

**Testimony of Daniel Steinberg, Senior Advisor at the Mayor's Office of
Operations**

**Committee on Finance and Subcommittee on Capital Budget
February 12, 2019 | 10 a.m.**

Good morning Chair Dromm, Chair Gibson and members of the Finance Committee and the Subcommittee on Capital Budget. My name is Daniel Steinberg, and I am a Senior Advisor at the Mayor's Office of Operations. At Operations, we are dedicated to making New York City government as effective and efficient as possible through rigorous project and performance management, data analysis, and research. In that vein, Operations created, and now manages, the New York City Capital Projects Dashboard. Thank you for the opportunity to present some of our work in this area and discuss relevant legislation currently under consideration by this Subcommittee.

NYC Capital Projects Dashboard

The City of New York's Capital Budget apportions the City's funds to pay for everything from the maintenance of our bridges to the construction of our schools to making sure our offices are equipped with computers and furniture.

My office, alongside our partners at the City Council, wanted to provide policymakers and the public with a better view into, and transparency around, many of the City's construction and information technology projects. Working with the Financial Information Services Agency, the Office of Management and Budget, the Department of Information Technology and Telecommunications, and the experts at capital agencies, we launched the Capital Projects Dashboard in early 2014.

Today, the Capital Projects Dashboard provides insight into all capital construction and information technology projects with budgets above \$25 million. Using standardized metrics for *all* agencies and projects, including timelines, and budget, the Dashboard serves as a centralized repository for oversight of, and comparisons between, capital projects.

Since launching in 2014, our office has made changes to the Capital Projects Dashboard in the interest of providing even greater transparency and accessibility to the public, including:

- Re-organizing the web portal around project categories that are meaningful to residents, such as Parks, Streets and Schools.
- Expanding project-level details to include schedule and budget-change history by reporting periods; and,
- Adding this data to the City's Open Data portal.

Legislation

I'll now take some time to speak about the proposed legislation being considered today, Introductions 113 and 32.

Introduction 113

Introduction 113 aims to provide greater insight for policymakers and the public through a centralized database of capital project information, which was our goal in building and updating the Capital Projects Dashboard. Operations agrees with the spirit of Introduction 113 and with many of its components.

However, we are concerned that the bill as written would require reporting on every capital project regardless of its size or type. There are more than 10,000 individual projects classified as "capital projects," which include everything from City Water Tunnel 3 to Paper Shredders for Libraries. The Dashboard currently tracks nearly 300 projects by applying a cost threshold of \$25 million. Because the data collection process is manual and labor-intensive, reporting out on over 10,000 projects would be impractical and of limited value.

We are also concerned with the proposed monthly reporting frequency. Most capital projects have multi-year timelines that do not change month-to-month. The Capital Projects Dashboard is currently updated three (3) times annually in sync with the tri-annual release of

the City's Capital Commitment Plans. This ensures the high quality and reliability of data, and we therefore recommend maintaining this reporting frequency.

However, as noted, we do agree with the spirit and most of the substance of this bill. We are happy to have further conversations with the Council, and believe we can reach a solution that would satisfy our mutual goals.

Introduction 32

Introduction 32 aims to provide more frequent updates to the public and policymakers when capital projects are delayed or see cost increases. As with Introduction 113, Operations agrees with this spirit of this bill. We are concerned, however, that the reporting mechanism laid out in Introduction 32 would be incredibly burdensome to implement while providing little new information. While I cannot speak to any individual agencies' exact process, I know that our capital agencies maintain their own protocols for notifying affected elected officials and impacted community stakeholders when projects in their neighborhoods are delayed which, in many cases, go beyond the standards proposed in this bill. As each agency delivers projects of varying size and nature, it would be very difficult and costly to set a standardized mechanism and timeframe for this type of notification across thousands of projects.

As I've stated, my office agrees with the spirit of this bill and its important aim of increasing transparency for New Yorkers. We would welcome to opportunity to discuss improved approaches to ensure you, and the communities you serve, receive the information you need.

Thank you again for the opportunity to testify today. We look forward to continuing the conversation and answering any questions you may have.



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Testimony of Elizabeth Brown
Supervising Analyst, New York City Independent Budget Office
To the New York City Council Committee on Finance and Subcommittee on Capital Budget
Regarding Reporting on Capital Expenditures
February 12, 2019

Good Morning Chairman Dromm, Chairwoman Gibson, and members of the Committee on Finance and the Subcommittee on Capital Budget. I am Elizabeth Brown a supervising analyst at the New York City Independent Budget Office. Thank you for the opportunity to testify today regarding Intros 113 and 32. Both Intros would expand the information the city is required to report on its capital projects.

Intro 113 requires the city to establish a public database of pending capital projects with data on each project's schedule and cost—including information on delays and cost-changes—as well as their location. Intro 32 requires that similar information be provided solely to the affected Council Members, Borough President, and community boards and only if a capital project is delayed or if there is a cost increase of 10 percent or more of the estimated cost.

IBO's role is to provide nonpartisan information on the city's budget to members of the Council, other elected officials, and the public. Although we generally do not make recommendations, we support efforts to increase government transparency, especially when it comes to expense and capital budget data and for reporting additional information of the sort required in the Intros being discussed today, particularly when that information is reported to the public.

IBO often receives questions about the city's capital projects. These questions range from the status of a local project to broader questions about the city's capital budgeting process. While we can provide information on changes in the overall budget and shifts in funding for specific projects, we often run into roadblocks when trying to identify and explain the causes of project delays and cost overruns—which are often what requesters most want to know.

Identifying a delay in or a cost overrun for a specific capital project is difficult given the nature of New York City's Capital Commitment Plan, the city's capital planning document. First, the Capital Commitment Plan is divided by budget line and then by project. A project may be either for discrete work (for example, "Reconstruction of 1st Avenue, Brooklyn") or it may be for a bundle of similar projects (for example, "Improvements to Highway Bridges and Structures, Citywide"). How capital projects are defined varies widely both among the city agencies, but also even within one agency's capital plan.

Next, while the commitment plan provides the total funding planned for a project—however it is defined—there is little detail on funding for the project’s individual components. Moreover, it is often unclear if the funding levels represent the total estimated cost of the project. If funding is increased in subsequent plans, it can be difficult to discern whether the new funding level represents an increase in cost (an overrun), a change of scope, or if the additional funds were part of the initial cost estimate, but are just newly reflected in the city’s budget documents.

In terms of delays, the Capital Commitment Plan provides little detail on the planned timeframe of a capital project. The commitment plan does contain a “milestone” field to indicate the project’s current status along with projected start and end dates. Unfortunately these fields are generally left blank. Even when status is included, it is rarely updated between plans.

Last week IBO provided similar testimony at a hearing of the Committee on Parks and Recreation regarding Intro 161, which would expand the information the parks department is required to report on its online Capital Project Tracker—a useful tool that already provides detail on each parks capital project’s location, phase, funding level, and timeline. As far as we know, the parks department is the only agency that currently makes such data public. The new data required by Intro 161 would include information on the reasons for capital project delays and the cause and extent of cost overruns—similar to what is also required in Intro 113. The parks tracker is a valuable resource that we use routinely and we often assist members of the public in using it as well.

Given IBO’s support for increased transparency and data sharing in general, the enhanced Parks Capital Project Tracker could be an example for other agencies on how to communicate progress and provide detailed information on their capital projects.

Thank you and I am happy to answer any questions.



Department of
Design and
Construction

A STRATEGIC BLUEPRINT FOR CONSTRUCTION EXCELLENCE

Bill de Blasio
Mayor

Lorraine Grillo
Commissioner

Letter from the Commissioner



MY FELLOW NEW YORKERS,

It's my great honor to have been selected by Mayor Bill de Blasio in July 2018 to lead the NYC Department of Design and Construction. Created in 1996, DDC has become the City's chief capital construction manager, consolidating and overseeing the work of dozens of government agencies, providing centralized, professional project management expertise, all while complying with New York City's strict regulatory requirements.

Since its inception, DDC has successfully delivered some of the City's largest and most important municipal projects. As a reflection of its success, the agency's portfolio continues to grow, with a record amount of construction in progress and several large programs affecting millions of New Yorkers in the works.

With this growing portfolio comes increased responsibility to deliver projects faster and more efficiently, and this report identifies reforms and processes that can allow DDC to better meet its obligations to the City. Many of these reforms will be implemented internally at DDC in the coming months, while others will require cooperation with DDC's partner agencies and regulators. Still others seek to improve the legislative and regulatory environment to streamline the construction process while maintaining important safeguards on the use of public funds.

Overall, this report is a roadmap for ways that DDC can renew focus on the bottom line—the timely delivery of great projects for the people of New York. Over 1,300 dedicated DDC professionals look forward to effecting positive change, and to fulfilling Mayor de Blasio's goals for an improved agency that helps a healthy City thrive and grow while serving all New Yorkers equally.

Sincerely,

A handwritten signature in blue ink that reads "Lorraine Grillo". The signature is written in a cursive, flowing style.

Lorraine Grillo
Commissioner



Times Square
Plaza Reconstruction
Manhattan

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Queens Museum Expansion
Queens

Executive Summary

NEW YORK CITY IS ONE OF THE WORLD'S great cities—a global center of economic activity and innovation, vibrant, diverse neighborhoods, and unparalleled cultural resources. Infrastructure and public facilities—the core physical improvements below and above ground that support commerce, mobility, and social growth—have long defined this success. Today, with more than 6,000 miles of streets, 500 miles of coastline, 1,800 public schools, 200 firehouses, a sophisticated waste management infrastructure, and an ingenious water supply system stretching well beyond the City's boundaries, New York's infrastructure remains the foundation of New York's future.

The Department of Design and Construction (DDC) was created to renovate and expand the City's public works as the City's chief design and construction manager. Now in its twenty-third year, DDC has successfully completed thousands of vital capital projects with a combined value of over \$20 billion.

However, internal and external challenges, including DDC's own business practices, extensive rules that strictly determine the procurement process, and the engineering challenges of working on underground infrastructure, all complicate efficient delivery of capital projects in New York City.

In order to meet its mandate, DDC is seeking to fundamentally reevaluate the status quo in City capital project delivery.

DDC is undertaking an agency-wide review of its own business practices, as well as external challenges, in order to build infrastructure more efficiently and cost effectively. While many of the recommendations are technical, focusing on management strategies to reduce inefficiency and error, the ultimate objectives are no less important: ensuring the collective quality of life for all New Yorkers.

This plan—DDC's Strategic Blueprint for Construction Excellence—recognizes that New York's future will in large part be influenced by our ability to deliver projects more efficiently. We must modernize how we do business.

THE STRATEGIC BLUEPRINT

Improve the Pipeline

DDC will improve project delivery from its outset by standardizing project initiation. The critical first steps of prioritization, initial planning, and defining project scope and funding needs must be clear to all parties before project execution.

DDC will support its partner agencies by better identifying and prioritizing needs and limiting scope changes. To that end, DDC will implement several efforts to improve the project pipeline:

Expand Front End Planning (FEP):

The FEP Unit performs an early review of project proposals with sponsor agencies and ensures that goals, budgets, scopes and schedules all align. Bringing architectural, engineering, cost estimating and project management tools to bear, FEP helps sponsoring agencies understand what exactly they are asking for and how much it will cost. FEP will receive the additional resources necessary to review all projects that come to DDC.

Enhance Capital Project Scope Development (CPSD):

For larger-scale projects, the CPSD program, managed by the Office of Management and Budget (OMB), is an innovative way to clearly determine project scope, cost, and other key factors before capital dollars are committed, a step historically absent from the City's capital planning process. DDC will more actively manage CPSD studies for projects slated for DDC implementation.

Upgrade the City's Asset Information Management System (AIMS) Program:

DDC will improve the depth and frequency of facility inspections so that sponsor agencies better understand the true condition of their assets, a vital first step in being able to prioritize capital needs in a rational way.

Streamline and Accelerate Certificates to Proceed (CPs):

Even after receiving a capital commitment, a project can be delayed during an extensive review of project scope and budget details required for a Certificate to Proceed. DDC will partner with OMB to streamline and accelerate the CP request and review process and allow projects to commence more rapidly.

Manage Projects More Effectively

DDC's design and construction professionals assume a large responsibility and work hard every day to deliver a broad array of projects of critical importance to the public.

DDC will provide new training and tools to empower staff to make critical decisions and manage workflow. DDC will also better manage key external challenges that impede effective project management.

Institute In-Depth Project Management Training:

New training will establish and reinforce industry best-practice standards for project managers, and DDC will empower them to oversee all aspects of the project.

Limit Change Orders & Expedite Contractor Payments for Additional Work:

When a project absolutely requires additional funding, a lengthy, multi-step change order process ensues, which can delay recommencement of the project and payment to contractors. DDC will work with the Mayor's Office of Contract Services (MOCS), OMB, and the Comptroller's Office to pilot the use of "allowances" where appropriate, to accelerate payments for additional work. DDC will also ensure robust review and management of these processes through the creation of a consolidated Change Order Review Unit.

Ensure Timely, Efficient Payment to Contractors:

Working with its oversight agencies, DDC will streamline and expedite the payment approval process while ensuring comprehensive oversight. DDC and OMB will allocate appropriate resources to ensure streamlined preparation and approval of Certificates to Proceed, payments and change orders.

Improve Utility Coordination:

Timely coordination with utilities on utility relocation and reengineering is a critical-path priority that can impair DDC infrastructure projects. To address this, DDC will institute joint long-term capital planning processes with utilities including ConEdison, National Grid, and telecommunications providers.

Incorporate Robust Project Controls:

The agency will expand the use of extensive data collected on past projects to strengthen, monitor, and continuously improve project cost assessments and standardize schedule durations, project risk management, and agency processes.

Create a Five-Borough Communications Strategy:

Ensuring that external stakeholders are fully engaged in capital construction projects creates the opportunity for them to work toward and share in the success of projects. To meet this important goal, DDC will expand its community and government relations functions to promote proactive communication and collaboration.

Get more out of Contractors and CMs

Just as DDC will enhance its own management capacity, it will also increase its expectations for contractors doing business with the agency. The new approach will offer incentives that reduce contractor risk and speed payment, but also create better contract enforcement tools to respond flexibly to underperformance.

To this end, DDC is modernizing how it procures, evaluates, and pays contractors and construction managers (CMs) while also exploring a range of options to restructure contracts to promote timely performance.

Develop M/WBE Capacity:

DDC's Office of Diversity and Industry Relations (ODIR) will broaden its engagement with the M/WBE community through the creation of a new Business Development Unit focused on expanding the pool of consultants and contractors with the capacity to participate in DDC contracting opportunities.

Streamline Procurement:

DDC is consolidating and modernizing procurement for increased flexibility and speed. For example, DDC will reform its Pre-Qualified Lists (PQLs) to make them more effective tools for quickly procuring contractors, and expand them to more project categories. DDC is also partnering with MOCS to take on key administrative functions to expedite contract awards through standard Citywide processes and implementation of the PASSPort procurement management system.

Implement Flexible Performance Guidelines and Performance Management Measures:

DDC is taking a more rigorous, performance-based approach to ensure it gets the most from the vendors that help deliver projects. This effort will take place alongside the agency's industry partners and lead to the use of updated, standardized contract design specifications; standardized design and construction durations; a more flexible vendor evaluation system to address vendor performance issues; and expanded use of incentives to accelerate the delivery of certain critical projects.

Adopt Innovative Project Delivery Mechanisms:

DDC will move beyond a one-size-fits-all low-bid procurement approach and utilize strategies that are common in the private sector, across New York State, and the rest of the country. The agency is exploring options like Design Build and Construction-Manager-at-Risk, where appropriate, and is working with City partners and the State legislature to advance legislative and regulatory changes to streamline project delivery.

Modernize Internal Systems and technology

DDC is implementing a suite of improvements that will transform basic operations and use data to improve business practices. DDC will also modernize organizational structures to make it easier to manage complex projects.

Implement a Comprehensive Information Technology Strategy:

DDC will upgrade legacy project management systems to modern standards, creating collaborative tools to empower and link all individuals playing a role in a project, and reducing the number of steps and the amount of time it takes for payment approvals.

Create and Use Standard Operating Procedures (SOPs):

SOPs will clearly define design and construction project management tasks and workflows across the agency.

Develop Complex Program Management Teams:

On efforts like the City's Coastal Resiliency Program, and creation of a safer, more humane borough-based jail system, DDC will organize integrated teams with dedicated leadership capable of managing design and delivery of projects with large budgets and multiple design and construction phases.



New Kensington Branch Library
Brooklyn

DDC—Its Mission, Its Challenges, Its Future

Visionary public works built over the past several centuries have been the foundation upon which New York City has grown to become a center of global economic activity and a vibrant home for 8.5 million New Yorkers. This vast infrastructure must be continually maintained and upgraded to modern standards in order for New York to continue to thrive.

Mission and Structure

Prior to 1996, much of the City's capital construction portfolio was dispersed among individual agencies focused on service delivery and with limited expertise in capital program management. Recognizing that the City's vast capital needs would be best met through a dedicated project management arm, the Department of Design and Construction was created to consolidate construction

management in a single agency. DDC soon took on key components of the water supply system; its transportation network; a system of police, fire and emergency response units that ensure public safety; parks and public spaces; the City's expansive public library system; and a host of other enterprises that protect public health and improve the quality of life for all New Yorkers. Today, DDC plays a critical role in building it all.

DDC has completed nearly 4,500 projects valued at over \$20.3 billion. In Fiscal Year 2018 alone, the agency completed 133 projects and managed an additional 754 longer-term projects, while working with 20 sponsor agencies and additional non-government sponsors.

In order to deliver effectively on its broad mandate to build core infrastructure and public buildings, DDC is organized around two primary construction divisions:

INFRASTRUCTURE

The **Infrastructure Division** delivers projects on behalf of the Department of Environmental Protection (DEP) and the Department of Transportation (DOT), and last year reconstructed 25 lane miles of New York City streets, and installed or replaced 118 miles of the City's sewers and water mains. The Infrastructure Division is also responsible for essential citywide programs strengthening the resiliency, sustainability, and livability of numerous connected communities. These include the City's Coastal Resiliency Program, the innovative Bluebelt stormwater management network in Staten Island, as well as the multi-year effort to make pedestrian ramps throughout the City ADA compliant and the \$1.9 billion initiative to improve streets and drainage in southeast Queens.

PUBLIC BUILDINGS

The **Public Buildings Division** builds and improves facilities providing services to City residents, including police precincts and engine houses for FDNY; marine transfer stations and salt sheds for the Department of Sanitation; structures supporting youth and family services; public libraries for all three of the City's library systems; cultural facilities, including museums and theaters; and Parks facilities. The division also works to upgrade public buildings throughout the City, including the recent historic renovation of City Hall, while making them more resilient and energy efficient, partnering with some of the leading designers in the country.

SPOTLIGHT ON DDC PROGRAMS

Disaster Recovery

When the City has been at its most vulnerable, following the attack on the World Trade Center in 2001 and after 51 square miles of NYC flooded during Hurricane Sandy in 2012, DDC has taken a central role in the City's recovery.

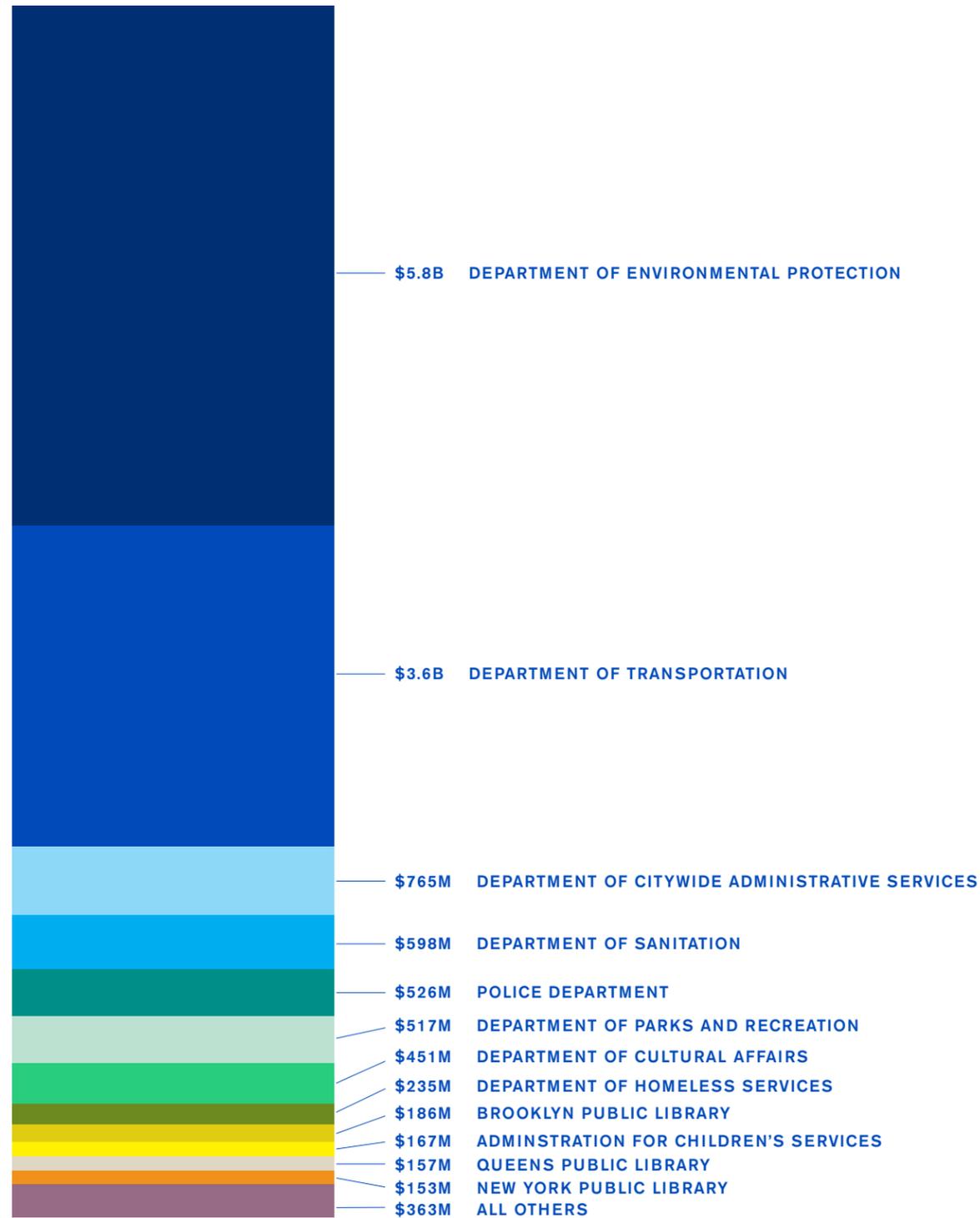
Following the devastating attacks of September 11, 2001, DDC used its project management expertise and industry knowledge at the

World Trade Center Site to manage the demolition, excavation and removal of more than 1.7 million tons of debris ahead of schedule and with no additional fatalities. Today, DDC continues to work with DOT to improve and expand infrastructure in a neighborhood that has been transformed since the attacks.

Following Hurricane Sandy, DDC undertook almost 50 projects to help rebuild streets and structures that were damaged, and to prepare for future storms. Today, DDC is reconstructing and expanding stormwater systems in affected areas from Staten Island to Far Rockaway.



Value of Active DDC-Managed Capital Projects

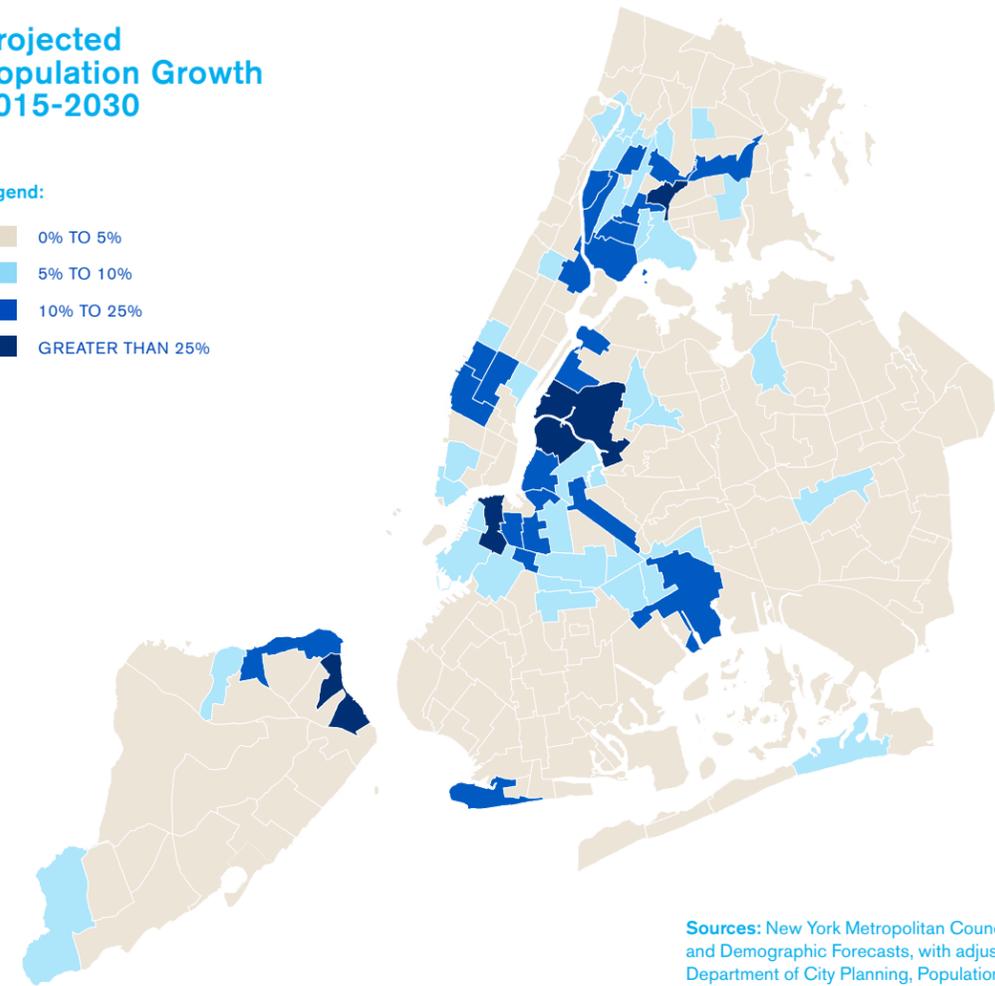


TOTAL \$ VALUE: \$13.5B

TOTAL NUMBER OF ACTIVE PROJECTS: 834

Projected Population Growth 2015-2030

Legend:



Sources: New York Metropolitan Council, 2050 Socioeconomic and Demographic Forecasts, with adjustments by NYC Department of City Planning, Population Division, 2016; Level of Geography: Neighborhood Tabulation Areas

Challenges and Trends

Since DDC's creation in 1996, the size of the City's capital program has grown dramatically. Between fiscal years 2004 and 2018, DDC's annual capital budget grew from approximately \$1 billion to more than \$3 billion.

This growth in construction volume demands greater urgency to keep pace delivering critical projects and a renewed need to find efficiencies and ways to improve project delivery. But

greatly increased project volume is only one factor complicating DDC's efforts to deliver high quality projects on time and within budget. Numerous other challenges exist as well:

UPGRADING AGING INFRASTRUCTURE

The City faces the challenge of restoring infrastructure that is nearing or has already surpassed its anticipated useful lifespan. With every year that passes, the wear and tear on water mains, sewers, streets, subways, bridges, and buildings drives an almost insatiable demand for repair and replacement.

Simultaneously, we must upgrade infrastructure to accommodate emergent trends and better address the realities of deferred maintenance, uncertain funding cycles, and new categories of infrastructure needs, like smart technology, multi-modal transit systems, and a pedestrianizing city.

BUILDING FOR A GROWING CITY

New York City has experienced a population boom in the last decade, growing from eight million people in 2009 to over 8.5 million today. Population is expected to increase to more than nine million by 2040. Job growth has also swelled with the addition of nearly one million jobs since 2004, the highest level on record.

New York City is also experiencing an explosion of tourism. Nearly 63 million tourists came in 2017 alone, a 30% increase from a decade before. While contributing significantly to the economy, the travel and tourism industry places special demands on City infrastructure.

While population and job growth are clear signs of a healthy city, they place an increasing burden on the critical infrastructure DDC builds, including streets and the water and sewer systems. Growth and a strong economy also create increased demand for important public safety services, waste management, and opportunities for culture and recreation.

ADVANCING A MORE EQUITABLE NEW YORK CITY

All New Yorkers should have access to high quality infrastructure and facilities. The City is working to balance maintaining assets in a state of good repair while enhancing infrastructure and facilities across all five boroughs. The City has redoubled its efforts to construct new community and recreational facilities, transform business districts, and improve connectivity across the City's diverse neighborhoods.

ADAPTING TO CLIMATE CHANGE

Another factor that DDC must now take into account for every project is climate change. The warming of the planet creates new infrastructure challenges related to higher temperatures, sea level rise, droughts, and storms.

The NYC Panel on Climate Change projects that by 2050 average annual temperatures in the City will increase by 4.1% to 5.7%; annual precipitation will rise by four to 11%; sea levels along the City's 520 miles of coastline could rise by as much as 2.5 feet; and the number of days each year when the temperature hits 90 degrees could

triple. These risks were highlighted in October 2012 when Sandy struck the region, killing 44 people. Seventeen percent of the City flooded and economic damages were estimated at \$19 billion.

The realities of climate change require that we invest to protect our city from rising sea levels and natural disasters, and continue our leadership role in minimizing the City's contributions to global warming.

LEVERAGING THE TRANSFORMATIVE POTENTIAL OF TECHNOLOGY

The proliferation of technology has transformed our economy and has great potential to enhance delivery in the construction industry. From building information management (BIM) modeling, to big data collection and applying artificial intelligence for risk prediction, the opportunities for efficiency gains are endless. DDC can deploy technology to facilitate internal processes and data collection and incorporate technology into New York City's infrastructure to adapt to changes in smart cities, the Internet of Things (IoT), autonomous mobility, and more.



Sheldon Avenue BMP Staten Island

The Future— Strengthening Our Agency

These wide-ranging challenges and opportunities necessitate reflection on the agency's recent performance, and identification of opportunities to improve on-time and on-budget project delivery.

While DDC completes 93% of design projects and 88% of construction projects early or on time per target completion dates, long project durations, scope and cost challenges exist even within these projects and offer opportunities for DDC to better guide projects from start to finish.

For example, design for over 10% of library and cultural projects take over three years, while construction for some street reconstruction projects can be delayed by more than two years.

Time is of the essence to put the systems in place and make the institutional reforms necessary to allow DDC to remain a world-class provider of urban infrastructure.

FOCUS AREAS

Internal process analysis highlighted several areas where opportunities for improved project delivery exist.

Business Process and Organization

DDC can resolve many challenges to project delivery by implementing industry best practices in project management. Streamlining internal agency processes and management practices can help avoid delays at each stage of delivery.

Regulation and Oversight

Public capital procurement is heavily regulated at local, state, and federal levels, limiting the ability for City agencies to draw upon a fuller spectrum of project delivery tools that consider project type and complexity.

DDC is working with City partners to identify high-impact reforms to the City Charter, Procurement Policy Board Rules, City Administrative Code, and State law. DDC is also subject to oversight by several external entities who review and approve contract materials and authorizations for payment. While oversight is necessary to ensure that City agencies conduct business in compliance with all relevant laws, there are opportunities to accelerate and reduce redundancy in reviews.

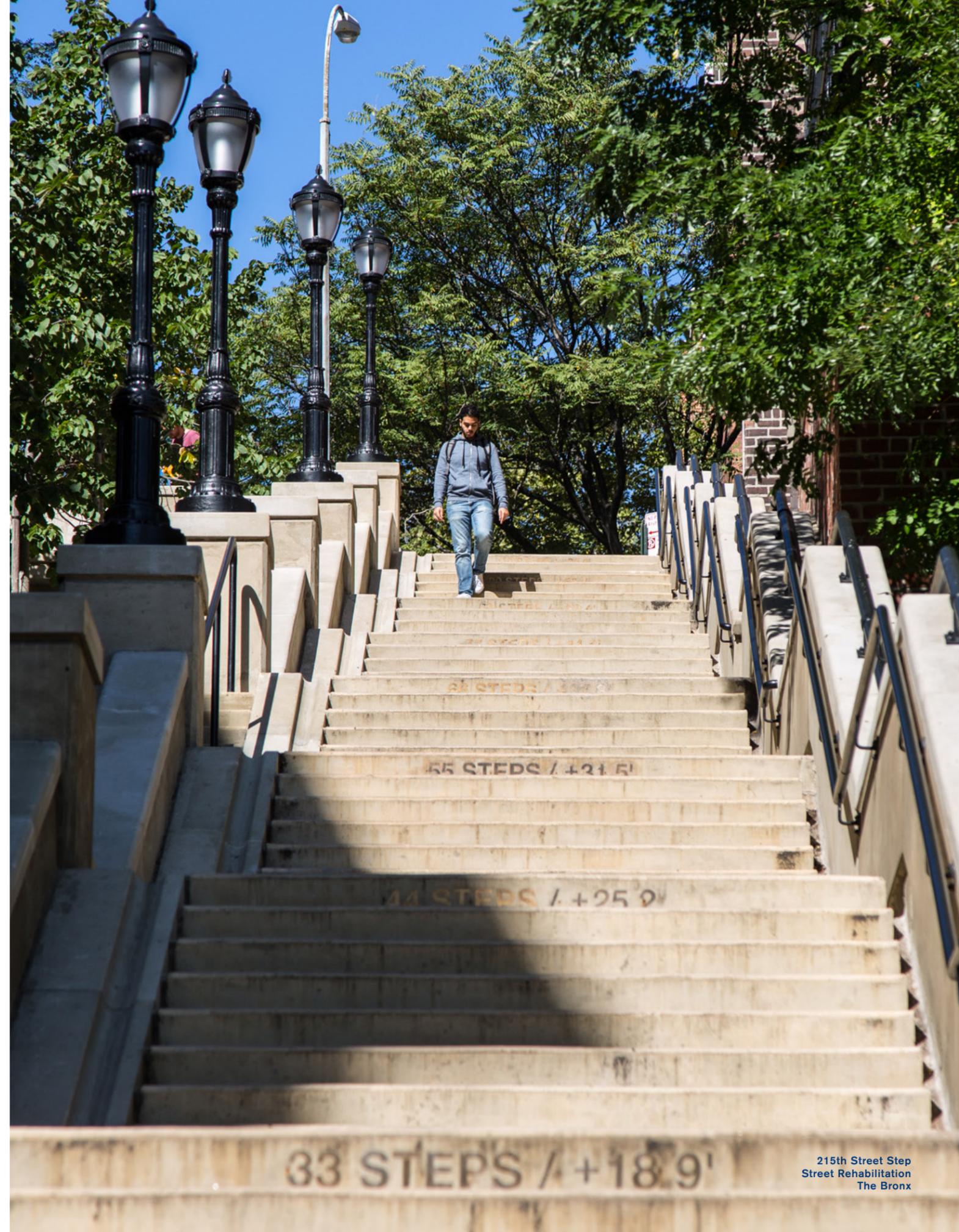
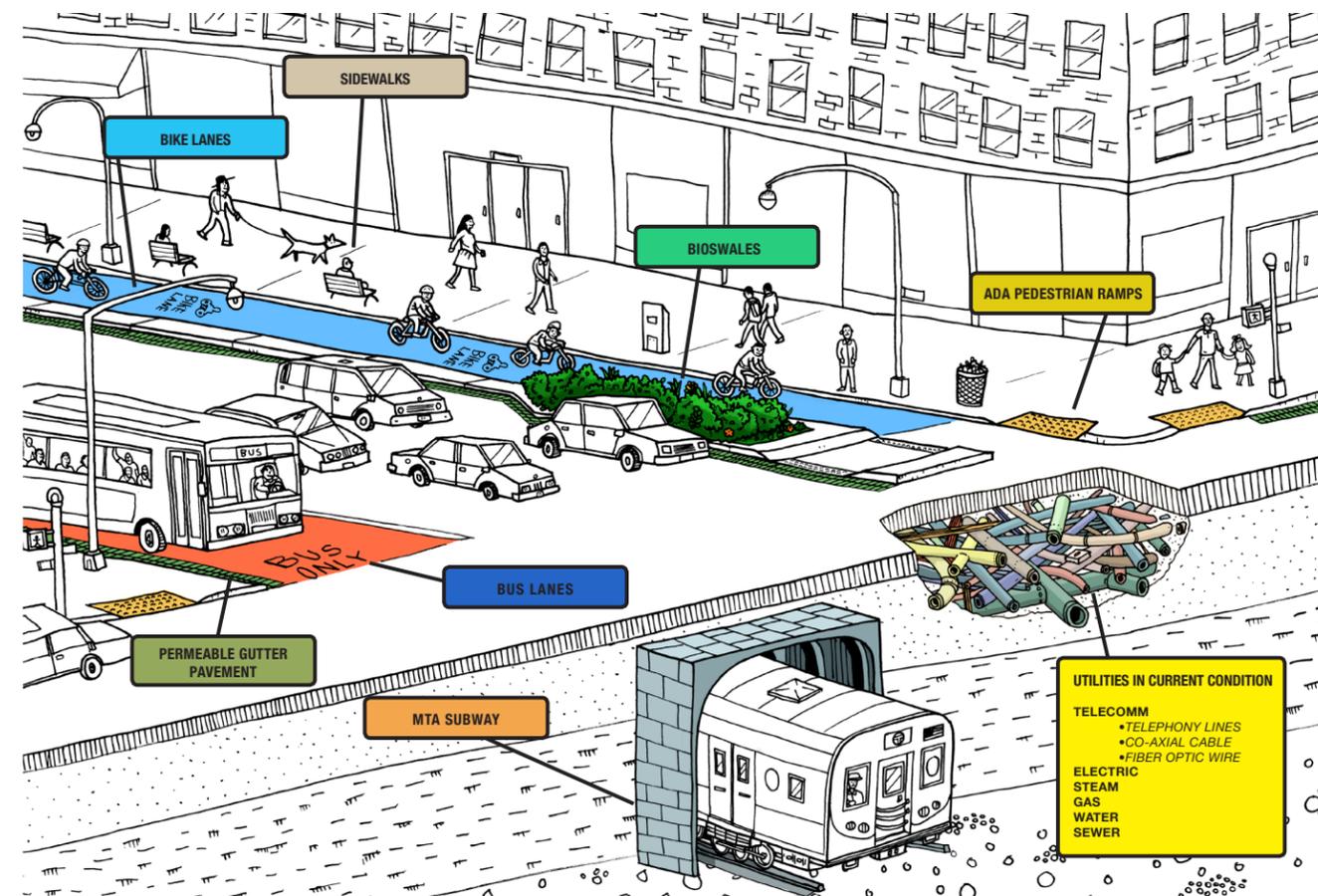
Project Sponsor Management

DDC strives to provide quality capital project delivery services to its project sponsors, but project manager/sponsor relationships have been inconsistent. This has led to project initiation with incomplete scopes, planning with insufficient project funding, and late-stage project scope change acceptance.

Utility Coordination

Enhanced coordination with utilities including Con Edison, National Grid, and telecommunications providers, from project conception through construction could improve project delivery and lead to cost and time savings.

Elements of Infrastructure



215th Street Step
Street Rehabilitation
The Bronx

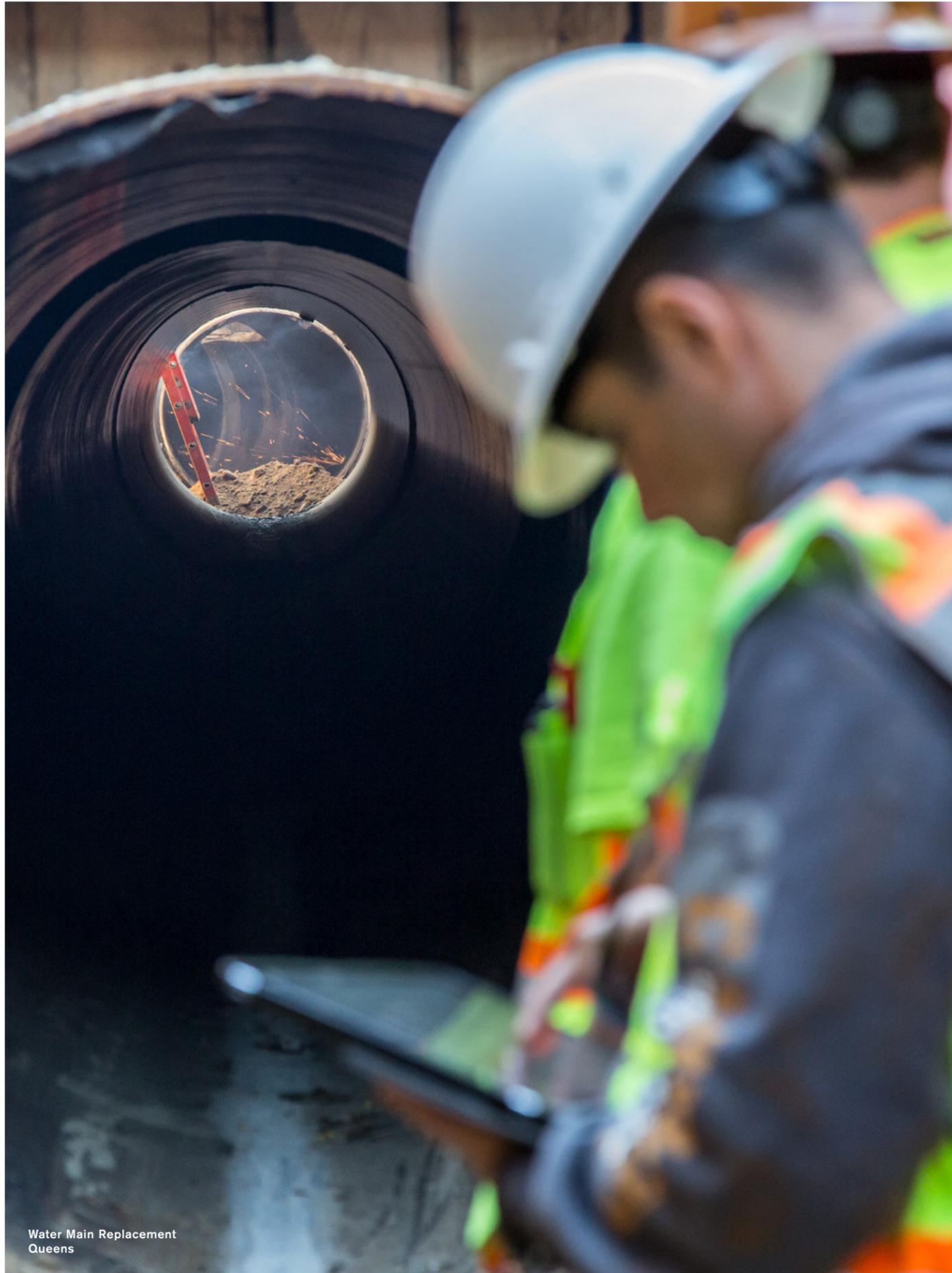
DDC Strategic Blueprint for Construction Excellence

THE DEPARTMENT OF DESIGN AND CONSTRUCTION is responsible for the delivery of great public works that improve the lives of all New Yorkers. For twenty-three years, it has done so, within increasingly challenging regulatory, oversight and internal management structures; swelling construction volume; and new external considerations related to climate change, and economic and population growth.

In large part, DDC has executed its projects successfully, but structural inefficiencies combined with current challenges demand a revised approach to DDC construction management.

The Strategic Blueprint contains common-sense solutions to bureaucratic inefficiencies, identified by practitioners and supported by stakeholders who work with and depend on DDC. In aggregate, implementing these solutions can have profound benefits for all New Yorkers, but also demonstrate that complicated government processes can be changed for the better.

DDC will work to implement the following proposals. Broad understanding and support will be necessary for their full incorporation into the way the City conceives of and executes its capital projects.



Water Main Replacement
Queens

Improve the Pipeline

Great capital projects begin with comprehensive scopes and appropriate budgets. DDC is working to provide improved guidance and support to our sponsor agencies to assess and prioritize capital needs and develop smart capital project scopes from the outset. We will accelerate internal processes to begin design and construction work in a timely fashion, locking in consensus on project scopes and significantly curtailing later-stage changes.

EXPAND FRONT-END PLANNING

DDC first receives requests to manage capital projects through a Project Initiation (PI) document. The PI starts the clock on DDC's ownership of the project's design and construction process.

To better manage this critical early phase of capital project development, DDC is introducing a more proactive project management approach to help project sponsors better understand and prioritize their overall capital needs before the PI is finalized.

Key among these initiatives is the expansion of **DDC's Front-End Planning (FEP) units**, which were established in 2016 to develop sensible project scopes that contain sufficient information about project objectives, design guidelines, and basic cost estimates, helping avoid project delays caused by incomplete early planning. FEP has worked to streamline the initiation of approximately 100 projects annually.

DDC will add staff to its FEP units to create more planning capacity for DDC's project pipeline. DDC will also offer **in-house cost-estimating services**, to ensure that project scopes realistically align with budgeted capital funds.

CAPITAL PROJECT SCOPE DEVELOPMENT

CPSD studies help develop scopes for complex projects *before* formal project initiation and allocation of capital dollars. Allowing DDC to manage CPSD studies for its projects can provide a holistic view of specific projects, promote early direction to agencies and encourage collaboration. To that end, DDC will **manage all CPSD studies for DDC projects**, while providing **in-house scope development** for an increased number of technically challenging projects each year.

Finally, a foundation of sensible long-term capital planning is **thorough asset condition information**. Each year, DDC manages the inspections and assessments of nearly 250 City assets, including service-providing facilities, libraries, and waste management facilities through the Charter-mandated **Asset Information Management System (AIMS)**. However, these assessments must be made more robust to capture all the critical information required for project scoping, similar to assessments performed annually by the School Construction Authority for all of its assets.

To this end, DDC will **expand its Asset Surveys** to ramp up to 800 inspections per year. At the same time it will **enhance building condition surveys** for a portion of assets to make them more actionable so that sponsor agencies can use them for capital project prioritization and initial scoping.

IMPROVE PROJECT INITIATION

DDC is working to standardize and streamline the way it receives and initiates projects, so that they can go into design as quickly as possible. We are partnering with our sponsor agencies to set standard information requirements, establish more rigorous scope change protocols, and minimize projects that stall in this initial phase.

DDC is making it easier for sponsor agencies to provide all the information needed to assess capital project complexity, set a baseline schedule, and carry-out the appropriate package of preliminary site work to enable design. Today, over 60% of PI requests have insufficient detail and are returned to sponsor agencies. **A standardized, online PI form** will improve quality of submissions overall, while reducing back and forth with project sponsors.

DDC will limit the number of projects that have late-stage, sponsor-initiated changes by **requiring scope acceptance sign-off from project sponsors**. Sponsor-requested scope changes received after design start impact many projects, leading to substantial delay. Limiting scope changes that occur post-design start to critical categories (e.g. coordination with neighboring planned capital projects) could significantly curtail time required for scope review and design modification.

However, some scope change may be inevitable and necessary. To better manage these changes, DDC will **fully assess the cost and schedule impact of scope changes** to recommend whether a change should be made, and require sign-off from client agencies before moving forward with implementation.

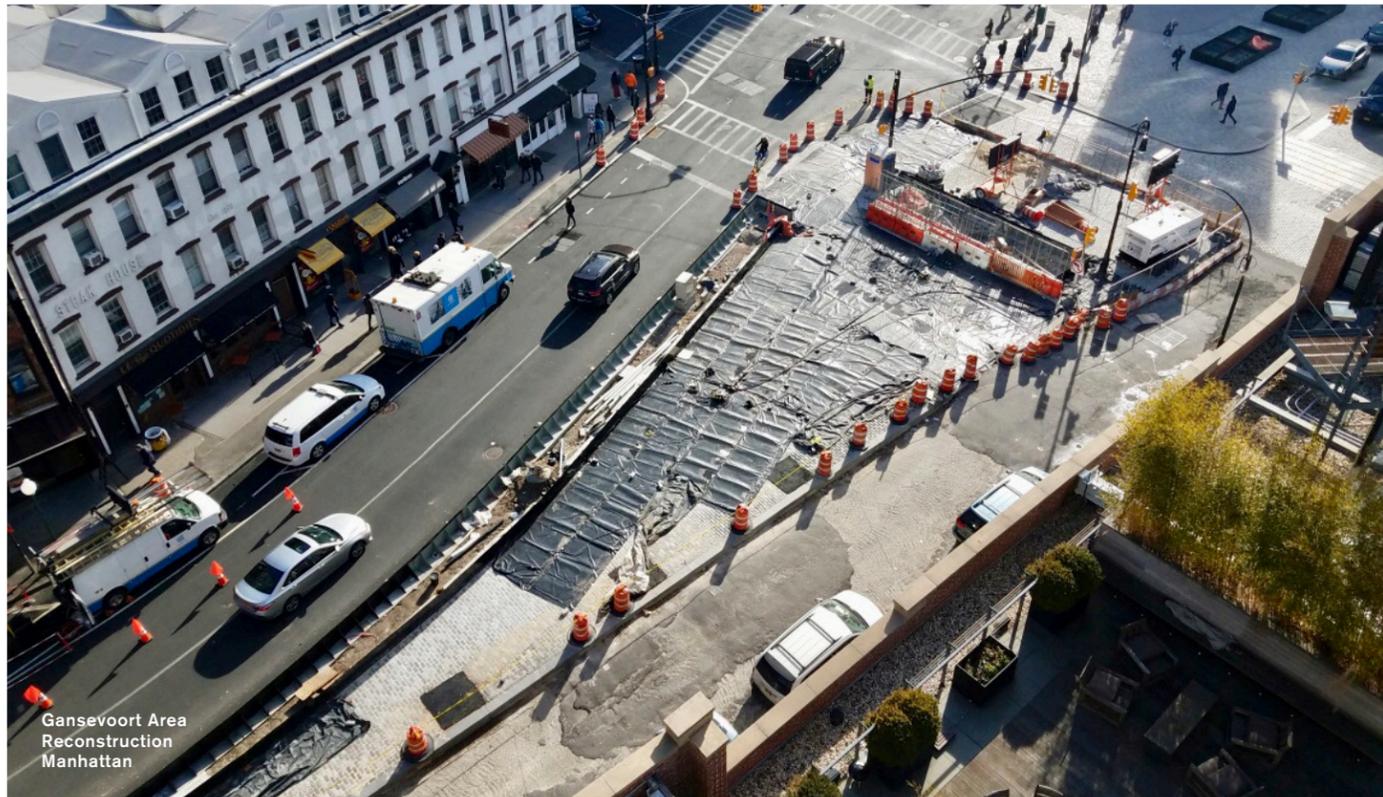
STREAMLINE AND ACCELERATE CERTIFICATES TO PROCEED

The development and approval of a Certificate to Proceed (CP) is a critical step in the life of a project. The CP is a detailed document demonstrating that a project is eligible to receive City capital funding, which is reviewed internally and externally and is frequently revised before it is approved. The CP process can potentially occur multiple times in the life of a single capital project at key milestones: at the commencement of design, at the commencement of construction, and again when any major change orders are processed. All told, the CP process can add months or more to any project.

While better project scoping and cost estimating should reduce the need for multiple CP amendments, DDC will also initiate several strategies to **accelerate and streamline CPs to advance timely design and construction starts**:

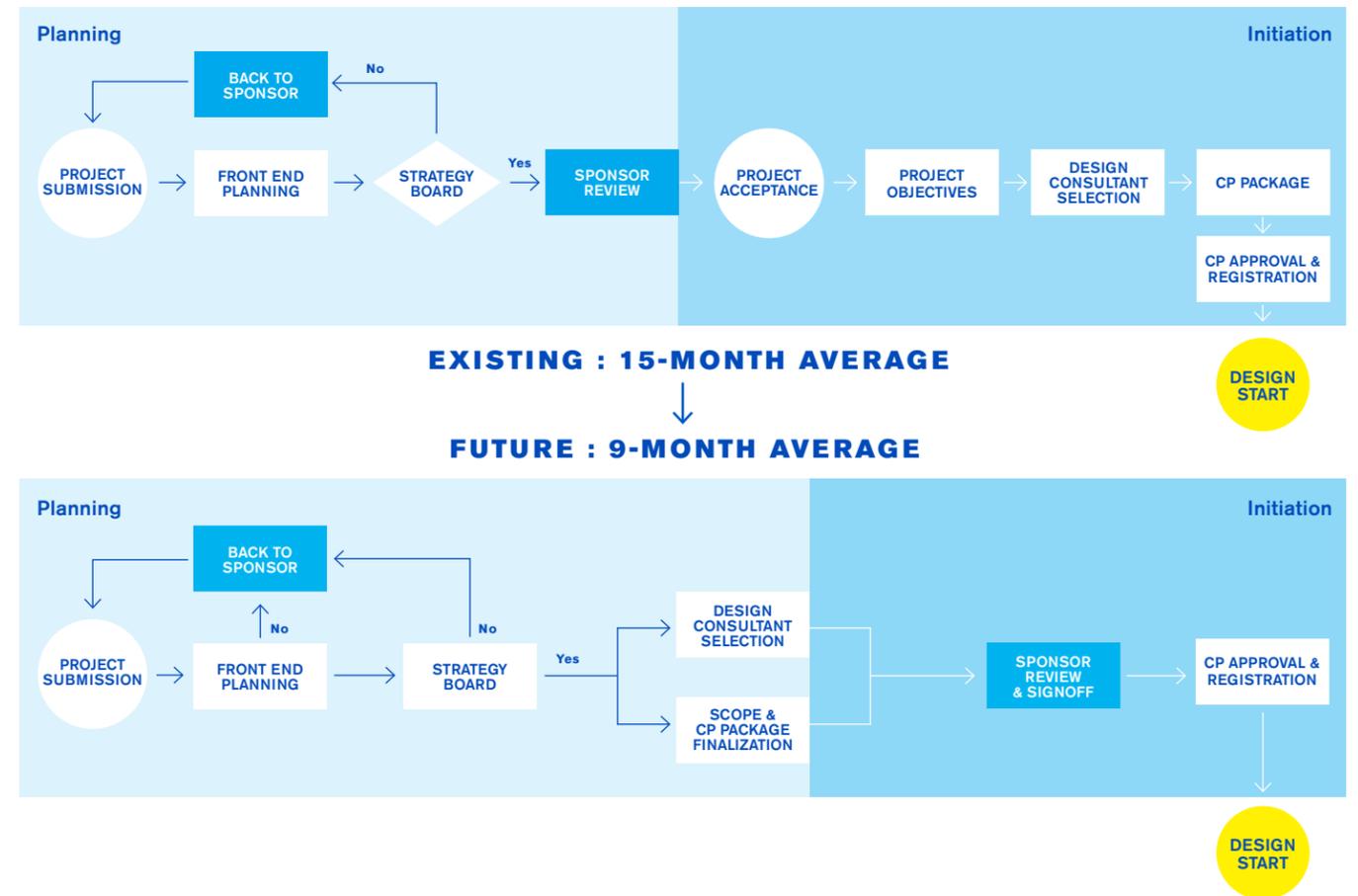
One key initiative is to **consolidate key project review documents** to reduce the time it takes to get an initial CP. At the close of DDC's Front End Planning (FEP) process, a detailed project feasibility document is produced and reviewed by DDC and the sponsor agency. A Certificate to Proceed (CP) for submission to OMB containing much of the same information is then prepared through a duplicative process. DDC is working with OMB to ensure FEP packages contain all of the information relevant for CP review so that these steps can be combined saving up to 100 days of processing time.

CP processing can add an incremental three months to typical Public Buildings projects, which generally require separate CPs at each phase of the project. DDC and OMB are partnering to **increase blanket CP threshold amounts**, creating a simplified, pre-arranged menu of capital work of specific value authorized to proceed without multiple cycles of CP approval. To accelerate CP processing, **DDC and OMB will ensure appropriate resources to review CP submission quality and expedite processing**, set standards for CP submission, and minimize back and forth during CP approval. Further, DDC will clarify capital eligibility guidelines in collaboration with OMB and the Comptroller's office to ensure that its internal assessment meets all criteria to accelerate subsequent oversight review.



Gansevoort Area Reconstruction Manhattan

Time Savings with CP Processes



Manage Projects More Effectively

In order to remain a best-in-class provider of construction services, DDC will improve its internal project management practices. During its strategic planning process DDC found several key areas where oversight and direction of capital projects, once underway, should be improved.

INSTITUTE ROBUST PROJECT MANAGEMENT AND CONTROLS

With direct responsibility for construction of vital City capital projects, DDC project managers (PMs) must be empowered to make critical decisions and develop the skill sets necessary to make critical decisions and manage workflow efficiently.

To ensure its PMs are fully equipped to meet this mandate, DDC is establishing a core **Project Management Training Program** that will enhance construction management expertise throughout the agency, create a sense of project ownership, and empower project managers to adhere to project cost, schedule, and quality requirements. Best practices training will include providing:

- Consistent decision-making among all managerial staff;
- Risk management expertise of project budget and scope; and
- Organizational capacity to ensure streamlined workflows.

The Program is underway and will be continuously adapted to ensure consistency and development of DDC's management team.

Alongside this effort, DDC is evaluating how work is allocated. **DDC will perform a workload management exercise** to effectively deploy staff to ensure a collaborative, cross-agency approach that will propel project development and decision-making.



Stapleton Library Expansion
Staten Island

DDC will supplement existing project oversight by **formalizing a Project Controls Unit for its Infrastructure Division**. The Project Controls Unit will use the extensive data collected on past projects to **establish standard construction durations and schedules**. The Unit will look to create interactive tools that will help flag potential risks on projects before they occur to help reduce project slippage and cost overruns.

DDC will also establish an agency-wide **Director of Cost Control**, who will oversee the development of robust in-house cost estimation tools in an effort to drive down project costs based on solid data.

Leveraging the vast data available about DDC operations, costs, and project durations to establish baseline, data-driven standards can fundamentally alter how DDC—and the City at large—understands and builds its infrastructure.

STREAMLINE CHANGE ORDERS & EXPEDITE CONTRACTOR PAYMENTS

Adverse field conditions can arise on even the best-planned capital construction projects, requiring rapid response and amendments to the project's original scope. These change orders are a reality on most construction projects. On well-designed and managed projects, change orders should generally not exceed a fraction of the overall project cost, but should be accounted for to avoid delays to **speedy project completion**.

Standard extra work, within a defined cost limit, should be permitted to be processed quickly, without multiple lengthy, and, at times, redundant reviews.

DDC is working internally and with its oversight agencies to **create a funded allowance contingency** up to a set percentage of individual project cost, and a pre-approved menu of common change order categories (like asbestos removal, soil conditions, utility interference, etc.) to be processed with fewer administrative steps.

Under this structure, DDC would be able to tap into critical funds quickly to keep projects moving when unexpected— but typical—conditions arise, while allowing for final review and approval by oversight agencies for validity and capital eligibility.

To support this effort, DDC will organize a **Change Order Review Team**, consolidating and streamlining reviews for validity, cost reasonableness, and capital eligibility. Budget specialists, cost estimators, and engineering auditors will work collaboratively and concurrently to review and advance change orders to the payment phase.

DDC is also establishing a **Payment Review Unit** with a dedicated director to monitor, troubleshoot, and expedite payments to all vendors in concert with the release of a new Project Delivery Management System. Ensuring timely payments is a critical part of effective project delivery, enabling DDC to attract high-quality vendors and grow the pool of small and medium firms and MWBEs that are able to do business with us.



Infrastructure Upgrades
Near Fresh Creek Basin
Brooklyn

ENHANCE UTILITY COORDINATION

DDC projects almost always require coordination with the City's gas, electric, and telecommunications utilities that share space beneath the street surface. Utility coordination has been identified as a key driver of delays for street reconstruction projects, which take on average 4-5 years to complete. Improved coordination and execution is required to resolve this important challenge. DDC is advancing the following three strategies:

First, DDC will **proactively design projects to avoid utilities in the critical path wherever possible**. This approach will ensure that the City's major infrastructure programs and utilities' capital plans are integrally developed through collaboration and shared data.

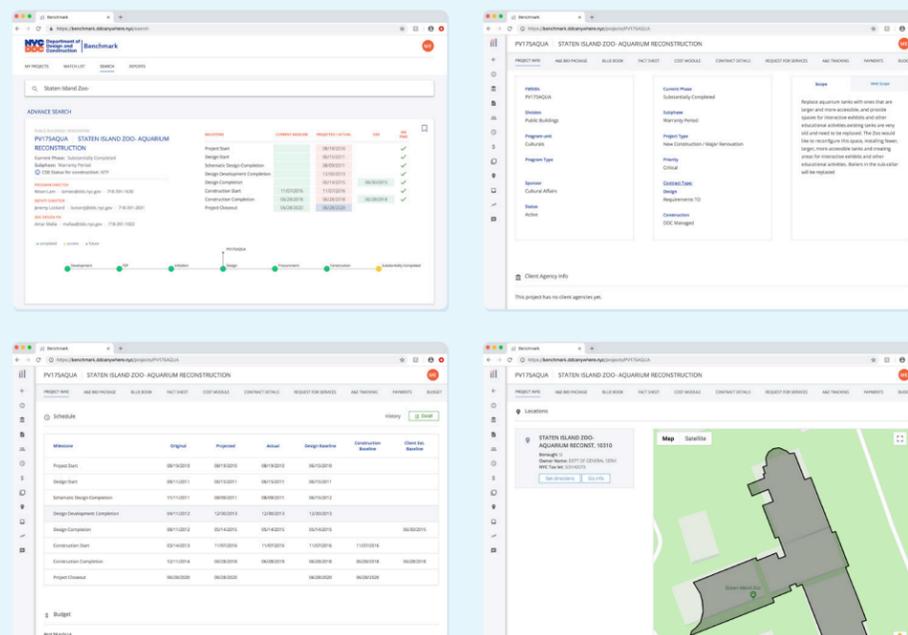
Next, DDC and its partner agencies will make utility coordination more efficient by instituting **systematic pre-alignment meetings** with utilities. These meetings will supplement paper and electronic budget documents so that capital planning teams can meet to work through project-specific construction schedules, give themselves advance lead time, and maintain continual updates on coordination plans and implementation.

Finally, DDC will **pursue more extensive joint bidding with utilities**, allowing it to procure utility relocation through its own construction contracts at the same time as its other work. In 2014, state legislation to allow for the use of joint bidding citywide was passed. Since then DDC has piloted a range of procurement strategies, avoiding anywhere from three to nine months of delays associated with utility relocation for a typical project. DDC will also work with utilities to ensure that specialized professionals are available to perform construction tasks in a timely fashion, irrespective of bid model.

SPOTLIGHT ON DDC PROGRAMS

Benchmark

Benchmark is DDC's project and portfolio management system used in the tracking and administration of capital projects. To facilitate the agency's core project delivery goals, Benchmark captures and highlights key project delivery information including high-level project information, schedules, contracts, costs, geo-location, and payments. Benchmark is designed to work securely anywhere and on all types of web capable devices.



STREAMLINE BUILDING PERMITTING AND PLAN REVIEW

DDC staff have extensive experience delivering safe and accessible public buildings and work closely with the Department of Buildings (DOB) to ensure that facilities meet all NYC building codes. Nonetheless, DDC projects must follow standard filing, permitting, plan review, and inspection processes which at times lead to duplicative processes and unnecessary delays.

To address this, DDC will establish a dedicated **DDC liaison at DOB** to be a single point of contact to help prioritize and expedite projects requiring permits, plan reviews, certificates of occupancy, and inspections. Further, the DOB liaison will help identify challenges with DDC submissions, and develop training for agency staff. The DOB liaison will expedite permit and approval processes for DDC projects, and also improve the quality of DDC submissions over time.

DDC is also piloting **DOB delegation of building plan code compliance review**. Applicants will still file with DOB, but DDC objections, comments, and approvals will be binding and recorded in BIS, the system of record. This will reduce duplicative plan review processes, as DDC already reviews for code compliance at various design stages. This also enables DDC to perform a detailed and binding constructability review during design.

EXPAND COMMUNITY OUTREACH AND ENGAGEMENT

The buildings and infrastructure DDC builds belong to every New Yorker, and its communications strategy should reflect this belief. By creating durable civic relationships, and engaging community members and stakeholders throughout the development and delivery of a project, a shared sense of commitment to these vital public assets is ensured.

Improved project outcomes are also driven by effective community engagement. Stakeholders in a public works project that are informed, engaged, and included ensure the clarity of a project's design and use, and that construction can move forward efficiently.

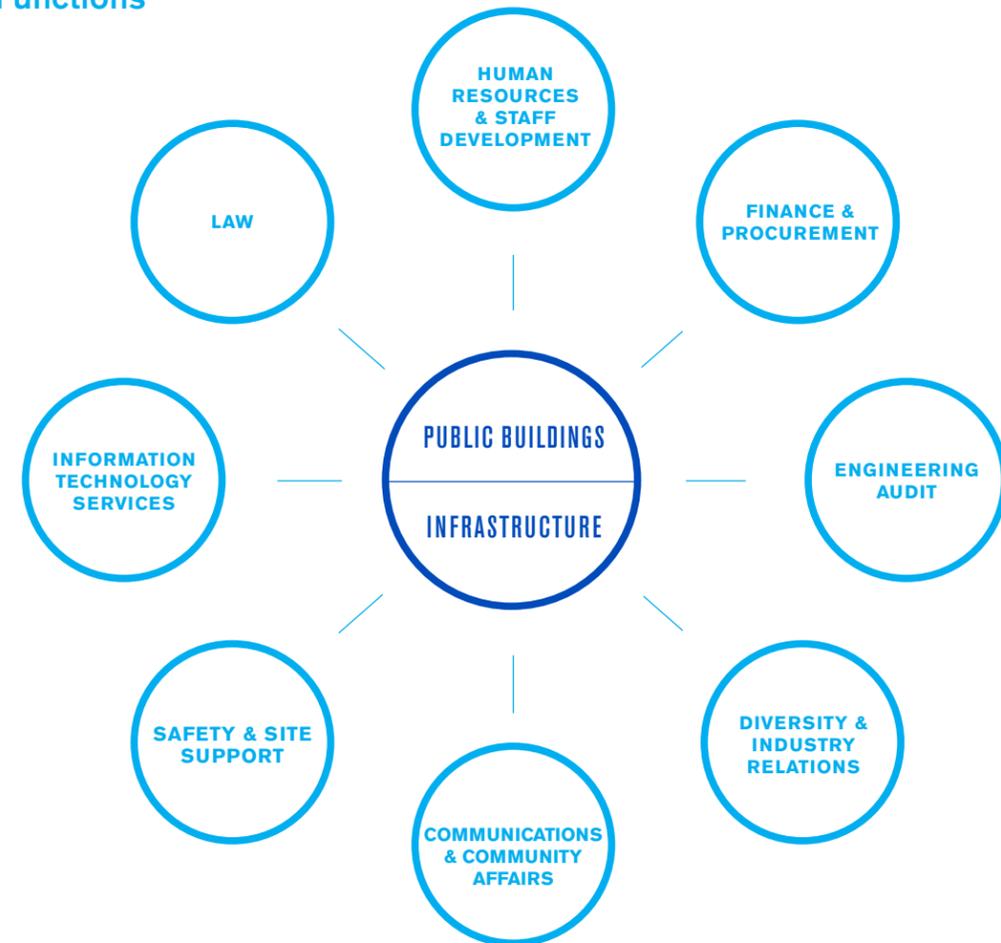
DDC will **enhance its Government and Community Relations Unit** by adding new borough-specific Government Relations Managers who will be responsible for early

and continuous outreach to key project stakeholders. The new managers will be available to address not only project-level concerns but agency-level issues, broader communications concerns, and to plan outreach strategies alongside stakeholders to guarantee a shared sense of collaboration and two-way communication.



Astor Place Reconstruction
Manhattan

Key Agency Functions



Get More Out of Contractors and CMs

In order to expand economic opportunity and increase competition, DDC must make it easier for contractors and consultants to participate in projects while demanding on-time and on-budget performance. To that end, DDC is modernizing how it procures, evaluates, and pays contractors while also exploring a range of options to promote timely project delivery.

INCREASE M/WBE PARTICIPATION

DDC's Office of Diversity and Industry Relations (ODIR) has helped DDC become a leading City agency for contract awards to Minority- and Women-Owned Business Enterprises (M/WBEs). Using innovative procurement policies and monitoring, DDC has awarded more than \$1 billion to M/WBEs since Fiscal Year 2015, including \$576 million in Fiscal Year 2018 alone, representing 54% of the City's total M/WBE awards. Consequently, the success of DDC's M/WBE program is crucial to that of the City.

While M/WBE utilization has improved from 10% in FY15 to 23% in FY18, there is significant room for growth. DDC is implementing strategies to further increase M/WBE participation, including setting a **30% M/WBE utilization goal** on all contracts in its Public Buildings Division.

Of particular significance, DDC's Chief Diversity and Industry Relations Officer will now be included in contract reviews and will be required to sign off on requests for approval of subcontractors. DDC will also integrate M/WBE utilization into its payment process.

Finally, recognizing the need to build the capacity and increase the pool of M/WBEs, DDC is creating a **Business Development Unit (BDU)** within ODIR to identify and reduce barriers and engage the M/WBE entrepreneurial community, aligning closely with Mayor de Blasio's goal of empowering M/WBEs to positively impact their communities.



New South Brooklyn Marine Transfer Station
Brooklyn



New EMS Station 50
Queens

STREAMLINE PROCUREMENT

The City's massive procurement program is heavily regulated at the State and City level, with multitudes of oversight and review, which limits speed and flexibility. There are a range of opportunities to streamline internal procurement processes to get consultants, CMs, and contractors on board more quickly. There is no silver bullet solution to improving procurement, but DDC and the City more broadly are pursuing several coordinated efforts that together can reduce procurement time overall.

DDC will be part of the development of PASSPort, the citywide procurement system upgrade. PASSPort aims to make procurement easier for both agencies and vendors. Phase 1 includes vendor performance evaluations and moving the former 20-page "VENDEX" paper form online. Because of PASSPort, the processing time for vendor

responsibility determinations has been reduced from 45 days to 20 days. Phases 2 and 3 will upgrade goods and services procurement and add payment requisitions and solicitations for opportunities. DDC will adapt agency processes to citywide standards and continue to ensure DDC technology development seamlessly integrates with PASSPort.

In addition, DDC is consolidating RFP development, evaluation, and fee negotiation under the Agency Chief Contracting Officer (ACCO) to eliminate redundancies and reduce processing time by several months, while improving the uniformity of standardized reviews.

DDC is also partnering with the Mayor's Office of Contract Services (MOCS) on important delegations of authority such as Contract Extensions, Renewals, and Recommendation for Award that will further reduce the time required to award contracts. Further,

DDC and MOCS are pursuing Procurement Policy Board (PPB) rule changes to streamline notice periods and be better positioned to rehabilitate vendors that have minor tax and Environmental Control Board (ECB) violations.

Finally, pre-qualified lists (PQLs) can make it easier to procure a vendor, especially when DDC sets special experience (e.g. working with landmarked buildings) or performance requirements. DDC will expand the use of PQLs for project types requiring special experience, create additional PQLs for a broader range of DDC project types, and improve vendor participation on PQLs through extensive outreach and development of an electronic portal. DDC will also explore using minimum performance evaluation requirements on PQLs to promote a pool of quality vendors.

SPOTLIGHT ON DDC PROGRAMS

Cultural Institutions

DDC works with cultural institutions, not-for-profits, and New York City's three library systems on projects that ensure the vitality and growth of City neighborhoods, and provide resources for communities to better engage in civic life and the arts.

Projects include the Far Rockaway Library, which will become a focal point of an emerging downtown corridor; Dancewave, a Brooklyn non-profit, tripling the size of the current studio, offering more opportunities for classes, performances, and cultural expression for this 23-year-old neighborhood staple; a new aquarium for the Staten Island Zoo; and the Bronx Children's Museum, creating a new home with exhibit spaces, a studio, and offices.



Staten Island Zoo Aquarium
Staten Island



New Kew Gardens Hills Library
Queens

CREATE FLEXIBLE VENDOR PERFORMANCE TOOLS

Improved consultant, CM, and contractor performance is essential to DDC's future success. DDC must therefore regularly evaluate contractors, and, for those found to be underperforming, develop and deploy flexible enforcement tools. These tools must include enforcement of non-responsibility contract clauses, but also other intermediate mechanisms that can compel performance or permit a range of actions. DDC is currently developing improved vendor guidelines, disciplinary measures, and incentives in collaboration with its industry partners.

This effort will yield changes at the front-end: DDC will publish updated, **standardized contract design specifications for Public Buildings** projects to improve design outcomes, streamline Department of Buildings (DOB) code compliance, and reduce constructability challenges and over use of costly, non-standard materials.

The current vendor quality evaluation system creates a five-year caution for entities receiving an Unsatisfactory rating, effectively preventing them from participating on DDC projects for this period.

This one-size-fits-all approach limits the City's ability to use evaluations to encourage and cultivate a pool of high quality vendors, and threatens the livelihoods of small firms. The agency is therefore working to **standardize and strengthen vendor evaluations, while creating a wider range of tools** to respond to poor contractor performance.

Incentives are another effective way to speed project delivery, where appropriate, and can lead to cost savings for certain projects. In Downtown Far Rockaway, DDC worked with City partners to use incentives to expedite a sewer reconstruction project in order to facilitate the timely development of critical affordable housing nearby, while reducing the length of disruption to local businesses and residents. DDC will **expand the use of incentives** to accelerate the delivery of designated projects.

GATHER AND INCORPORATE SPONSOR AGENCY FEEDBACK

As DDC reforms business practices to better deliver quality infrastructure and public buildings, it is essential to get continual feedback from the agencies for whom it builds. In this way, DDC staff can better understand and address the issues and processes that challenge sponsor agencies and impede effective project delivery.

DDC will create **simplified, standardized Project Sponsor Satisfaction surveys**, to be distributed at the end of construction projects, that will be reviewed by project managers and division leadership. Key issues will become the foundation of future process improvement discussions by the Project Delivery Working Group overseeing implementation of this Blueprint.



9th Avenue Water Main Reconstruction Manhattan

EMPLOY INNOVATIVE PROJECT DELIVERY

While DDC works to improve project delivery within existing limitations, the City needs and deserves more methods to deliver projects as quickly as possible.

DDC will work to add more tools to the project delivery toolbox while ensuring robust oversight by the City's multiple procurement management entities.

Design-build, for example, has proven to be an effective tool for on-time, on-budget delivery of recent large-scale projects such as the Kosciuszko Bridge and Mario M. Cuomo Bridge. DDC is currently employing Design-Build on the Borough-Based Jails program and hopes to further expand its application.

DDC could also be more efficient through the use of **CM-Build and CM-At-Risk contract models** for public buildings projects. CM-At-Risk allows the construction manager to engage earlier in the design process to improve cost estimating and constructability assessment, while CM-Build promotes robust cost and schedule oversight during construction.

Both have performance and efficiency benefits compared to the Design-Bid-Build method currently employed. Also, DDC is currently exploring the utilization of CM- Build-to-Replace on projects where an on-call CM could be utilized to replace a contractor or CM who is not meeting performance goals at 70% project completion.

DDC would also benefit from **insurance reform for better contracting**, which allow for an Owner Controlled Insurance Program (OCIP), or a Contractor Controlled Insurance Program (CCIP). OCIPs and CCIPs are becoming a standard feature in the construction industry and both forms of insurance offer risk and cost benefits that the City should be able to leverage.

SPOTLIGHT ON DDC PROGRAMS

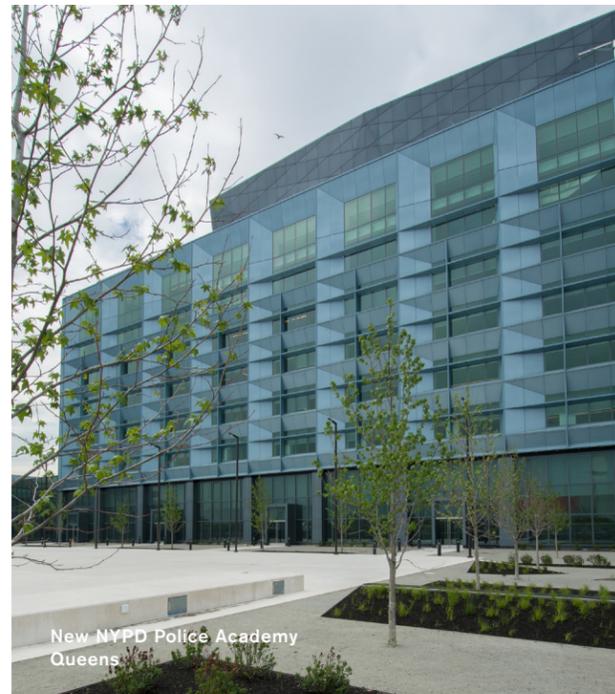
Public Safety

Partnering with NYPD, FDNY and other City agencies, DDC is responsible for capital projects essential to the safety and security of all New Yorkers.

DDC has completed transformational public safety projects including the 730,000-square-foot New York City Police Academy in College Point, Queens, and the

500,000-square-foot Public Safety Answering Center II, built as a second emergency communications 911 call intake and dispatch center for the City.

DDC manages a large portfolio for FDNY, renovating and building new firehouses and EMS stations in every borough. DDC is working with NYPD to build new stationhouses, including the 40th Precinct in the Bronx and the 116th Precinct in Queens. DDC also manages the creation of a new system of community-based jails for the Department of Corrections.



Modernize Internal Systems and Technology

Like every sector of the economy, construction management has transformed rapidly in response to technological change and other innovations. Moving forward, emerging trends such as big data and 3D modeling, integrated management practices, and wireless- and cloud-based communications will continue to advance what the construction sector is able to achieve. DDC will take advantage of these trends to continue to improve its project execution systems and approaches, drawing on innovations in the private and public sectors.

TRANSFORM INFORMATION TECHNOLOGY SYSTEMS

Modernizing, customizing, and centralizing DDC's information technology systems will improve every aspect of the agency's project management capabilities, from project planning through closeout. It will also ensure that contractors are paid in a timely fashion for work that is performed. DDC is in the midst of a two-year, \$16 million IT strategic plan that will upgrade legacy project management systems to facilitate project work and adapt to business process change over time. The plan will also provide an Internet-facing portal for centralized access to

agency systems from anywhere, enabling project managers, resident engineers, and auditors, as well as sponsor agencies and contractors, to work more from the field.

Four highlights of this effort to be completed in 2019 are:

Expand Benchmark, DDC's in-house end-to-end project management system, incorporating online project initiation, front-end planning, and a project management delivery system to facilitate payment processing. By 2021, Benchmark will fully support project management functions across DDC, and lay the foundation for partner agencies to integrate into the system as well.

Develop an integrated Document Management System to enable central access and cloud storage for all critical project documentation.

Create DDC Anywhere, an online portal for DDC staff and key partners to access project files and submit information from the field and their offices.

Participate in **citywide development and deployment of the PASSPort system**, which has already saved five weeks in the vendor integrity process, replacing the former VENDEX system, and will soon support procurement and contracting functions as well as payment processing, fully integrated with DDC's Benchmark system.



New Ocean Breeze Athletic Facility
Staten Island

INVEST IN RESEARCH AND DEVELOPMENT

As a premier infrastructure design and construction agency, DDC will draw from a Research and Development program to invest in the use of emerging and advanced technologies, spanning the project delivery lifecycle.

DDC will use this budget to apply enhanced data and analytics that can streamline project planning and design. For example, 3D-modeling and BIM-compliant design for infrastructure and utility projects can yield significant time savings and better assess location and condition data.

DDC will leverage recent, significant advances in physical technologies to improve the constructability and sustainability of its projects. These include trenchless construction, allowing for the installation of underground infrastructure with minimal excavation, modular building techniques to reduce in-place construction, and porous pavement and concrete to improve ground permeability.

Finally, DDC will advance the use of Smart City technologies in its projects. As infrastructure, transportation, utilities, and communications become increasingly interconnected, DDC Research and Development can help ensure that the structures it builds are adaptable for the future.

STANDARDIZE OPERATING PROCEDURES

Consistent operating procedures and clear roles and responsibilities are essential to avoid project delays and promote consistent outcomes at every project stage. To that end, DDC is undertaking a complete review of agency business processes, analyzing pain points, and subsequently **developing Standard Operating Procedures (SOPs) to address areas of opportunity.**

DDC will establish end-to-end SOPs for all common project delivery processes including:

- Design and construction project management tasks;
- Effective utilization of contract tools for contractor and CM management; and
- Finance, procurement, and other central division workflows.

Beyond rolling out SOPs, DDC is promoting a renewed focus on project delivery and capital project ownership across all internal divisions. By encouraging all staff to be true stewards of on-time, on-budget project delivery and fostering a proactive and communicative agency, all staff will be empowered.

SPOTLIGHT ON DDC PROGRAMS

Southeast Queens Initiative

DDC is working with DEP to deliver on Mayor de Blasio's historic \$1.9 billion commitment to alleviate flooding in neighborhoods throughout southeast Queens. The initiative involves 45 separate capital projects in communities such as St. Albans, Rosedale, Jamaica, Laurelton, and Springfield Gardens, which together comprise one of

the wealthiest African-American communities in the United States.

After decades during which vital infrastructure failed to keep up with development in southeast Queens, forcing residents to live with the constant worry of flooding and the resulting property damage and unsafe roadway conditions, Mayor de Blasio announced the allocation of funds for the construction of a robust, area-wide drainage system for the area. Construction is well underway on this effort.



Southeast Queens Infrastructure Upgrades Queens

SPOTLIGHT ON DDC PROGRAMS

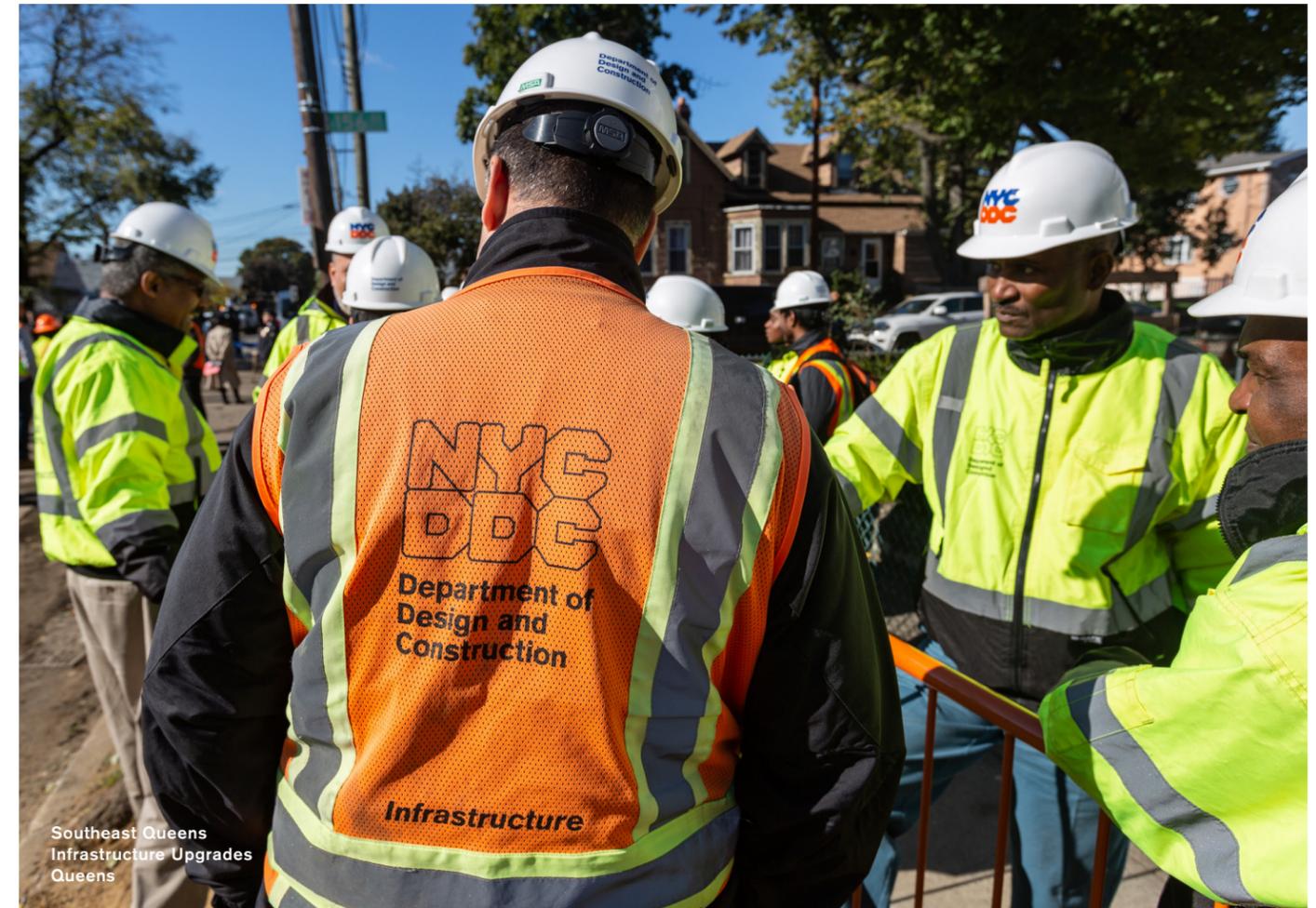
Facilities

DDC is at home in every borough. With permanent offices in Long Island City, satellite offices in Manhattan and soon in Staten Island, and temporary field offices in virtually every community board in the city, DDC is a physical presence in the lives of New Yorkers.

DDC Facilities is in the midst of a major rehabilitation of its main Long Island City office, home to more than 1200 DDC employees. This makeover is especially important as DDC undertakes a major rethinking of its operations—demonstrating a commitment to the quality of life of its employees who will be tasked with modernizing its project delivery systems.



DDC Atrium



Southeast Queens Infrastructure Upgrades Queens

DEVELOP PROGRAM MANAGEMENT

As DDC takes on some of the most complex large-scale programs in its history, it is essential to create a clear management structure for the many smaller, individual projects that make up some of DDC's larger, multi-phase initiatives. To ensure consistent management, strategic resource deployment, risk management, and application of lessons learned to improve integrated project execution. DDC will create programs for:

Coastal Resiliency: The City is undertaking ambitious coastal protection and resiliency projects and studies across the five boroughs to reduce the risk of flooding, facilitate access to the waterfront, and enhance natural areas. Projects in DDC's current pipeline include East Side and Two Bridges Coastal Resiliency, Red Hook, and Breezy Point, while studies are underway for additional neighborhoods across the City.

Southeast Queens:

The Comprehensive Drainage Improvement Program and replacement of old water mains in southeast Queens aims to alleviate flooding, enhance communities with green infrastructure, and better the lives of neighborhood residents. The City is investing \$1.9 billion to alleviate flooding in Southeast Queens through 45 discrete projects which will continue to demand consistent, sequential project execution as the program advances.

Citywide Pedestrian Accessibility:

This multi-year program will reconstruct more than 70,000 corners citywide, making them compliant with the Americans with Disabilities Act (ADA).

Borough-Based Jails: The City has committed to closing the jails on Rikers Island and creating a network of modern, humane, borough-based facilities to house a jail population of approximately 5,000, reflecting the reality that both crime and the number of people in jail have continued to fall.

Vision Zero and Select Bus Service:

Vision Zero is a priority program requiring that New York City redesign its streets and intersections to improve safety, while the Select Bus Service (SBS) program provides a complementary service to the subway system by connecting neighborhoods to subway stations and major destinations through a range of improvements including constructing dedicated bus lanes.

For each of these key programs, DDC will hire program executives for complex program management, institute program-specific controls, and create "matrixed" staff organization structures to integrate design, construction management, finance, and procurement.



Introduce A Girl to Architecture, Engineering & Construction Day
The Bronx

SPOTLIGHT ON DDC PROGRAMS

Safety

Safety is priority number one. DDC's Construction Safety & Quality Assurance team is responsible for overseeing and ensuring that best practices are learned and implemented across hundreds of DDC's active construction sites.

DDC's Safety team takes a proactive approach, and in 2018 provided safety training to more than 600 DDC and contractor employees and to 300 project managers on developing effective site safety plans; reviewed more than 900 safety programs; and performed more than 1,500 site safety inspections and audits.



DDC Safety Summit Conference

INVEST IN DEVELOPING OUR WORKFORCE

DDC's success is dependent on the professionals advancing the mission of effective capital project delivery, day in and day out. DDC Human Resources is dedicated to developing staff, promoting a positive workplace culture, and enhancing recruitment across the agency.

In order to deliver world-class infrastructure and public buildings, DDC staff must be equipped with knowledge of industry best practices. As such, DDC is developing **occupation-specific training for all positions** across its

many professional fields, ensuring a culture of professional development and continuous improvement.

DDC is also **streamlining hiring processes** to make sure it is able to draw from a broad talent pool and quickly on-board additional staff required to fully implement this Strategic Blueprint.

DDC will continue to support its **STEAM (Science, Technology, Engineering, Art/ Architecture and Math) education** initiative which was created in 2014 to work with schools in every borough to increase students' interest in technical career fields. STEAM offers year-round training and support for emerging

construction professionals and supports internships and programs such as ACE Mentor, the Young Engineers Program, Introduce a Girl to Architecture, Engineering and Construction to equip young New Yorkers with the skills they need for technical careers.



Columbus Circle Rehabilitation
Manhattan

Implementation

With this Strategic Blueprint, DDC can set a new paradigm for efficient delivery of public works. Projects can be executed from start to finish more quickly and more cost effectively. The mechanics of making this change are complex and often painfully bureaucratic, but the benefit of real improvements to project delivery to all New Yorkers is game-changing.

DDC will set milestones to deliver on its strategic goals and its commitment to change, and will report on progress regularly. DDC will also establish an internal Project Delivery Working Group that will meet regularly to monitor implementation and discuss additional actions to improve the agency. These goals are outlined below.

Improve the Pipeline	2019 GOALS	FULL IMPLEMENTATION
Expand Front End Planning	<ul style="list-style-type: none"> Double staff in FEP units Manage the execution of all CPSD studies for DDC intended projects 	Provide in-house cost estimation, complex scope development, and detailed building condition survey services to sponsor agencies by June 2020
Improve Project Initiation and Limit Scope Change	Implement standardized, online PI form	Partner with sponsor agencies to limit scope changes by January 2020
Streamline and Accelerate Certificates to Proceed	<ul style="list-style-type: none"> Finalize standard FEP report with OMB to ensure it meets all CP requirements Work with OMB to confirm additional and increased blanket CPs 	Ensure appropriate resources to accelerate CP review and clarify capital eligibility requirements by January 2020

Manage Projects More Effectively	2019 GOALS	FULL IMPLEMENTATION
Institute Robust Project Management and Controls	Train all construction PMs on industry best practices	Implement comprehensive cost, schedule, and risk management for all capital projects and complete DDC workload management review by June 2020
	Expand project controls in Infrastructure	
	Hire a Director of Cost Control	
	Roll out standard design and construction durations by project type	
Limit Change Orders & Expedite Contractor Payments	Pilot Allowances for Extra Work	Limit change orders and accelerate payments by December 2020
	Create consolidated Change Order Review and Payment Review teams	
Enhance Utility Coordination	Establish advance capital planning and monthly pre-alignment meetings with utilities	Expand the use of joint bidding and strengthen utility data-sharing by March 2020
Streamline Building Permitting and Plan Review	Create a DOB liaison	Partner with DOB to develop process for delegated plan review by March 2020
Expand Community Outreach and Engagement	Staff the Community Outreach Unit to support enhanced borough-based communications	Develop a more proactive, outward-facing approach to community outreach and engagement by March 2020

Get More out of Contractors and CMs	2019 GOALS	FULL IMPLEMENTATION
Increase M/WBE Participation	Identify strategies for reducing barriers M/WBEs face when trying to work with DDC	Fully staff M/WBE Business Development Unit and implement strategies to promote capacity development by June 2020
Streamline Procurement	Secure key delegations of authority in partnership with MOCS	Expand and enhance the use of PQLs and support the citywide implementation of PASSPort on an ongoing basis
	Implement centralized internal procurement processes	
	Put forward proposed rule changes to the Procurement Policy Board	
Create Flexible Vendor Performance Tools	Publish standardized design specifications for Public Buildings	Reform Vendor Performance Evaluations and advance innovative assessment and remedy alternatives in collaboration with City partners by January 2020
	Establish standard design and construction durations for all projects based on type and complexity	
Gather and Incorporate Project Sponsor Feedback	Create simplified, standardized Project Sponsor Satisfaction Surveys	Integrate sponsor feedback when considering future project delivery reforms beginning by June 2020
Employ Innovative Project Delivery	Pursue increased authority for Design-Build, CM-Build, CM-At-Risk with State Legislature Pursue insurance reforms such as CCIP for better contracting	Continue to explore additional project delivery methods that can yield cost and schedule savings on an ongoing basis

Modernize Internal Systems and Technology	2019 GOALS	FULL IMPLEMENTATION
Transform Information Technology Systems	Launch online CPI and FEP module in Benchmark	Complete Benchmark expansion, document management system, project delivery management systems, and DDC Anywhere by June 2020
	Integrate Infrastructure CP submissions to Benchmark	
Invest in Research and Development	Select priority data, analytics, and construction technology innovations to pilot on DDC projects	Develop additional SOPs as-needed on a continuous basis
Standard Operating Procedures	Develop SOPs to address areas of chronic delay and inconsistent practices	Continue to invest in research and development on an ongoing basis
Develop Program Management	Hire program executives for Coastal Resiliency, SEQ, Citywide Pedestrian Ramps, SBS/ Vision Zero, and Borough-Based Jails	Create matrixed organizational structures and implement program-specific controls for all complex programs by December 2020
Invest in Workforce Development	Roll out occupation-specific trainings for all staff	Partner with other City agencies to develop strategies to recruit from a diverse pool of talent and continue STEAM education initiatives on an ongoing basis

Conclusion

DDC IS COMMITTED TO IMPLEMENTING meaningful institutional change that will speed project delivery, reduce overall project costs, streamline management and oversight, and inspire continual innovation in public capital project delivery.

To achieve these important goals, hundreds of individuals, spread over multiple organizations, with sometimes competing mandates, will be asked to commit to change. That change will begin at home at the Department of Design and Construction. Only by giving continual attention to process improvement, and ensuring buy-in and action from key DDC leadership and staff, can this plan have its desired impact.

Over the coming months, DDC will implement this Blueprint and review progress to ensure goals are met, and adapt it where necessary to make meaningful progress. We are committed to providing regular progress reports to demonstrate a long-term commitment to improvement and self-evaluation.

DDC will use the specific proposals and the timeline included here as its metrics as it works to make this plan a reality. Most important, we look forward to using the Blueprint to build New York City's vital infrastructure more efficiently and to create renewed confidence in our government.



New York City
Department of Design
and Construction

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FOR THE RECORD

**Testimony of Denise M. Richardson, Executive Director
The General Contractors Association of New York
Joint City Council Hearing
Committee on Finance and Subcommittee on Capital Budget
February 12, 201, 10:00am
Committee Room, City Hall
Intro 32 and Intro 113**

Thank you, Council Members Dromm, Gibson and members of the Committee on Finance and Subcommittee on Capital Budget for the opportunity to submit comments for the record on behalf of the General Contractors Association of New York.

The GCA represents the unionized heavy civil and public works infrastructure contractors that construct New York City's parks, water, wastewater, road, highway, and bridge networks along with the mass transportation systems and building foundations that shape the skyline and make New York a vibrant city.

We support efforts to bring transparency to the city's capital projects. Creating a capital program dashboard that includes a project description, budget and scope, along with updates on the status of the project, will provide clear information to the public about the status of projects in their community and around the city. The data should be maintained by each capital project sponsoring agency, in a standard, downloadable format that will allow for data analytics, including an assessment of the number of projects, by agency, that are over or under budget, and the schedule status.

There are many factors that impact a project's costs and schedule. Allowing for data analytics will highlight whether there is an issue at a particular agency, with a certain type of project, or with certain size projects. This will be useful information for the City to then drill down and identify any problems. Some of

the most common reasons for project and budget delays are the result of agency scope changes, unknown subsurface conditions, or other errors and omissions that might result in design changes. Data that is in a format that can be analyzed will help point to and drive corrective action.

With the creation of a robust and up-to-date capital program dashboard, there will be no need for agency electronic notification to council members about project delays and cost changes. Council members will be able to look at the dashboard to determine the status of projects in their districts. As such, it will be essential for the agencies to keep the information on the dashboard current. This can best be accomplished by having a standard format for tracking all projects and avoiding customized information that drains agency time and resources to continually prepare, update, and revise.

Unfortunately, we were not able to attend the hearing in person. We welcome the opportunity discuss issues relating to the construction of the City's infrastructure with the Council. Our most recent annual report, *Deconstructing the Cost of Construction*, discusses many of the issues that impact the cost of construction in New York. These issues apply equally to all public procurements, regardless of whether it is a city or state agency or public authority.



Testimony on Intro. No. 113

For an Online Database of Pending Construction Projects

Submitted to the New York City Council Committee on Finance and the Subcommittee on Capital Budget

The Citizens Budget Commission, a nonpartisan, nonprofit think tank whose mission is to achieve constructive change in the finances and services of New York State and New York City government, submits this testimony in support of Intro. No. 113.

Intro. No. 113 would require the City of New York to produce an online database of all pending construction projects that includes initial and current completion dates and costs. The database would also provide the current project phase, borough, and managing and project agencies.

The City's annual capital investments have grown substantially; in fiscal year 2014, the City committed \$7.4 billion, which increased to \$11.8 billion in fiscal year 2018. The recently released February 2019 Preliminary Capital Commitment Plan forecasts \$83.8 billion in capital commitments from fiscal years 2019 through 2023. Yet tracking and assessing capital project costs currently is challenging. Accurate data on the total cost of projects is hard to acquire because projects are often funded across budget lines with multiple project ID codes for which there are no publicly available data on actual capital commitments. Additional challenges exist with regard to determining the cause of project delays and cost escalation. The database proposed in Intro. No. 113 would improve substantially the quality and accessibility of public data on capital project costs and delays by requiring reporting on all capital projects in a machine readable format and would address three shortcomings in the existing Capital Projects Dashboard: 1) data are provided only on current capital projects greater than \$25 million, which limits the scope; 2) data are not downloadable for analysis, which constrains usefulness as an analytic tool; and 3) data are not kept up to date, which limits timeliness.

Intro. No. 113 could be enhanced by using the existing Capital Projects Dashboard as the basic platform, while requiring the broader scope of projects, downloadable format, and up-to-date data already envisioned in the Introduction. However, Intro. No. 113 is not sufficient since it does not include additional data elements that would facilitate capital analysis. The Introduction should consider expanding the existing Capital Projects Dashboard because it would leverage an existing platform that already includes more data elements than would be required under Intro. No. 113. For example, the Capital Projects Dashboard maintains historical data on changes to each project's budget, rather than just the initial and

current values.

Two amendments to Intro. No. 113 would further enhance its benefit to elected officials, advocates, fiscal monitors, and the public. First, requiring inclusion of each project's associated capital budget lines and project ID codes would allow the database to be linked to budget documents. Second, the database should retain data on completed projects to allow for retrospective assessment of performance.

The capital budget is just as important as the operating budget and should be subject to the same monitoring and scrutiny. The reporting requirements proposed in Intro. No. 113, along with the enhancements outlined above, would allow for greater oversight of the City's more than \$10 billion annual capital commitments.

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<https://cbcny.org>

Citizens Budget Commission, Two Penn Plaza, 5th Floor, New York, NY 10121

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