Ten-Year Capital Strategy Fiscal Years 2020-2029



The City of New York Bill de Blasio, Mayor

Office of Management and Budget
Melanie Hartzog, Director

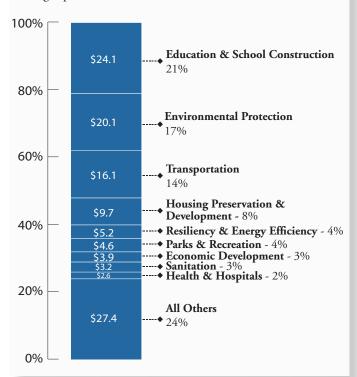
Department of City Planning
Marisa Lago, Director

Ten-Year Capital Strategy Summary

2020-2029 Ten-Year Capital Strategy Overview of \$116.9 Billion in Planned Spending

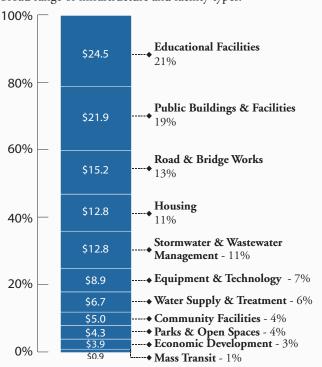
By Agency

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



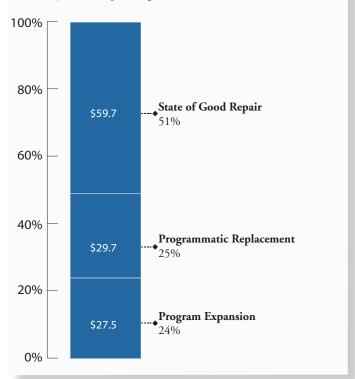
By Service Category

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



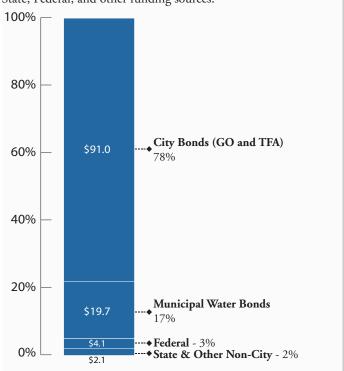
By Lifecycle Category

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



By Funding Source

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



Introduction and Overview

We are pleased to present the Fiscal Year 2020 Ten Year Capital Strategy (TYCS) that details how we plan to invest \$116.9 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 TYCS is distinct from both capital budget financial documents and other citywide strategic plans, such as OneNYC. Mandated by the New York City Charter, the TYCS provides a venue for the City to demonstrate the comprehensive capital 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 TYCS has five main components:

- An Overview of Spending that shows the allocation of our capital budget across agencies, program types, and lifecycle categories.
- Guiding Principles that provide City agencies with a long-term framework to use in developing their capital project portfolios and underlying planning processes.
- Investment Priorities help City agencies make capital investments that reflect citywide policy and strategic goals.
- 4) A **Financing Program** section that provides a detailed look at the City's capital finance program.
- 5) A **Program Detail by Agency** section that provides a deeper dive into specific City agencies' capital investments.

This publication includes expanded sections on our Guiding Principles and Investment Priorities. 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 revised our Investment Priorities to recognize the importance of modernizing infrastructure and making additional resiliency investments.

In aggregate, these enhanced components 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 and priorities, we plan for a more socially, environmentally, and fiscally resilient future.

Summary of Guiding Principles

The Guiding Principles summarized below, and examined in more detail in the section that follows, are used by City capital agencies to help develop their long-term investment and planning strategies. As guideposts, they facilitate planning within and across agencies, stress the importance of maintaining our assets in a state of good repair, and lay a roadmap to address capital planning in the City's varied and dynamic neighborhoods. By observing these principles, we will implement capital planning that furthers a strong, equitable, and more resilient city for today's New Yorkers, and for those who will live in this city for generations to come.

- 1. Maintain New York City's financial responsibility
 The City of New York finances its capital program primarily through the 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 TYCS 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 consider the totality of neighborhood needs over time, taking into account 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.

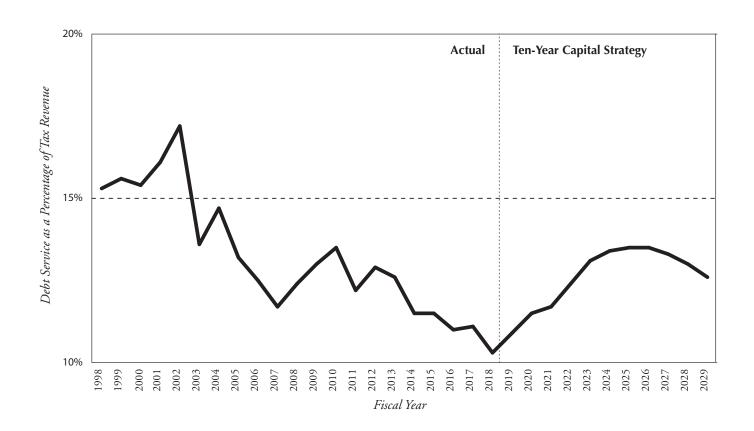
Guiding Principle 1: Maintain New York City's financial responsibility

New York City's capital investments are primarily funded through the 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.

Since the late 1980's, the City and fiscal monitoring agencies measure the debt service burden as a percentage of tax revenues. 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 TYCS 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	11.5%
2021	\$7.6	11.7%
2022	\$8.3	12.4%
2023	\$9.1	13.1%
2024	\$9.6	13.4%
2025	\$10.1	13.5%
2026	\$10.5	13.5%
2027	\$10.8	13.3%
2028	\$11.0	13.0%
2029	\$11.1	12.6%



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 designbuild authority by improving bidding and project management processes to ensure critical capital projects are delivered within shorter timelines and at lower costs.



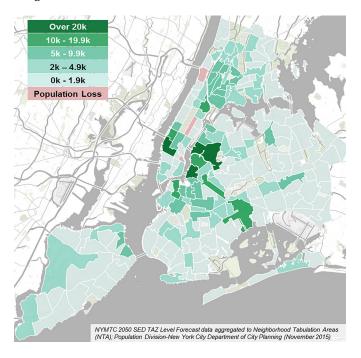
The City takes a needs-based approach to integrated capital planning. City agencies assess their capital needs by incorporating existing condition assessments and projected citywide and neighborhood growth trends.

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 an estimated population of roughly 8.5 million residents, the highest in its history. The population has been increasing in every borough, with the Bronx experiencing the largest relative change in population. Overall population is expected to increase to roughly nine million in the next few decades, 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. 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.

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. Prior 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.

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 its 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. 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.

Ensuring school capacity planning accounts for housing growth

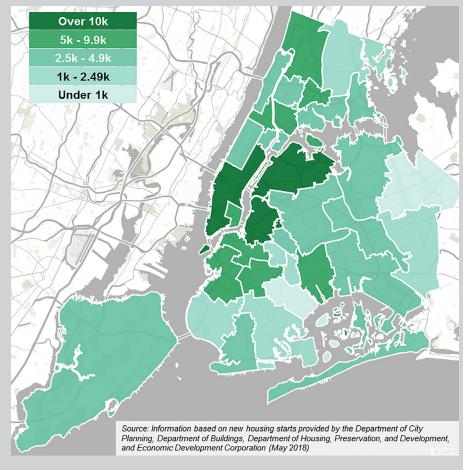
The School Construction Authority (SCA), as part of its capital planning process, estimates how many public school students are likely to enroll in one of its 32 geographic Community School Districts (CSDs) serving elementary through middle school grades. This process relies in part on understanding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

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.

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

The City is working on expanding the availability of similar new 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

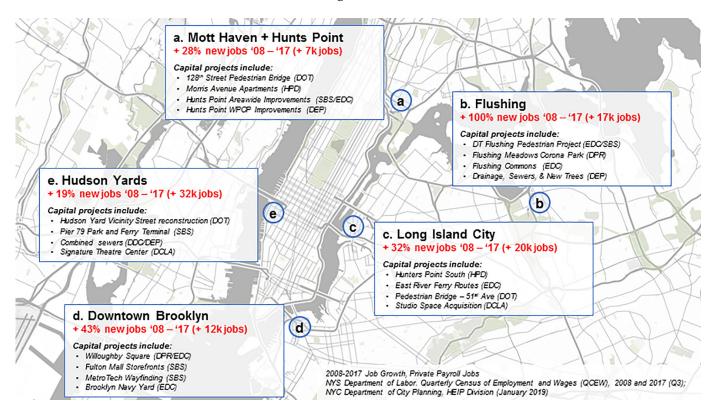


Job Growth: As of 2017, New York City is home to 4.3 million payroll jobs, with the densest concentration of jobs in traditional Central Business Districts (CBDs) like Midtown and Lower Manhattan. Between 2008 and 2017, New York City captured 75% of the 31-county region's net private sector employment 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 highly 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



Responding to climate change

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 TYCS 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 rainfalll.

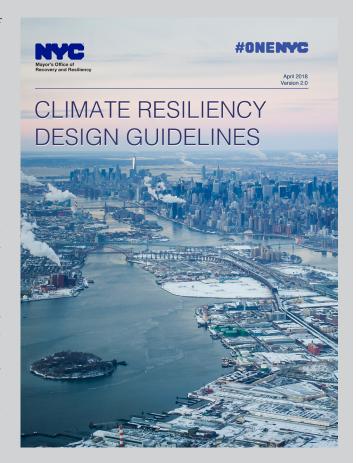
Climate Resiliency Design Guidelines

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-bystep 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



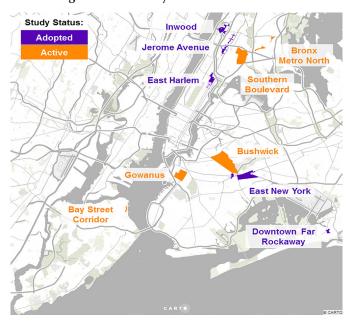
<u>Planning with knowledge of relevant City neighborhood initiatives</u>

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 publiclyowned 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 TYCS 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.



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

<u>Driving consistency in capital need assessment approach across all boroughs and neighborhoods</u>

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. 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. 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. 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.

<u>Planning with knowledge of relevant City equity initiatives</u>

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).

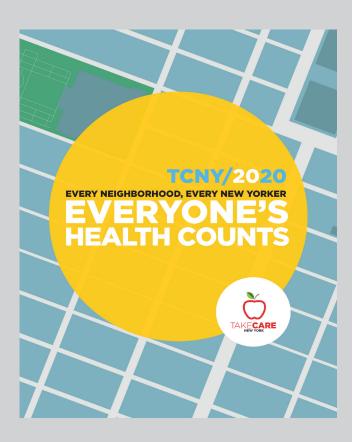
Guiding Principle 3: Advance a more equitable NYC through supportive capital investment

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 TYCS 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 expand public engagement around its Street Improvement Projects. The Ambassadors engage the community at events, parks, and busy streets, using smartphones to collect information regarding street and safety improvements in many languages. 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. 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-touse 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 inquires 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. At the Department of Sanitation (DSNY), local district supervisors use 311 data, Rapid Snow Conditions 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 Commercial District Needs Assessments 360° (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 Cityfunded 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.

Summary of Investment Priorities

The City of New York will advance six overarching capital investment priorities over the next decade that are aligned to the City's programmatic objectives. These investment priorities cut across City capital agencies and help inform agency program planning and project decision-making, as well as frame long-term capital investment allocation discussions.

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. Sustaining and improving quality of life is easier when the underlying physical infrastructure that supports the city is robust and durable.

2. Support growth and preserve affordability in our diverse neighborhoods

The City will continue to invest in housing for lowand 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

Strategic investments in schools, higher education, and industries will provide quality jobs for New Yorkers, including new funding to deliver 57,000 new school seats. We will provide stronger conditions for businesses and jobs to thrive in more neighborhoods through strategic capital investments.

4. Address citywide resiliency goals, and restore and protect our waterfront

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

The City 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

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

Investment Priority 1: Maintain and modernize our infrastructure to ensure a state of good repair

Infrastructure helps support a robust urban community. Investments that maintain, modernize, and upgrade our assets are critical towards ensuring our infrastructure systems continue to deliver service and respond to change. This Ten-Year Capital Strategy promotes safety, reliability, and efficiency in our City's existing infrastructure and public facilities by dedicating more than 50%, or \$59.7 billion, of our total anticipated capital spending over the next decade to state of good repair. This includes upgrading infrastructure, modernizing buildings, and enhancing information technologies. As these assets reach the end of their useful life, we will allocate an additional 25% towards replacement.

We will continue to invest in maintaining and upgrading roads and bridges. These investments in our local streets, arterial highway networks and bridges help keep pedestrians, commuters, and bicyclists safe, facilitate distribution of commercial goods, and limit pollution-causing congestion. Over the next decade, we will allocate \$3.1 billion for street reconstruction work, including \$1.6 billion toward Vision Zero initiatives. Our investment in this area also includes \$8.3 billion to repair more than 100 bridge structures, including all four East River Bridges.

New York City's Department of Environmental Protection continuously maintains and upgrades the City's water and wastewater systems. To maintain the safety and reliability of our water supply, we are allocating \$6.7 billion to our water supply

and distribution systems. To protect the public health and improve the quality of New York harbor waters, we will allocate \$12.8 billion to our sewer and wastewater treatment systems. This includes our City's wastewater resource recovery facilities, where we will allocate \$1.3 billion toward modernizing equipment to promote energy efficiency and meeting resiliency needs.

We are also focused on improving City-owned buildings, including schools and libraries, recreation and cultural centers, police precincts, fire houses, and maintenance facilities. This includes reducing building-based emissions. The City has committed to achieving a 20% energy reduction in City buildings by 2025. On top of this, the City's OneNYC plan sets a goal of reducing these emissions by at least 40 percent by 2030, and 80 percent by 2050. To meet these targets, the Mayor's Office of Sustainability, DCAS, and a broad range of City agencies have been working together to green the City's portfolio. For example, this group is collaborating to achieve emissions and energy reduction targets by accelerating the pace of deep energy retrofits throughout the City's portfolio. The City has also launched a new program to prioritize buildings across its portfolio that are suitable for implementation of a range of energy conservation measures at scale.

Investment Priority 1: Maintain and modernize our infrastructure to ensure a state of good repair

Water Tunnel No. 3

The City Water Tunnel No. 3 is a complex infrastructure project aiming to improve and expand the drinking water delivery system to New York City neighborhoods, allow for the maintenance and repairs of the existing Water Tunnels No. 1 and No. 2 and build redundancies to our water delivery system. Water Tunnel No. 3 consists of over 60 miles of tunnel systems and the installation of state of the art operating technology. There are two active stages to this project – Stage 1 runs from Hillview Reservoir through the Bronx and into Manhattan, while Stage 2 runs through Manhattan, Queens and Brooklyn.

Stage 1 went into service in 1998. The Manhattan leg of Stage 2 went into service in October of 2013, and the Brooklyn/ Queens leg has been "activation ready" since December 2017, serving as an emergency water source. In this Ten-Year Capital Strategy, the City is committing \$339.5 million to Stage 1 for work at Hillview Reservoir and \$604.7 million to Stage 2 of Water Tunnel No. 3 to complete the final two remaining distribution shafts for the Brooklyn/Queens leg.



Investment Priority 2: Support growth and preserve affordability in our diverse neighborhoods

New York City's population is estimated at roughly 8.5 million residents, and projected to expand to roughly nine million in the next few decades. While this growth is good for the economy, and expands job opportunities for New Yorkers, it can also create pressure on our existing infrastructure and communities. This Ten-Year Capital Strategy makes supportive investments in growing neighborhoods to create and preserve affordable housing, improve public parks and open spaces, enhance community facilities, and strengthen core infrastructure to promote thriving neighborhoods across the five boroughs.

The City has several initiatives dedicated to preserving existing affordable housing units, creating new affordable units, and modernizing existing housing stock for low to middle-income New Yorkers. This Strategy allocates \$7.1 billion in support of Housing NY 2.0, a five-borough, twelve-year plan to create or preserve 300,000 affordable homes by 2026. The Ten-Year Capital Strategy also allocates an additional \$2.7 billion for HPD programs from FY2027 - 2029, after the completion of HNY 2.0. Within the 2020 – 2029 Ten Year Capital Strategy described above, we will provide low-interest loans to create or preserve affordable housing in privately-owned buildings across all five boroughs through preservation (\$3.7 billion), new construction (\$2.9 billion), supportive housing (\$2.4 billion), and disposition (\$600 million) in all five boroughs. Housing developments managed by the New York Housing Authority (NYCHA) are home to more than 400,000 low to moderate income New Yorkers; the Ten Year Capital Strategy allocates \$3.0 billion NYCHA can use to repair building exteriors, install new roofs, upgrade building systems, and more.

To support growing neighborhoods, the City's Neighborhood Development Fund helps ensure that our integrated neighborhood plans help the city thrive today and in the future by coupling increased housing density with funding for necessary infrastructure and facility improvements. For example, the Downtown Far Rockaway study supported community investments to improve accessibility to the neighborhood, increase economic opportunity, and improve quality of life for residents. As a part of these investments, the City will fund new storm and sanitary sewers to help improve drainage and reduce street flooding.

The City will continue to invest in our neighborhood parks, playgrounds and recreational facilities to support thriving and growing communities so that all New Yorkers can have access to quality open space. The Strategy funds capital construction and upgrade projects in our parks and open spaces; this includes the reconstruction of specialized and youth-oriented recreational spaces like tennis courts, playing fields, and swimming pools.

This Ten Year Capital Strategy will also provide resources for areas experiencing repeated flooding during wet weather events. This includes \$1.8 billion to improve drainage and reduce flooding in Southeast Queens through a strategic combination of traditional sewer construction and green infrastructure.

Investment Priority 2: Support growth and preserve affordability in our diverse neighborhoodsr

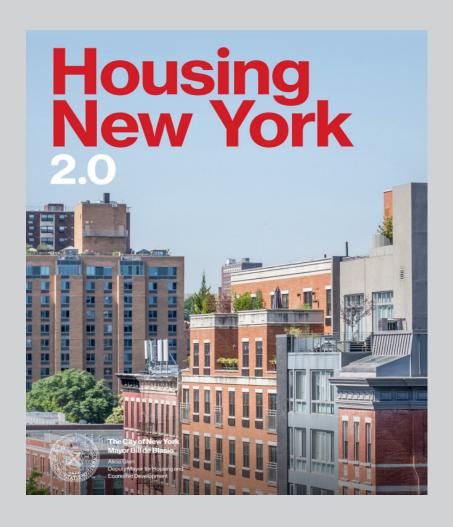
Housing NY 2.0

Mayor de Blasio launched the Housing New York plan in 2014 with a goal to "build or preserve nearly 200,000 affordable units, and help both tenants and small landlords preserve the quality and affordability of their homes." Since 2014, the City has preserved or constructed 25,000 affordable homes per year and is expected to reach its goal of 200,000 affordable homes by 2022, two years ahead of schedule. In Fall 2017, the plan was updated and Housing NY 2.0 was released with the aim of generating an additional 100,000 affordable homes by 2026.

This extended plan focuses on 5 key areas:

- a) ensure there is more affordable housing for seniors;
- b) introduce homeownership programs;
- develop anti-displacement programs to protect existing affordability;
- d) pursue innovative construction methods for new housing; and
- e) unlock the potential of City-owned vacant lots that can be redeveloped for housing.

Additionally, the City is making complementary investments in parks, streets, schools, and other infrastructure in areas with significant increases in residential development as part of Housing New York and Housing New York 2.0.



Investment Priority 3: Expand access to education and economic opportunity

New Yorkers' lives are enhanced by access to education and diverse job opportunities. By improving existing schools and building new ones we promote access to quality education; by making strategic investments to catalyze job growth and promote innovation, we nurture a more vibrant job market.

With more than 1.1 million students across 1,700 schools, New York City has the largest public-school system in the country. The SCA FY 2020-2024 Capital Plan invests \$17 billion in support of building and improving facilities, and expanding initiatives. The current plan supports almost 57,000 new seats to alleviate overcrowding and improve access to schools in growing neighborhoods. By maintaining support for high-speed broadband connectivity, and investing in new computer labs, gymnasiums, and playgrounds, we will provide our children with access to robust tools and quality facilities to prepare them for the future. To enhance safety in areas with substantial student traffic during the school day, we are investing an additional \$86.9 million in the Safe Routes to Schools program.

Early childhood education initiatives build a foundation for our children and our city. DOE and SCA will support early childhood learning initiatives by investing \$550 million over five years to build new 3-K and Pre-K classrooms in both existing facilities and new locations. These initiatives reduce the childcare cost burden for families and help young children succeed as they transition through the public-school system. We will also continue to invest in new childcare facilities, like daycare centers and child welfare facilities, while modernizing existing centers.

We are also making investments that will drive sustainable, resilient growth by making it easier to build and maintain a thriving business. In 2017, the City committed to a Jobs Plan for all New Yorkers with the goal of creating 100,000 new good paying jobs over the next ten years. To further these goals, we are investing in a logistics terminal at Brooklyn Army Terminal, an industrial business space that currently supports over 100 businesses. We are also supporting and growing our bioscience workforce by investing in a new Applied Life Science Hub, and will continue to support ongoing infrastructure improvements to Brooklyn Navy Yard and Bush Terminal to ensure they remain world class industrial parks.

SCA Accessibility

In the most recent SCA Capital Plan FY2020-2024, the City will considerably expand its investment to improve accessibility in schools for children, staff, and parents who have mobility impairments and other disabilities. Currently, less than 20% of New York's public schools are considered fully accessible. This expanded allocation of \$750 million, compared to \$178 million in the previous plan, will enable a third of all school buildings in every school district to become fully accessible, and ensure 50% of all elementary schools around the city are either partially or fully accessible. Capital projects to improve accessibility in school buildings include building ramps and wheelchair lifts, creating accessible bathrooms, widening doors and partitions, and making public assembly spaces compliant with disability access requirements. With this initiative, our public schools will become far more inclusive, providing opportunities for students with physical disabilities and special needs to access educational opportunities close to home, avoiding the need to travel to a more accessible facility.



Investment Priority 4: Address citywide resiliency goals, and restore and protect our waterfront

Our waterfront and waterways are unique assets that have fostered the city's development for centuries. Over the next decade the City will protect these resources, and our community, by increasing investment in critical resilient and flood-resistant infrastructure. Further, we will support infrastructure that facilitates the use of waterways for transportation, commerce, and recreation.

Our investments to address the effects of climate change are related to Hurricane Sandy recovery efforts, and informed by the need to prepare for future storms. Our commitment to resiliency is reflected in our ambitious \$500 million plan to reduce Lower Manhattan's vulnerability to flooding due to coastal storms and sea level rise. Other important resiliency investments include \$1.1 billion at NYC Health + Hospitals for the reinforcement of Bellevue and Coney Island Hospitals from future flood events, and \$459 million to strengthen wastewater resource recovery facilities and pumping stations through flood protection upgrades.

NYC Ferry launched in the summer of 2017 and has connected growing neighborhoods to job centers and brought much needed transit access to NYC's waterfront and recreational areas. Between 2020-21, NYC Ferry plans to expand by introducing two new routes: one connecting Staten Island to Midtown Manhattan

(via Lower Manhattan), and another connecting Coney Island to Lower Manhattan. The expansion will also include a new landing at Throggs Neck in the Bronx and a stop at Brooklyn Navy Yard to support the existing routes. With the expansion, NYC Ferry service will connect all five boroughs. In this Ten-Year Capital Strategy, the City has committed \$304.5 million toward the purchase of new ferries, infrastructure improvements to bulkheads and piers, and investments to strengthen the City's waterfront assets for public, commercial, and recreational uses.

A series of capital investments will develop new waterfront open spaces to anchor waterfront communities and serve as new recreation destinations for all New Yorkers. We have made major investments to close the largest gaps in the Manhattan Waterfront Greenway, a project focused on providing continuous waterfront access around the island of Manhattan, and are investing more than \$41 million to activate new parkland and expand access to the Greenpoint-Williamsburg waterfront.

More detailed information on the City's strategy to making New York safer and more resilient to the impacts of climate change in the near and long term can be found in the OneNYC plan.

East Side Coastal Resiliency (ESCR)

East Side Coastal Resiliency (ESCR) is a plan to protect the lower Manhattan communities along the East River that were most affected by Hurricane Sandy from the effects of future storms and sea level rise. The 2.4-mile-long project will install a continuous flood protection system from Montgomery Street north to East 25th Street, protecting 110,000 residents, including approximately 15,000 New Yorkers living in NYCHA developments. Flood protection consists of a combination of floodwalls and deployable flood gates, raised landscapes and

other structures, each individually tailored to the specific site in which they will be constructed. The project will enhance drainage and other infrastructure within the protected areas and rebuild park and waterfront areas to create a resilient and cohesive East River waterfront with improved community amenities. ESCR is a collaborative project between city, state and federal agencies to protect NYC coastline. The Ten-Year Capital Strategy provides \$1.45 billion in funding to design and implement this project.



Investment Priority 5: Build stronger connections between our communities

Building stronger societal connections between New York's many communities includes ensuring convenient access to community centers, essential services and other resources that improve our quality of life. To build a more equitable city, these resources should be accessible via multiple modes of transportation, and navigable for all New Yorkers. Through this Ten-Year Capital Strategy, we are allocating funds to provide better transportation options and expand community facilities and public spaces.

We facilitate better connections between transportation options by investing in a variety of complementary and innovative modes of travel. We will invest to improve the speed and reliability of buses by re-designing our streets to put buses first. We will also support our mass transit system through our contributions to the Metropolitan Transportation Authority's Capital Plan. As mentioned in Investment Priority 4, we are expanding the citywide ferry service to directly connect all five boroughs. In order to help and encourage both recreational and commuter bicycling we are also investing in a network of bike routes that will connect all five boroughs.

Community centers play an important role in providing a place for neighborhood gatherings and diverse social service programs. In this TYCS we provide funding to complete the creation of a community center and multi-purpose gym facility in East New York, which has been planned concurrently with the introduction of additional affordable housing in that area. This plan also invests in important social institutions like botanical gardens, museums and zoos, which enhance communities, and provide cultural and educational opportunities citywide.

Today's libraries are far more than mere repositories of books and media. Our public library system, the largest and busiest in the country, enhances communities by hosting a range of key urban services including after school and adult learning programs, literacy courses, and free-internet service. By investing in the 216 libraries across the New York, Brooklyn, and Queens library systems, we further community connections, enhance educational opportunities, and advance economic opportunity. We are supporting library facilities by upgrading our existing libraries with new HVAC systems, making interior and exterior improvements, installing new equipment and technologies, and upgrading facilities to help disabled New Yorkers enjoy the benefits of library facilities.

City parks contribute to social cohesion within and among our communities. We will continue to invest to improve equitable access to our parks and create new open space across the city through initiatives like the Anchor Parks program, which provides for major improvements in one large park in each borough. The Walk to a Park initiative will improve access in areas that are currently underserved by parks and open space. We will invest in recreational centers, rehabilitate and upgrade amenities like pools and tennis courts, and ensure that youth, seniors and people with disabilities have access to top-quality and affordable recreational opportunities. Over the next ten years we will also continue to maintain access areas within our watershed areas for fishing, hiking and other low-impact recreational uses.

Further, strategic investments in broadband infrastructure increase digital connectivity, capacity, and improve internet access to all New Yorkers across the city.

Investment Priority 5: Build stronger connections between our communities

Manhattan Greenway

The Manhattan Greenway project plans to connect all waterfront adjacent green spaces to create a 32.5-mile continuous greenway loop around the island of Manhattan. This project will provide over 1,000 acres of greenspace to residents and visitors, including designated bike and walking paths along the waterfront. The City has committed to close the loop and provide an additional 15 acres of quality open space in five areas (Inwood, Esplanade Gardens, East Harlem,

East Midtown and the United Nations Esplanade). Most of these investments are in low-income areas that historically have not had access to the waterfront. The Ten-Year Capital Strategy funds components of the Manhattan Greenway project which will be jointly delivered by EDC, DOT and DPR.



Investment Priority 6: Promote the health and safety of all New Yorkers

We are continually striving to make New York a cleaner, more environmentally conscious, safer, and healthier city. The Strategy allocates funding for improving health care facilities, police and emergency response infrastructure, and sanitation facilities and equipment.

We are revitalizing our health and hospitals system to ensure New Yorkers have access to state-of-the-art preventative care and medical treatment. We are allocating \$2.6 billion to support the rehabilitation of existing hospitals, including \$696 million to modernize our hospital facilities by upgrading IT systems and medical equipment. We will also invest \$327 million to renovate existing public health facilities to ensure uninterrupted and quality services to all New Yorkers.

Safeguarding the well-being of vulnerable populations including the elderly, disabled, and homeless, is a priority. We are increasing capacity and making improvements to homeless shelter facilities that serve a range of disparate populations. Investments in traffic safety help all New Yorkers, especially seniors and people with disabilities. In addition to Vision Zero projects, this TYCS includes initiatives including accessible pedestrian signals and pedestrian ramp improvements.

We will protect our communities and promote public safety by equipping our police officers, fire fighters, and correctional officers with infrastructure and facilities to respond to neighborhood needs. For example, we are committing \$75 million to building a new police precinct for the 40th Precinct in the Bronx. This brand-new building will include a new community event space, making our precincts more welcoming while ensuring the safety of those who live and work in the neighborhood.

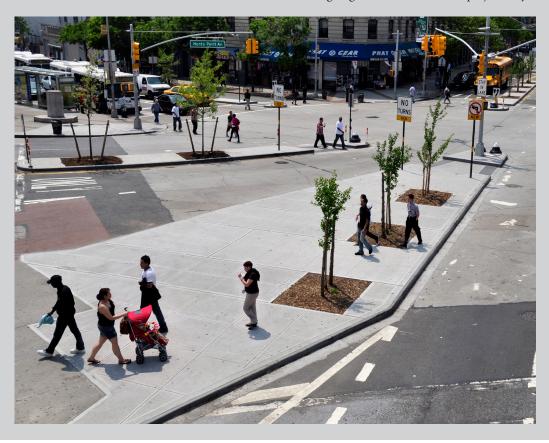
Making the city cleaner and greener improves the lives of all New Yorkers. DSNY collects approximately 12,000 tons of garbage and recycling a day, operates from 59 local sanitation garages, and utilizes over 5,400 vehicles, other specialized equipment. This Strategy funds new equipment so DSNY can continue to provide safe and reliable service. We will make our city greener by devoting \$187 million toward planting new street trees.

Investment Priority 6: Promote the health and safety of all New Yorkers

Vision Zero

In February 2014, the Vision Zero initiative was launched to eliminate deaths and serious injuries on New York City streets. The City then committed \$2.6 billion to a series of initiatives in priority locations designated by DOT to a) improve safety infrastructure on streets, including protected bike-lanes and improved pedestrian crossings; b) introduce new engineering and enforcement policies like installing speed cameras, modifying signals to give pedestrian head starts, changing road geometry to encourage slower speeds and safer turns, and reducing the speed limit to 25 mph; and c) increase traffic safety education and awareness in schools and senior centers.

Vision Zero improvements have shown progress for all five years of the initiative, bringing road deaths down to their lowest numbers since the adoption of the automobile: as of 2018, there was a 26% decrease in traffic fatalities compared to the five-year average before Vision Zero. In February 2019, the DOT released a new Borough Pedestrian Safety Plan, which targets the next set of streets, intersections, and areas that will be the focus of Vision Zero initiatives. This Ten-Year Capital Strategy has committed \$3.1 billion in street reconstruction projects of which \$1.6 billion will be dedicated to ongoing and new Vision Zero projects citywide.



Closing

Comprehensive capital planning is not just about the projects that are funded, but equally about the process, principles, and priorities that guide our approach to ensure that city infrastructure meets our dynamic long-term needs. This includes proactive collaboration across City agencies. Throughout the planning process, we strive to consider the aggregate impact of all capital and land use decisions affecting a given neighborhood and use consistent and high-quality planning inputs and growth assumptions. We aim to share best practices, and technology and regularly coordinate project

planning and delivery, allowing us to pursue continuous process improvements and realize potential cost efficiencies and time savings. Through these practices, we also seek to increase public transparency in decision-making. By considering financial responsibility, neighborhood needs of today and tomorrow, equity, and community perspectives, we pursue integrated capital planning across agencies and asset categories to shape a stronger and fairer city for all New Yorkers.

Distribution of the All Funds Ten-Year Capital Strategy 2020-2029 by Life Cycle Category

Total Program: \$116,909

(\$ in millions)

State of Good Repair \$	59,719	Program Expansion	\$27,514	Programmatic Replacement \$2	9,676
• Reconstruction &		New School Construction	\$8,889	Design and Construction of	
Rehabilitation of Schools	\$14,989	New and Special Needs Housing	5,260	New Jail Facilities	\$8,746
• East River &		 Construction of the 		Upgrade of Water Pollution	
Other Bridge Reconstruction	8,279	Third Water Tunnel	2,275	Control Plants	\$5,101
Housing Preservation &		Neighborhood Revitalization &		• Citywide Information Systems &	
Rehabilitation	7,522	Community Development	2,058	Equipment	2,635
• Reconstruction & Resurfacing of		Augmentation of Sewers	1,926	Water Main Replacement &	
Streets & Highways	6,611	• Industrial, Commercial, Waterfr	ont	Dam Safety Program	2,453
• Resiliency, Energy Efficiency &		& Market Development	1,864	Water Quality Mandates &	
Sustainability	5,193	Water Quality Preservation	1,126	Preservation	2,049
• Reconstruction of		Sewer Extensions to Accommod	ate	• Reconstruction &	
Recreational Spaces	4,276	New Development	1,004	Renovation of Court Facilities	1,981
• Rehabilitation of Hospitals &		Green Infrastructure	891	Purchase of Sanitation Equipment	1,803
Health Clinics	2,288	Water Main Construction	555	Firefighting Equipment &	
Rehabilitation of Public		Bluebelt Program	348	Vehicles	922
Buildings & Systems	1,612	• Improvements to Cultural &		Medical Equipment & Systems	795
• Rehabilitation of Libraries &		Recreational Facilities	335	Replacement of DEP Facilities &	
Cultural Institutions	1,541	• Water Pollution Improvements	299	Equipment	617
Sanitation Garages & Facilities	1,276	Smart Schools Bond Act	260	Police Vehicles & Equipment	571
• Renovation of Police Facilities	1,148	Solid Waste Management	117	Transit System Rehabilitation	510
Social Services Facility &		• Others	307	Ferry Boats and Terminals	400
Technology Upgrades	1,086			Social Services Management	
Replacement of Failing				Systems & Equipment	286
Sewer Components	927			Sewer Components	264
Correctional Facilities Building				Correctional Equipment	241
Systems & Infrastructure Repair	868			Library Facilities and Equipment	101
• Reconstruction &				• Others	201
Rehabilitation of CUNY Facilities	598				
Upgrades to Traffic Systems	582				
• Fire House Renovations	471				
• Water for the Future &					
Filtration Avoidance	277				
• Others	175				

Funding for the Ten-Year Capital Strategy by Agency Program

(\$ in 000's)

	EV	20-23	EV	⁷ 20-29
	City Funds	All Funds	City Funds	All Funds
	City I tilius	7 III I UIIGS	City I unus	An runus
Education	\$13,781,507	\$14,857,869	\$22,471,595	\$24,110,407
Correction	4,577,165	4,585,892	9,949,540	9,958,267
Housing	4,444,652	4,572,652	9,427,281	9,747,281
Water Pollution Control	4,299,704	4,463,692	7,993,564	8,340,071
Bridges	4,382,727	4,617,796	7,998,447	8,302,894
Resiliency, Technology & Equipment	4,137,510	4,619,135	7,226,529	7,708,154
Highways	3,572,950	4,041,146	5,959,428	6,610,731
Parks and Recreation	3,637,382	3,907,943	4,178,390	4,591,314
Sewers	2,571,539	2,594,698	4,424,503	4,447,662
Water Mains	2,283,997	2,284,020	4,353,199	4,353,222
Subtotal-Major Agency Programs	\$47,689,133	\$50,544,843	\$83,982,476	\$88,170,003
Economic Development	\$3,034,675	\$3,294,391	\$3,657,743	\$3,922,243
Sanitation	1,670,325	1,680,779	3,186,317	3,196,771
Housing Authority	1,487,422	1,487,422	3,033,831	3,033,831
Hospitals	1,065,298	2,152,721	1,533,917	2,621,340
Water Supply	1,012,316	1,012,316	2,311,924	2,311,924
Courts	1,171,017	1,173,529	1,990,606	1,993,118
Public Buildings	1,395,126	1,395,126	1,819,735	1,819,735
Police	1,358,704	1,385,100	1,692,266	1,718,662
Fire	701,516	787,959	1,306,357	1,392,800
Cultural Affairs	724,782	725,782	805,268	806,268
CUNY	506,455	516,195	656,317	666,057
DEP Equipment	330,744	331,312	660,813	661,381
Homeless Services	388,354	388,354	649,060	649,060
Traffic	214,489	325,935	385,928	641,970
Health	441,016	443,202	619,320	624,683
Transit	269,790	269,790	509,790	509,790
Ferries	249,617	376,002	270,389	406,005
Admin For Children's Services	282,009	321,563	352,869	392,423
Queens Libraries	328,024	328,272	335,235	335,483
Brooklyn Libraries	272,458	272,458	277,992	277,992
NY Branch Libraries	242,152	242,152	276,550	276,550
Human Resources	153,196	208,760	191,857	274,999
Transportation Equipment	77,682	79,033	88,516	89,867
Aging	31,782	31,782	59,243	59,243
Real Estate	26,464	26,464	52,894	52,894
NY Research Library	1,717	1,717	3,962	3,962
Total	\$17,437,130	\$19,258,116	\$26,728,699	\$28,739,051
Grand Total	\$65,126,263	\$69,802,959	\$110,711,175	\$116,909,054

Ten-Year Capital Strategy Fiscal Years 2020-2029

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			Citywide Total 127

Financing Program

The City financing program projects \$53.3 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.

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 \$20.7 billion and \$23.9 billion, respectively, during the plan period. The City issuance supports 39 percent of the total, while TFA FTS issuance supports 45 percent of the total. NYW will issue approximately \$8.7 billion.

2019–2023 Financing Program

(\$ in millions)

	2019	2020	2021	2022	2023	Total
City General Obligation Bonds	\$1,200	\$4,040	\$4,650	\$5,280	\$5,500	\$20,670
TFA Bonds ⁽¹⁾	4,475	4,040	4,650	5,280	5,500	23,945
Water Authority Bonds (2)	1,447	1,852	1,667	1,752	1,993	8,711
Total	\$7,122	\$9,932	\$10,967	\$12,312	\$12,993	\$53,326

⁽¹⁾ TFA 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.

2019–2023 Debt Outstanding

(\$ in millions at year end)

	2019	2020	2021	2022	2023
City General Obligation Bonds	\$37,519	\$39,341	\$41,809	\$44,750	\$47,749
TFA Bonds ⁽¹⁾	38,513	41,158	44,264	47,900	51,659
TSASC Bonds	1,053	1,023	993	966	938
Conduit Debt	1,116	1,057	994	928	837
Total	\$78,201	\$82,579	\$88,060	\$94,544	\$101,183
Water Authority Bonds	\$30,118	\$31,580	\$32,832	\$34,137	\$35,686

⁽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	\$3,775	\$4,082	\$4,191	\$4,524	\$4,886
TFA Bonds ⁽¹⁾	2,733	3,031	3,308	3,666	4,038
TSASC Bonds	72	82	82	76	76
Conduit Debt	122	126	126	126	147
Total Debt Service	\$6,702	\$7,321	\$7,707	\$8,392	\$9,147
Water Authority Bonds ⁽²⁾	\$1,651	\$1,845	\$1,956	\$2,077	\$2,184

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

2019-2023 Debt Burden

	2019	2020	2021	2022	2023
Total Debt Service ⁽¹⁾ as % of:					
a. Total Revenue	7.1%	7.8%	8.1%	8.6%	9.1%
b. Total Taxes	10.9%	11.5%	11.7%	12.4%	13.1%
c. Total NYC Personal Income	1.0%	1.1%	1.1%	1.2%	1.2%
Total Debt Outstanding1 as % of:					
a. Total NYC Personal Income	11.9%	12.1%	12.5%	13.0%	13.5%

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

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

Financing Program

Currently the debt service for the City, TFA FTS, and City appropriation debt, or conduit debt, excluding the effect of prepayments, is 7.1 percent of the City's total budgeted revenues in fiscal year 2019. That ratio is projected to rise to 9.1 percent in fiscal year 2023. As a percentage of tax revenues, the debt service ratio is 10.9 percent in fiscal year 2019 and is projected to increase to 13.1 percent in fiscal year 2023.

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. On March 1, 2019, Moody's upgraded the City's credit rating from Aa2 to Aa1. 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

Ratings

Issuer	Moody's	Standards and Poor's	Fitch
NYC GO	Aa1	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. The impact of this legislation is still developing.

New York City General Obligation Bonds

Since July 1, 2018, the City has issued \$1.2 billion in GO bonds for capital purposes and \$1.8 billion in GO refunding bonds. The dates and principal amounts are as follows:

NYC GO Issuance

(\$ in millions)

Series	(N)ew \$/ (R)efunding	Issue Date	Tax Exempt Amount	Taxable Amount	Total Par Amount
2019 ABC	R	8/22/2018	\$771	\$60	\$831
2019 D	N	12/18/2018	850	350	1,200
2019 EF	R	3/19/2019	915	78	993
Total			\$2,536	\$488	\$3,024

The GO refunding transactions the City completed to date in fiscal year 2019 generated just under \$250 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 four subseries of floating rate bonds amounting to approximately \$316 million. Of those reoffered issues, two subseries of tax-exempt variable rate demand bonds totaling

approximately \$110 million and two subseries of tax-exempt index rate bonds amounting to approximately \$206 million were converted to fixed rates.

The City plans to issue GO bonds for capital purposes of approximately \$1.2 billion, \$4.0 billion, \$4.7 billion, \$5.3 billion, and \$5.5 billion in fiscal years 2019 through 2023, respectively.

New York City Related Issuers - Variable Rate Debt

The City and other issuers supporting the City capital program have maintained floating rate exposure to minimize interest costs. When reviewing the City's variable rate debt, it is useful to include all sources of financing with the exception of NYW, which is typically considered separately for such purposes. Variable rate demand bonds compose the majority of the City's variable rate portfolio, but also included are direct placements and public offerings of index floating rate notes. The City and TFA continue to explore various debt instruments that will confer the benefit of floating rates. Currently, the City and its related entities, excluding NYW, have approximately \$10.4 billion of floating rate exposure, which provides attractive financing costs relative to long term fixed-rate debt. During fiscal year 2019, short-term interest rates have been 1.57 percent on average for tax-exempt floating rate debt, which is approximately 170 basis points lower than those for long term fixed-rate debt, resulting in an annual savings of over \$175 million.

While floating rate debt continues to provide significant savings relative to fixed-rate debt, the 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 a liquidity provider can also have an impact on net interest costs. 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.

The following table shows a breakout of the City's and its related issuers' floating rate exposure, excluding NYW. Floating rate exposure is currently at 13.3 percent, and this 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 4.1 percent of its outstanding debt. Moreover, the City uses conservative assumptions in budgeting expenses from floating rate instruments.

NYC Floating-Rate Exposure(1)

10		• 11 •	
(3)	1n	millions	1

	GO	TFA	Conduit	TSASC	Total
Floating Rate Bonds	\$5,729	\$4,444	\$30	\$0	\$10,203
Synthetic Fixed	150	0	31	0	181
Total Floating-Rate	\$5,879	\$4,444	\$61	\$0	\$10,384
Total Debt Outstanding	\$37,519	\$38,513	\$1,116	\$1,053	\$78,201
% of Floating-Rate / Total Debt Outstanding					13.3%
Total Floating-Rate Less \$7.2 Billion Balance in					
General Fund (Floating-Rate Assets)					3,196
% of Net Floating Rate / Total Debt Outstanding					4.1%

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

In addition to the floating rate debt instruments previously discussed, the City has utilized basis swaps and synthetic fixed rate debt (issuance of floating rate debt which is then swapped to a fixed rate), though no basis swaps remain outstanding at this time. In contrast to variable rate demand bonds and other floating rate instruments, basis swaps and synthetic fixed rate debt are largely insensitive to changes in interest rates and changes in the City's credit, though they do provide exposure to decreases in marginal tax rates in the tax code. Given the limited floating rate exposure by these instruments, they are counted at 25 percent of par or notional amount in the table above. While the City did not enter into any new interest rate swaps to date in fiscal year 2019, the City did terminate a basis swap at no cost in March 2019. The TFA has no outstanding swaps. The total notional amount of GO swaps outstanding as of March 31, 2019 was \$599 million, on which the termination value was negative \$53.7 million. This is the theoretical amount which the City would pay if all of the swaps terminated under market conditions as of March 31, 2019.

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. LIBOR is a taxable index to which a percentage is applied to approximate a tax-exempt rate, so the discontinuation of this rate will impact floating rate instruments indexed to it. Because the tax-exempt index SIFMA has been the City's preferred index, the City and TFA have no floating rate debt instruments linked to LIBOR, while NYW has only a small amount of such debt. For all 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. The City

and its related issuers are monitoring all developments related to the LIBOR discontinuation and transition to an alternative index, which is currently expected to be the Secured Overnight Financing Rate (SOFR) developed by the Federal Reserve.

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 \$68.9 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, \$26.9 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 April 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 current fiscal year.

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 March 29, 2019, the mark-to-market value of the swaps was negative \$96.4 million. This is the theoretical amount, which NYW would pay if both swaps were terminated as of March 29, 2019.

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

Series	(N)ew \$/ (R)efunding	Issue Date	Par Amount	True Interest Cost (TIC)	Longest Maturity
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
2019 EE	R	3/20/2019	\$415,610,000	3.75%	2040
2019 FF	N/R	4/17/2019	\$500,000,000	3.49%	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.

NYW expects to issue \$75 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 \$4.5 billion in bonds for capital purposes. The dates and principal amounts are as follows:

NYC TFA Issuance

(\$ in millions)

Series	(N)ew \$/ (R)efunding	Issue Date	Tax Exempt Amount	Taxable Amount	Total Par Amount
2019 A	N	8/10/2018	\$1,050	\$300	\$1,350
2019 B	N	9/25/2018	1,025	500	1,525
2019 C	N	4/12/2019	1,000	600	1,600
Total			\$3,075	\$1,400	\$4,475

Additionally, the TFA took steps to manage outstanding floating rate bonds by converting approximately \$150 million of floating rate bonds to a fixed rate mode and converting \$200 million of index rate bonds to variable rate demand bonds.

The TFA plans to issue TFA FTS bonds for capital purposes of approximately \$4.5 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)

Series	(N)ew \$/ (R)efunding	Issue Date	Tax Exempt Amount	Taxable Amount	Total Par Amount
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	\$309	\$2,456

Hudson Yards Infrastructure Corporation

Hudson Yards Infrastructure Corporation (HYIC), a not-forprofit 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.

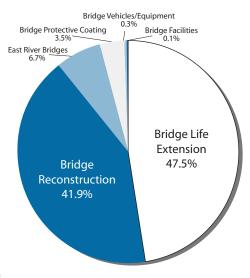
Capital Program Goals

- 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.

Ten-Year Capital Strategy

The Ten-Year Capital Strategy provides approximately \$16.1 billion to the Department, with Bridges and Highways receiving the bulk of funding, totaling approximately \$14.9 billion.

Department of Transportation - Bridges



Bridges

	(in millions)
Bridge Life Extension	\$3,947.2
Bridge Reconstruction	3,477.6
East River Bridges	552.6
 Bridge Protective Coating 	292.8
 Bridge Vehicles/Equipment 	23.7
Bridge Facilities	9.0
TOTAL.	\$8,302.9

The Ten-Year Capital Strategy provides \$8.3 billion in the Bridge Program for the reconstruction and upgrade of the City's bridge system. The Ten-Year Capital Strategy includes funding for work on the four East River Bridges and other bridge structures. The first four years of this Ten-Year Capital Strategy provides \$4.6 billion to the Bridge Program, of which \$730.3 million is planned to be committed in 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 Ten-Year Capital Strategy provides \$3.9 billion for rehabilitative work on 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 Ten-Year Capital Strategy provides \$3.5 billion to reconstruct bridge structures currently rated "fair" or "good," including \$1.6 billion for Brooklyn-Queens Expressway (BQE) bridges from Sands Street to Atlantic Avenue and \$301.1 million for the Shore Road Bridge over Hutchinson River.

East River Bridges

The Ten-Year Capital Strategy provides \$552.6 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 work on the Queensboro Bridge totaling \$199.0 million.

Bridge Protective Coating

The Ten-Year Capital Strategy provides \$292.8 million for protective coating treatment on bridge structures. This program includes \$8.5 million for West 207th Bridge over Harlem River.

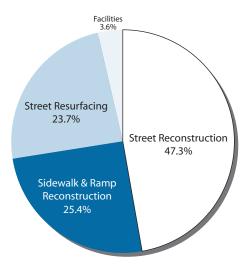
Bridge Facilities, Equipment and Vehicles

The Ten-Year Capital Strategy provides \$23.7 million for the purchase of equipment and vehicles and \$9.0 million for bridge facilities.

Department of Transportation - Bridges

East River Bridges City Fair Bridges City Federal State Private Useful Life Extension and Miscellaneous Work City	2020 200,000 238,433 8,069 1,907 3,781	64,738 376,143 58,413	30,863 700,809	257,000	0	0	0	0	2028 0	0	<i>Total</i> 552,601
City Fair Bridges City Federal State Private Useful Life Extension and Miscellaneous Work	238,433 8,069 1,907	376,143 58,413			0	0	0	0	0	0	552,601
Fair Bridges City Federal State Private Useful Life Extension and Miscellaneous Work	238,433 8,069 1,907	376,143 58,413			0	0	0	0	0	0	552,601
City Federal State Private Useful Life Extension and Miscellaneous Work	8,069 1,907	58,413	700,809	024 502							
City Federal State Private Useful Life Extension and Miscellaneous Work	8,069 1,907	58,413	700,809	024 502							
State Private Useful Life Extension and Miscellaneous Work	1,907			934,583	979,324	45,443	0	0	0	0	3,274,735
Private Useful Life Extension and Miscellaneous Work			0	55,269	69,378	0	0	0	0	0	191,129
Useful Life Extension and Miscellaneous Work	3 781	6,000	0	0	0	0	0	0	0	0	7,907
	3,701	0	0	0	0	0	0	0	0	0	3,781
City											
	277	58	0	0	0	0	0	0	0	0	335
Useful Life Extension											
City	202,637	269,633	357,844	628,136	611,109	171,588	223,326	322,878	510,012	548,050	3,845,213
Federal	43,918	3,160	54,136	0	0	0	0	0	0	0	101,214
State	416	0	0	0	0	0	0	0	0	0	416
Bridge Painting											
City	20,946	21,946	25,000	32,000	32,000	32,000	32,919	32,000	32,000	32,000	292,811
Equipment for Bridge Maintenance											
City	1,553	600	600	600	600	600	516	531	0	0	5,600
Bridge Facilities											
City	0	0	5,837	414	428	441	455	469	487	507	9,038
Bridge Vehicles											
City	8,400	1,623	1,017	1,037	1,071	1,107	1,141	1,177	1,221	320	18,114
Project Type Total by Source of Funds											
City	672,246	734,741	1,121,970	1,853,770	1,624,532	251,179	258,357	357,055	543,720	580,877	7,998,447
Federal	51,987	61,573	54,136	55,269	69,378	0	0	0	0	0	292,343
State	2,323	6,000	0	0	0	0	0	0	0	0	8,323
Private	3,781	0	0	0	0	0	0	0	0	0	3,781
Project Type Total											
All Funds	730,337	802,314	1,176,106	1,909,039	1,693,910	251,179	258,357	357,055	543,720	580,877	8,302,894

Department of Transportation - Highways



Highways

TOTAL	\$6,610.7
• Facilities	236.3
Street Resurfacing	1,569.5
• Sidewalk & Ramp Reconstruction	1,680.6
• Street Reconstruction	\$3,124.3
	(in millions)

The Ten-Year Capital Strategy provides \$6.6 billion to the Highways program for the rehabilitation of City streets.

Street Reconstruction

Total funding in the Ten-Year Capital Strategy for street reconstruction is \$3.1 billion. This work includes \$260.9 million to improve drainage conditions in Southeast Queens and \$1.6 billion for Vision Zero projects.

Sidewalk and Ramp Reconstruction

The Ten-Year Capital Strategy provides funding of \$475.4 million for the reconstruction of sidewalks. Additionally, \$1.2 billion is provided to install and reconstruct pedestrian ramps throughout the City.

Street Resurfacing

The Ten-Year Capital Strategy provides funding of \$1.6 billion for the resurfacing of approximately 6,770 lane miles of primary streets and arterial highways.

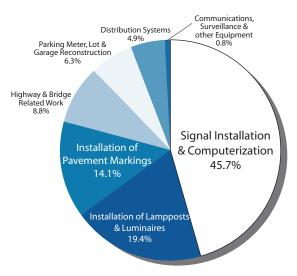
Facility Reconstruction

A total of \$236.3 million is allocated in the Ten-Year Capital Strategy for the design and reconstruction of highway maintenance and repair yards, other Department facilities, and miscellaneous renovations and upgrades.

Department of Transportation - Highways

Project Type: HW					(\$ in 000's)					
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Facility Reconstruction											
City	25,201	26,625	61,076	23,178	60,604	5,942	7,611	6,397	6,003	6,257	228,894
Federal	2,641	4,511	290	0	0	0	0	0	0	0	7,442
Local Street Reconstruction											
City	10,607	0	7,662	0	73	0	0	0	0	0	18,342
Federal	433	0	0	0	41	0	0	0	0	0	474
State	2,587	0	300	0	1	0	0	0	0	0	2,888
Pedestrian Ramp Construction											
City	194,830	120,541	126,336	105,959	109,476	107,801	107,801	107,801	110,333	113,027	1,203,905
Federal	0	0	111	0	30	0	861	0	0	0	1,002
Private	236	0	0	0	0	0	0	0	0	0	236
Primary Street Reconstruction											
City	316,916	409,341	829,206	488,597	359,893	29,481	39,320	37,412	35,388	36,887	2,582,441
Federal	78,321	105,297	42,649	112,273	35,088	30,528	27,383	8,512	0	0	440,051
State	4,315	21,841	3,761	33,677	0	0	0	0	0	0	63,594
Private	3,333	1,320	0	31	0	0	0	0	0	0	4,684
Primary Street Resurfacing											
City	262,446	131,451	141,971	134,810	137,130	141,589	145,979	150,504	156,506	162,785	1,565,171
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	52,096	27,058	32,127	33,048	37,323	32,938	28,699	32,938	34,521	38,059	348,807
Federal	74	0	1,380	0	142	0	14,421	0	0	0	16,017
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
Reconstruction of Step Streets											
City	0	9,627	2,241	0	0	0	0	0	0	0	11,868
Project Type Total by Source of Funds											
City	862,096	724,643	1,200,619	785,592	704,499	317,751	329,410	335,052	342,751	357,015	5,959,428
Federal	81,805	111,346	46,860	112,273	35,301	30,528	42,665	8,512	0	0	469,290
State	6,902	21,844	4,321	33,677	1	0	0	0,312	0	0	66,745
Private	14,631	12,382	11,062	11,093	11,062	11,062	9,470	11,062	11,479	11,965	115,268
Project Type Total											
All Funds	965,434	870,215	1,262,862	942,635	750,863	359,341	381,545	354,626	354,230	368,980	6,610,731
m i unus	903, 4 34	070,213	1,202,002	774,033	150,003	337,341	J01,J 1 J	337,020	337,430	500,700	0,010,731

Department of Transportation - Traffic



Traffic

(in r	nillions)
Signal Installation and Computerization	\$293.5
• Installation of Lampposts and Luminaires	124.8
• Installation of Pavement Markings	90.4
Highway and Bridge Related Work	56.7
Parking Meter, Lot and Garage	
Reconstruction	40.3
Distribution Systems	31.4
Communications, Surveillance and	
other Equipment	4.9
TOTAL	\$642.0

The Ten-Year Capital Strategy provides \$642.0 million for Traffic programs.

Signal Installation and Computerization

The Ten-Year Capital Strategy provides \$293.5 million for signal installation and computerization. This includes \$61.8 million to install accessible pedestrian signals.

Installation of Lampposts and Luminaires

The Ten-Year Capital Strategy provides \$124.8 million for the installation of lampposts and luminaires.

Installation of Pavement Markings

The Ten-Year Capital Strategy provides funding of \$90.4 million for the installation of thermoplastic reflectorized pavement markings to be done in conjunction with the Department's inhouse resurfacing program.

Highway and Bridge Related Work

The Ten-Year Capital Strategy provides \$56.7 million for the installation of signals, streetlights, and lane markings associated with the Highway Reconstruction and Bridge Programs.

Parking Meter, Lot and Garage Reconstruction

The Ten-Year Capital Strategy provides \$40.3 million for parking meters and facilities.

Replacement of Electrical Distribution Systems

To reduce lighting outages, the 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 \$31.4 million.

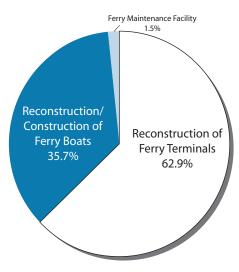
Communications, Surveillance and other Equipment

The Ten-Year Capital Strategy provides \$4.9 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	773	0	0	0	0	0	0	0	0	0	773
Communications, Surveillance Equipment											
City	0	4,920	0	0	0	0	0	0	0	0	4,920
Highway Drawdown Program											
City	3,896	3,346	995	751	3,392	0	0	0	0	0	12,380
Federal	0	0	203	0	44	0	1,552	0	0	0	1,799
Installation of Lampposts and Luminaires											
City	13,177	6,319	6,905	3,955	72	55	0	31	32	34	30,580
Federal	0	0	2,354	0	0	0	0	0	0	0	2,354
State	5,618	9,395	2,856	7,500	22,000	7,500	22,000	7,500	0	7,500	91,869
Parking Meters, Lots and Garages											
City	27,213	0	6,468	3,418	493	507	523	539	559	583	40,303
Installation of Pavement Markings											
City	10,353	0	10,804	0	10,805	0	10,805	0	19,992	27,677	90,436
Traffic Work in Conjunction with Highway Reconstruction											
City	2,607	0	9,097	3,538	10,430	3,066	2,016	2,079	3,384	3,526	39,743
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	507	0	589	0	0	0	0	0	0	0	1,096
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	35,091	21,306	28,159	10,302	10,098	7,103	0	17,196	17,843	18,599	165,697
Federal	6,840	2,678	7,112	0	0	20.500	0	0	0	20.500	16,630
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	93,617	35,891	63,017	21,964	35,290	10,731	13,344	19,845	41,810	50,419	385,928
Federal	7,661	2,678	15,964	0	44	0	1,552	0	0	0	27,899
State	15,163	21,545	15,435	33,000	22,000	33,000	22,000	33,000	0	33,000	228,143
Project Type Total				_,		:					
All Funds	116,441	60,114	94,416	54,964	57,334	43,731	36,896	52,845	41,810	83,419	641,970

Department of Transportation - Ferries



Ferries

		(in millions)
•	Reconstruction of Ferry Terminals	\$255.2
•	Reconstruction/Construction of	
	Ferry Boats	144.8
•	Ferry Maintenance Facility	6.0
TC	OTAL	\$406.0

The Ten-Year Capital Strategy for Ferries provides a total of \$406.0 million for the reconstruction, construction and improvement of various ferry vessels and facilities.

Reconstruction of Ferry Terminals

The Ten-Year Capital Strategy includes \$255.2 million for the rehabilitation and renovation work to ferry terminal buildings, slips, and racks.

Reconstruction/Construction of Ferry Boats

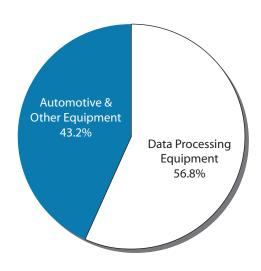
The Ten-Year Capital Strategy provides \$144.8 million for various projects associated with the Department of Transportation-operated ferry boats.

Reconstruction of Ferry Maintenance Facility

Funding of \$6.0 million is included for general construction work at the ferry maintenance facility and other equipment.

Project Type: FA	(\$ in 000's)											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total	
Reconstruction of Ferry Boats												
City	7,083	18,902	17,952	18,359	3,787	3,768	8,076	1,301	1,350	1,407	81,985	
Federal	5,176	0	45,753	0	422	4,340	0	0	0	0	55,691	
State	3,865	0	3,271	0	0	0	0	0	0	0	7,136	
Ferry Maintenance Facility Construction												
City	380	0	971	0	0	0	0	0	0	0	1,351	
Federal	2,865	0	1,428	0	0	0	0	0	0	0	4,293	
State	330	0	0	0	0	0	0	0	0	0	330	
Reconstruction of Ferry Terminal Facilities												
City	34,070	41,902	58,119	51,879	1,083	0	0	0	0	0	187,053	
Federal	27,966	22,673	314	11,801	3,655	0	0	0	0	0	66,409	
State	0	406	537	0	814	0	0	0	0	0	1,757	
Project Type Total by Source of Funds												
City	41,533	60,804	77,042	70,238	4,870	3,768	8,076	1,301	1,350	1,407	270,389	
Federal	36,007	22,673	47,495	11,801	4,077	4,340	0	0	0	0	126,393	
State	4,195	406	3,808	0	814	0	0	0	0	0	9,223	
Project Type Total												
All Funds	81,735	83,883	128,345	82,039	9,761	8,108	8,076	1,301	1,350	1,407	406,005	

Department of Transportation - Equipment



The Ten-Year Capital Strategy provides \$89.9 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	38.8
TO	TAL	\$89.9

Project Type: TD		(\$ in 000's)											
Troject Type. TD	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	23,225	8,196	5,992	0	0	0	0	0	0	0	37,413		
Federal	1,348	0	0	0	0	0	0	0	0	0	1,348		
Project Type Total by Source of Funds													
City	36,751	18,415	16,450	6,066	4,809	1,577	1,207	1,039	1,078	1,124	88,516		
Federal	1,351	0	0	0	0	0	0	0	0	0	1,351		
Project Type Total All Funds	38,102	18,415	16,450	6,066	4,809	1,577	1,207	1,039	1,078	1,124	89,867		
Transportation Total	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total		
Transportation Total Total by Source of Funds	2020	2021	2022	2023	2024	2025	2026	2027		2029	Total		
Total by Source of Funds City	1,706,243	1,574,494	2,479,098	2,737,630	2,374,000	585,006	610,394	714,292	930,709	990,842	14,702,708		
Total by Source of Funds City Federal	1,706,243 178,811	1,574,494 198,270	2,479,098 164,455	2,737,630 179,343	2,374,000 108,800	585,006 34,868	610,394 44,217	714,292 8,512	930,709	990,842	14,702,708 917,276		
Total by Source of Funds City Federal State	1,706,243 178,811 28,583	1,574,494 198,270 49,795	2,479,098 164,455 23,564	2,737,630 179,343 66,677	2,374,000 108,800 22,815	585,006 34,868 33,000	610,394 44,217 22,000	714,292 8,512 33,000	930,709 0 0	990,842 0 33,000	14,702,708 917,276 312,434		
Total by Source of Funds City Federal	1,706,243 178,811	1,574,494 198,270	2,479,098 164,455	2,737,630 179,343	2,374,000 108,800	585,006 34,868	610,394 44,217	714,292 8,512	930,709	990,842	14,702,708 917,276		

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 approximately 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 4,359 buses on 235 routes on over 2,000 route miles throughout the City. Through 2018, 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 121,272 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 City's contribution to the MTA 2015-2019 Capital Program is \$2.7 billion, of which \$657.0 million is previously budgeted, \$164.0 million is for the Subway Action Plan, and \$600.0 million is to be funded through alternative non tax levy revenue sources. The remaining \$1.2 billion is to be provided concurrently with additional State funds in accordance with the funding needs of the capital program.

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 1,305 buses, MTABC serves nearly 121.0 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.

Ten-Year Capital Strategy

In the Ten-Year Capital Strategy, the City will contribute \$509.8 million to the MTA, including \$350.0 million for ongoing NYCT track improvements and rehabilitation and \$159.8 million for other subway and bus projects. Additional City funds of \$1.2 billion for the 2015-2019 MTA Capital Program shall be provided concurrently with additional State funds.

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

Transit Authority - Transit											
Project Type: T	2020	2021	2022	2023	(\$ 2024	in 000's) 2025	2026	2027	2028	2029	Total
Miscellaneous Transit Improvement Projects City	81,240	0	0	0	0	0	0	0	0	0	81,240
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	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	350,000
Project Type Total by Source of Funds											
City	121,240	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	481,240
Project Type Total All Funds	121,240	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	481,240
Transit Authority Total	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Total by Source of Funds City Federal	135,515 0	54,275 0	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	509,790
State Private	0 0	0	0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0

40,000

40,000

40,000

40,000

40,000

40,000

40,000

135,515

54,275

40,000

All Funds

509,790

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 resource recovery facilities (WRRFs). The Department also operates facilities and equipment to maintain and support these systems.

Capital Program Goals

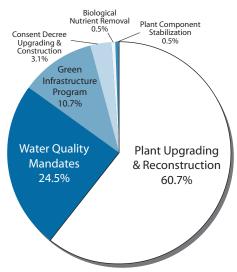
- To maintain the quality of water in the City's watersheds and, where necessary, treat the supply to ensure that it continues to be of high quality;
- To maintain and improve the transmission and distribution capacity of the City's water supply system;
- To improve the quality of the surrounding waters 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.

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 Ten-Year Capital Strategy includes \$20.1 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 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 Ten-Year Capital Strategy provides approximately \$8.3 billion towards wastewater treatment programs.

	1 0	
		(in millions)
•	Plant Upgrading & Reconstruction	\$5,060.9
•	Water Quality Mandates	2,048.7
•	Green Infrastructure Program	891.1
•	Consent Decree Upgrading and	
	Construction	258.9
•	Biological Nutrient Removal	40.3
•	Plant Component Stabilization	40.2
TC	OTAL	\$8,340.1

Plant Upgrading and Reconstruction

The 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 WRRFs, such as the replacement of several main sewage pumps (\$546.2 million). In addition, the Department has allocated \$1.1 billion for energy efficiency and resiliency upgrades at WRRFs, \$547.5 million for Job Order Contracts (JOCs) that address small capital improvements, and \$534.7 million for wastewater pumping stations across the five boroughs.

Water Quality Mandates

The 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 CSOs into harbor waters.

Green Infrastructure Program

The Ten-Year Capital Strategy provides approximately \$891.1 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 Ten-Year Capital Strategy provides \$258.9 million to address mandates, including \$256.2 million allocated to projects that will reduce residual chlorine released into harbor waters from WRRFs.

Biological Nutrient Removal

The Ten-Year Capital Strategy provides \$40.3 million for projects to reduce the amount of nitrogen discharged into Jamaica Bay and the Long Island Sound.

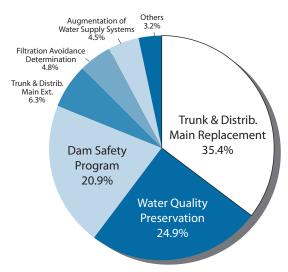
Plant Component Stabilization

The Ten-Year Capital Strategy provides \$40.2 million to stabilize in-City WRRFs 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 WRRF, 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	72	93	0	40,100	0	0	0	0	0	0	40,265
Green Infrastructure Program											
City	393,652	260,505	168,900	31,524	1,500	33,000	1,290	750	0	0	891,121
Consent Decree Upgrading and Construction	21.765	50.405	21.070	12.500	56.700	1.076	0	02 200	0	0	250,002
City	21,765	50,405	21,970	13,500	56,788	1,076	0	93,389	0	0	258,893
Plant Upgrading and Reconstruction	204.002	765 605	524.555	500 645	061 150	445 150	401 402	70.560	75.005	220 042	4.500.050
City Federal	384,892 163,988	765,605 0	534,575 0	780,645 0	961,153 0	445,178 0	481,403 0	70,560 0	75,905 167,056	229,943 0	4,729,859 331,044
Plant Component Stabilization	102,500	v		· ·	· ·	v	· ·	Ů	107,000	· ·	221,0
City	20,736	2,300	0	0	0	0	0	0	1,718	0	24,754
Federal	0	0	0	0	0	0	0	0	15,463	0	15,463
Water Quality Mandates											
City	131,380	163,362	240,207	273,516	294,750	126,728	389,045	163,000	146,684	120,000	2,048,672
Project Type Total by Source of Funds											
City	952,497	1,242,270	965,652	1,139,285	1,314,191	605,982	871,738	327,699	224,307	349,943	7,993,564
Federal	163,988	0	0	0	0	0	0	0	182,519	0	346,507
Project Type Total											
All Funds	1,116,485	1,242,270	965,652	1,139,285	1,314,191	605,982	871,738	327,699	406,826	349,943	8,340,071

Department of Environmental Protection - Water Mains, Sources and Treatment



Water Mains, Sources and Treatment

The Ten-Year Capital Strategy provides approximately \$4.4 billion for the protection and upkeep of the City's source water supply and water distribution systems.

r-/	(ir	n millions)
•	Trunk and Distribution Main	
	Replacement	\$1,541.0
•	Water Quality Preservation	1,084.5
•	Dam Safety Program	911.7
•	Trunk and Distribution Main Extension	273.4
•	Filtration Avoidance Determination	210.5
•	Augmentation of Water Supply Systems	195.0
•	Croton Filter Project	41.1
•	Extensions to Accommodate	
	New Development	37.8
•	Water for the Future Program	22.1
•	Bluebelt Program	22.0
•	Miscellaneous Improvements Upstate	14.1
T	OTAL	\$4,353.2

Trunk and Distribution Main Replacement

The Ten-Year Capital Strategy includes the replacement of distribution and trunk mains at a total cost of \$1.5 billion. This includes \$957.0 million for various state-of-good-repair projects to replace aging water mains. In addition, \$218.5 million will fund projects in partnership with DOT priority programs including Vision Zero, Great Streets, and Select Bus Service and \$141.0 million will allow for contracts for emergency responses leading to immediate reconstruction and rehabilitation of water mains.

Water Quality Preservation

The 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 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 Ten-Year Capital Strategy includes \$273.4 million for the extension of distribution and trunk mains.

Filtration Avoidance Determination

The Ten-Year Capital Strategy includes \$210.5 million for the continuation of various Filtration Avoidance Determination (FAD) measures in the upstate watershed, including \$123.4 million for land acquisition, \$52.2 million for stream management, and \$21.0 million for the implementation of agriculture and forestry best practices.

Augmentation of Water Supply Systems

The Ten-Year Capital Strategy provides \$195.0 million to increase capacity of the existing water main system.

Croton Filter Project

The Ten-Year Capital Strategy includes \$41.1 million to complete a filtration plant for the Croton water supply, which commenced operation in 2015.

Extensions to Accommodate New Development

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

Water for the Future

The Ten-Year Capital Strategy provides \$22.1 million to fund projects associated with the repair and temporary shutdown of the Delaware Aqueduct to address leakage.

Bluebelt Program

The Ten-Year Capital Strategy provides \$22.0 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.

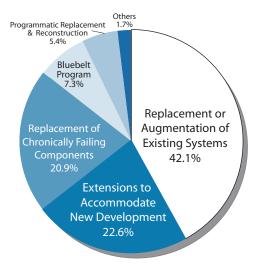
Miscellaneous Improvements Upstate

The 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	59,577	48,462	23,462	61,792	5	0	1,713	0	0	0	195,011
Bluebelt Program											
City	3,248	7,132	8,142	0	3,488	0	0	0	0	0	22,010
Croton Filter Project											
City	7,845	9,900	0	23,386	0	0	0	0	0	0	41,131
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	4.650		25.500								2= =0=
City	1,650	7,038	27,599	1,477	23	0	0	0	0	0	37,787
Filtration Avoidance Determination	70.120	45.220	22.122	12 100	107	20.250	200	0	0	0	210.525
City	79,139	45,329	23,132	42,199	187	20,250	299	0	0	0	210,535
Miscellaneous Improvements Upstate	6.000	- 100	• • • •								44.000
City	6,990	5,100	2,000	0	0	0	0	0	0	0	14,090
Trunk and Distribution Main Extension		26	54.220	22.662	0	0	12.050	104.250	22.500	22.500	272.256
City	0	36	54,329	33,662	0	0	13,970	104,359	33,500	33,500	273,356
Trunk and Distribution Main Replacement	265 105	01.600	220 522	1.42.200	160 155	140 171	05.610	25.165	105.455	150 455	1.540.052
City Private	265,195 0	91,692 0	239,733 23	142,309 0	169,177 0	140,171 0	85,619 0	37,167 0	197,455 0	172,455 0	1,540,973 23
Water For The Future		v	-20	v	· ·	· ·	v	v	· ·	v	25
City	13,000	2,000	7,077	0	0	0	0	0	0	0	22,077
Water Quality Preservation		ŕ	ŕ								
City	129,800	102,363	125,110	266,360	242,239	34,750	3,000	141,000	6,000	33,875	1,084,497
Project Type Total by Source of Funds											
City	573,244	343,552	531,016	836,185	415,119	205,171	172,601	676,526	359,955	239,830	4,353,199
Private	0	0	23	0	0	0	0	0	0	0	23
Project Type Total											
All Funds	573,244	343,552	531,039	836,185	415,119	205,171	172,601	676,526	359,955	239,830	4,353,222
		•	•	•	•	,	,	,	•	•	

Department of Environmental Protection - Sewers



Sewers

The Ten-Year Capital Strategy provides \$4.4 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	\$1,871.6
• Extensions to Accommodate	
New Development	1,003.7
Replacement of Chronically	
Failing Components	927.4
Bluebelt Program	326.1
Programmatic Replacement and	
Reconstruction	241.6
Programmatic Response to	
Regulatory Mandates	54.4
Trunk and Distribution Main	
Replacement	22.9
TOTAL	\$4,447. 7

Replacement or Augmentation of Existing Systems

The Ten-Year Capital Strategy provides \$1.9 billion to increase capacity of the existing system. This includes \$1.1 billion for the buildout of sewers in Southeast Queens to mitigate flooding in the area and \$247.5 million for various state-of-good-repair upgrades to sewers, Citywide.

Extensions to Accommodate New Development

The 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 Ten-Year Capital Strategy provides \$927.4 million for the replacement of malfunctioning or collapsed cement pipe combined sewers, including \$590.2 million to fund emergency sewer work across the City.

Bluebelt Program

The Ten-Year Capital Strategy includes \$326.1 million for a comprehensive stormwater management plan that reduces local flooding.

Programmatic Replacement and Reconstruction

The Ten-Year Capital Strategy includes \$241.6 million for the construction of storm sewers to alleviate flooding.

Programmatic Response to Regulatory Mandates

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

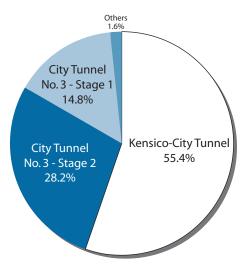
Trunk and Distribution Main Replacement

The Ten-Year Capital Strategy includes \$22.9 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	Tota
Replacement or Augmentation of Existing Systems											
City Private	319,847 12	437,939 0	213,733 0	411,009 0	193,068 0	24,285 0	93,203 0	54,000 0	60,529 0	63,958 0	1,871,57
Bluebelt Program											
City Federal	46,269 11,344	55,507 0	99,269 8,613	27,430 0	47,696 0	12,000 0	12,000 0	2,000 0	2,000 0	2,000 0	306,171 19,957
Extensions to Accommodate New Development City	125,226	62,050	84,972	91,078	97,782	102,405	65,910	90,641	141,816	141,816	1,003,696
Programmatic Response to Regulatory Mandates				0						0	
City Programmatic Replacement and Reconstruction	54,384	0	0	0	0	0	0	0	0	0	54,384
City	244	71	31,709	0	0	209,611	0	0	0	0	241,635
Replacement of Chronically Failing Components	94,625	154,709	101.070	48,928	(2.547	52 004	47.500	50 212	107.000	107,000	025 57
City Federal	94,623	1,800	191,070 0	48,928	62,547 0	53,884 0	47,500 0	58,313 0	107,000 0	0	925,576 1,800
Trunk and Distribution Main Replacement											
City	11,925	4,233	5,312	0	0	0	0	0	0	0	21,470
Private	1,358	0	32	0	0	0	0	0	0	0	1,390
Project Type Total by Source of Funds											
City	652,520	714,509	626,065	578,445	401,093	402,185	218,613	204,954	311,345	314,774	4,424,503
Federal	11,344	1,800	8,613	0	0	0	0	0	0	0	21,757
Private	1,370	0	32	0	0	0	0	0	0	0	1,402
Project Type Total											
All Funds	665,234	716,309	634,710	578,445	401,093	402,185	218,613	204,954	311,345	314,774	4,447,662

Department of Environmental Protection - Water Supply



Water Supply

The 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	\$1,280.2
•	City Tunnel No. 3 - Stage 2	652.8
•	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
TO	TAL	\$2,312.0

Kensico-City Tunnel

The 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 Ten-Year Capital Strategy provides \$652.8 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 Ten-Year Capital Strategy provides \$342.0 million for the rehabilitation of equipment at the Hillview Reservoir, including new chemical addition facilities, flow control equipment, and electrical infrastructure.

Conveyance

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

City Tunnel No. 1

The 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.

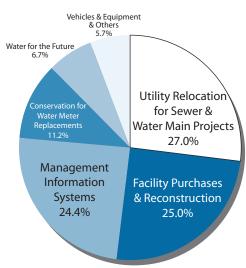
Water for the Future

The 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	2020	2021	2022	2022		S in 000's)	2024	2025	2020	2020	m . 1
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Conveyance											
City	1,000	27,473	6,000	0	0	0	0	0	0	0	34,473
Kensico-City Tunnel City	10,525	75,000	37,000	24,069	0	933,608	200,000	0	0	0	1,280,202
Miscellaneous Programs City	1,000	0	0	0	0	0	0	0	0	0	1,000
City Tunnel No. 1, Reconstruction City	0	0	965	0	0	0	0	0	0	0	965
City Tunnel No. 3, Stage 1 City	21,000	0	128,000	30,000	143,000	20,000	0	0	0	0	342,000
City Tunnel No. 3, Stage 2 City	316,619	1,483	305,000	26,700	0	0	1,500	0	0	1,500	652,802
Water For The Future City	0	0	482	0	0	0	0	0	0	0	482
Project Type Total by Source of Funds											
City	350,144	103,956	477,447	80,769	143,000	953,608	201,500	0	0	1,500	2,311,924
Project Type Total All Funds	350,144	103,956	477,447	80,769	143,000	953,608	201,500	0	0	1,500	2,311,924

Department of Environmental Protection - Equipment



Equipment & Miscellaneous Programs

The Ten-Year Capital Strategy provides \$661.4 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	\$178.8
•	Facility Purchases and Reconstruction	165.3
•	Management Information Systems	161.4
•	Conservation for Water Meter	
	Replacements	74.4
•	Water for the Future	44.4
•	Vehicles and Equipment	36.9
•	Bluebelt Program	0.2
TC	OTAL	\$661.4

Utility Relocation for Sewer and Water Main Projects

The Ten-Year Capital Strategy provides \$178.8 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 Ten-Year Capital Strategy provides \$165.3 million for the reconstruction and rehabilitation of various water and sewer field operations facilities and DEP administrative offices.

Management Information Systems

The 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 Ten-Year Capital Strategy provides \$74.4 million for the installation and replacement of water meters in residential and commercial properties.

Water for the Future

The 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 Ten-Year Capital Strategy provides \$36.9 million for the systematic replacement of vehicles and equipment used for water and sewer field operations, plant maintenance, upstate maintenance, and customer service operations.

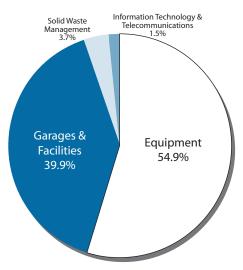
Bluebelt Program

The Ten-Year Capital Strategy includes \$0.2 million for a comprehensive stormwater management plan that reduces local flooding.

Department of Environmental Protection - Equipment

Project Type: EP						(\$ in 000's)					
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Bluebelt Program											
City	242	0	0	0	0	0	0	0	0	0	242
Conservation for Water Meter Replacements											
City	17,045	7,630	10,541	9,221	10,000	0	0	0	10,000	10,000	74,437
Management Information Systems											
City	8,580	4,520	5,553	12,125	35,125	34,900	20,000	20,000	10,000	10,000	160,803
Federal	568	0	0	0	0	0	0	0	0	0	568
Facility Purchases and Reconstruction City	28,748	8,800	54,100	3,900	18,000	50,500	1,200	0	0	0	165,248
·	20,740	0,000	34,100	3,900	18,000	30,300	1,200	U	U	U	103,240
Utility Relocation for SE and WM Projects City	17,742	10,245	15,824	43,997	45,000	46,000	0	0	0	0	178,808
·	17,742	10,243	15,624	73,777	75,000	40,000	U	U	U	U	170,000
Vehicles and Equipment City	14,261	3,420	4,257	5,618	1,000	4,344	2,000	2,000	0	0	36,900
·	11,201	3,120	1,20 /	2,010	1,000	1,5 1 1	2,000	2,000	· ·	· ·	30,700
Water for the Future City	19,088	25,287	0	0	0	0	0	0	0	0	44,375
	15,000	20,207									,. , , ,
Project Type Total by Source of Funds											
City	105,706	59,902	90,275	74,861	109,125	135,744		22,000	20,000	20,000	660,813
Federal	568	0	0	0	0	0	0	0	0	0	568
Project Type Total											
All Funds	106,274	59,902	90,275	74,861	109,125	135,744	23,200	22,000	20,000	20,000	661,381
Environmental Protection Total	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Total by Source of Funds											
City	2,634,111	2,464,189	2,690,455	2,709,545			1,487,652		915,607	926,047	19,744,003
Federal State	175,900 0	1,800 0	8,613 0	0	0			0	182,519 0	0	368,832 0
Private	1,370	0	55	0	0			0	0	0	1,425
All Funds	2,811,381	2,465,989	2,699,123	2,709,545	2,382,528	2,302,690	1,487,652	1,231,179	1,098,126	926,047	20,114,260

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 longterm waste disposal strategy that maximizes flexibility and access to available disposal alternatives, and minimizes negative environmental impacts.

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 Ten-Year Capital Strategy responds to projected needs in four primary areas.

	(in millions)
• Equipment	\$1,754.1
 Garages and Facilities 	1,276.6
Solid Waste Management	117.1
 Information Technology & 	
Telecommunications	49.0
TOTAL	\$3,196.8

Department of Sanitation

Equipment

The 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 Ten-Year Capital Strategy provides \$1.3 billion for the construction and reconstruction of garages and other facilities. This includes \$262.2 million for construction of a new Bronx 9/10/11 Garage, \$199.7 million for construction of a new Manhattan 6/6A/8 Garage, \$144.6 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 Ten-Year Capital Strategy provides \$117.1 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 Ten-Year Capital Strategy provides \$49.0 million for information technology and telecommunications projects. DSNY's information technology and telecommunications infrastructure is vital to the Department's support and management functions.

Project Type: S					(\$	§ in 000's)					
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Garages and Facilities City Federal	237,361 9,839	181,888	203,503	281,593 0	224,013	38,355 0	25,000 0	25,000 0	25,000 0	25,000 0	1,266,713 9,839
Equipment City	177,735	186,980	182,626	162,237	164,487	168,471	170,137	173,446	180,384	187,599	1,754,102
Information Technology and Communications City	9,826	8,847	3,500	3,500	4,607	3,500	3,609	3,720	3,869	4,024	49,002
Solid Waste Management City Federal	20,782 615	3,959 0	0	5,988 0	54,699 0	6,408 0	4,070 0	6,597 0	6,861 0	7,136 0	116,500 615
Project Type Total by Source of Funds											
City Federal	445,704 10,454	381,674 0	389,629 0	453,318 0	447,806 0	216,734 0	202,816 0	208,763 0	216,114	223,759 0	3,186,317 10,454
Project Type Total All Funds	456,158	381,674	389,629	453,318	447,806	216,734	202,816	208,763	216,114	223,759	3,196,771

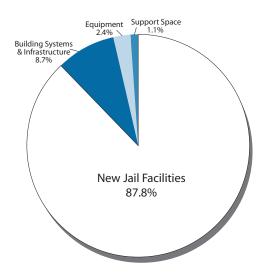
Department of Correction

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



Ten-Year Capital Strategy

The Ten-Year Capital Strategy provides \$10.0 billion to ensure sufficient capacity and support space as well as to upgrade equipment, vehicles, and necessary systems.

TOT	AL	\$9,958.3
• 5	Support Space	103.4
• I	Equipment	241.0
• I	Building Systems and Infrastructure	867.7
• 1	New Jail Facilities	\$8,746.2
		(in millions)

New Jail Facilities

The Ten-Year Capital Strategy provides \$8.7 billion for the design and construction of new jail facilities.

Building Systems and Infrastructure

The Ten-Year Capital Strategy provides \$867.7 million for building systems and infrastructure, including \$173.4 million for the upgrade of the fire/life safety systems. It also provides \$92.7 million for ADA compliance; \$60.9 million for heating, air conditioning and ventilation; \$52.8 million for electrical work; \$42.2 million for plumbing; \$22.3 million for perimeter security and fencing; and \$423.4 million for other state of good repair work.

Equipment

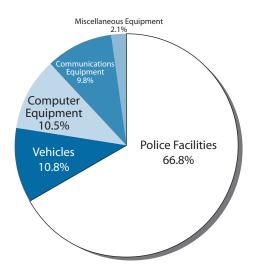
The Ten-Year Capital Strategy provides \$241.0 million for equipment replacement, including \$78.5 million for network and information technology equipment; \$50.9 million for vehicles; \$36.2 million for radio equipment replacement; \$31.1 million for generators; \$21.8 million for the replacement of food service equipment; \$17.9 million for security equipment including cameras, and \$4.6 million in other equipment.

Support Space

The Ten-Year Capital Strategy provides \$103.4 million to improve and construct support facilities and perimeter fencing. This allocation includes \$100.0 million for a new training academy, \$1.0 million for perimeter security and fencing, and \$2.4 million for other work in support space.

Project Type: C	2020	2021	2022	2023	2024	(\$ in 000's) 2025	2026	2027	2028	2029	Total
Support Space City	12,940	90,500	0	0	0	0	0	0	0	0	103,440
Equipment City	74,048	17,970	10,257	10,750	15,703	15,599	20,790	24,569	24,496	26,796	240,978
New Jail Facilities City	201,835	392,351	823,263	2,226,316	2,201,113	1,945,978	955,306	0	0	0	8,746,162
Building Systems and Infrastructure City Federal	431,921 8,727	123,770 0	115,055 0	46,189 0	25,036 0	27,256 0	23,394	20,984	22,879 0	22,476 0	858,960 8,727
Project Type Total by Source of Funds											
City Federal	720,744 8,727	624,591 0	948,575 0	2,283,255	2,241,852 0	1,988,833 0	999,490 0	45,553 0	47,375 0	49,272 0	9,949,540 8,727
Project Type Total All Funds	729,471	624,591	948,575	2,283,255	2,241,852	1,988,833	999,490	45,553	47,375	49,272	9,958,267

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 326 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.

Ten-Year Capital Strategy

The Ten-Year Capital Strategy provides \$1.7 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	\$1,147.9
•	Vehicles	184.7
•	Computer Equipment	181.3
•	Communications Equipment	168.6
•	Miscellaneous Equipment	36.2
TO	TAL	\$1,718.7

Police Department

Police Facilities

The Ten-Year Capital Strategy includes \$423.7 million for the construction of a new consolidated Property Clerk warehouse facility, \$239.4 million for the renovation of the Rodman's Neck Firearms Training Facility, \$72.4 million for the construction of the new 116 Precinct, and \$412.4 million for the renovation of police facilities, Citywide.

Vehicles

The Department will replace operational and support vehicles, including \$39.6 million for medium tow trucks, \$26.8 million for twelve-passenger vans, \$20.3 million for radio emergency patrol trucks, and \$98.0 million for other vehicles.

Computer Equipment

The Department will replace and upgrade computer equipment, including \$72.1 million for the purchase and upgrade of servers and storage equipment as a part of phase two of the Sustainable Technology Initiative, \$22.0 million to upgrade the NYPD data warehouse, \$20.1 million to enhance its local and wide area networks, and \$67.1 million for other computer equipment.

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 \$53.0 million for the replacement of radio systems, \$47.0 million for portable radios, Citywide, \$34.0 million for core radio infrastructure upgrades, and \$34.6 million for other communications equipment.

Miscellaneous Equipment

The Ten-Year Capital Strategy also provides \$36.2 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	Departm	ent
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Project Type: PO					(\$	in 000's)					
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Communications Equipment											
City	63,871	13,456	17,140	10,000	11,000	10,741	11,636	10,750	10,000	10,000	168,594
Computer Equipment	(2.24)	< 2 0 7	24.204	44.054			10.000	11 000	44.500	4= =00	101.000
City	62,249	6,297	34,281	11,354	6,081	6,000	12,000	11,000	14,500	17,500	181,262
Miscellaneous Equipment	10.050	1.720	2.462	2.051	264	270	102	200	1216	4.056	26.240
City	18,858	1,739	3,462	2,851	364	270	103	300	4,246	4,056	36,249
Police Facilities	255.042	410.502	105.075	167,170	14.500	14.500	14.500	14.500	17.000	17.000	1 101 470
City Federal	255,842 20,230	410,583 6,166	195,875 0	167,170 0	14,500 0	14,500 0	14,500 0	14,500 0	17,000 0	17,000 0	1,121,470 26,396
Vehicles	20,230	0,100	v	v	Ů	Ü	Ŭ	· ·	Ŭ	v	20,370
City	54,165	5,788	4,257	19,466	8,932	18,063	19,177	24,772	15,221	14,850	184,691
Project Type Total by Source of Funds											
City	454,985	437,863	255,015	210,841	40,877	49,574	57,416	61,322	60,967	63,406	1,692,266
Federal	20,230	6,166	0	0	0	0	0	0	0	0	26,396
Project Type Total											
All Funds	475,215	444,029	255,015	210,841	40,877	49,574	57,416	61,322	60,967	63,406	1,718,662

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.

Ten-Year Capital Strategy

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

(in millions)

 Construction/Renovation of Court Facilities

\$1,993.1

TOTAL

\$1,993.1

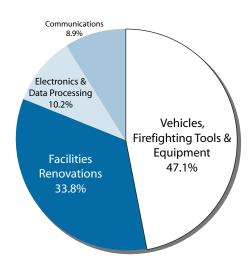
Construction/Renovation of Court Facilities

The 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; \$251.7 million for fire/life safety work; \$78.4 million for exterior renovation; \$75.4 million for electrical upgrades; \$73.5 million for elevator upgrades; and \$65.1 million for HVAC improvements.

Cc	urts	
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2020 0 435,377 2,205 435,377 2,205	2021 0 353,265 307 353,265 307	2022 0 224,860 0 224,860 0	11,787 145,728 0 157,515	2024 0 263,058 0	0 167,130 0	2026 0 127,452 0	0 92,304 0	0 83,159 0	0 86,486 0	11,787 1,978,819 2,512
435,377 2,205 435,377 2,205	353,265 307 353,265	224,860 0 224,860	145,728 0	263,058 0	167,130	127,452	92,304	83,159	86,486	1,978,819
435,377 2,205 435,377 2,205	353,265 307 353,265	224,860 0 224,860	145,728 0	263,058 0	167,130	127,452	92,304	83,159	86,486	1,978,819
2,205 435,377 2,205	307 353,265	224,860	157,515	0						
2,205 435,377 2,205	307 353,265	224,860	157,515	0						
435,377 2,205	353,265	224,860	157,515							2,312
2,205				263.058						
2,205				263.058						
	307	U	U	203,038	167,130 0	127,452 0	92,304 0	83,159 0	86,486 0	1,990,606
127 500				U	Ü	U	U	U	U	2,512
127 502										
431,382	353,572	224,860	157,515	263,058	167,130	127,452	92,304	83,159	86,486	1,993,118

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 prehospital 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.

Ten-Year Capital Strategy

The Ten-Year Capital Strategy provides \$1.4 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	\$656.1
•	Facilities Renovation	470.8
•	Electronics and Data Processing	142.0
•	Communications	123.9
TO	TAL	\$1,392.8

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 Ten-Year Capital Strategy provides \$656.1 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 Ten-Year Capital Strategy includes \$412.5 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 Ten-Year Capital Strategy also includes \$58.3 million to facilitate structural improvements at the EMS Academy at Fort Totten.

Electronic Data Processing

The Ten-Year Capital Strategy provides \$109.6 million for the replacement/upgrade of equipment components that are approaching the end of useful life, and \$32.4 million for the upgrade of the 911 communications system infrastructure.

Communications

The Ten-Year Capital Strategy provides \$94.4 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, \$15.7 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 Depart	tment
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Project Type: F					(5	\$ in 000's)					
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Communications											
City Federal	8,959 38,023	6,759 45,073	15,017 0	700 0	700 0	700 0	1,000 0	1,000 0	3,000 0	3,000 0	40,835 83,096
Electronics and Data Processing City	47,209	11,629	25,877	10,000	10,000	4,850	3,500	3,500	9,794	15,663	142,022
New Facilities and Renovations											
City Federal	38,596 3,237	99,330 110	99,491 0	25,000 0	25,000 0	25,000 0	30,000 0	30,000 0	40,000 0	55,000 0	467,417 3,347
Vehicles, Firefighting Tools and Equipment City	102,711	49,728	52,545	107,965	83,007	85,357	81,111	52,270	27,254	14,135	656,083
Project Type Total by Source of Funds											
City Federal	197,475 41,260	167,446 45,183	192,930 0	143,665 0	118,707 0	115,907 0	115,611 0	86,770 0	80,048 0	87,798 0	1,306,357 86,443
Project Type Total All Funds	238,735	212,629	192,930	143,665	118,707	115,907	115,611	86,770	80,048	87,798	1,392,800

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 2017-2018 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 Ten-Year Capital Strategy determines the funding levels available to the Department.

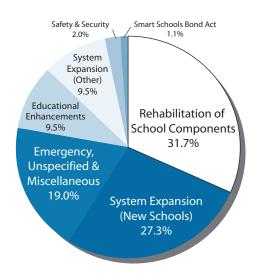
The first year of the Ten-Year Capital Strategy is also the first year of the Department of Education's Five-Year Capital Plan.

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 support the City's sports programs through the rehabilitation of athletic fields.

Department of Education



Ten-Year Capital Strategy

The Ten-Year Capital Strategy provides the Department with a lump-sum allocation of \$24.1 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	6,575.9
•	Emergency, Inspection,	
	and Miscellaneous	4,571.3
•	Educational Enhancements	2,295.8
•	System Expansion - Other	2,285.6
•	Safety and Security	477.6
•	Smart Schools Bond Act	260.0
TO	ΓAL	\$24,110.4

Rehabilitation of School Components

The 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 Ten-Year Capital Strategy provides \$8.9 billion for system expansion. Of this amount, \$6.6 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 Ten-Year Capital Strategy provides \$4.6 billion for miscellaneous capital improvements, including federally funded disaster relief, administrative costs, emergency projects, research and development, and prior plan completion costs.

Educational Enhancements

The Ten-Year Capital Strategy designates \$2.3 billion to capital improvements associated with recent programmatic needs, such as providing computers for teachers and students. Funds will also be used to purchase educational software, upgrade networks, make schools accessible, 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 Ten-Year Capital Strategy provides \$477.6 million for security systems, emergency lighting and code compliance.

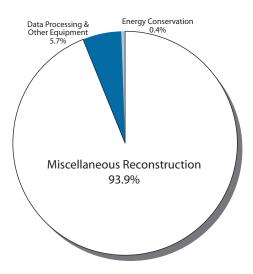
Smart Schools Bond Act

The Ten-Year Capital Strategy allocates \$260.0 million from a \$2.0 billion New York State general obligation bond, known as the Smart Schools Bond Act, which was brought before voters and passed in November 2014. Funds may be used for technological enhancements, expansion of pre-kindergarten capacity, and the removal of Transportable Classroom Units (TCUs).

Department of Education

City Pole						(\$ in 000's)					
City P13,577 439,885 531,460 431,410 250,971 318,605 378,326 329,494 342,674 356,380 Federal 72,282 0		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Federal State 72,282 0 0 0 0 0 0 0 0 0	Emergency, Inspection and Miscellaneous											
State 0	City	913,577	439,885	531,460	431,410	250,971	318,605	378,326	329,494	342,674	356,380	4,292,782
Automate Educational Enhancements	Federal	72,282	0	0	0		0	0	0	0	0	72,282
City State 405,580 298,814 365,140 360,840 306,803 68,530 115,881 92,560 96,262 100,113 State 0 45,076 0 0 0 40,247 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	State	0	147,165	0	0	59,029	0	0	0	0	0	206,194
State 0 45,076 0 0 40,247 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Educational Enhancements											
Project Type Total by Source of Funds Project Type Total by Source Of Project Type	City	405,580		365,140	360,840		68,530	115,881	92,560	96,262	100,113	2,210,523
City State 971,880 463,934 700,040 787,120 619,166 774,273 674,790 714,166 742,733 772,442 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	State	0	45,076	0	0	40,247	0	0	0	0	0	85,323
State 0 262,486 0 0 161,124 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Pehabilitation of School Components											
Total by Source of Funds Total by Source of	City	971,880	463,934	700,040	787,120	619,166	774,273	674,790	714,166	742,733	772,442	7,220,544
City	State	0	262,486	0	0	161,124	0	0	0	0	0	423,610
State 0 1,946 0 0 13,008 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	afety and Security											
State 260,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	City	70,990	66,454	66,350	68,400	54,962	12,592	5,003	37,780	39,291	40,863	462,685
State 260,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	State	0	1,946	0	0	13,008	0	0	0	0	0	14,954
City 683,290 1,250,525 1,627,850 1,350,230 1,386,974 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	mart Schools Bond Act											
City State 683,290 1,250,525 1,627,850 1,350,230 1,386,974 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	State	260,000	0	0	0	0	0	0	0	0	0	260,000
State 0 54,245 0 0 222,776 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ystem Expansion (New Schools)											
State 0 54,245 0 0 222,776 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	City	683,290	1,250,525	1,627,850	1,350,230	1,386,974	0	0	0	0	0	6,298,869
City State 760,670 310,208 340,480 516,380 58,454 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	State	0	54,245	0	0	222,776	0	0	0	0	0	277,021
City State 760,670 310,208 340,480 516,380 58,454 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ystem Expansion (Other)											
State 0 233,162 0 0 66,266 0 0 0 0 0 Project Type Total by Source of Funds City 3,805,987 2,829,820 3,631,320 3,514,380 2,677,330 1,174,000 1,174,000 1,220,960 1,269,798 Federal 72,282 0	•	760,670	310,208	340,480	516,380	58,454	0	0	0	0	0	1,986,192
City 3,805,987 2,829,820 3,631,320 3,514,380 2,677,330 1,174,000 1,174,000 1,220,960 1,269,798 Federal 72,282 0 0 0 0 0 0 0 0 0 0 0 0 0				0		66,266			0	0		299,428
City 3,805,987 2,829,820 3,631,320 3,514,380 2,677,330 1,174,000 1,174,000 1,220,960 1,269,798 Federal 72,282 0 0 0 0 0 0 0 0 0 0 0 0 0	Project Type Total by Source of Funds											
Federal 72,282 0 0 0 0 0 0 0 0 0 0	City	3,805,987	2,829,820	3.631.320	3,514,380	2,677,330	1.174.000	1.174.000	1.174.000	1.220.960	1,269,798	22,471,595
											0	72,282
			744,080	0	0	562,450	0	0	0	0	0	1,566,530
Project Type Total	Project Type Total											
All Funds 4,138,269 3,573,900 3,631,320 3,514,380 3,239,780 1,174,000 1,174,000 1,220,960 1,269,798		4.138.269	3,573,900	3,631,320	3.514.380	3.239.780	1.174.000	1.174.000	1.174.000	1.220.960	1.269.798	24,110,407
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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 in 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.

Ten-Year Capital Strategy

The Ten-Year Capital Strategy totals \$666.1 million. The City funds its share of the University's large construction projects through its 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 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.

TO	TAL	\$666.1
•	Energy Conservation	2.8
•	Data Processing and Other Equipment	38.0
•	Miscellaneous Reconstruction	\$625.3
		(in millions)

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City University

Miscellaneous Reconstruction

The Ten-Year Capital Strategy provides \$625.3 million for the replacement or rehabilitation of roofs, windows, elevators, and exterior and interior renovations. This amount includes \$20.0 million annually for various critical maintenance projects to maintain a state of good repair. Additionally, \$8.5 million allocated in a prior plan continues to support the expansion of the nationally-acclaimed Accelerated Study in 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 Ten-Year Capital Strategy provides \$38.0 million for the purchase of computer, laboratory and other equipment.

Energy Conservation

The 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	5,177	18,606	13,210	623	0	0	0	0	0	0	37,616
Energy Conservation Projects											
City	0	1,597	0	1,228	0	0	0	0	0	0	2,825
Athletic Fields, Gymnasiums and Equipment											
City	342	0	0	0	0	0	0	0	0	0	342
Federal, State and Local Mandates											
City	0	5	10	0	0	0	0	0	0	0	15
Electrical, Mechanical and HVAC System											
/ pgrading City	0	0	250	0	0	0	0	0	0	0	250
New School Construction											
City	0	0	13,932	13,875	0	0	0	0	0	0	27,807
Aiscellaneous Reconstruction											
City	126,344	115,620	122,981	72,436	23,506	23,622	24,354	25,109	26,113	27,158	587,243
Federal	4,139	0	0	0	0	0	0	0	0	0	4,139
State	5,381	65	0	0	0	0	0	0	0	0	5,446
Private	155	0	0	0	0	0	0	0	0	0	155
Security Systems											
City	0	0	219	0	0	0	0	0	0	0	219
Project Type Total by Source of Funds											
City	131,863	135,828	150,602	88,162	23,506	23,622	24,354	25,109	26,113	27,158	656,317
Federal	4,139	0	0	0	0	0	0	0	0	0	4,139
State	5,381	65	0	0	0	0	0	0	0	0	5,446
Private	155	0	0	0	0	0	0	0	0	0	155
Project Type Total											
All Funds	141,538	135,893	150,602	88,162	23,506	23,622	24,354	25,109	26,113	27,158	666,057

Department of Health and Mental Hygiene

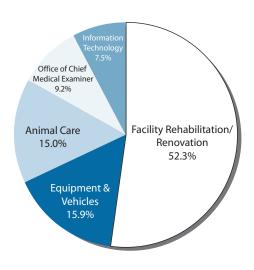
The Department of Health and Mental Hygiene (DOHMH) is an integral component of public safety by preserving core public health infrastructure and protecting New Yorkers from existing and emerging threats, both natural and human-made. DOHMH currently maintains public health facilities in all five boroughs, 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 sitdown restaurants). The Department also plays an important role in animal care and control - specifically in funding their capital improvement needs.

The Department's 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



Ten-Year Capital Strategy

The focus of the 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	\$327.0
•	Equipment and Vehicles	99.3
•	Animal Care	93.7
•	Office of Chief Medical Examiner	57.7
•	Information Technology	47.0
	TOTAL	\$624.7

Facility Rehabilitation and Renovation

The Ten-Year Capital Strategy provides \$147.5 million for laboratory improvement. Funding of \$170.6 million is provided for the renovation of various public health facilities. The Ten-Year Capital Strategy reflects a commitment to assessing, maintaining, and improving conditions throughout the agency's facilities portfolio.

Equipment and Vehicles

Funding of \$99.3 million is provided in the Ten-Year Capital Strategy for the purchase of equipment and vehicles to maintain and improve public health services.

Animal Care

Funding of \$93.7 million is provided in the 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 animal care centers in Brooklyn and Manhattan, and other animal welfare investments.

Office of Chief Medical Examiner

The Ten-Year Capital Strategy provides \$57.7 million for OCME projects, including IT upgrades and laboratory equipment.

Information Technology

The Ten-Year Capital Strategy provides \$47.0 million to purchase technology to maintain and improve services. This includes \$25.9 million to gradually replace the agency's personal computers and network servers.

Department of Health and Mental Hygiene

Project Type: HL					(\$	in 000's)					
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
dministration											
City	4,687	1,617	100	0	0	0	0	0	0	0	6,404
nimal Care											
City	18,880	27,193	47,312	0	250	0	0	0	0	0	93,635
CME											
City	9,196	4,263	7,329	7,703	6,907	6,976	5,901	4,500	2,429	2,527	57,731
formation Technology											
City	5,293	3,382	4,488	4,029	6,580	5,600	6,094	6,717	0	0	42,183
State	487	393	446	375	814	693	753	830	0	0	4,791
quipment and Vehicles											
City	16,310	13,551	29,948	13,860	10,278	8,088	5,251	1,458	0	0	98,744
State	270	39	87	89	0	87	0	0	0	0	572
aboratories											
City	1,000	0	1,500	0	0	0	0	0	0	0	2,500
linic Renovation and Rehabilitation											
City	47,426	86,546	52,596	32,807	10,137	13,890	16,767	14,000	21,546	22,408	318,123
Project Type Total by Source of Funds											
City	102,792	136,552	143,273	58,399	34,152	34,554	34,013	26,675	23,975	24,935	619,320
State	757	432	533	464	814	780	753	830	0	0	5,363
Project Type Total											
All Funds	103,549	136,984	143,806	58,863	34,966	35,334	34,766	27,505	23,975	24,935	624,683

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, four long-term care facilities, a certified home health care agency, and more than 60 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.

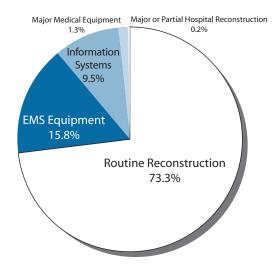
Capital Program Goals

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 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



Ten-Year Capital Strategy

The 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 Reconstru	iction	\$1,920.4
Emergency Medical	al Services Equipment	413.3
• Information System	ns	248.3
• Major Medical Eq	uipment	34.2
• Major or Partial H	ospital Reconstruction	5.1
TOTAL		\$2,621.3

Routine Reconstruction

The Ten-Year Capital Strategy breakdown is as follows: \$1.1 billion of federal funds and \$834.3 million of City funds.

\$1.0 billion of federal funding is associated with Hurricane Sandy storm damage projects, in addition to \$62.1 million for mitigation work. Regarding the City fund portion, HHC's is making a \$106.1 million investment in primary care expansion in underserved areas.

Emergency Medical Services Equipment

The Ten-Year Capital Strategy provides \$413.3 million for the purchase of FDNY/EMS ambulances.

Information Technology Systems

The Ten-Year Capital Strategy provides \$144.7 million for the replacement of the Revenue Cycle Management and the Electronic Medical Record systems. This category also includes \$103.6 million for the implementation of other major IT projects such as the upgrade of HHC's network infrastructure, biomedical equipment, and radiology imaging system.

Major Medical Equipment

The Ten-Year Capital Strategy includes \$34.2 million for the purchase of a variety of medical equipment.

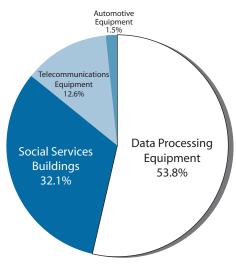
Major of Partial Hospital Reconstruction

The Ten-Year Capital Strategy includes \$5.1 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	197,724	49,439	1,142	0	0	0	0	0	0	0	248,305
Emergency Medical Services Equipment											
City	39,162	34,944	61,319	32,557	27,856	34,967	38,339	68,652	40,076	34,816	412,688
Federal	417	139	0	0	0	0	0	0	0	0	556
Major Medical Equipment											
City	24,046	9,431	0	0	0	0	0	0	0	0	33,477
Federal	556	185	0	0	0	0	0	0	0	0	741
Major or Partial Hospital Reconstruction											
City	293	2,000	2,842	0	0	0	0	0	0	0	5,135
Routine Reconstruction											
City	175,063	203,321	157,726	74,289	25,000	25,000	25,113	25,000	57,322	66,478	834,312
Federal	329,626	367,591	263,956	124,953	0	0	0	0	0	0	1,086,126
Project Type Total by Source of Funds											
City	436,288	299,135	223,029	106,846	52,856	59,967	63,452	93,652	97,398	101,294	1,533,917
Federal	330,599	367,915	263,956	124,953	0	0	0	0	0	0	1,087,423
Project Type Total											
All Funds	766,887	667,050	486,985	231,799	52,856	59,967	63,452	93,652	97,398	101,294	2,621,340

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.

Ten-Year Capital Strategy

A primary focus of the Ten-Year Capital Strategy is to improve employee productivity and the delivery of client services. 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	\$147.9
•	Social Services Buildings	88.2
•	Telecommunications Equipment	34.8
•	Automotive Equipment	4.1
TO	TAL	\$275.0

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Human Resources Administration

Data Processing Equipment

The Ten-Year Capital Strategy provides \$147.9 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 Ten-Year Capital Strategy provides \$88.2 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

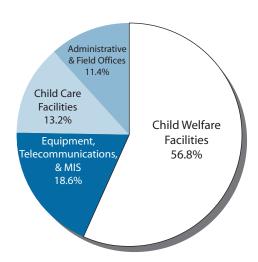
The Ten-Year Capital Strategy provides \$34.8 million to improve connectivity among agency personnel and contract service providers. This includes updates to various HRA-managed systems including HRA's interactive voice response systems, an extensive network of servers and data storage systems, and routine replacement of workstation equipment.

Automotive Equipment

The Ten-Year Capital Strategy provides \$4.1 million to replace vans and trucks utilized in both programmatic support and agency internal operations.

Project Type: HR					(\$	in 000's)					
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Telecommunications Equipment											
City	4,577	724	0	1,620	2,762	2,507	2,554	2,549	100	0	17,393
Federal	2,757	445	0	1,116	1,945	1,791	1,824	1,790	71	0	11,739
State	1,429	245	0	510	930	819	834	863	33	0	5,663
Data Processing Equipment											
City	66,400	16,966	5,263	264	0	732	2,957	2,517	2,198	2,182	99,479
Federal	14,979	2,854	2,870	0	0	493	1,991	1,695	1,480	1,470	27,832
State	13,559	1,565	1,566	0	0	269	1,086	925	807	802	20,579
Social Services Buildings											
City	38,531	6,106	4,368	6,548	1,132	957	4,105	3,702	3,430	3,463	72,342
Federal	6,167	2,163	0	0	762	440	453	467	486	506	11,444
State	1,513	1,168	0	0	416	240	247	255	265	276	4,380
Automotive Equipment											
City	478	324	441	586	220	111	114	118	123	128	2,643
Federal	18	75	170	162	148	75	42	43	83	86	902
State	10	41	93	89	81	41	77	79	45	47	603
Project Type Total by Source of Funds											
City	109,986	24,120	10,072	9,018	4,114	4,307	9,730	8,886	5,851	5,773	191,857
Federal	23,921	5,537	3,040	1,278	2,855	2,799	4,310	3,995	2,120	2,062	51,917
State	16,511	3,019	1,659	599	1,427	1,369	2,244	2,122	1,150	1,125	31,225
Project Type Total											
All Funds	150,418	32,676	14,771	10,895	8,396	8,475	16,284	15,003	9,121	8,960	274,999

Administration for Children's Services



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, as well as detention services to juveniles remanded to ACS custody by the courts.

The Agency is responsible for various facilities including the ACS Children's Center, 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;

Ten-Year Capital Strategy

The primary focus of the 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	\$222.7
•	Equipment, Telecommunications & MIS	73.2
•	Child Care Facilities	51.9
•	Administrative & Field Offices	44.6
	TOTAL	\$392.4

Child Welfare Facilities

The Ten-Year Capital Strategy provides \$222.7 million for the renovation of child welfare facilities including juvenile detention facilities.

Equipment, Telecommunications, & MIS

The Ten-Year Capital Strategy provides \$73.2 million for information technology and telecommunications.

Child Care Facilities

The Ten-Year Capital Strategy provides \$51.9 million for the construction and renovation of daycare centers throughout the City.

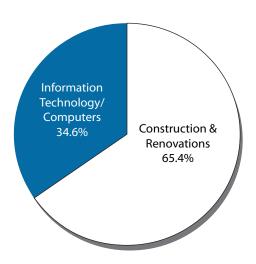
Administrative & Field Offices

The Ten-Year Capital Strategy provides \$44.6 million for the construction and renovation of central and field offices.

Chi	ldren's	Services
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Project Type: CS					(\$	in 000's)					
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Child Welfare Facilities											
City	111,973	57,595	16,207	1,612	3,000	3,000	0	0	8,951	9,309	211,647
Federal	918	670	929	744	0	0	0	0	0	0	3,261
State	2,243	1,599	2,219	1,777	0	0	0	0	0	0	7,838
Day Care Facilities											
City	6,089	9,266	8,012	19,134	1,267	1,444	1,622	2,491	2,576	0	51,901
Equipment											
City	9,359	5,945	4,407	8,780	8,862	10,228	7,745	3,274	0	0	58,600
Federal	2,258	1,213	0	770	0	0	0	0	0	0	4,241
State	5,466	3,033	0	1,861	0	0	0	0	0	0	10,360
Social Service Buildings											
City	8,992	4,138	7,974	2,526	1,942	0	2,529	2,620	0	0	30,721
Federal	1,733	900	1,421	0	0	0	0	0	0	0	4,054
State	4,372	1,962	3,466	0	0	0	0	0	0	0	9,800
Project Type Total by Source of Funds											
City	136,413	76,944	36,600	32,052	15,071	14,672	11,896	8,385	11,527	9,309	352,869
Federal	4,909	2,783	2,350	1,514	0	0	0	0	0	0	11,556
State	12,081	6,594	5,685	3,638	0	0	0	0	0	0	27,998
Project Type Total All Funds	152 402	96 221	11 625	27 204	15 071	14 672	11 206	0 205	11 527	0.200	202 422
All Fullds	153,403	86,321	44,635	37,204	15,071	14,672	11,896	8,385	11,527	9,309	392,423

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.

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	\$38.7
•	Information Technology/ Computers	20.5
TO	TAL	\$59.2

Construction and Renovations

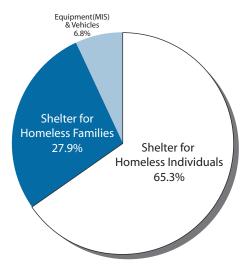
The Ten-Year Capital Strategy provides \$38.7 million to complete renovations and upgrades for the various senior centers around the City. Funds are also provided to ensure the agency's fire and safety infrastructure meet standards, and that necessary improvements for HVAC, masonry, roofing, electrical, plumbing are completed.

Information Technology and Computers

The Ten-Year Capital Strategy provides \$20.5 million for the technology needs of the agency as well as technology improvements for the agency's contractors and service providers.

Project Type: AG	(\$ in 000's)										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Data Processing and Information Technology City	3,012	0	2,354	3,184	804	7,088	2,728	1,393	0	0	20,563
Department for the Aging Building Reconstruction City	4,434	3,840	9,569	5,389	8,295	2,926	2,270	896	520	541	38,680
Project Type Total by Source of Funds											
City	7,446	3,840	11,923	8,573	9,099	10,014	4,998	2,289	520	541	59,243
Project Type Total All Funds	7,446	3,840	11,923	8,573	9,099	10,014	4,998	2,289	520	541	59,243

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.

Ten-Year Capital Strategy

The Ten-Year Capital Strategy totals \$649.0 million, which includes \$604.8 million for transitional housing for homeless individuals and families, and \$44.2 million for IT, Equipment & vehicle needs.

TO	TAL	\$649.0
•	Equipment (MIS) and Vehicles	44.2
•	Shelter for Homeless Families	181.0
•	Shelter for Homeless Individuals	\$423.8
		(in millions)

Shelter for Homeless Individuals & Families

The major goal of the Ten-Year Capital Strategy is the comprehensive upgrades and renovations across shelters and expansion of transitional housing for homeless families and single adults. This approach is in continuation with the Mayor's Turning the Tide on Homelessness plan. The Ten-Year Capital Strategy allocates 93 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 improvements. Major projects include the exterior and interior upgrades at Bellevue-30th Street intake center, roof/façade work at Harlem 1, boiler and electrical upgrade at Regent Family Residence, and roof, boiler and plumbing system at the 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. A total \$38.8 million is set aside for department's technology needs.

Purchase of Vehicles

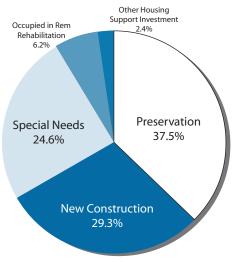
The Department's vehicle strategy involves a continuation of funding for the purchase and replacement of Department vehicles. These vehicles facilitate the transportation of clients between intake locations and placement shelters. They are also used to assist clients in moving into permanent housing. A total \$5.4 million is allocated for future vehicle needs.

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	68,985	68,224	77,570	49,515	51,138	39,749	1,519	22,854	21,884	22,359	423,797
Equipment City	24,191	8,620	3,928	3,182	1,884	2,360	0	0	0	0	44,165
Shelters for Homeless Families											
City	17,037	14,775	14,354	37,905	61,487	13,305	22,167	0	0	0	181,030
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	110,258	91,642	95,852	90,602	114,509	55,414	23,686	22,854	21,884	22,359	649,060
Project Type Total All Funds	110,258	91,642	95,852	90,602	114,509	55,414	23,686	22,854	21,884	22,359	649,060

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 or 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 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.



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.

Ten-Year Capital Strategy

The Ten-Year Capital Strategy provides \$9.7 billion for HPD in support of its capital program goals from 2020-2029. Of this amount, \$9.4 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	\$3,655.4
•	New Construction	2,859.8
•	Special Needs	2,399.7
•	Occupied In Rem Rehabilitation	600.4
•	Other Housing Support Investment	232.0
	TOTAL	\$9,747.3

Preservation

The 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.

New Construction

The Ten-Year Capital Strategy provides \$2.9 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 Ten-Year Capital Strategy provides \$2.4 billion for the construction and preservation of housing for seniors, persons with disabilities, and formerly homeless households throughout the five boroughs.

Occupied In Rem Rehabilitation

The Ten-Year Capital Strategy provides \$600.4 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 Ten-Year Capital Strategy provides \$232.0 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.

Project Type: HD						s in 000's)					
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
New Housing Construction											
City	424,051	341,933	408,844	261,806	283,537	189,658	206,133	238,298	247,829	257,742	2,859,831
Other Housing Support Investment City	13,929	19,147	19,068	20,979	22,929	33,045	24,336	25,178	26,184	27,232	232,027
Occupied In Rem Rehabilitation											
City	101,555	62,422	49,919	60,043	43,082	52,974	54,616	56,309	58,561	60,903	600,384
Preservation											
City	422,095	433,466	462,887	420,126	414,199	280,912	289,621	298,599	310,543	322,965	3,655,413
Special Needs Housing											
City	284,415	265,193	233,774	139,000	138,000	190,542	196,449	202,540	210,644	219,069	2,079,626
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	1,246,045	1,122,161	1,174,492	901,954	901,747	747,131	771,155	820,924	853,761	887,911	9,427,281
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											
All Funds	1,278,045	1,154,161	1,206,492	933,954	933,747	779,131	803,155	852,924	885,761	919,911	9,747,281

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 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

Ten-Year Capital Strategy

The 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)

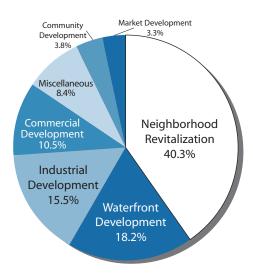
 Low to Moderate Income Public Housing Upgrade & Replacement

\$3.0

TOTAL \$3.0

Project Type: HA					(\$	8 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	419,422	326,000	376,000	326,000	326,000	326,000	326,465	327,944	200,000	0	2,953,831
Project Type Total by Source of Funds											
City	429,422	336,000	386,000	336,000	336,000	336,000	336,465	337,944	200,000	0	3,033,831
Project Type Total All Funds	429,422	336,000	386,000	336,000	336,000	336,000	336,465	337,944	200,000	0	3,033,831

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 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 upgrade infrastructure in the City's industrial areas;
- 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; and
- To provide public market facilities.

Ten-Year Capital Strategy

	(in millions)
 Neighborhood Revitalization 	\$1,582.3
Waterfront Development	715.4
 Industrial Development 	607.5
 Commercial Development 	412.9
 Miscellaneous 	329.2
 Community Development 	146.9
 Market Development 	128.1
TOTAL	\$3,922.3

Department of Small Business Services

Neighborhood Revitalization

The 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 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.

Waterfront Development

The 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 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.

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 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 425 businesses generating 10,000 jobs. The Ten-Year Capital Strategy also includes on-going infrastructure improvements at the Brooklyn Army Terminal and Bush Terminal.

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 Ten-Year Capital Strategy supports the City's vision of investment into the life sciences industry in the City.

Miscellaneous

The 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). This category also includes resiliency projects.

Community Development

NYCEDC continues its efforts to foster community development by leading the completion of the Manhattan Greenway, a continuous 32.5-mile route around Manhattan intended to transform the waterfront into a green attraction for recreational and commuting use, as well as certain other projects.

Market Development

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

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	10,736	76,069	160,967	71,661	59,818	22,225	0	0	0	0	401,476
Federal	4,732	0	0	429	0	0	0	0	0	0	5,161
State	6,300	0	0	1	0	0	0	0	0	0	6,301
Community Development											
City	35,166	1,041	104,136	6,172	0	0	0	0	0	0	146,515
Federal	0	0	15	0	0	0	0	0	0	0	15
State	365	0	0	0	0	0	0	0	0	0	365
Industrial Development											
City	91,854	60,544	169,601	100,182	28,002	18,350	15,965	16,944	16,582	17,245	535,269
Federal	72,102	104	0	0	0	0	0	0	0	0	72,206
Market Development											
City	1,500	12,512	34,722	45,886	19,877	13,249	0	0	0	0	127,746
Federal	320	0	0	0	0	0	0	0	0	0	320
Miscellaneous											
City	54,240	92,397	74,015	12,750	7,690	4,000	4,124	4,252	4,422	4,559	262,449
Federal	66,644	0	0	0	0,000	0	0	0	0	0	66,644
Neighborhood Revitalization	00,011	· ·	v	V	V	V	V	V	V	O	00,011
	(2.401	266 476	521.266	333,818	257 270	70.574	0.500	0	0	0	1 520 205
City Federal	63,401	266,476	521,266		256,270	70,574	8,580	0	0	0	1,520,385 61,173
State	12,872 70	12,078 718	2,761 0	33,462 0	$0 \\ 0$	$0 \\ 0$	0	0	0	0	788
Waterfront Development	, 0	,10	Ů	· ·	Ů	Ů	v	· ·	· ·	Ŭ	700
City	168,692	257,885	125,158	81,828	23,340	7,000	0	0	0	0	663,903
Federal	16,657	28,136	340	1,574	4,157	7,000	0	0	0	0	50,864
State	0	28,130	36	1,5/4	627	0	0	0	0	0	663
									•		
Project Type Total by Source of Funds											
City	425,589	766,924	1,189,865	652,297	394,997	135,398	28,669	21,196	21,004	21,804	3,657,743
Federal	173,327	40,318	3,116	35,465	4,157	0	0	0	0	0	256,383
State	6,735	718	36	1	627	0	0	0	0	0	8,117
Project Type Total											
All Funds	605,651	807,960	1,193,017	687,763	399,781	135,398	28,669	21,196	21,004	21,804	3,922,243

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

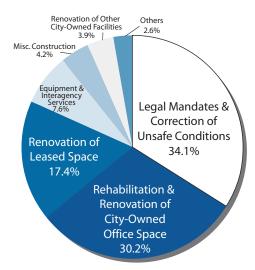
- To rehabilitate and maintain public structures, including piers and bulkheads;
- To reconstruct public buildings;
- To coordinate and enhance citywide space planning;
- To improve the procurement, warehousing, and distribution of goods;
- To increase productivity through advanced technology/ information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

Ten-Year Capital Strategy

The 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 Ten-Year Capital Strategy seeks to correct existing or potential safety hazards.

The Ten-Year Capital Strategy totals \$1.9 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** \$621.3 Rehabilitation and Renovation of City-Owned Office Space 549.4 Renovation of Leased Space 317.2 Equipment and Interagency Services 138.9 Miscellaneous Construction 75.4 Renovation of Other City-Owned Facilities 71.1 Acquisition of Real Property 32.1 Board of Elections Modernization 11.5 Rehabilitation of Court Buildings 1.4 Communications Equipment 1.4 **TOTAL** \$1,819.7

Legal Mandates and Correction of Unsafe Conditions

The correction of code violations and compliance with legal mandates represents \$621.3 million of the Ten-Year Capital Strategy. Legally mandated work will include \$363.1 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 \$51.2 million for Local Law 11 façade repairs.

Rehabilitation and Renovation of City-Owned Office Space

The Ten-Year Capital Strategy provides \$549.4 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 Ten-Year Capital Strategy provides \$68.3 million for the Manhattan Municipal Building, \$32.7 million for 1932 Arthur Avenue in the Bronx, \$22.2 million for 100 Gold Street in Manhattan, \$14.3 million for the Queens Borough Hall, and \$26.2 for renovations at 253 Broadway. Funding is also provided for projects at 345 Adams Street, Brooklyn (\$119.9 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 Ten-Year Capital Strategy provides \$317.2 million for leased space renovations. Funding is primarily for agency office consolidations and office space needs when City-owned facilities are not available. The Ten-Year Capital Strategy provides \$85.0 million for expansion of Department of Emergency Management leased space in Brooklyn, \$16.2 million for the renovation of the Department of Finance Queens Business Center, and \$14.2 million for infrastructure upgrades at the Department of Information Technology & Telecommunications' leased facility at 11 MetroTech Center.

Equipment and Interagency Services

The Ten-Year Capital Strategy provides \$138.9 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 Ten-Year Capital Strategy provides \$75.4 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.

Renovation of Other City-Owned Facilities

The Ten-Year Capital Strategy provides \$71.1 million for renovation of other City-owned facilities, including \$64.5 million for facility remediation and construction for the Taxi and Limousine Commission in Woodside, Queens.

Acquisition of Real Property

The Ten-Year Capital Strategy provides \$32.1 million for the acquisition of real property, including \$32.0 million for the acquisition of impacted parkland for the construction of the Staten Island Levee.

Board of Elections Modernization

The Ten-Year Capital Strategy provides \$11.5 million for Board of Elections modernization, including \$6.3 million for the purchase and installation of electronic voting systems and related accessories.

Rehabilitation of Court Buildings

The 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.

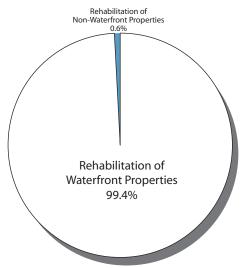
Communications Equipment

The Ten-Year Capital Strategy provides \$1.4 million for communications equipment, including \$0.6 million for Voice Over Internet Protocol (VOIP) phones.

Department of Citywide Administrative Services - Public Buildings

Project Type: PW					(\$	in 000's)							
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total		
Acquisition of Real Property													
City	32,000	0	0	95	0	0	0	0	0	0	32,095		
Communications Equipment													
City	758	321	322	0	0	0	0	0	0	0	1,401		
Rehabilitation of Court Buildings	000	0	50	0	500	0	0	0	0	0	1 440		
City	890	0	50	0	500	0	0	0	0	0	1,440		
Board of Elections Modernization City	1,115	707	1,955	6,030	1,164	549	0	0	0	0	11,520		
·	1,113	707	1,933	0,030	1,104	349	U	0	U	U	11,320		
Equipment and Interagency Services City	31,472	30,962	33,866	5,869	6,641	5,617	5,790	5,970	6,209	6,458	138,854		
•	31,472	30,702	33,800	3,607	0,041	3,017	3,770	3,770	0,207	0,436	150,057		
Legal Mandates and Correction of Unsafe Conditions													
City	60,012	115,059	153,447	136,181	29,875	23,696	24,431	25,188	26,195	27,243	621,327		
Miscellaneous Construction													
City	35,494	29,261	5,367	5,059	200	0	0	0	0	0	75,381		
Rehabilitation of City-Owned Office Space													
City	140,578	61,612	107,520	110,908	71,092	19,256	10,954	8,818	9,171	9,538	549,447		
Renovation of Leased Space													
City	89,389	46,569	28,438	52,704	38,045	11,593	11,952	12,322	12,815	13,327	317,154		
Renovation of Other City-Owned Facilities	(•					
City	65,540	5,576	0	0	0	0	0	0	0	0	71,116		
Project Type Total by Source of Funds													
City	457,248	290,067	330,965	316,846	147,517	60,711	53,127	52,298	54,390	56,566	1,819,735		
,													
Project Type Total													
All Funds	457,248	290,067	330,965	316,846	147,517	60,711	53,127	52,298	54,390	56,566	1,819,735		

Department of Citywide Administrative Services - Real Property



Real Property

	(in millions)
 Rehabilitation of 	
Waterfront Properties	\$52.6
 Rehabilitation of 	
Non-Waterfront Properties	0.3
TOTAL	\$52.9

Rehabilitation of Waterfront Properties

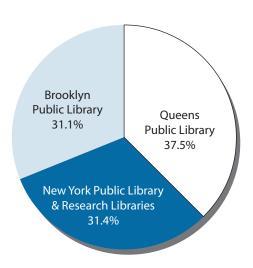
The Ten-Year Capital Strategy includes \$52.6 million for the reconstruction of DCAS-managed waterfront properties.

Rehabilitation of Non-Waterfront Properties

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

Department of Citywide Administrative Services - Real Property Project Type: RE (\$ in 000's) 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 Total Rehabilitation of Non-Waterfront Properties 0 0 0 0 City 0 250 44 0 0 294 Rehabilitation of Waterfront Properties City 37 17,356 4,340 4,050 4,184 4,314 4,625 4,810 52,600 4,437 4,447 Project Type Total by Source of Funds City 37 17,606 4,384 4,437 4,050 4,184 4,314 4,447 4,625 4,810 52,894 Project Type Total All Funds 37 52,894 17,606 4,384 4,437 4,050 4,184 4,314 4,447 4,625 4,810 Citywide Administrative Services Total 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 Total Total by Source of Funds City 457,285 307,673 335,349 321,283 151,567 64,895 57,441 56,745 59,015 61,376 1,872,629 Federal 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 State 0 0 0 0 0 0 0 Private 0 0 0 0 0 0 0 All Funds 457,285 307,673 335,349 321,283 151,567 64,895 57,441 56,745 59,015 61,376 1,872,629

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 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 for Speakers of Other Languages 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 Public Library (QPL) 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.

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 Ten-Year Capital Plan Strategy provides a total of \$894.0 million, allocated as follows:

Brooklyn Public Library

		(in millions)
•	Essential Reconstruction of Facilities	\$269.6
•	Reconstruction Necessary to Maintain	1
	Facilities	8.4
Sul	ototal	\$278.0

New York Public Library and Research Libraries

•	Essential Reconstruction of Facilities	\$222.6
•	Improvements to Existing Facilities	45.7
•	Expansion and Construction of Facilities	7.6
•	Support Services Improvements	3.1
•	Reconstruction Necessary to	
	Maintain Facilities	0.8
•	Access for the Handicapped	0.7
Sub	ototal	\$280.5

Public Libraries

Queens Public Library

•	(in millions)
• Essential Reconstruction of Facilities	\$176.8
• Replacement Branches	63.1
Reconstruction Necessary to	
Maintain Facilities	61.6
• Support Services Improvements	34.0
Subtotal	\$335.5
TOTAL	\$894.0

Brooklyn Public Library

The Ten-Year Capital Strategy allocates \$278.0 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. In addition, \$26.3 million is also allocated for the second phase of a comprehensive rehabilitation of the Central Library. 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 Ten-Year Capital Strategy allocates \$280.5 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, \$74.6 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, \$29.4 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 Public Library

The Ten-Year Capital Strategy allocates \$335.5 million for the Queens Public Library (QPL) and reflects a commitment to maintain and upgrade existing facilities and continue construction of new branches. Specifically, \$97.1 million is allocated to QPL for comprehensive renovations, new construction, and expansion of branches. In addition, \$28.3 million is also allocated for an expansion and renovation at Jackson Heights Library. Additional funding for other branches focuses on renovations and rehabilitations, systems upgrades, and cyclical replacements of building components (roofs, windows, and doors).

New York	Research	Libraries
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Project Type: L	(\$ in 000's)											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total	
Expansion and Construction of Research Libraries	0	45	0	221	221	252	0	0	174	17	1.021	
City	0	45	0	221	221	353	0	0	174	17	1,031	
Improvements to Existing Facilities City	16	40	172	843	14	0	0	0	0	0	1,085	
Essential Reconstruction of Facilities City	46	0	221	113	221	196	287	264	244	254	1,846	
Project Type Total by Source of Funds												
City	62	85	393	1,177	456	549	287	264	418	271	3,962	
Project Type Total All Funds	62	85	393	1,177	456	549	287	264	418	271	3,962	

New York Public Library

				(\$	in 000's)					
2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
200	0	0	500	0	0	0	0	0	0	700
6,001	0	609	0	0	0	0	0	0	0	6,610
8,003	6,643	0	29,913	14	0	0	0	0	0	44,573
102,647	29,001	16,407	38,369	11,473	6,949	4,124	4,606	3,572	3,655	220,803
51	600	107	3	0	0	0	0	0	0	761
1,338	927	40	793	0	0	5	0	0	0	3,103
118,240	37,171	17,163	69,578	11,487	6,949	4,129	4,606	3,572	3,655	276,550
118,240	37,171	17,163	69,578	11,487	6,949	4,129	4,606	3,572	3,655	276,550
	200 6,001 8,003 102,647 51 1,338	200 0 6,001 0 8,003 6,643 102,647 29,001 51 600 1,338 927 118,240 37,171	200 0 0 6,001 0 609 8,003 6,643 0 102,647 29,001 16,407 51 600 107 1,338 927 40 118,240 37,171 17,163	200 0 0 500 6,001 0 609 0 8,003 6,643 0 29,913 102,647 29,001 16,407 38,369 51 600 107 3 1,338 927 40 793 118,240 37,171 17,163 69,578	2020 2021 2022 2023 2024 200 0 0 500 0 6,001 0 609 0 0 8,003 6,643 0 29,913 14 102,647 29,001 16,407 38,369 11,473 51 600 107 3 0 1,338 927 40 793 0 118,240 37,171 17,163 69,578 11,487	200 0 0 500 0 0 6,001 0 609 0 0 0 8,003 6,643 0 29,913 14 0 102,647 29,001 16,407 38,369 11,473 6,949 51 600 107 3 0 0 1,338 927 40 793 0 0 118,240 37,171 17,163 69,578 11,487 6,949	2020 2021 2022 2023 2024 2025 2026 200 0 0 500 0 0 0 6,001 0 609 0 0 0 0 8,003 6,643 0 29,913 14 0 0 102,647 29,001 16,407 38,369 11,473 6,949 4,124 51 600 107 3 0 0 0 1,338 927 40 793 0 0 5 118,240 37,171 17,163 69,578 11,487 6,949 4,129	2020 2021 2022 2023 2024 2025 2026 2027 200 0 0 500 0 0 0 0 6,001 0 609 0 0 0 0 0 8,003 6,643 0 29,913 14 0 0 0 102,647 29,001 16,407 38,369 11,473 6,949 4,124 4,606 51 600 107 3 0 0 0 0 1,338 927 40 793 0 0 5 0 118,240 37,171 17,163 69,578 11,487 6,949 4,129 4,606	2020 2021 2022 2023 2024 2025 2026 2027 2028 200 0 0 500 0 0 0 0 0 6,001 0 609 0 0 0 0 0 0 8,003 6,643 0 29,913 14 0 0 0 0 102,647 29,001 16,407 38,369 11,473 6,949 4,124 4,606 3,572 51 600 107 3 0 0 0 0 0 1,338 927 40 793 0 0 5 0 0 118,240 37,171 17,163 69,578 11,487 6,949 4,129 4,606 3,572	2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 200 0 0 500 0 0 0 0 0 0 0 6,001 0 609 0 0 0 0 0 0 0 0 0 8,003 6,643 0 29,913 14 0 0 0 0 0 0 0 102,647 29,001 16,407 38,369 11,473 6,949 4,124 4,606 3,572 3,655 51 600 107 3 0 0 0 0 0 0 1,338 927 40 793 0 0 5 0 0 0 118,240 37,171 17,163 69,578 11,487 6,949 4,129 4,606 3,572 3,655

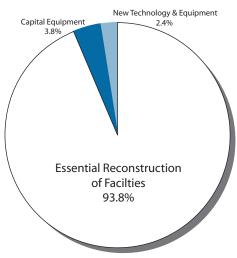
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Brooklyn	Public	Library
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Project Type: LB					(\$	in 000's)					
.	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Rehabilitation and Relocation of Branch											
Libraries City	0	54	0	0	0	0	0	0	0	0	54
Essential Reconstruction of Facilities City	33,927	102,230	102,884	25,030	1,468	760	784	808	840	874	269,605
Reconstruction Necessary to Maintain Facilities City	44	8,289	0	0	0	0	0	0	0	0	8,333
Project Type Total by Source of Funds											
City	33,971	110,573	102,884	25,030	1,468	760	784	808	840	874	277,992
Project Type Total All Funds	33,971	110,573	102,884	25,030	1,468	760	784	808	840	874	277,992

Queens Public Library	/										
Project Type: LQ	2020	2021	2022	2023	(\$ 2024	in 000's) 2025	2026	2027	2028	2029	Total
	2020	2021	2022	2023	2024	2023	2020	2027	2020	2029	10141
Replacement Branches City	7,165	7,017	39,903	7,951	1,000	0	0	0	0	0	63,036
Essential Reconstruction of Facilities City	17,310	12,884	66,071	74,355	1,953	796	821	846	880	915	176,831
Reconstruction Necessary to Maintain Facilities City	8,298	35,684	16,052	1,324	0	0	0	0	0	0	61,358
Federal	0	216	0	32	0	0	0	0	0	0	248
Support Services Improvements City	747	15,195	12,285	5,783	0	0	0	0	0	0	34,010
Project Type Total by Source of Funds											
City Federal	33,520 0	70,780 216	134,311	89,413 32	2,953 0	796 0	821 0	846 0	880	915 0	335,235 248
Project Type Total All Funds	33,520	70,996	134,311	89,445	2,953	796	821	846	880	915	335,483
	2020	2021	2022	2022	2024	2025	2027	2027	2020	2020	7.41
Public Libraries Total	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Total by Source of Funds City	185,793	218,609	254,751	185,198	16,364	9,054	6,021	6,524	5,710	5,715	893,739
Federal	0	216,007	0	32	0	0	0,021	0,324	0	0	248
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	185,793	218,825	254,751	185,230	16,364	9,054	6,021	6,524	5,710	5,715	893,987

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 480 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 \$806.3 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.

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 \$395.7 million planned in 2019. The Ten-Year Capital Strategy for cultural institutions and organizations, which reflects DCLA's focus on facility reconstruction and programmatic enhancement, provides a total of \$806.3 million allocated as follows:

		(in millions)
•	Essential Reconstruction of Facilities	\$756.5
•	Capital Equipment	30.8
•	New Technology and Equipment	19.0
ТО	TAL	\$806.3

Department of Cultural Affairs

Highlights of the Ten-Year Capital Strategy include:

- Bronx Children's Museum: \$2.0 million for the construction of a new museum, in addition to \$0.9 million in 2019.
- Bronx Zoo: \$17.4 million for the upgrade of the Con Edison switchgear, in additional to \$0.7 million in 2019.
- New York Botanical Garden: \$10.3 million for the renovation of the worker's operation center.
- Snug Harbor Cultural Center: \$10.8 million for various upgrades and improvements, in addition to \$23.5 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 construction of the Clove Entrance Discovery Zone, 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: \$5.6 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: \$16.9 million for the construction of an education center, in addition to \$2.1 million in 2019.
- MoMA PS1: \$18.3 million for various upgrades and improvements.
- Metropolitan Museum of Art: \$21.7 million for the skylights replacement.
- Public Theater: \$9.9 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.

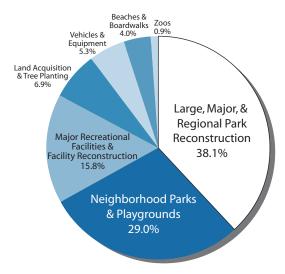
Project Type: PV	• •										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Capital Equipment											
City	6,023	1,221	8,387	13,679	1,507	0	0	0	0	0	30,817
Ssential Reconstruction of Facilities											
City	168,249	104,076	233,476	170,702	53,967	9,790	3,609	3,720	3,869	4,024	755,482
State	200	0	800	0	0	0	0	0	0	0	1,000
lew Technology and Construction											
City	13,168	0	5,795	6	0	0	0	0	0	0	18,969
Project Type Total by Source of Funds											
City	187,440	105,297	247,658	184,387	55,474	9,790	3,609	3,720	3,869	4,024	805,268
State	200	0	800	0	0	0	0	0	0	0	1,000
Project Type Total All Funds	187,640	105,297	248,458	184,387	55,474	9,790	3,609	3,720	3,869	4,024	806,268

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 the Coney Island Boardwalk and Central Park to community gardens and Greenstreets. The Department maintains and operates approximately 900 athletic fields, 1,000 playgrounds, and 700 tennis courts. It also maintains and operates 65 public pools, 51 recreational facilities, 16 nature centers, 14 miles of beaches, 160 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 nearly 700,000 street trees and an additional 2 million trees within parks.

The Ten-Year Capital Strategy provides \$4.6 billion for capital construction and reconstruction projects. This capital program includes \$365.2 million associated with work to repair and reconstruct Parks damaged by Hurricane Sandy; an additional \$33.4 million for storm reconstruction is included in 2019. There is also \$301.0 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 \$117.2 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.



Ten-Year Capital Strategy

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

1	(i	in millions)
•	Large, Major, and Regional Park	
	Reconstruction	\$ 1,750.5
•	Neighborhood Parks and Playgrounds	1,329.5
•	Major Recreational Facilities and Facilit	у
	Reconstruction	726.8
•	Land Acquisition and Tree Planting	315.5
•	Vehicles and Equipment	241.3
•	Beaches and Boardwalks	185.7
•	Zoos	42.0
TO	TAL	\$4,591.3

Large, Major, and Regional Park Reconstruction

The Ten-Year Capital Strategy provides \$1.8 billion for work at numerous sites, Citywide. This allocation includes \$936.5 million for the reconstruction of Parks bridges, Citywide; \$91.6 million for various projects located at Flushing Meadows-Corona Park in Queens; \$73.9 million for various projects located at Central Park in Manhattan; \$48.2 million for the development of Fresh Kills Park in Staten Island; \$19.9 million for various projects located at Prospect Park in Brooklyn; \$16.8 million for reconstruction of pools, Citywide; \$15.6 million for the construction of various open space projects in Greenpoint-Williamsburg; and \$548.0 million for other large, major and regional park reconstruction projects, Citywide.

Neighborhood Parks and Playgrounds

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

Major Recreational Facilities & Facility Reconstruction

The Ten-Year Capital Strategy provides \$726.8 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 \$123.6 million for the rehabilitation of recreation/nature centers, Citywide; \$106.6 million for the remediation and reconstruction of Red Hook Recreation Area; \$58.3 million for the reconstruction of comfort stations and other buildings under Parks jurisdiction, Citywide; \$56.8 million for the reconstruction of boilers and HVACs, Citywide; \$43.0 million for the reconstruction of marinas, docks, and esplanades, Citywide; \$18.2 million for the reconstruction of Historic Houses, Citywide; and \$320.3 million for other major recreational facilities and facility reconstruction projects, Citywide.

Land Acquisition and Tree Planting

The Ten-Year Capital Strategy provides \$315.5 million for tree planting, reforestation, land acquisition, and related projects.

Vehicles and Equipment

The Ten-Year Capital Strategy provides \$241.3 million to support infrastructure improvements and equipment purchases. Major highlights include \$112.2 million for the replacement of vehicles and \$60.8 million for improvements to computer and communications systems; and \$68.3 million for other infrastructure improvements and equipment purchases.

Beaches and Boardwalks

The Ten-Year Capital Strategy provides \$185.7 million for the reconstruction of boardwalks, beaches, and marinas, Citywide, including \$66.9 million for the reconstruction of the Orchard Beach Pavilion in the Bronx.

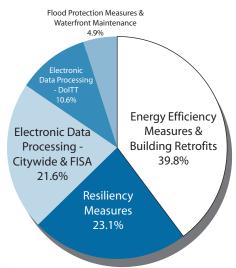
Zoos

The Ten-Year Capital Strategy provides \$42.0 million for infrastructure rehabilitation at the Central Park Zoo, the Prospect Park Zoo and the Queens Zoo.

Project Type: P					(\$	in 000's)					
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Beaches and Boardwalks											
City	25,072	19,987	83,329	1,038	1,297	923	952	981	1,020	1,061	135,660
Federal	5,068	22,508	21,402	288	737	0	0	0	0	0	50,003
Land Acquisition and Tree Planting											
City	70,244	120,352	44,760	16,507	8,179	10,000	10,000	10,000	10,000	10,000	310,042
Federal	0	0	368	0	0	0	0	0	0	0	368
Private	894	0	4,192	0	0	0	0	0	0	0	5,086
Major Recreational Facilities											
City	95,700	138,795	291,996	23,368	23,111	11,563	11,658	11,129	11,078	11,520	629,918
Federal	-279	871	6,927	381	88,853	0	0	0	0	0	96,753
State	128	0	0	29	0	0	0	0	0	0	157
Neighborhood Parks and Playgrounds											
City	201,468	200,171	523,227	55,336	65,209	14,565	12,374	12,438	20,144	17,955	1,122,887
Federal	30,419	69,549	40,010	13,924	31,092	0	0	0	0	0	184,994
State	3,106	1,000	1,710	337	543	0	0	0	0	0	6,696
Private	12,990	1,918	0	57	0	0	0	0	0	0	14,965
Vehicles, Equipment and Facility Reconstruction											
City	48,049	23,505	44,230	20,602	18,319	17,717	19,384	20,065	14,392	14,968	241,231
Federal	63	0	0	0	0	0	0	0	0	0	63
Large, Major and Regional Park Reconstruction											
City	366,145	249,044	532,967	409,109	91,604	8,075	8,139	8,206	8,294	15,114	1,696,697
Federal	5,866	2,302	8,417	2,640	1,838	0	0	0	0	0	21,063
State	754	4,451	590	1,100	2,645	0	0	0	0	0	9,540
Private	767	5,766	48	0	16,655	0	0	0	0	0	23,236
Zoos											
City	10,550	7,981	6,660	7,190	4,583	3,209	520	220	511	531	41,955
Project Type Total by Source of Funds											
City	817,228	759,835	1,527,169	533,150	212,302	66,052	63,027	63,039	65,439	71,149	4,178,390
Federal	41,137	95,230	77,124	17,233	122,520	0	0	0	0	0	353,244
State	3,988	5,451	2,300	1,466	3,188	0	0	0	0	0	16,393
Private	14,651	7,684	4,240	57	16,655	0	0	0	0	0	43,287
Project Type Total											
All Funds	877,004	868,200	1,610,833	551,906	354,665	66,052	63,027	63,039	65,439	71,149	4,591,314
	077,001	000,200	1,010,033	331,700	33 1,003	00,032	03,027	03,037	03,137	71,117	1,371,311

11

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.

Ten-Year Capital Strategy

		(in millions)
•	Energy Efficiency Measures &	
	Building Retrofits	\$3,066.0
•	Resiliency Measures	1,782.1
•	Electronic Data Processing -	
	Citywide & FISA	1,663.1
•	Electronic Data Processing - DoITT	820.1
•	Flood Protection Measures &	
	Waterfront Maintenance	376.4
	TOTAL	\$7,707.7

Energy Efficiency and Citywide Equipment

Energy Efficiency

The Ten-Year Capital Strategy provides \$3.1 billion over the ten-year period to fund energy efficiency projects throughout the City.

Resiliency Measures

The Ten-Year Capital Strategy provides \$1.8 billion over the ten-year period to fund resiliency measures, including \$1.2 billion for the East Side Coastal Resiliency project and \$194.9 million to construct a flood protection system in the Two Bridges neighborhood. Funding is also provided for flood protection measures, including \$136.0 million for resiliency measures to protect the Battery, \$80.6 million to construct additional bulkheads, revetments, and living shorelines to protect against sea level rise through the Raised Shorelines program, and \$100.0 million to protect the Red Hook neighborhood from coastal flooding and projected sea level rise through construction of an integrated flood protection system.

Electronic Data Processing - Citywide & FISA

The Ten-Year Capital Strategy provides \$1.7 billion for Electronic Data Processing - Citywide & FISA.

Electronic Data Processing - DoITT

The Ten-Year Capital Strategy provides \$820.1 million for Electronic Data Processing - DoITT.

Flood Protection & Waterfront Maintenance

The Ten-Year Capital Strategy provides \$376.4 million over the ten-year period to fund flood protection measures and waterfront maintenance, including \$108.6 million for rehabilitation of the substructure at Pier 36 and \$90.4 million for the rehabilitation of the substructure of Harlem River Park between 132nd Street to 135th Street.

Project Type: DP						in 000's)					
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Electronic Data Processing Equipment for DoITT, Citynet City	107,621	106,542	119,425	84,115	80,043	80,321	78,056	73,638	59,949	30,394	820,104
Project Type Total by Source of Funds											
City	107,621	106,542	119,425	84,115	80,043	80,321	78,056	73,638	59,949	30,394	820,104
Project Type Total All Funds	107,621	106,542	119,425	84,115	80,043	80,321	78,056	73,638	59,949	30,394	820,104

Project Type: PU					(\$	in 000's)					
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Building Construction, Reconstruction or Retrofit											
City	330,716	342,536	282,225	281,389	296,630	275,110	296,398	237,119	240,677	250,304	2,833,104
Distributed Generation											
City	31,514	0	0	0	0	0	0	0	0	0	31,514
Electronic Data Processing Equipment - FISA											
City	6,840	4,944	10,442	12,120	11,865	11,920	11,608	10,601	6,860	5,272	92,472
Electronic Data Processing Equipment -											
City-Wide	4 / 2 - 2 - 1			4=4 0.0	104			4 < 4	444	106	
City	149,334	141,112	220,972	171,819	136,503	146,637	221,260	161,752	114,577	106,688	1,570,654
Miscellaneous Energy Efficiency and Sustainability											
City	721,466	577,640	360,109	74,629	71,243	73,594	0	0	0	0	1,878,681
Federal	288,854	142,771	50,000	0	0	0	0	0	0	0	481,625
Project Type Total by Source of Funds											
City	1,239,870	1,066,232	873,748	539,957	516,241	507,261	529,266	409,472	362,114	362,264	6,406,425
Federal	288,854	142,771	50,000	0	0	0	0	0	0	0	481,625
Project Type Total											
All Funds	1,528,724	1,209,003	923,748	539,957	516,241	507,261	529,266	409,472	362,114	362,264	6,888,050
	• • • •		***								
Citywide Equipment Total	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Total by Source of Funds											
City	1,347,491	1,172,774	993,173	624,072	596,284	587,582	607,322	483,110	422,063	392,658	7,226,529
Federal	288,854	142,771	50,000	0	0	0	0	0	0	0	481,625
State	0	0	0	0	0	0	0	0	0	0	0
Private	0	0	0	0	0	0	0	0	0	0	0

Project Type: CW	(\$ in 000's)										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
itywide Total by Source of Funds											
City			17,631,690								110,711,175
Federal	1,406,550	938,189	604,654	391,818	270,332	69,667	80,527	44,507		34,062	4,056,945
State Private	336,441 34,588	810,461 20,066	34,577 15,357	72,845 11,150	591,321 27,717	35,149 11,062		35,952 11,062	1,150 11,479		1,977,018 163,916
Tilvate	34,300	20,000	13,337	11,130	27,717	11,002	9,470	11,002	11,479	11,903	103,910
All Funds	18,445,059	16,213,667	18,286,278	16,857,955	14,393,570	8,914,204	6,975,663	5,726,756	5,642,336	5,453,566	116,909,054