public market facilities.

Preliminary Ten-Year Capital Strategy

	(in millions)
• Neighborhood Revitalization	\$1,442.8
• Miscellaneous	785.6
• Industrial Development	454.2
• Waterfront Development	420.2
• Commercial Development	300.3
• Market Development	121.4
• Community Development	99.9
• Port Development	28.3
TOTAL	\$3,652.7

Department of Small Business Services

Neighborhood Revitalization

The Preliminary Ten-Year Capital Strategy invests in infrastructure improvements in neighborhoods throughout the City to support economic development and the development of affordable housing. Additionally, the Preliminary Ten-Year Capital Strategy invests in physical improvements to public areas, including street and sidewalk reconstruction, new public lighting and landscaping, pedestrian and intermodal improvements in mixed-use neighborhoods.

Miscellaneous

The Preliminary Ten-Year Capital Strategy allocates resources for various other citywide projects, as well as portions of infrastructure support for the Trust for Governors Island (TGI).

Industrial Development

NYCEDC markets City-owned real estate to industrial users and works closely with firms to find sites for their expansion and relocation. In support of these efforts, the Preliminary Ten-Year Capital Strategy also includes health and safety related infrastructure improvements and returning existing assets to a state of good repair at the Brooklyn Navy Yard, which houses 400 businesses generating 9,000 jobs. The Preliminary Ten-Year Capital Strategy also includes on-going infrastructure improvements at the Brooklyn Army Terminal and Bush Terminal.

Waterfront Development

The Preliminary Ten-Year Capital Strategy upholds the City's commitment in all five boroughs to support the City's waterfront assets. It recognizes the importance of providing public and commercial transportation while preserving and expanding recreational spaces for the public along the City's waterfront. The Preliminary Ten-Year Capital Strategy includes funding for the purchase of new ferries and infrastructure improvements for NYC Ferry, as well as investments to fortify the City's waterfront assets

Commercial Development

NYCEDC continues its efforts to expand the City's commercial base and diversify the City's economy by fostering the growth of new industries and new retail opportunities. The Preliminary Ten-Year Capital Strategy supports the City's vision of investment into the life sciences industry in the City.

Market Development

The City's ongoing commitment to preserve its markets through various infrastructure improvements is reflected in the Preliminary Ten-Year Capital Strategy, which provides funding for infrastructure improvements and facility modernization at the Hunts Point Food Distribution Markets in the Bronx.

Community Development

NYCEDC continues its efforts to foster community development by funding components of the Manhattan Greenway, as well as certain other projects.

Port Development

The Preliminary Ten-Year Capital Strategy includes funding for improvements at certain cruise terminal and Freight NYC locations, as well as other port investments. Freight NYC is a strategy to modernize and optimize how freight moves into, through, and out of the city. Improvements to the cruise terminals increase the City's ability to serve a growing number of passengers, retain and expand tourism-related businesses.

Department of Small Business Services

Project Type: ED		(\$ in 000's)										
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Commercial Development												
City		11,816	127,706	109,162	30,910	9,094	4,900	0	0	0	0	293,588
Federal		0	0	0	429	0	0	0	0	0	0	429
State		6,300	0	0	1	0	0	0	0	0	0	6,301
Community Development												
City		867	93,012	325	5,301	0	0	0	0	0	0	99,505
Federal		15	0	0	0	0	0	0	0	0	0	15
State		365	0	0	0	0	0	0	0	0	0	365
Industrial Development												
City		50,661	46,544	110,720	75,282	21,950	21,700	16,465	16,944	16,582	17,245	394,093
Federal		60,068	0	0	0	0	0	0	0	0	0	60,068
Market Development												
City		1,076	40,300	49,014	11,802	6,000	13,249	0	0	0	0	121,441
Miscellaneous												
City		176,321	186,555	182,438	58,368	30,530	12,500	12,704	4,252	4,422	4,599	672,689
Federal		75,283	34,264	2,700	0	0	0	0	0	0	0	112,247
State		0	718	0	0	0	0	0	0	0	0	718
Neighborhood Revitalization												
City		55,784	415,282	484,202	305,697	72,324	69,074	0	0	0	0	1,402,363
Federal		4,108	2,761	12,761	20,762	0	0	0	0	0	0	40,392
State		70	0	0	0	0	0	0	0	0	0	70
Port Development												
City		2,007	0	9,006	2,507	13,500	0	0	0	0	0	27,020
Federal		887	0	0	0	0	0	0	0	0	0	887
State		350	0	0	0	0	0	0	0	0	0	350
Waterfront Development												
City		208,804	152,603	51,504	0	0	0	0	0	0	0	412,911
Federal		5,298	0	1,314	600	0	0	0	0	0	0	7,212
State		0	0	36	0	0	0	0	0	0	0	36
Project Type Total by Source of Funds												
City		507,336	1,062,002	996,371	489,867	153,398	121,423	29,169	21,196	21,004	21,844	3,423,610
Federal		145,659	37,025	16,775	21,791	0	0	0	0	0	0	221,250
State		7,085	718	36	1	0	0	0	0	0	0	7,840
Project Type Total												
All Funds		660,080	1,099,745	1,013,182	511,659	153,398	121,423	29,169	21,196	21,004	21,844	3,652,700

Department of Citywide Administrative Services

The Department of Citywide Administrative Services (DCAS) is the principal support agency for the City of New York. DCAS is responsible for the maintenance of public buildings, the maintenance and reconstruction of piers and bulkheads, and the procurement of goods and services for City agencies.

DCAS operates, maintains, and reconstructs the 55 public buildings in its real estate portfolio. This portfolio totals 15 million square feet of space, which includes seven million square feet of court space. The Department acquires, manages, and leases non-residential real properties. DCAS also provides municipal supply services to agencies. The services include the acquisition, testing, and distribution of supplies and equipment as well as the administration of the citywide vehicle fleet.

Capital Program Goals

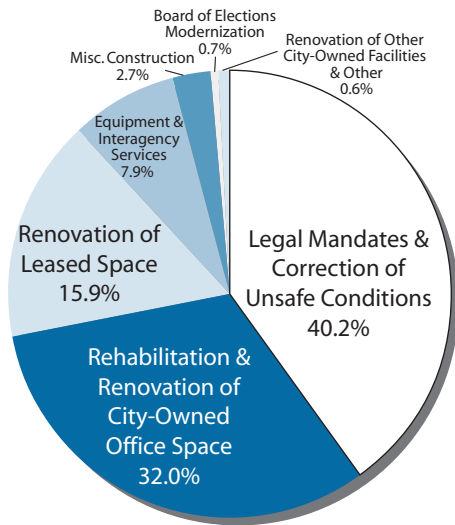
- To rehabilitate and maintain public structures, including piers and bulkheads;
- To reconstruct public buildings;
- To coordinate and enhance citywide space planning;
- To improve the procurement, warehousing, and distribution of goods;
- To increase productivity through advanced technology/information systems; and
- To ensure resiliency and the continued provision of City services.

Preliminary Ten-Year Capital Strategy

The Preliminary Ten-Year Capital Strategy includes improvements and renovations to public buildings. This will help reduce ongoing maintenance costs as well as the City's reliance on leased space. In addition, the Preliminary Ten-Year Capital Strategy seeks to correct existing or potential safety hazards.

The Preliminary Ten-Year Capital Strategy totals \$1.7 billion and is allocated between Public Buildings and Real Property.

Department of Citywide Administrative Services - Public Buildings



Public Buildings

(in millions)

• Legal Mandates and Correction of Unsafe Conditions	\$618.1
• Rehabilitation and Renovation of City-Owned Office Space	491.1
• Renovation of Leased Space	244.8
• Equipment and Interagency Services	121.1
• Miscellaneous Construction	41.5
• Board of Elections Modernization	10.4
• Renovation of Other City-Owned Facilities	6.6
• Rehabilitation of Court Buildings	1.4
• Communications Equipment	0.6
• Acquisition of Real Property	0.1
TOTAL	\$1,535.8

Legal Mandates and Correction of Unsafe Conditions

The correction of code violations and compliance with legal mandates represents \$618.1 million of the Preliminary Ten-Year Capital Strategy. Legally mandated work will include \$367.2 million for projects that ensure compliance with Local Law 5 (fire and life safety), \$139.6 million for fuel tank replacement and remediation, Citywide, and \$49.5 million for Local Law 11 façade repairs.

Rehabilitation and Renovation of City-Owned Office Space

The Preliminary Ten-Year Capital Strategy provides \$491.1 million for the rehabilitation and renovation of City-owned office space. Included are major rehabilitation projects for exterior stabilization; mechanical, plumbing, and electrical systems; heating, ventilation, and air conditioning (HVAC) systems; and boiler plant replacements at selected buildings, Citywide. The Preliminary Ten-Year Capital Strategy provides \$46.3 million for the Manhattan Municipal Building, \$32.7 million for the Bergen Building in the Bronx, \$21.6 million for 100 Gold Street in Manhattan, \$14.3 million for the Queens Borough Hall, and \$7.0 million for renovations 10 Richmond Terrace in Staten Island. Funding is also provided for projects at 345 Adams Street, Brooklyn (\$100.2 million) and 22 Reade Street, Manhattan (\$24.4 million), as well as for the construction of a new Computerized Testing and Applications Center (CTAC) at 2556 Bainbridge Avenue, Bronx (\$30.2 million).

Department of Citywide Administrative Services - Public Buildings

Renovation of Leased Space

The Preliminary Ten-Year Capital Strategy provides \$244.8 million for leased space renovations. Funding is primarily for agency office consolidations and office space needs when City-owned facilities are not available. The Preliminary Ten-Year Capital Strategy provides \$85.0 million for expansion of Department of Emergency Management leased space in Brooklyn.

Equipment and Interagency Services

The Preliminary Ten-Year Capital Strategy provides \$121.1 million for the DCAS information systems infrastructure, including projects for the development of an Inventory Management System for municipal supplies (\$12.2 million) and the installation of electric vehicle charging infrastructure (\$10.8 million).

Miscellaneous Construction

The Preliminary Ten-Year Capital Strategy provides \$41.5 million for construction in non-City owned facilities and properties, including \$0.4 million for remedial design of the Gowanus Canal 1st Street Turning Basin.

Board of Elections Modernization

The Preliminary Ten-Year Capital Strategy provides \$10.4 million for Board of Elections modernization, including \$6.0 million for the purchase and installation of electronic voting systems and related accessories.

Renovation of Other City-Owned Facilities

The Preliminary Ten-Year Capital Strategy provides \$6.6 million for renovation of other City-owned facilities, including \$3.5 million for facility remediation and construction for the Taxi and Limousine Commission in Woodside, Queens.

Rehabilitation of Court Buildings

The Preliminary Ten-Year Capital Strategy provides \$1.4 million for rehabilitation of court buildings, including \$0.8 million for renovation of the St. George Courthouse in Staten Island.

Communications Equipment

The Preliminary Ten-Year Capital Strategy provides \$0.6 million for communications equipment, including \$0.6 million for Voice Over Internet Protocol (VOIP) phones.

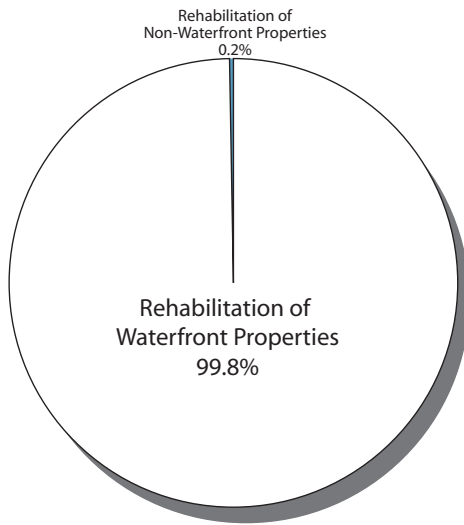
Acquisition of Real Property

The Preliminary Ten-Year Capital Strategy provides \$0.1 million for the acquisition of real property.

Department of Citywide Administrative Services - Public Buildings

Project Type: PW	(\$ in 000's)										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
<i>Acquisition of Real Property</i> City	0	0	0	95	0	0	0	0	0	0	95
<i>Communications Equipment</i> City	321	161	161	0	0	0	0	0	0	0	643
<i>Rehabilitation of Court Buildings</i> City	890	0	50	0	500	0	0	0	0	0	1,440
<i>Board of Elections Modernization</i> City	0	707	1,955	6,030	1,164	549	0	0	0	0	10,405
<i>Equipment and Interagency Services</i> City	33,261	10,570	33,866	5,869	7,453	5,617	5,790	5,970	6,209	6,458	121,063
<i>Legal Mandates and Correction of Unsafe Conditions</i> City	177,330	85,438	172,726	31,353	24,475	23,696	24,431	25,188	26,195	27,243	618,075
<i>Miscellaneous Construction</i> City	28,286	4,865	3,291	5,059	0	0	0	0	0	0	41,501
<i>Rehabilitation of City-Owned Office Space</i> City	162,338	43,124	157,136	20,906	49,862	19,256	10,954	8,818	9,171	9,538	491,103
<i>Renovation of Leased Space</i> City	37,484	26,246	28,305	52,704	38,045	11,593	11,952	12,322	12,815	13,327	244,793
<i>Renovation of Other City-Owned Facilities</i> City	1,294	5,353	0	0	0	0	0	0	0	0	6,647
Project Type Total by Source of Funds City	441,204	176,464	397,490	122,016	121,499	60,711	53,127	52,298	54,390	56,566	1,535,765
Project Type Total All Funds	441,204	176,464	397,490	122,016	121,499	60,711	53,127	52,298	54,390	56,566	1,535,765

Department of Citywide Administrative Services - Real Property



Rehabilitation of Waterfront Properties

The Preliminary Ten-Year Capital Strategy includes \$142.5 million for the reconstruction of DCAS-managed waterfront properties.

Rehabilitation of Non-Waterfront Properties

The Preliminary Ten-Year Capital Strategy includes \$0.3 million for the reconstruction of DCAS-managed non-waterfront properties.

Real Property

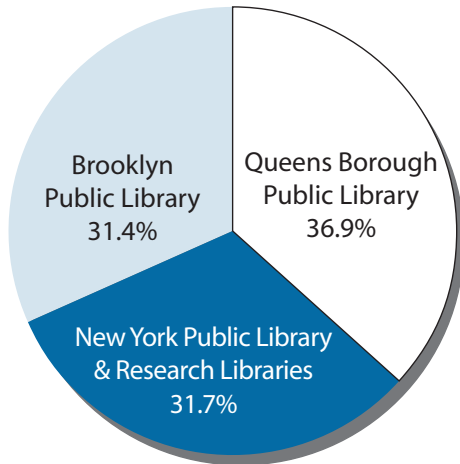
(in millions)

• Rehabilitation of Waterfront Properties	\$142.5
• Rehabilitation of Non-Waterfront Properties	0.3
TOTAL	\$142.8

Department of Citywide Administrative Services - Real Property

Project Type: RE		(\$ in 000's)										
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
<i>Rehabilitation of Non-Waterfront Properties</i> City		250	0	44	0	0	0	0	0	0	0	294
<i>Rehabilitation of Waterfront Properties</i> City		37	107,874	4,256	3,945	4,050	4,184	4,314	4,447	4,625	4,810	142,542
<i>Project Type Total by Source of Funds</i> City		287	107,874	4,300	3,945	4,050	4,184	4,314	4,447	4,625	4,810	142,836
<i>Project Type Total</i> All Funds		287	107,874	4,300	3,945	4,050	4,184	4,314	4,447	4,625	4,810	142,836
<i>Citywide Administrative Services Total</i>		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
<i>Total by Source of Funds</i> City		441,491	284,338	401,790	125,961	125,549	64,895	57,441	56,745	59,015	61,376	1,678,601
Federal		0	0	0	0	0	0	0	0	0	0	0
State		0	0	0	0	0	0	0	0	0	0	0
Private		0	0	0	0	0	0	0	0	0	0	0
All Funds		441,491	284,338	401,790	125,961	125,549	64,895	57,441	56,745	59,015	61,376	1,678,601

Public Libraries



New York City’s public library services are provided by three individually operated systems – the Brooklyn Public Library, the New York Public Library (including the New York Research Libraries), and the Queens Borough Public Library. Each of these receives funds from the City as well as State, Federal, and private contributions. The branch libraries provide circulating collections, reference materials, computers and access to the internet, literacy programs, English-as-a-Second-Language programs, and children’s reading programs. The City’s three library systems are among the country’s largest and busiest.

The Brooklyn Public Library (BPL) oversees a Central Library and 58 branches, including five Adult Learning Centers.

The New York Public Library (NYPL) manages libraries in three boroughs: the Bronx, with 35 branches; Manhattan, with 40 branches; and Staten Island, with 13 branches. In addition, the New York Research Library oversees four research libraries: the Stephen A. Schwarzman Building; the New York Public Library for the Performing Arts; the Schomburg Center for Research in Black Culture; and the Science, Industry, and Business Library (SIBL).

The Queens Borough Public Library (QBPL) has a Central Library, which houses the Children’s Library Discovery Center, and 61 branches, including the Flushing Community Library and Langston Hughes Community Library and Cultural Center, as well as seven Adult Learning Centers and two Family Literacy Centers.

Capital Program Goals

- To support service levels by maintaining, improving, and optimizing the operation of library facilities;
- To phase infrastructure improvements for full Americans with Disabilities Act (ADA)-compliant access at all sites;
- To preserve unique and irreplaceable collections through improved environmental systems, security and fire protection, and increased storage capacity;

- To improve the management of data through enhancement of computerized records management systems; and
- To provide remote access to digital collections, expand personal computer stations, and offer free internet service at the branches by improving information technology systems.

Preliminary Ten-Year Capital Strategy

The three library systems strive to increase circulation, develop comprehensive community-oriented outreach programs, and grow attendance at cultural/informational programs. The three library systems will focus on the protection of the growing collection of library materials, reconstruction of branches, increasing accessibility for persons with disabilities, and upgrading the technology infrastructure to improve online and computer access. The Preliminary Ten-Year Capital Plan Strategy provides a total of \$778.3 million, allocated as follows:

Brooklyn Public Library

	(in millions)
• Essential Reconstruction of Facilities	\$238.1
• Reconstruction Necessary to Maintain Facilities	8.3
Subtotal	\$246.4

New York Public Library and Research Libraries

• Essential Reconstruction of Facilities	\$204.7
• Improvements to Existing Facilities	28.3
• Expansion and Construction of Facilities	8.2
• Support Services Improvements	1.8
• Reconstruction Necessary to Maintain Facilities	0.7
• Access for the Handicapped	0.7
Subtotal	\$244.4

Public Libraries

Queens Borough Public Library

	(in millions)
• Essential Reconstruction of Facilities	\$137.8
• Replacement Branches	66.9
• Reconstruction Necessary to Maintain Facilities	58.1
• Support Services Improvements	24.7
Subtotal	\$287.5
TOTAL	\$778.3

Brooklyn Public Library

The Preliminary Ten-Year Capital Strategy allocates \$246.4 million to the Brooklyn Public Library (BPL) and emphasizes the essential reconstruction of facilities. Specifically, \$93.1 million is allocated for the comprehensive renovation of branches and is distributed among five libraries (Brownsville, Canarsie, Eastern Parkway, New Lots, and New Utrecht) designated as most critical by BPL. \$9.9 million is also allocated for an interior and exterior rehabilitation at the Borough Park branch. Additional funding for other branches focuses on public service enhancements, cyclical replacements of building components (roofs, HVAC systems, and boilers), and Americans with Disabilities Act (ADA) compliance.

New York Public Library and Research Libraries

The Preliminary Ten-Year Capital Strategy allocates \$244.4 million for the New York Public Library (NYPL) and New York Research Libraries (NYRL) and focuses on the essential reconstruction, expansion, and improvements to existing facilities. Specifically, \$75.9 million is allocated for the comprehensive renovation and outfitting of branches and is distributed among five libraries (125th Street, Fort Washington, Hunts Point, Melrose, and Port Richmond) designated as most critical by NYPL. In addition, \$17.4 million is allocated for construction of a new Westchester Square branch. Additional funding for other branches focuses on maintaining and upgrading facilities, including roof, window, and door replacements, and Americans with Disabilities Act (ADA) compliance.

Queens Borough Public Library

The Preliminary Ten-Year Capital Strategy allocates \$287.5 million for the Queens Borough Public Library (QBPL) and reflects a commitment to maintain and upgrade existing facilities and continue construction of new branches. Specifically, \$87.3 million is allocated to QBPL for comprehensive renovations, new construction, and expansion of branches. \$25.0 million is also allocated for an expansion and renovation at Corona Branch Library. Additional funding for other branches focuses on renovations and rehabilitations, systems upgrades, and cyclical replacements of building components (roofs, windows, and doors).

Brooklyn Public Library

Project Type: LB		(\$ in 000's)										
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
<i>Rehabilitation and Relocation of Branch Libraries</i>												
City		0	54	0	0	0	0	0	0	0	0	54
<i>Essential Reconstruction of Facilities</i>												
City		69,811	119,280	25,342	18,853	735	760	784	808	840	874	238,087
<i>Reconstruction Necessary to Maintain Facilities</i>												
City		7,588	701	0	0	0	0	0	0	0	0	8,289
<i>Project Type Total by Source of Funds</i>												
City		77,399	120,035	25,342	18,853	735	760	784	808	840	874	246,430
<i>Project Type Total</i>												
All Funds		77,399	120,035	25,342	18,853	735	760	784	808	840	874	246,430

New York Public Library

Project Type: LN	(\$ in 000's)										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
<i>Access for the Handicapped</i> City	200	500	0	0	0	0	0	0	0	0	700
<i>Expansion and Construction of Facilities</i> City	4,969	0	609	1,397	0	0	0	0	0	0	6,975
<i>Improvements to Existing Facilities</i> City	7,186	2,108	0	17,913	11	0	0	0	0	0	27,218
<i>Essential Reconstruction of Facilities</i> City	105,623	30,166	6,783	30,044	10,851	4,806	3,724	4,006	3,372	3,655	203,030
<i>Reconstruction Necessary to Maintain Facilities</i> City	3	600	107	0	0	0	0	0	0	0	710
<i>Support Services Improvements</i> City	245	1,546	40	0	0	0	5	0	0	0	1,836
<i>Project Type Total by Source of Funds</i> City	118,226	34,920	7,539	49,354	10,862	4,806	3,729	4,006	3,372	3,655	240,469
<i>Project Type Total</i> All Funds	118,226	34,920	7,539	49,354	10,862	4,806	3,729	4,006	3,372	3,655	240,469

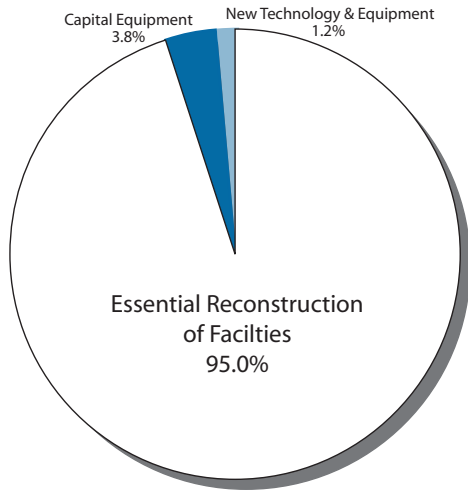
New York Research Libraries

Project Type: L		(\$ in 000's)										
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
<i>Expansion and Construction of Research Libraries</i>												
City		0	221	0	221	221	353	0	0	174	17	1,207
<i>Improvements to Existing Facilities</i>												
City		215	40	172	644	14	0	0	0	0	0	1,085
<i>Essential Reconstruction of Facilities</i>												
City		46	0	221	84	162	137	228	235	244	254	1,611
<i>Project Type Total by Source of Funds</i>												
City		261	261	393	949	397	490	228	235	418	271	3,903
<i>Project Type Total</i>												
All Funds		261	261	393	949	397	490	228	235	418	271	3,903

Queens Public Library

Project Type: LQ	(\$ in 000's)											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total	
Replacement Branches												
City	9,480	30,726	20,842	5,851	0	0	0	0	0	0	0	66,899
Essential Reconstruction of Facilities												
City	16,151	57,519	36,572	22,549	771	796	821	846	880	915	0	137,820
Reconstruction Necessary to Maintain Facilities												
City	14,111	42,270	1,448	0	0	0	0	0	0	0	0	57,829
Federal	0	248	0	0	0	0	0	0	0	0	0	248
Support Services Improvements												
City	8,547	11,067	5,131	0	0	0	0	0	0	0	0	24,745
Project Type Total by Source of Funds												
City	48,289	141,582	63,993	28,400	771	796	821	846	880	915	0	287,293
Federal	0	248	0	0	0	0	0	0	0	0	0	248
Project Type Total												
All Funds	48,289	141,830	63,993	28,400	771	796	821	846	880	915	0	287,541
Public Libraries Total	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total	
Total by Source of Funds												
City	244,175	296,798	97,267	97,556	12,765	6,852	5,562	5,895	5,510	5,715	0	778,095
Federal	0	248	0	0	0	0	0	0	0	0	0	248
State	0	0	0	0	0	0	0	0	0	0	0	0
Private	0	0	0	0	0	0	0	0	0	0	0	0
All Funds	244,175	297,046	97,267	97,556	12,765	6,852	5,562	5,895	5,510	5,715	0	778,343

Department of Cultural Affairs



The Department of Cultural Affairs (DCLA) is the largest local funder of arts and culture in the nation and is dedicated to supporting and strengthening New York City’s vibrant cultural life. The agency works to create and expand access to public programming, provide technical assistance, promote and advocate for quality arts programming, and articulate the contribution made by the cultural community to the City’s quality of life and economic vitality.

Among DCLA’s primary missions is to ensure adequate public funding for nonprofit cultural organizations, both large and small, throughout the five boroughs. DCLA’s funding programs include programming grants for more than 945 cultural organizations through the Cultural Development Fund, operating and energy support for the 33 members of the Cultural Institutions Group (CIG) that operate on City-owned property, and capital funding for design, construction, and equipment purchases at cultural facilities. DCLA also commissions public artworks through the Percent for Art program, and provides material resources to more than 1,900 nonprofit organizations, government agencies, and public schools annually through its Materials for the Arts program.

DCLA’s portfolio includes over 9.8 million gross square feet of space in City-owned buildings operated by the CIG and other cultural organizations under DCLA’s jurisdiction, many of which are landmarks. The agency has a robust capital program at both City-owned and privately-owned sites and is currently funding more than 472 capital projects on behalf of approximately 220 arts organizations that lead the way in sustainable architecture and design excellence, representing a cultural capital investment of \$766.6 million.

Capital Program Goals

- To increase public access to cultural resources, programs, and activities throughout the five boroughs;
- To increase the capacity of cultural organizations to meet programmatic needs and achieve optimal display, protection, and preservation of cultural collections;
- To upgrade and enhance facilities dedicated to cultural uses, including through investment in equipment systems, vehicles, technology, and energy efficiency upgrades;
- To maintain and preserve cultural infrastructure and historic facilities; and
- To ensure compliance with legal mandates and code requirements, including ADA accessibility and environmental considerations, and address emergency situations as they arise.

Preliminary Ten-Year Capital Strategy

The City’s cultural institutions have benefited from sizable levels of City capital investment. Approximately \$1.8 billion of City funds were committed from 2009 through 2018 for the reconstruction, modernization, and expansion of these facilities, in addition to \$308.0 million planned in 2019. The Preliminary Ten-Year Capital Strategy for cultural institutions and organizations, which reflects DCLA’s focus on facility reconstruction and programmatic enhancement, provides a total of \$766.6 million allocated as follows:

	(in millions)
• Essential Reconstruction of Facilities	\$728.2
• Capital Equipment	29.4
• New Technology and Equipment	9.0
TOTAL	\$766.6

Department of Cultural Affairs

Highlights of the Preliminary Ten-Year Capital Strategy include:

- Bronx Children's Museum: \$2.0 million for the construction of a new museum, in addition to \$1.0 million in 2019.
- Bronx Zoo: \$18.1 million for the upgrade of the Con Edison switchgear.
- New York Botanical Garden: \$10.3 million for the renovation of the worker's operation center.
- Snug Harbor Cultural Center: \$4.7 million for various upgrades and improvements, in addition to \$29.6 million in 2019.
- Staten Island Museum: \$6.7 million for the construction of a geo-thermal heating and cooling system, in addition to \$1.7 million in 2019.
- Staten Island Zoo: \$3.3 million for the restoration of Clove Road, in addition to \$3.0 million in 2019.
- Brooklyn Academy of Music: \$22.4 million for the development and expansion of the BAM Harvey Theater.
- Brooklyn Museum: \$6.0 million for the building envelope rehabilitation.
- Brooklyn Botanic Garden: \$5.4 million for the construction of a sustainable gardening center.
- Queens Museum: \$14.7 million for Phase II of the Queens Museum expansion project.
- Queens Botanical Garden: \$17.0 million for the construction of an education center, in addition to \$2.1 million in 2019.
- MoMA PS1: \$18.3 million for various upgrades, improvements and acquisitions.
- Metropolitan Museum of Art: \$19.7 million for the skylights replacement.
- Public Theater: \$9.8 million for the renovation of the Delacorte Theater.
- South Street Seaport Museum: \$7.9 million for Phase II of the restoration of the historic ship Wavertree

Department of Cultural Affairs

Project Type: PV		(\$ in 000's)										
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Capital Equipment												
	City	6,742	6,431	2,834	13,005	227	128	0	0	0	0	29,367
Essential Reconstruction of Facilities												
	City	130,862	180,607	242,071	134,959	9,003	14,470	3,609	3,720	3,869	4,024	727,194
	State	200	0	800	0	0	0	0	0	0	0	1,000
New Technology and Construction												
	City	7,793	0	0	1,206	0	0	0	0	0	0	8,999
Project Type Total by Source of Funds												
	City	145,397	187,038	244,905	149,170	9,230	14,598	3,609	3,720	3,869	4,024	765,560
	State	200	0	800	0	0	0	0	0	0	0	1,000
Project Type Total												
	All Funds	145,597	187,038	245,705	149,170	9,230	14,598	3,609	3,720	3,869	4,024	766,560

Department of Parks & Recreation

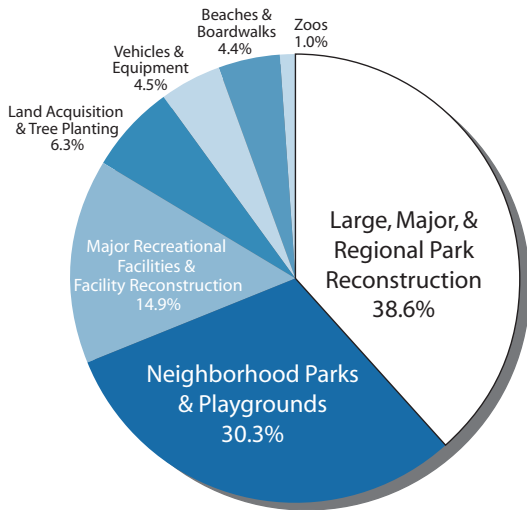
The Department of Parks and Recreation (DPR) is the steward of over 30,000 acres of land made up of nearly 5,000 individual properties ranging from Coney Island and Central Park to community gardens and Greenstreets. The Department maintains and operates approximately 800 athletic fields, 1,000 playgrounds, and 700 tennis courts. It also maintains and operates 67 public pools, 52 recreational facilities, 15 nature centers, 14 miles of beaches, 148 miles of waterfront parkland, and 14 golf courses. The Department is also responsible for nearly 850 monuments, 23 historic house museums and the care and maintenance of street and park trees.

The Preliminary Ten-Year Capital Strategy provides \$4.1 billion for capital construction and reconstruction projects. This capital program includes \$354.5 million associated with work to repair and reconstruct Parks damaged by Hurricane Sandy; an additional \$34.9 million for storm reconstruction is included in 2019. There is also \$282.4 million for the Parks Department's signature equity initiatives: the Community Parks Initiative, the Anchor Parks Initiative, Walk to a Park, and the Parks Without Borders program, with an additional \$134.0 million in 2019.

Capital Program Goals

- To provide open space and recreational facilities in the City;
- To maintain these facilities in a clean, attractive, and usable condition;
- To protect natural landscapes, unique environmental features, and wildlife;
- To conserve historic structures and statues;
- To provide and coordinate public recreational programs; and
- To plant and care for street trees.

Department of Parks & Recreation



Preliminary Ten-Year Capital Strategy

The Preliminary Ten-Year Capital Strategy supports the Department of Parks and Recreation’s continuing commitment to provide quality open space.

(in millions)

• Large, Major, and Regional Park Reconstruction	\$ 1,594.6
• Neighborhood Parks and Playgrounds	1,251.8
• Major Recreational Facilities and Facility Reconstruction	614.3
• Land Acquisition and Tree Planting	258.4
• Vehicles and Equipment	185.3
• Beaches and Boardwalks	182.1
• Zoos	42.1
TOTAL	\$4,128.6

Large, Major, and Regional Park Reconstruction

The Preliminary Ten-Year Capital Strategy provides \$1.6 billion for work at numerous sites, Citywide. This allocation includes \$928.6 million for the reconstruction of Parks bridges, Citywide; \$92.3 million for various projects located at Flushing Meadows-Corona Park in Queens; \$68.1 million for various projects located at Central Park in Manhattan; \$46.9 million for the development of Fresh Kills Park in Staten Island; \$21.9 million for reconstruction of pools, Citywide; \$17.6 million for the construction of various open space projects in Greenpoint-Williamsburg; \$16.3 million for various projects located at Prospect Park in Brooklyn; \$11.6 million for the reconstruction of Synthetic Turf Fields, Citywide; and \$391.3 million for other large, major and regional park reconstruction projects, Citywide.

Neighborhood Parks and Playgrounds

The Preliminary Ten-Year Capital Strategy provides funding of \$1.3 billion for the reconstruction of neighborhood parks and playgrounds.

Department of Parks & Recreation

Major Recreational Facilities & Facility Reconstruction

The Preliminary Ten-Year Capital Strategy provides \$614.3 million for the rehabilitation of specialized and youth-oriented major recreational facilities, such as indoor recreation centers, pools, tennis courts, and playing fields. Major highlights include \$106.8 million for the rehabilitation of recreation/nature centers, Citywide; \$64.3 million for the remediation and reconstruction of Red Hook Recreation Area; \$61.6 million for the reconstruction of boilers and HVACs, Citywide; \$23.1 million for the reconstruction of comfort stations and other buildings within parks, Citywide; \$17.0 million for the reconstruction of Historic Houses, Citywide; \$15.2 million for roofing reconstruction projects, Citywide; and \$326.3 million for other major recreational facilities and facility reconstruction projects, Citywide.

Land Acquisition and Tree Planting

The Preliminary Ten-Year Capital Strategy provides \$258.4 million for tree planting, reforestation, land acquisition, and related projects.

Vehicles and Equipment

The Preliminary Ten-Year Capital Strategy provides \$185.3 million to support infrastructure improvements and equipment purchases. Major highlights include \$88.7 million for the replacement of vehicles and \$42.9 million for improvements to computer and communications systems; and \$53.7 million for other infrastructure improvements and equipment purchases.

Beaches and Boardwalks

The Preliminary Ten-Year Capital Strategy provides \$182.1 million for the reconstruction of boardwalks, beaches, and marinas, Citywide. Continued FEMA reconstruction and improvement projects tied to the Rockaway Boardwalk damaged by Hurricane Sandy is included in the Neighborhood Parks and Playground category.

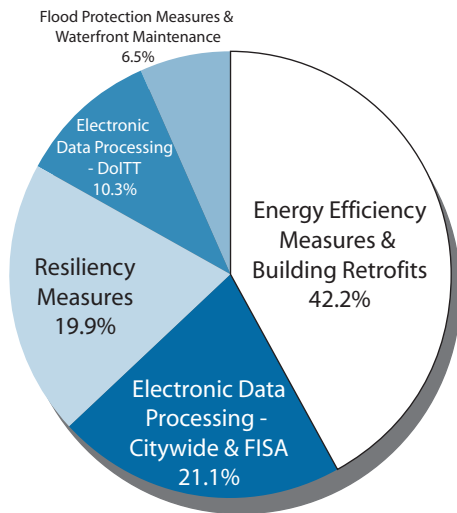
Zoos

The Preliminary Ten-Year Capital Strategy provides \$42.1 million for infrastructure rehabilitation at the Central Park Zoo, the Prospect Park Zoo and the Queens Zoo.

Department of Parks & Recreation

Project Type: P	(\$ in 000's)										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Beaches and Boardwalks											
City	22,072	26,260	76,855	1,038	1,297	923	952	981	1,020	1,061	132,459
Federal	4,821	38,239	5,564	288	737	0	0	0	0	0	49,649
Land Acquisition and Tree Planting											
City	83,429	95,915	22,526	9,420	7,141	7,377	7,606	7,842	8,156	8,482	257,894
Federal	0	0	368	0	0	0	0	0	0	0	368
Private	131	0	0	0	0	0	0	0	0	0	131
Major Recreational Facilities											
City	102,875	169,819	139,258	27,190	22,686	11,563	11,658	11,129	11,078	11,520	518,776
Federal	2,231	7,210	551	381	85,030	0	0	0	0	0	95,403
State	128	0	0	29	0	0	0	0	0	0	157
Neighborhood Parks and Playgrounds											
City	256,805	415,916	243,811	23,250	61,744	10,928	9,030	9,735	9,682	10,070	1,050,971
Federal	31,859	88,619	37,268	14,014	10,438	0	0	0	0	0	182,198
State	1,581	1,000	210	337	543	0	0	0	0	0	3,671
Private	13,546	1,362	0	57	0	0	0	0	0	0	14,965
Vehicles, Equipment and Facility Reconstruction											
City	21,002	21,855	19,657	17,885	18,315	17,717	19,384	20,065	14,392	14,968	185,240
Federal	63	0	0	0	0	0	0	0	0	0	63
Large, Major and Regional Park Reconstruction											
City	387,143	410,018	210,447	433,420	60,152	8,075	8,139	8,206	8,533	8,875	1,543,008
Federal	4,816	2,302	8,092	2,641	1,837	0	0	0	0	0	19,688
State	4,450	451	674	1,101	2,560	0	0	0	0	0	9,236
Private	4,033	1,951	0	16,655	0	0	0	0	0	0	22,639
Zoos											
City	10,550	8,081	6,660	7,190	4,583	3,209	520	220	511	531	42,055
Project Type Total by Source of Funds											
City	883,876	1,147,864	719,214	519,393	175,918	59,792	57,289	58,178	53,372	55,507	3,730,403
Federal	43,790	136,370	51,843	17,324	98,042	0	0	0	0	0	347,369
State	6,159	1,451	884	1,467	3,103	0	0	0	0	0	13,064
Private	17,710	3,313	0	16,712	0	0	0	0	0	0	37,735
Project Type Total											
All Funds	951,535	1,288,998	771,941	554,896	277,063	59,792	57,289	58,178	53,372	55,507	4,128,571

Energy Efficiency and Citywide Equipment



Energy Efficiency & Sustainability

The City has enacted a comprehensive energy management strategy across its portfolio of roughly 4,000 buildings. The One City, Built to Last initiative aims to reduce the City’s greenhouse gas emissions by 80 percent below 2005 levels by 2050, and investments in energy efficiency measures and retrofits in public buildings will lead the way. Quick, cost-effective and energy-saving capital projects are planned that target the individual needs of City agencies. Expanded solar power on City rooftops, deep retrofits in key City facilities, efficient streetlighting fixtures, and cogeneration heat and power systems will also offer new opportunities for energy savings and reductions in GHG emissions.

Electronic Data Processing

The City purchases computer equipment for its major central data centers, and for the departmental computer systems of many City agencies.

The data center of the Financial Information Services Agency (FISA) supports citywide applications, which are key to the City’s financial integrity, such as the Financial Management System (FMS), the Payroll Management System (PMS), and the Pension Payroll Management System (PPMS). FMS maintains the City’s budget and accounting records in a single, unified database. This provides the Comptroller with a uniform system of accounts, which is subject to audit by an independent firm of Certified Public Accountants.

The New York City Department of Information Technology and Telecommunications (DoITT) was created to consolidate citywide management of information and communications technologies to achieve long-term productivity improvements, revenue enhancements, and cost savings. The services provided by DoITT include consolidated data facilities to support City agencies’ systems; application development for the coordination of City IT resources; the City’s website (nyc.gov); telecommunication

services; and CityNet, the citywide data communication network.

DoITT has responsibility for the technology aspects of the New York City 3-1-1 Center, which provides a centralized source for information about non-emergency City services, and is coordinating the implementation of the e9-1-1 emergency response system.

Capital Program Goals

- To fund energy efficiency and sustainability projects to achieve the OneNYC citywide greenhouse gas reduction goals;
- To fund sustainability measures to ensure resiliency throughout the City;
- To fund flood protection measures and waterfront maintenance to fortify and rehabilitate coastal and waterfront assets throughout the City; and
- To purchase data processing equipment and services that will enable the City to achieve greater productivity with limited resources.

Preliminary Ten-Year Capital Strategy

	(in millions)
• Energy Efficiency Measures & Building Retrofits	\$3,026.5
• Electronic Data Processing - Citywide & FISA	1,516.2
• Resiliency Measures	1,425.3
• Electronic Data Processing - DoITT	736.0
• Flood Protection Measures & Waterfront Maintenance	465.5
TOTAL	\$7,169.5

Energy Efficiency and Citywide Equipment

Energy Efficiency

The Preliminary Ten-Year Capital Strategy provides \$3.0 billion over the ten-year period to fund energy efficiency projects throughout the City.

Electronic Data Processing - Citywide & FISA

The Preliminary Ten-Year Capital Strategy provides \$1.5 billion for Electronic Data Processing - Citywide & FISA.

Resiliency Measures

The Preliminary Ten-Year Capital Strategy provides \$1.4 billion over the ten-year period to fund resiliency measures, including \$1.2 billion for the East Side Coastal Resiliency project.

Electronic Data Processing - DoITT

The Preliminary Ten-Year Capital Strategy provides \$736.0 million for Electronic Data Processing - DoITT.

Flood Protection & Waterfront Maintenance

The Preliminary Ten-Year Capital Strategy provides \$465.5 million over the ten-year period to fund flood protection measures and waterfront maintenance. The Preliminary Ten-Year Capital Strategy provides \$285.5 million for rehabilitation projects across the City's portfolio of coastal and waterfront assets, including \$90.4 million for the rehabilitation of the substructure of Harlem River Park between 132nd Street to 135th Street and \$56.6 million for the rehabilitation of the substructure of Battery Wharf. Funding is also provided for flood protection measures, including \$90.0 million to protect the Red Hook neighborhood from coastal flooding and projected sea level rise through construction of an integrated flood protection system, and \$75.6 million to construct additional bulkheads, revetments, and living shorelines to protect against sea level rise through the Raised Shorelines program.

Energy Efficiency and Citywide Equipment

Project Type: DP		<i>(\$ in 000's)</i>										
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
<i>Electronic Data Processing Equipment for DoITT, Citynet</i>												
City		148,902	134,293	71,001	62,869	55,788	63,538	59,866	64,433	44,893	30,394	735,977
<i>Project Type Total by Source of Funds</i>												
City		148,902	134,293	71,001	62,869	55,788	63,538	59,866	64,433	44,893	30,394	735,977
<i>Project Type Total</i>												
All Funds		148,902	134,293	71,001	62,869	55,788	63,538	59,866	64,433	44,893	30,394	735,977

Energy Efficiency and Citywide Equipment

Project Type: PU		(\$ in 000's)										
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Building Construction, Reconstruction or Retrofit												
City		447,517	467,925	380,151	352,938	397,037	351,422	296,398	237,119	240,677	250,304	3,421,488
Federal		40,000	0	0	0	0	0	0	0	0	0	40,000
Distributed Generation												
City		30,506	0	0	0	0	0	0	0	0	0	30,506
Electronic Data Processing Equipment - FISA												
City		10,038	8,989	9,238	10,518	9,252	9,308	9,467	9,590	6,860	5,272	88,532
Electronic Data Processing Equipment - City-Wide												
City		159,442	209,179	193,666	143,713	82,148	97,500	179,791	140,916	114,577	106,688	1,427,620
Miscellaneous Energy Efficiency and Sustainability												
City		460,000	303,720	230,000	0	0	0	0	0	0	0	993,720
Federal		288,854	142,771	0	0	0	0	0	0	0	0	431,625
Project Type Total by Source of Funds												
City		1,107,503	989,813	813,055	507,169	488,437	458,230	485,656	387,625	362,114	362,264	5,961,866
Federal		328,854	142,771	0	0	0	0	0	0	0	0	471,625
Project Type Total												
All Funds		1,436,357	1,132,584	813,055	507,169	488,437	458,230	485,656	387,625	362,114	362,264	6,433,491
Citywide Equipment Total												
		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Total by Source of Funds												
City		1,256,405	1,124,106	884,056	570,038	544,225	521,768	545,522	452,058	407,007	392,658	6,697,843
Federal		328,854	142,771	0	0	0	0	0	0	0	0	471,625
State		0	0	0	0	0	0	0	0	0	0	0
Private		0	0	0	0	0	0	0	0	0	0	0
All Funds		1,585,259	1,266,877	884,056	570,038	544,225	521,768	545,522	452,058	407,007	392,658	7,169,468

Citywide Summary

Project Type: CW

(\$ in 000's)

2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 Total

Citywide Total by Source of Funds

City	17,067,283	15,183,546	14,621,751	13,169,932	10,375,525	6,019,635	5,692,216	5,423,647	5,408,167	5,366,060	98,327,762
Federal	1,467,347	842,127	451,383	505,898	188,295	67,886	81,232	45,251	216,639	34,062	3,900,120
State	64,814	801,851	41,858	64,827	592,933	37,865	28,541	39,777	1,150	34,125	1,707,741
Private	39,548	14,375	11,117	27,805	11,062	11,062	9,470	11,062	11,479	11,965	158,945

All Funds	18,638,992	16,841,899	15,126,109	13,768,462	11,167,815	6,136,448	5,811,459	5,519,737	5,637,435	5,446,212	104,094,568
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