



CAPITAL PLAN 2017-2026

FEBRUARY 16, 2017

OUR MISSION

Meet the critical transportation infrastructure needs of the bistate region's people, businesses, and visitors by providing the highest-quality and most-efficient transportation and port commerce facilities and services to move people and goods within the region, provide access to the nation and to the world, and promote the region's economic development.

Our mission is simple:
To keep the region moving.

Capital Plan 2017-2026

Letter of Transmittal to the Governors	2
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Capital Plan Categories	4
<i>Renew</i>	7
<i>Highlights</i>	
<i>List of Projects</i>	
<i>Expand and Connect</i>	28
<i>Highlights</i>	
<i>List of Projects</i>	
<i>Partner</i>	39
<i>Highlights</i>	
<i>List of Projects</i>	
<i>Deliver</i>	45
<i>Highlights</i>	
<i>List of Projects</i>	

Capital Spending by Department	63
<i>Tunnels, Bridges and Terminals</i>	64
<i>PATH</i>	65
<i>Aviation</i>	66
<i>Port</i>	67
<i>World Trade Center</i>	68

Sources	69
<i>Financial Plan</i>	70

Terms	73
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Appendix	
A. <i>Monitoring and Delivering the Capital Plan</i>	A-1
B. <i>Map of 2017-2026 Capital Plan Investments</i>	B-1
C. <i>List of Projects by Department/Facility</i>	C-1

Letter of Transmittal to the Governors

Dear Governors,

Under your leadership and guidance, The Port Authority of New York and New Jersey has finalized a comprehensive, \$32.2 billion, 10-year Capital Plan – the Agency’s largest ever - focused on the agency’s core mission to develop and manage critical transportation infrastructure for the region. The Plan detailed in this book was developed following months of deliberation and a transparent public process. The 2017-2026 Capital Plan represents a blueprint to responsibly rebuild and enhance the complex network of infrastructure assets that connect people and move freight throughout the New York – New Jersey region.

In February 2015, The Port Authority of New York and New Jersey endorsed the recommendations of the Special Panel on the Future of the Port Authority, which called for the Port Authority to reassess and update its prior 10-year Capital Plan to reflect a more focused investment in the region’s transportation needs. This 2017-2026 Capital Plan reflects a number of difficult choices required to balance and prioritize our investments priorities in a financially responsible way and adheres to three guiding principles:

- To apply the agency’s financial capacity and full resources toward modernizing and expanding the region’s aging airports, seaports, mass transit facilities, and other vital trans-Hudson transportation assets;
- To continue serving our customers efficiently, focusing on maintaining our facilities in a state of good repair, while ensuring safety, security and resiliency; and
- To allocate the agency’s affordable capital to its highest priority needs in a fiscally responsible manner so as to achieve a financially balanced plan.

As part of the process to develop this Plan, we closely scrutinized our projected expenditures to ensure that our resources were utilized in the most efficient and effective manner. We also have allocated our capital resources in order to maximize accompanying private sector investment where it makes sense, by catalyzing private sector development at our facilities including through public-private partnerships. We believe this ambitious plan is a foundation for a new tomorrow built on our four main funding priorities and objectives:

RENEW: \$8.8 billion for projects required to renew and maintain assets in a state of good repair, and ensure efficient, safe and secure operations. Physical condition, operational impact, risk assessment, and state/federal regulations are among the factors considered to determine criticality of renewal projects.

EXPAND and CONNECT: \$11.1 billion to invest in projects that expand capacity, improve connectivity, meet the future growth of the region, and advance the region's transportation needs. Projects are evaluated based on scale of impact to the agency and the region as well as potential to enhance revenue generation.

PARTNER: \$4.7 billion for projects where we partner with federal and regional stakeholders to complete Superstorm Sandy restoration, fortify and improve resiliency of our assets, and build for the future, with \$2 billion in Port Authority direct investment. In addition, the plan provides for the Port Authority’s support of the Gateway Development Program, a critical trans-Hudson rail link and associated infrastructure. This support, in the amount of up to \$2.7 billion, would support debt service on a portion of the Gateway Development Corporation’s low cost borrowing. The Port Authority would not be subject to project completion, cost overrun or funding risk.

DELIVER: \$7.6 billion in spending to complete and deliver the projects that are currently under construction. Projects currently under construction in this capital plan include \$3.2 billion in Renew projects, and \$4.1 billion in Expand and Connect projects.

This slate of projects in our Plan – projects that will strengthen our core transportation infrastructure and will meet the needs of the Port District for generations to come – is part of our ongoing investment, and requires the assistance of local, regional, and federal partners, both public and private. We remain strongly committed to exercising our fiduciary responsibility in carefully scrutinizing every expenditure to ensure accountability and prudence.

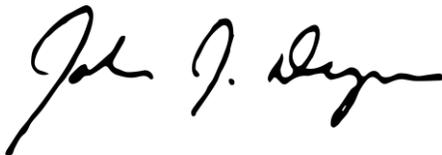
For major projects and facilities, the projects in our Plan reflect a broader vision and long-term, holistic plan for the role that the facility will play in the future as part of the region's inter-connected transportation network. For example, at LaGuardia Airport, we have embarked on building a new, world-class airport with a unified, modern central terminal area and an expanded and more-efficient airside, together with improved access given anticipated growth in demand. Similar modernization plans are reflected in investments at Newark Liberty and JFK International airports. At PATH, given the continued trend of growing trans-Hudson ridership and commutation, we are modernizing the system to enhance safety and increase capacity. Similarly, to meet the anticipated long-term growth in trans-Hudson bus ridership, the agency is planning for a replacement of the Port Authority Bus Terminal. This complements major investments already underway at the trans-Hudson bridge crossings including a replacement of Goethals Bridge, a re-engineered Bayonne Bridge, and a comprehensive renewal of the George Washington Bridge. For the maritime facilities, which represent major economic engines for the entire region, this Plan builds on investments in channels, berths, and related infrastructure to accommodate anticipated growth in cargo volume and the next-generation of larger, more efficient container ships, and to ensure the continued competitiveness of the Port of New York and New Jersey – the East Coast's largest port.

These are just a few highlights among the many infrastructure projects in the 2017-2026 Capital Plan. And while there are many such highlights, we reiterate that this Plan required difficult choices as we sought to achieve a fiscally responsible, financially balanced plan.

Consistent with our efforts to reform how this Agency does business, the Port Authority sought and received significant public input to this Plan as part of its development. Following issuance of the proposed Capital Plan in early January, the Agency held two public hearings to solicit and receive public feedback and input. In addition, we received over 400 comments from the public which the Board reviewed and discussed prior to finalization of this Capital Plan. We hope and believe that the numerous Board meetings and public discussions and solicitation of public input reflect our commitment to transparency and reform. We thank you, the Governors, for your leadership and guidance in our overall steps toward reform and improved transparency.

The next chapter of the transportation infrastructure in our region, as shown in this Plan, is only now beginning. The Board of Commissioner's adoption of this Plan marks a new milestone in the agency's renewed commitment to focus on its core transportation mission of keeping the region moving.

Yours sincerely,



John J. Degnan
Chairman



Patrick J. Foye
Executive Director

February 16, 2017

Capital Plan 2017-2026

The 2017-2026 **\$32.2 billion** Capital Plan reflects \$29.5 billion of direct investments by the Port Authority spread over a broad portfolio of assets and facilities, both new and existing, with the goal of keeping them efficient, safe, secure, and reliable for generations to come. In addition to investing in our own assets, the agency plans to provide up to \$2.7 billion in debt service support for the Gateway Program. While each of these undertakings is noteworthy, when the individual pieces integrate to form a complete picture, that vision is exciting and invigorating for the region.

The balanced portfolio of critical infrastructure projects presented in this Capital Plan both affirms and supports the Port Authority's mission to meet the region's core transportation needs, while simultaneously acting as good stewards of the public's resources in a fiscally responsible way. These projects also ensure the agency's ability to serve its stakeholders both today and tomorrow.

The course of action is the result of the continued use of a comprehensive fiscally disciplined risk-based approach to evaluating projects, followed by extensive deliberation by the Port Authority's Board of Commissioners. The agency's engineering, capital planning and delivery, operations, and financial planning professionals conducted a comprehensive survey of the current and most pressing capital needs, as well as a thorough evaluation of the relative benefits and priorities these capital requests reflected. The resulting plan consists of over **600 projects**, each of which contributes to renewing, restoring, maintaining, expanding, or connecting assets vital to the current regional transportation portfolio. Notably, many of these projects simultaneously seek to enhance and expand capacity and improve connectivity so the region can continue to grow and prosper in a safe, resilient, and sustainable manner as we head into the future. The Capital Plan prioritizes the allocation of available capital to those projects that provide the most benefit and aid in our mission of keeping the region moving.

With this capital plan, the Port Authority and its Board of Commissioners affirm a renewed focus of investment in our core transportation assets. As recommended by the Special Panel on the Future of the Port Authority, \$600 million in unallocated "regional development" funds has been redeployed to transportation projects that align with the Authority's core mission. Significant projects, such as Terminal B Redevelopment at LaGuardia, Terminal A Redevelopment at Newark Liberty International, the Bayonne Bridge Navigational Clearance Program, Goethals Bridge Replacement, George Washington Bridge Restoring the George Construction Program, and the Port Authority Bus Terminal Replacement are all included in this plan. The plan provides funding for both new and ongoing projects, and reflects the agency's commitment to facilitating the movement of people and goods efficiently and safely throughout the region.

In determining funding allocation, the first priority was to ensure sufficient funds to deliver the projects that are currently in construction. Next, funds were allocated to maintain our assets in full operational capacity and provide for projects required by law or for security purposes. Finally, funds were allocated to provide for projects that will restore and fortify assets damaged by Superstorm Sandy, and to other high priority projects that will expand and improve critical transportation assets.

This foundation for the future is built on our four main funding priorities and objectives:

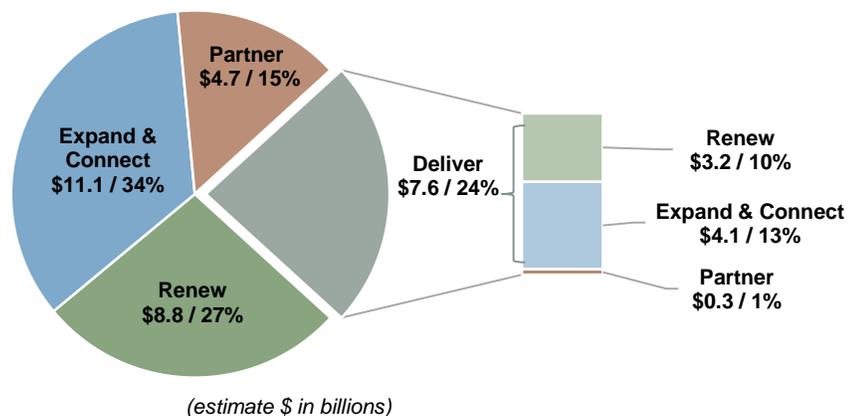
RENEW: \$8.8 billion for projects required to renew and maintain assets in a state of good repair and ensure efficient, safe and secure operations. Physical condition, operational impact, risk assessment, and state/federal regulations are among the factors considered to determine criticality of renewal projects. (An additional \$3.2 billion in Renew projects are currently in construction and included under the Deliver portion of the program).

EXPAND and CONNECT: \$11.1 billion to invest in projects that expand capacity, improve connectivity, meet the growth of the region, and advance the region's transportation needs. Projects are evaluated based on scale of impact to the agency and the region as well as potential to enhance revenue generation. (An additional \$4.1 billion in Expand and Connect projects are currently in construction and included under the Deliver portion of the program).

PARTNER: \$4.7 billion for projects where we partner with federal and regional stakeholders to complete Superstorm Sandy restoration, fortify and improve resiliency of our assets, and build for the future, with \$2 billion in direct Port Authority investment. In addition, the plan also provides for the Port Authority's support of the Gateway Development Program, a critical trans-Hudson rail link and associated infrastructure. This support, in the amount of \$2.7 billion, would support debt service on a portion of the Gateway Program Development Corporation's low cost borrowing. The Port Authority would not be subject to project cost overrun or funding gap risk.

DELIVER: \$7.6 billion in spending to complete and deliver the projects that are currently under construction. Projects currently under construction in this Capital Plan include \$3.2 billion in Renew projects, \$4.1 billion in Expand and Connect projects and \$300,000 in Partner projects.

CAPITAL PLAN BY CATEGORY



Monitoring the Plan

The Capital Plan is a blueprint for future spending, and does not purport to supplant the Port Authority Board's authorization process for specific projects and contracts. Accordingly, the capital plan and related questions of funding capacity will be monitored and will be adjusted in the future.

The Port Authority Board's Committee on Finance and Committee on Capital Planning, Execution, and Asset Management will continue to monitor Port Authority capital expenditures and capital capacity on a quarterly basis. In addition, at least every two years, the Board will reassess the capital plan in light of then-current information as to capital capacity and the progress of capital projects, and determine whether there will be sufficient resources to:

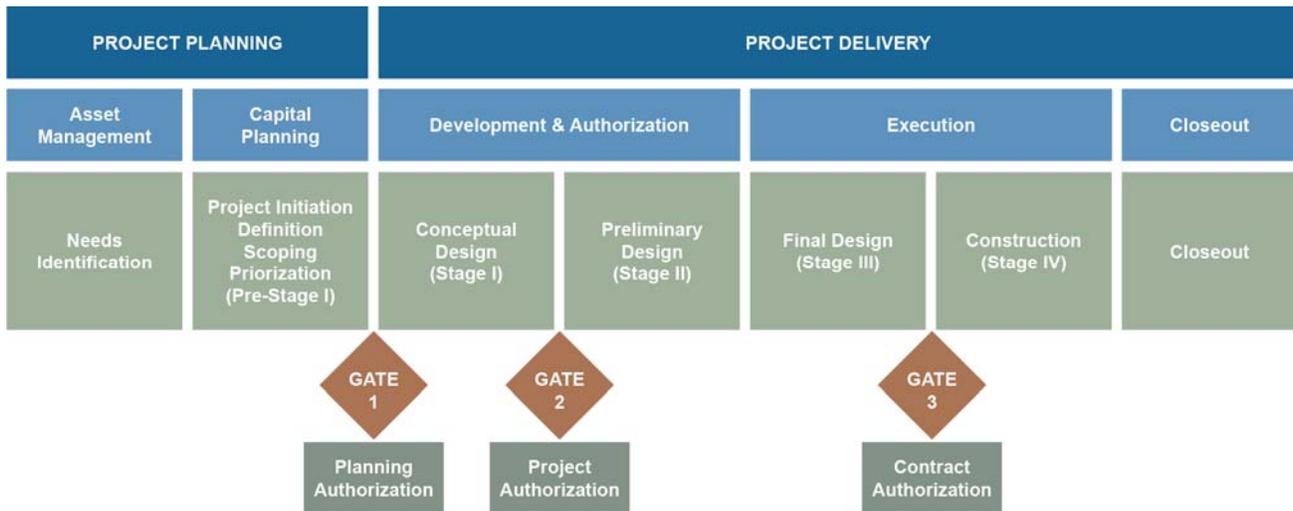
- invest in capital plan projects during the remaining period of the capital plan at roughly the pace and the cost that has been planned, and to fund necessary expenditures in the subsequent 10-year period; and
- if the Board cannot make this determination, it will modify the capital plan to ensure that these two conditions can be met and to maintain a balanced plan.

Further, the Port Authority Board has directed staff to enhance its “gates” management process, in order to determine when construction may begin on a given capital project. This process includes, among other things, consideration of: (1) the revenue-generating potential and capital capacity impact of the capital project; (2) the relative priority of the project; (3) and the overall capital capacity of the Port Authority.

The enhanced gating process, which is outlined below, provides natural break points in a project’s life cycle, to either continue or modify a specific project. If in the Board’s judgment there is not sufficient capital capacity to complete a project, or other priorities arise, then:

- construction will not begin;
- other projects will be deferred, eliminated, or modified to the point that there is sufficient capital capacity, at which point construction may begin; or
- the Board will consider other fiscally-prudent alternatives, taking into account such factors as revenues, expenses, and anticipated project costs.

In determining capital capacity, consideration will be given to steps to reduce expenses, as well as to projected revenue increases and anticipated receipt of proceeds from either third-party grants or monetization of Port Authority assets, but only to the extent that such savings and additional funding are, in the judgment of the Board, highly likely to be realized.



Gate 1 ensures: Proper project definition, scoping and prioritization

Gate 2 ensures: Appropriate level of project development (cost, schedule and scope)
Validation of available capacity prior to proceeding to final design

Gate 3 ensures: Project compliance with existing budget and authorization
Validation of available capacity prior to proceeding to construction phase

Gating Process: Appendix A provides an overview of how capital capacity and delivery of the capital plan will be monitored.

Renew

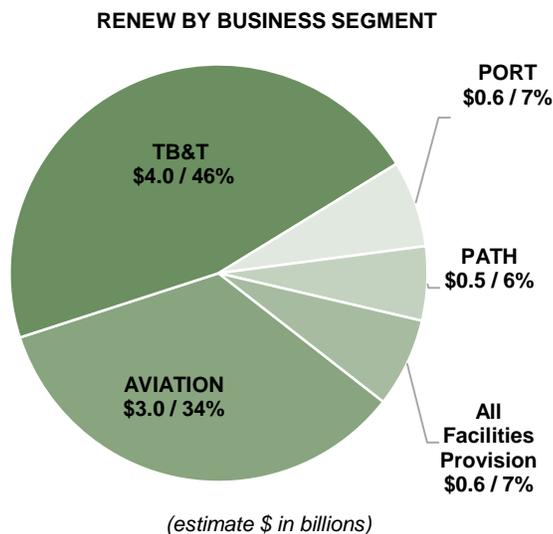
PROJECTS REQUIRED TO RENEW AND MAINTAIN ASSETS IN A STATE OF GOOD REPAIR AND ENSURE EFFICIENT, SAFE AND SECURE OPERATIONS.

As the Port Authority approaches its centennial, it is important to remember that many of the agency’s facilities have aged and some of their functional systems are reaching the end of their useful lives. Additionally, the region has grown significantly since these facilities were built, and in some cases current demand exceeds what was envisioned in their original designs. The aging facilities have been maintained to accommodate progressively higher volumes and larger vehicles, vessels, and aircraft, and require more frequent repairs as a result. Renewal projects focus on maintaining assets to ensure efficient operations and reflect current security and storm resiliency needs, all of which are important priorities for the agency. Projects in this category will improve existing assets and provide infrastructure that is efficient, reliable, and safe for our customers.

The portfolio of renewal projects represents **\$8.8 billion (27 percent)** of the total Capital Plan. Some significant projects from this category include:

Highlights

<i>(estimate \$ in millions)</i>	2017-2026
George Washington Bridge — Restoring the George Construction Program	\$ 1,444
Lincoln Tunnel Helix Replacement Program	\$ 1,138
Port Wharf and Berth Replacement Program	\$ 364
Port Authority Bus Terminal Interim Improvement Program	\$ 328
Newark Liberty International Airport — AirTrain Newark Interim Repairs	\$ 300
John F. Kennedy International Airport — Runway Rehabilitation (4R-22L and 13L-31R)	\$ 228



George Washington Bridge “Restoring the George” Construction Program

Overview: The George Washington Bridge (GWB) is the busiest bridge in the world, supporting an average of 100 million vehicles per year, or more than 300,000 vehicles a day. It opened in 1931. Today, the span remains structurally sound due to the Port Authority’s ongoing investments aimed at addressing wear and tear caused by traffic over this vital crossing.

TOTAL PROJECT COST	\$1.8 BILLION
2017-2026 COST	\$1.4 BILLION
CURRENT STAGE	MULTIPLE

Purpose: The Restoring the George Program will maintain the structural health of the bridge for the millions of customers who use it over the next decades, whether driving, biking or walking. Investments specifically aim to renew the bridge by rehabilitating, replacing, and modernizing bridge components to ensure the operational safety and efficiency of this facility.

Scope: The program includes 11 high-priority projects, the largest of which is the roughly \$1 billion Suspender Rope Replacement Project, which encompasses the innovative replacement of more than 500 suspender ropes and handrails. Other projects under the program rebuild the Palisades Interstate Parkway Helix; double the capacity for pedestrians and cyclists, with separate sidewalks for each, by replacing the bridge’s upper level sidewalks; installation of new ADA access ramps; installation of state of the art safety fencing; and rehabilitate the Main Span’s eastbound upper and lower levels. The program also provides for the rehabilitation of several major elements associated with the bridge, including the approach spans over the New Jersey anchorage and Hudson Terrace; the 178th and 179th street ramps, bus ramps and bus turnaround; the main span upper level structural steel; and the Center and Lemoine Avenue Bridges.

Implementation Plan: Careful planning underpins the construction schedule in order to mitigate impacts on the GWB’s many customers. Projects under the Restoring the George Program have been sequenced with an integrated master construction schedule to identify and mitigate potential lane closure conflicts. Along these lines, roughly \$90 million worth of work is currently underway. The GWB Suspender Rope Replacement Project is one of the most complicated and significant components of the overall program and will therefore govern the overall project schedule, which can be adjusted to respond to conflicts and changes as they may occur in the field. The Suspender Rope Replacement Project is expected to be completed in 2024.

For more program information, please visit <http://www.panynj.gov/bridges-tunnels/restoring-the-george.html>



Lincoln Tunnel Helix Replacement Program

Overview: The Lincoln Tunnel Helix is a critical link in the regional transportation network. It carries more than 120,000 vehicles per day to and from the tunnel and the Port Authority Bus Terminal via the Exclusive Bus Lane (XBL). A bus rapid transit fixed guideway, the XBL is one part of a three-part priority bus system that includes the Lincoln Tunnel and the Port Authority Bus Terminal, and carries an estimated 1,800 buses, or 63,000 passengers, daily. The Lincoln Tunnel Helix, a series of entry ramps to the tunnel on the New Jersey side, was constructed in 1937 and widened by one lane in 1957. In 2015, the agency completed a three-year Helix rehabilitation project, which extended the structure’s serviceable life until 2025.

TOTAL PROJECT COST	\$1.5 BILLION
2017-2026 COST	\$1.1 BILLION
CURRENT STAGE	DESIGN

Purpose: To replace the Lincoln Tunnel Helix, which is functionally obsolete and approaching the end of its useful life.

Scope: The agency envisions participating in robust community stakeholder engagement to seek new and innovative ways to handle vehicles safely and more efficiently. The Lincoln Tunnel Helix Replacement Program includes funding for planning, environmental review, public outreach and participation, design and permitting, and construction. The program will accommodate anticipated future capacity needs, meet contemporary standards and code requirements, and provide direct connectivity to and from a new bus terminal.

Implementation Plan: Planning for a new Lincoln Tunnel Helix is currently underway. The agency will evaluate multiple replacement alternative schemes before commencing design and environmental efforts, which will include public outreach to local and regional stakeholders. Construction will be staged to minimize disruption to the Helix’s existing operations, and will necessarily be coordinated with regional partners and other construction activities at the George Washington Bridge, Holland Tunnel, and Port Authority Bus Terminal.



Port Wharf and Berth Replacement Program

Overview: This program focuses on replacing mission-critical, timber-supported wharf structures vital to marine cargo activities. Some of these structures were constructed almost 90 years ago and have deteriorated significantly, particularly in recent history as a result of increased marine-borer activity in the area. This program will be performed in three phases over the next 30 years.

TOTAL PHASE 1 PROJECT COST	\$1.0 BILLION
2017-2026 COST	\$364 MILLION
CURRENT STAGE	PLANNING

Purpose: Phase 1 of this program will proactively and systematically plan for and replace infrastructure for mission-critical wharves in Port Newark/Elizabeth, Port Jersey, and Brooklyn.

Scope: Fourteen berths at New Jersey Marine Terminals and one pier at the Brooklyn piers will be replaced or rehabilitated in this 10-year plan, based on their age and other operational considerations. The project will include preliminary conceptual planning, design alternative selection, underwater surveys and field investigations, contract document preparation, and award of contracts for the replacement of these berths across NJ and NY port facilities.

Implementation Plan: This program includes a two-year study to analyze current conditions and develop a long-term wharf replacement strategy. The implementation plan will include the selection of an environmentally acceptable design suitable for specific berth usages, plus staging to minimize disruption of container terminal operations during construction.



Port Authority Bus Terminal Interim Improvement Program

Overview: The Port Authority Bus Terminal (PABT) is one of the busiest terminals in the world, serving approximately 230,000 passenger trips each weekday and approximately 600 bus movements during its peak hour. The facility’s South Wing opened for service in 1950 and expanded in 1981 via construction of the North Wing. It is currently experiencing physical and operational challenges that this program seeks to alleviate.

TOTAL PROJECT COST	\$337 MILLION
2017-2026 COST	\$328 MILLION
CURRENT STAGE	MULTIPLE

Purpose: The PABT Interim Improvement Program aims to enhance the customer experience at the 64-year-old terminal and provide the replacement or repair work to major building systems necessary to ensure that this facility remains operationally effective and safe until the new one is built.

Scope: This program includes a full portfolio of projects consisting of priority repairs aimed at the preservation or rehabilitation of parking level trusses, roadways (wearing courses), structural slabs, concrete, and masonry. It also targets replacement of electrical panels, controls, HVAC, ductwork, and sanitary drainage; the on-going repair of leaks; and the completion of the \$90 million “Quality of Commute” Program authorized by the Port Authority Board of Commissioners in 2014. The \$90 million Quality of Commute Program was developed to improve conditions for customers at the existing PABT while planning continues for the design and construction of a new terminal. It includes operational improvements to help reduce crowding and improve bus flow (which has already enhanced the customer experience); the addition of increased cellular and Wi-Fi connectivity within the terminal; the installation of new restrooms; and the installation of supplementary ventilation systems, among other improvements. Additional work includes rehabilitation of elevators and escalators, replacement of the visual paging system, enhancement of building entrances/exits, and the renovation of all remaining restrooms.

Implementation Plan: Projects within this program exist in various stages of design or implementation, with \$40 million already committed in construction. The full portfolio of projects is anticipated to support the continued operation of the PABT as construction on the new facility occurs (see page 29). All projects will be staged to minimize service disruptions to passengers as well as to coordinate with all other work.



Newark Liberty International Airport — AirTrain Newark Interim Repairs

Overview: AirTrain Newark is a critical component of the overall functionality of Newark Liberty International Airport (EWR). The line conveys an average of 30,000 passengers per day or 10 million passengers per year, providing transfer of customers and employees between the terminals, parking lots, and rental car facilities, as well as granting them access to the Northeast Corridor (NEC) Rail Link. Without AirTrain, EWR likely would not function at its current level of service. Congestion on airport roadways and terminal frontages would increase dramatically and there would be no airport access from Amtrak, NJ TRANSIT, or any future PATH to Northeast Corridor Rail Link Station connection without the use of buses.

TOTAL PROJECT COST	\$380 MILLION
2017-2026 COST	\$300 MILLION
CURRENT STAGE	PLANNING

Purpose: AirTrain Newark has experienced mounting operational failures as the existing system nears the end of its useful life. The AirTrain Newark Interim Repairs Program will extend the life of this AirTrain to 2030 by providing interim capital repairs of \$380 million while planning for a replacement system progresses.

Scope: The overall program includes several projects consisting of priority repairs and sub-system overhauls, plus refurbishment and replacement of multiple system elements, including the running surface and guideway heating system, guideway structure, mainline switches, gearboxes, on-board vehicle sub-systems, power distribution and communications, train controls, and fixed facilities. This program would continue simultaneously with the ongoing Capital Asset Replacement Program that the agency authorized in 2012 to enable AirTrain Newark to operate through 2022. Notably, the Capital Plan includes funding for the planning of a full replacement of AirTrain Newark in the future.

Implementation Plan: Ongoing preventative and corrective maintenance to the system will continue as part of the Capital Asset Replacement Program authorized in 2012. The interim repair work will begin in 2018. In addition to this project, the Capital Plan also includes preliminary planning for the eventual replacement of AirTrain Newark. In connection with the gates program, the condition of the EWR AirTrain will be carefully monitored and appropriate actions will be taken, if necessary.



John F. Kennedy International Airport — Runway Rehabilitation (4R-22L and 13L-31R)

Overview: Runways 4R-22L and 13L-31R serve primarily as landing runways at John F. Kennedy International Airport (JFK). They were last rehabilitated in 2001 and 2004, respectively. Runway 4R-22L accommodates about 47 percent of arrivals at JFK, or about 95,000 aircraft operations annually.

TOTAL PROJECT COST	\$232 MILLION
2017-2026 COST	\$228 MILLION
CURRENT STAGE	DESIGN

Runway 13L-31R accommodates about 36 percent of arrivals or about 75,000 of aircraft operations annually. The pavement on both runways and their associated taxiways show normal, age-related wear and tear caused by weather and aircraft landings. Both runways require resurfacing plus the replacement of their lighting systems to remain operationally efficient.

Purpose: As the region’s largest airport, JFK’s combined runways handle over 430,000 flights a year (with arrivals and departures almost evenly split). The runway surfaces need periodic rehabilitation as a consequence of normal wear and weathering, as well as to comply with FAA requirements for airport certification. This work also provides an opportunity to replace or upgrade related utilities infrastructure and associated taxiways, which can help increase operational efficiency and thus reduce delays.

Scope: The project scope for Runway 4R-22L will include milling and repaving of the runway and associated taxiways; replacing the existing taxiways; and realigning high-speed taxiways to improve operational efficiency and reduce airport delays. The realignment involves removing existing taxiways and constructing two new ones. The project will also replace associated electrical systems, such as lighting and guidance signs, drainage systems, and pavement markings. The project scope for Runway 13L-31R will be similar, and includes rehabilitating the runway and associated taxiways; replacing electrical and drainage infrastructures; upgrading taxiways to meet current standards; and realigning existing taxiways and/or constructing a new high speed taxiway to improve operational efficiency and reduce airport delays.

Implementation Plan: Construction on Runway 4R-22L is expected to commence early in 2017 and finish by late 2018. Planning for Runway 13L-31R is expected to begin in 2017, with construction expected to finish in 2020.



2017- 2026 Capital Project List — Renew

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
TUNNELS, BRIDGES & TERMINALS						
GEORGE WASHINGTON BRIDGE						
CB04-223	REHABILITATION AND RECOATING OF STRUCTURAL STEEL FOR FORT WASHINGTON AVE	Planning	Bridges	\$ 3,900	\$ 1,500	\$ 5,400
CB04-224	REHABILITATION AND RECOATING OF STRUCTURAL STEEL FOR AMSTERDAM AVENUE	Planning	Bridges	4,200	1,500	5,700
CB04-229	REPLACEMENT OF LIGHTING ALONG FIXTURES, FEEDERS AND WIRING RAMPS	Planning	Electrical Power & Lighting	1,700	–	1,700
CB04-241	REHABILITATION OF NJ/NY HIGH TENSION ELECTRICAL SWITCHGEAR	Planning	Electrical Power & Lighting	9,400	46,600	56,000
CB04-260	REPLACEMENT OF TOLL COLLECTION SYSTEM	Construction	Control Systems	55,000	–	55,000
CB04-263	REHABILITATION OF TRANS MANHATTAN EXPRESSWAY	Planning	Paving & Roadways	800	39,100	39,900
CB04-286	REHABILITATION OF STRUCTURAL STEEL, LEAD ABATEMENT & PAINT FOR NEW YORK RAMPS	Planning	Bridges	5,300	7,200	12,500
CB04-310	REPLACEMENT OF CHILLER AT TOLL HOUSES	Planning	HVAC, Plumbing & Sprinklers	4,900	3,000	7,900
CB04-312	UPGRADE/REPLACEMENT OF SIGNS AND FIELD DEVICES	Design	Control Systems	49,000	800	49,800
CB04-325	REPLACEMENT OF EMERGENCY POWER SYSTEM	Design	Electrical Power & Lighting	3,300	–	3,300
CB04-328	UPGRADE OF FLAG HOIST SYSTEM ACCESS	Planning	Bridges	1,500	–	1,500
CB04-330	REHABILITATION OF HUDSON RAMPS COMPLEX – PHASE II	Planning	Bridges	–	3,400	3,400
CB04-332	REHABILITATION OF ROADWAY DECK OVER EMERGENCY GARAGE AT ADMIN. BUILDING	Planning	Bridges	–	900	900
CB04-334	REHABILITATION OF HUDSON RAMPS COMPLEX – PHASE I	Planning	Bridges	6,700	62,300	69,000
CB04-335	REHABILITATION OF TRANSMANHATTAN EXPRESSWAY ELECTRICAL SYSTEM INCLUDING LIGHTING REPLACEMENT	Planning	Electrical Power & Lighting	5,200	38,600	43,800
CB04-337	REHABILITATION OF NEW JERSEY APPROACH TUNNELS	Design	Paving & Roadways	–	2,300	2,300
CB04-338	REPLACEMENT OF NEW JERSEY LIGHTING FEEDERS	Planning	Electrical Power & Lighting	5,200	1,600	6,800
CB04-339	REPLACEMENT OF BRIDGE TOWER TRANSFORMERS	Planning	Electrical Power & Lighting	–	1,700	1,700
CB04-359	REHABILITATION OF SANITARY SEWER AT ADMIN BLDG PARKING LOT	Design	HVAC, Plumbing & Sprinklers	1,500	–	1,500
CB04-363	REPLACEMENT OF ELECTRICAL DISTRIBUTION ROOMS IN TOWERS	Planning	Electrical Power & Lighting	1,200	8,100	9,300
CB04-364	REPLACEMENT OF HALON FIRE SUPPRESSANT SYSTEM IN ADMIN. BUILDING COMPUTER ROOM	Planning	HVAC, Plumbing & Sprinklers	4,000	–	4,000
CB04-366	REPLACEMENT OF SPRINKLER SYSTEM AT NEW JERSEY ADMIN. BUILDING	Design	HVAC, Plumbing & Sprinklers	–	4,100	4,100
CB04-367	REPLACEMENT OF SCADA SYSTEM	Planning	Control Systems	4,000	6,600	10,600
CB04-368	REHABILITATION OF RETAINING WALLS AT NY & NJ APPROACHES	Planning	Bridges	900	9,400	10,300
CB04-379	INSTALLATION OF AGENCYWIDE TRANSPORTATION MANAGEMENT SOFTWARE	Design	Control Systems	2,700	–	2,700
CB04-383	REHABILITATION OF LOW VOLTAGE POWER DISTRIBUTION SYSTEM	Design	Electrical Power & Lighting	1,600	–	1,600
CB04-384	REPLACEMENT OF AUTOMATIC TRANSFER SWITCHES	Design	Electrical Power & Lighting	300	–	300
CB04-390	REPLACEMENT OF ELECTRICAL FEEDER (PHASE II)	Planning	Electrical Power & Lighting	2,800	–	2,800
CB04-391	INSTALLATION OF PEDESTRIAN SAFETY FENCING ON VARIOUS PARAPETS	Planning	Bridges	900	–	900

2017- 2026 Capital Project List — Renew

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
RESTORING THE GEORGE PROGRAM						
CB04-132	REHABILITATION OF UNDERSIDE OF LOWER LEVEL STRUCTURE, PRIORITY STEEL REPAIR	Multiple	Bridges	130,000	62,000	192,000
CB04-276	REHABILITATION OF 178TH & 179TH STREET RAMP, BUS RAMP, AND BUS TURNAROUND	Design	Bridges	142,000	78,000	220,000
CB04-288	REPLACEMENT OF MEDIAN BARRIERS AND TRAFFIC SAFETY IMPROVEMENTS	Design	Paving & Roadways	31,000	–	31,000
CB04-317	REHABILITATION OF CENTER AVE BRIDGE AND LEMOINE AVE BRIDGE	Design	Bridges	77,000	10,000	87,000
CB04-319	REPLACEMENT OF SUSPENDER ROPES AND REHABILITATION OF MAIN CABLES	Design	Bridges	478,000	524,000	1,002,000
CB04-336	REHABILITATION OF TRANSMANHATTAN EXPRESSWAY OVERPASSES (PHASE 1)	Planning	Bridges	20,000	52,000	72,000
CB04-362	REPAVING OF EASTBOUND UPPER LEVEL	Design	Paving & Roadways	10,500	–	10,500
CB04-380	REHABILITATION OF BRIDGE MAIN SPAN UPPER LEVEL STRUCTURAL STEEL REHABILITATION (PHASE II)	Planning	Bridges	86,000	33,000	119,000
CB04-XXX	PROVISION FOR EFFICIENCY AND PHASING – RESTORE THE GEORGE PROGRAM	Construction	Structure Rehabilitation	(178,260)	(111,740)	(290,000)
RESTORING THE GEORGE PROGRAM, Subtotal				796,240	647,260	1,443,500
SECURITY PROGRAM						
CB04-351	ACCESS RAMP BARRIER UPGRADES	Construction	Paving & Roadways	1,300	–	1,300
CB04-375	MAIN CABLE PROTECTION	Design	Bridges	3,900	–	3,900
SECURITY PROGRAM, Subtotal				5,200	–	5,200
GEORGE WASHINGTON BRIDGE, Subtotal				977,440	885,960	1,863,400
HOLLAND TUNNEL						
CB02-156	REPLACEMENT OF SUPERVISORY CONTROL SYSTEM	Planning	Control Systems	21,000	11,900	32,900
CB02-175	REPLACEMENT OF BULKHEAD DOORS IN VENTILATION BUILDINGS	Design	Buildings & Garages	3,000	–	3,000
CB02-189	REHABILITATION OF STRUCTURAL COMPONENTS OF GRANITE WALLS AT PORTALS	Planning	Buildings & Garages	1,800	32,500	34,300
CB02-191	REHABILITATION OF POWER DISTRIBUTION SYSTEM AND REPLACE EMERGENCY GENERATORS	Planning	Electrical Power & Lighting	1,100	3,800	4,900
CB02-193	REHABILITATION OF CONCRETE AND STEEL	Planning	Tunnels	15,600	–	15,600
CB02-196	REHABILITATION OF EVASE STACKS ON VENTILATION BUILDINGS	Planning	Buildings & Garages	8,700	100	8,800
CB02-197	REPLACEMENT OF OVERHEIGHT DETECTION EQUIPMENT AT NEW YORK PLAZA	Planning	Tunnels	300	6,900	7,200
CB02-202	REPLACEMENT OF TOLL COLLECTION SYSTEM	Construction	Control Systems	17,100	–	17,100
CB02-207	REHABILITATION OF BRONZE DOORS AT SPRING STREET	Design	Buildings & Garages	300	–	300
CB02-210	REPLACEMENT OF EXISTING INTELLIGENT TRANSPORTATION SYSTEM	Planning	Control Systems	8,200	22,000	30,200
CB02-211	REHABILITATION OF FRESH AIR STACKS IN VENTILATION BUILDINGS	Planning	Buildings & Garages	4,200	6,600	10,800
CB02-213	MITIGATION OF WATER LEAKAGE AT VENTILATION DUCTS AND MID-RIVER PUMP ROOM	Construction	Tunnels	5,900	–	5,900
CB02-217	REPLACEMENT OF ROOF AND PARAPET AT NEW YORK EMERGENCY GARAGE	Design	Buildings & Garages	1,700	–	1,700

2017- 2026 Capital Project List — Renew

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
CB02-218	REHABILITATION AND REPLACEMENT OF HIGH VOLTAGE TRANSFORMERS	Planning	Electrical Power & Lighting	3,400	3,400	6,800
CB02-220	INSTALLATION OF ADDITIONAL SUPERVISORY CONTROL AT MID-RIVER PUMP ROOM	Design	Control Systems	900	–	900
CB02-223	INSTALLATION OF ADDITIONAL MEANS OF EGRESS FOR NJ ADMINISTRATION BUILDING	Design	Buildings & Garages	1,100	–	1,100
CB02-227	INSTALLATION OF AGENCYWIDE TRANSPORTATION MANAGEMENT SOFTWARE	Design	Control Systems	1,400	–	1,400
CB02-228	INSTALLATION OF EVASE STACK INSPECTION STRUCTURES	Design	Buildings & Garages	800	–	800
CB02-233	REPLACEMENT OF MIDRIVER PUMP ROOM PUMP	Design	HVAC, Plumbing & Sprinklers	1,600	–	1,600
SECURITY PROGRAM						
CB02-200	WATERSIDE BUFFER ZONE PROTECTION	Construction	Buildings & Garages	1,100	–	1,100
CB02-229	HOLLAND TUNNEL VENTILATION BUILDINGS CAMERA INSTALLATION	Planning	Control Systems	2,100	700	2,800
SECURITY PROGRAM, Subtotal				3,200	700	3,900
HOLLAND TUNNEL, Subtotal				101,300	87,900	189,200
LINCOLN TUNNEL						
CB03-148	REPLACEMENT OF ELECTRIC FEEDERS AND LIGHT FIXTURES AT NEW JERSEY PLAZA	Planning	Electrical Power & Lighting	–	3,300	3,300
CB03-172	REPLACEMENT OF EXHAUST AND BLOWER DUCT ACCESS DOORS	Planning	HVAC, Plumbing & Sprinklers	400	4,400	4,800
CB03-241	REHABILITATION OF GALVIN PLAZA APPROACH SLABS	Planning	Paving & Roadways	–	1,200	1,200
CB03-253	UPGRADE OF LIFE SAFETY MONITORING SYSTEM	Planning	Control Systems	3,800	2,300	6,100
CB03-259	REHABILITATION OF PRIORITY STRUCTURAL COMPONENTS	Planning	Paving & Roadways	4,800	100	4,900
CB03-260	REHABILITATION OF PAVEMENT AT LINCOLN TUNNEL NEW YORK APPROACHES FOR NORTH AND CENTER TUNNELS	Planning	Paving & Roadways	–	3,000	3,000
CB03-262	REPLACEMENT OF TOLL COLLECTION SYSTEM	Construction	Control Systems	25,000	500	25,500
CB03-264	REPLACEMENT OF HVAC SYSTEM AT ADMINISTRATION BUILDING – PHASE II	Design	HVAC, Plumbing & Sprinklers	2,500	–	2,500
CB03-273	REPLACEMENT OF EXISTING INTELLIGENT TRANSPORTATION SYSTEM	Planning	Control Systems	5,500	38,400	43,900
CB03-274	REPLACEMENT OF ABOVE-GROUND STORAGE TANKS	Construction	HVAC, Plumbing & Sprinklers	1,900	–	1,900
CB03-276	REPLACEMENT OF SCADA SYSTEM	Planning	Control Systems	5,200	16,800	22,000
CB03-277	REPLACEMENT OF MECHANICAL AND ELECTRICAL VENTILATION EQUIPMENT	Planning	HVAC, Plumbing & Sprinklers	16,600	72,400	89,000
CB03-278	INSTALLATION AND REPLACEMENT OF OVERHEIGHT STRUCTURES AND DETECTORS AT NEW YORK ENTRANCE	Design	Control Systems	4,800	–	4,800
CB03-290	INSTALLATION OF AGENCYWIDE TRANSPORTATION MANAGEMENT SOFTWARE	Design	Control Systems	1,400	–	1,400
CB03-291	REHABILITATION AND RELOCATION OF LINCOLN TUNNEL HELIX GUIDERAIL AND MANHOLE COVER - PRIORITY REHABILITATION	Design	Paving & Roadways	400	–	400
CB03-297	REPLACEMENT OF SIGNALS AT EASTBOUND 495 APPROACH	Design	Paving & Roadways	1,200	–	1,200
CB03-298	REPLACEMENT OF HVAC SYSTEM AT THE ADMINISTRATION BUILDING – PHASE III	Planning	HVAC, Plumbing & Sprinklers	1,700	–	1,700

2017- 2026 Capital Project List — Renew

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
LINCOLN TUNNEL HELIX REPLACEMENT						
CB03-213	REPLACEMENT OF HELIX (PLANNING)	Planning	Paving & Roadways	57,000	–	57,000
CB03-254	REPLACEMENT OF HELIX (CONSTRUCTION)	Planning	Paving & Roadways	90,000	991,000	1,081,000
LINCOLN TUNNEL HELIX REPLACEMENT, Subtotal				147,000	991,000	1,138,000
SECURITY PROGRAM						
CB03-261	WATERSIDE BUFFER ZONE PROTECTION	Design	Buildings & Garages	5,500	–	5,500
CB03-263	TB&T INTEROPERABILITY RADIO COMMUNICATIONS	Planning	Control Systems	–	1,200	1,200
CB03-292	LINCOLN TUNNEL VENTILATION BUILDINGS CAMERA INSTALLATION	Planning	Control Systems	2,100	700	2,800
SECURITY PROGRAM, Subtotal				7,600	1,900	9,500
LINCOLN TUNNEL, Subtotal				229,800	1,135,300	1,365,100
BAYONNE BRIDGE						
CB06-113	REPLACEMENT OF TOLL COLLECTION SYSTEM	Construction	Control Systems	7,300	–	7,300
CB06-120	INSTALLATION OF AGENCYWIDE TRANSPORTATION MANAGEMENT SOFTWARE	Design	Control Systems	600	–	600
BAYONNE BRIDGE, Subtotal				7,900	–	7,900
GOETHALS BRIDGE						
CB07-144	REHABILITATION OF PAVEMENT ON NEW JERSEY ROADWAYS AND ON NEW YORK WESTBOUND APPROACH	Planning	Paving & Roadways	–	3,200	3,200
CB07-149	REPLACEMENT OF TOLL COLLECTION SYSTEM	Construction	Control Systems	14,300	–	14,300
CB07-156	INSTALLATION OF AGENCYWIDE TRANSPORTATION MANAGEMENT SOFTWARE	Design	Control Systems	600	–	600
GOETHALS BRIDGE, Subtotal				14,900	3,200	18,100
OUTERBRIDGE CROSSING						
CB08-082	REHABILITATION OF SLAB	Planning	Paving & Roadways	2,200	92,800	95,000
CB08-090	REHABILITATION OF OUTERBRIDGE CROSSING CATWALKS	Planning	Bridges	–	4,100	4,100
CB08-100	REPLACEMENT OF OUTERBRIDGE CROSSING	Planning	Bridges	–	25,800	25,800
CB08-104	PRIORITY STRUCTURAL REHABILITATION	Planning	Bridges	22,000	27,500	49,500
CB08-110	REPLACEMENT OF TOLL COLLECTION SYSTEM	Construction	Control Systems	12,600	–	12,600
CB08-112	REPLACEMENT OF ROOF AND HVAC AT TOLL BUILDING	Construction	HVAC, Plumbing & Sprinklers	–	1,900	1,900
CB08-118	INSTALLATION OF AGENCYWIDE TRANSPORTATION MANAGEMENT SOFTWARE	Design	Control Systems	600	–	600
CB08-119	REPLACEMENT OF UNINTERRUPTIBLE POWER SUPPLY SYSTEM	Design	Electrical Power & Lighting	–	100	100
SECURITY PROGRAM						
CB08-109	MAIN SPAN PIER & FENDER UPGRADES	Design	Bridges	36,000	5,000	41,000
SECURITY PROGRAM, Subtotal				36,000	5,000	41,000
OUTERBRIDGE CROSSING, Subtotal				73,400	157,200	230,600

2017- 2026 Capital Project List — Renew

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
PORT AUTHORITY BUS TERMINAL						
CT06-200	REPLACEMENT OF FIRE ALARM SYSTEM	Design	Control Systems	19,100	10,000	29,100
CT06-212	REHABILITATION OF ESCALATORS	Planning	Buildings & Garages	2,400	–	2,400
CT06-228	IMPLEMENTATION OF TERMINAL CEILING PANEL REPLACEMENT PROGRAM	Construction	Buildings & Garages	–	5,000	5,000
CT06-239	INTERNAL STRUCTURAL ENHANCEMENTS	Design	Buildings & Garages	34,000	–	34,000
CT06-259	REPLACEMENT OF NORTH WING STANDING BUS LANE WEARING COURSE	Design	Paving & Roadways	8,300	3,000	11,300
CT06-260	RESTORATION OF CONCRETE & MASONRY OF DETERIORATED AREAS — TERMINAL, 41ST ST VENTILATION BUILDING & ACCESS TUNNEL	Construction	Buildings & Garages	–	18,000	18,000
CT06-262	REHABILITATION OF SOUTH WING STANDING BUS LANE AND UPPER BUS LEVEL UNLOADING PLATFORMS AND STATIONARY STAIRS	Construction	Buildings & Garages	–	7,300	7,300
CT06-268	REPLACEMENT OF SPRINKLER SYSTEM	Planning	HVAC, Plumbing & Sprinklers	16,400	5,500	21,900
CT06-269	REHABILITATION OF EMERGENCY EGRESS DOORS	Design	Buildings & Garages	11,300	–	11,300
CT06-271	REHABILITATION/REPLACEMENT OF 33 FRESH AIR SUPPLY FANS LOCATED IN THE NORTH AND SOUTH WINGS	Construction	HVAC, Plumbing & Sprinklers	–	4,600	4,600
CT06-274	IMPLEMENTATION OF SOUTHWING MISCELLANEOUS LEAK REPAIRS	Design	Buildings & Garages	20,000	600	20,600
CT06-275	REPLACEMENT OF VISUAL PAGING SYSTEM AND MASTER CLOCK SYSTEM	Design	Control Systems	5,900	–	5,900
CT06-276	REHABILITATION OF ELEVATORS	Planning	Buildings & Garages	1,400	–	1,400
CT06-282	REHABILITATION OF FLOORING, WALLS & FINISHES	Design	Buildings & Garages	4,000	–	4,000
CT06-283	INSTALLATION OF AGENCYWIDE TRANSPORTATION MANAGEMENT SOFTWARE	Design	Control Systems	500	–	500
CT06-289	REHABILITATION OF PRIORITY CONCRETE (PHASE II)	Design	Buildings & Garages	5,000	2,000	7,000
CT06-290	REPLACEMENT OF TERMINAL DRAINAGE SYSTEM	Planning	HVAC, Plumbing & Sprinklers	3,400	1,000	4,400
CT06-291	REPLACEMENT OF ELECTRIC PANELS	Planning	Electrical Power & Lighting	5,600	–	5,600
CT06-292	REPLACEMENT OF BUS RAMP HEATING CONTROLS (SNOW MELTING)	Planning	Control Systems	1,100	–	1,100
CT06-293	STRAND REPLACEMENT OF PARKING LEVEL TRUSS #1	Planning	Buildings & Garages	6,700	–	6,700
CT06-294	REHABILITATION OF SANITARY DRAINAGE SYSTEM	Planning	HVAC, Plumbing & Sprinklers	9,800	–	9,800
CT06-295	DECOMMISSION OF ELECTRICAL SERVICE SWITCHGEAR 2	Planning	Electrical Power & Lighting	1,800	–	1,800
CT06-296	REPLACEMENT OF SOVALOID SYSTEM	Planning	Control Systems	700	–	700
CT06-297	MODIFICATIONS TO CHILLED WATER SYSTEM	Planning	HVAC, Plumbing & Sprinklers	800	–	800
CT06-298	REHABILITATION OF PRIORITIZED CONCRETE AND MASONRY	Planning	Buildings & Garages	5,900	4,000	9,900
CT06-299	INSTALLATION OF FIRE SPRINKLER HYDRO PNEUMATIC TANKS	Planning	HVAC, Plumbing & Sprinklers	4,900	–	4,900
CT06-300	REHABILITATION OF HVAC BALANCING AND DUCTWORK	Planning	HVAC, Plumbing & Sprinklers	6,300	1,700	8,000
CT06-301	REHABILITATION OF NEW VERTICAL CIRCULATION SUBWAY LEVEL TO MAIN LEVEL	Planning	Buildings & Garages	6,800	–	6,800
CT06-302	RESTORATION OF TWO SAWTOOTH GATES	Planning	Paving & Roadways	2,600	–	2,600

2017- 2026 Capital Project List — Renew

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
CT06-303	MODIFICATIONS TO EXISTING ELEVATOR AND LOBBY	Planning	Buildings & Garages	1,400	–	1,400
CT06-304	REHABILITATION OF ROOF FLASHING AT NORTH WING AND SOUTH WING	Planning	Buildings & Garages	800	–	800
CT06-306	REHABILITATION OF WEARING COURSE FOR LOWER LEVEL, PARTIAL 3RD AND 4TH FLOOR BUS LEVEL	Planning	Paving & Roadways	51,000	20,900	71,900
CT06-307	PRESERVATION OF PARKING LEVEL TRUSS	Planning	Buildings & Garages	6,700	–	6,700
PORT AUTHORITY BUS TERMINAL, Subtotal				244,600	83,600	328,200
GEORGE WASHINGTON BRIDGE BUS STATION						
CB48-048	REPLACEMENT OF CEILING OVER TRANSMANHATTAN EXPRESSWAY	Planning	Buildings & Garages	5,800	7,600	13,400
CB48-060	STRUCTURAL REHABILITATION OF NORTH & SOUTH BUS PARKING BRIDGES OVER BROADWAY	Planning	Bridges	–	4,400	4,400
CB48-062	REPLACEMENT OF BLUE FASCIA PANELS	Planning	Buildings & Garages	–	2,300	2,300
CB48-065	INSTALLATION OF AGENCYWIDE TRANSPORTATION MANAGEMENT SOFTWARE	Design	Control Systems	400	–	400
GEORGE WASHINGTON BRIDGE BUS STATION, Subtotal				6,200	14,300	20,500
TUNNELS, BRIDGES AND TERMINALS, Total				1,655,540	2,367,460	4,023,000

PATH

PATH

CR02-233	CONSTRUCTION AND RELOCATION OF SUBSTATION #2	Planning	Electrical Power & Lighting	20,000	112,000	132,000
CR02-412	REHABILITATION OF DUCT BANK	Planning	Electrical Power & Lighting	–	1,700	1,700
CR02-419	UPGRADE OF FIRE ALARM SYSTEM	Design	Control Systems	47,000	200	47,200
CR02-421	REHABILITATION OF TUNNEL ELECTRICAL LIGHTING SYSTEM	Planning	Electrical Power & Lighting	7,600	2,300	9,900
CR02-425	REPLACEMENT OF 27 KV CABLES BETWEEN SUBSTATION #1 AND SUBSTATION #2	Planning	Electrical Power & Lighting	400	900	1,300
CR02-502	INSTALLATION OF TACTILE STRIP AND RUBBING BOARD AT NEW YORK UPTOWN STATIONS	Planning	Rail Systems	2,000	–	2,000
CR02-505	RESTORATION OF FACADE AND ROOF AT CHRISTOPHER STREET SUBSTATION #1	Design	Buildings & Garages	7,300	–	7,300
CR02-507	UPGRADE OF FIRE SUPPRESSION SYSTEM	Planning	HVAC, Plumbing & Sprinklers	17,400	100	17,500
CR02-511	REPLACEMENT OF VENT LOUVERS AT SUBSTATION #4	Design	Buildings & Garages	1,100	–	1,100
CR02-513	REHABILITATION OF SUBSTATION #2A TO PREVENT WATER INFILTRATION	Design	Buildings & Garages	800	–	800
CR02-514	REPLACEMENT OF THE ROOF AT EXCHANGE PLACE SUBSTATION #4	Design	Buildings & Garages	1,400	–	1,400
CR02-521	REPLACEMENT OF HIGH MAST LIGHTING AT HARRISON CAR MAINTENANCE FACILITY	Planning	Electrical Power & Lighting	1,800	–	1,800
CR02-529	REPLACEMENT OF TRACKSIDE CIRCUIT BREAKERS	Planning	Electrical Power & Lighting	1,000	12,100	13,100
CR02-535	REPLACEMENT OF SCADA PROGRAMMABLE LOGIC CONTROLLERS AND INTERFACE EQUIPMENT	Design	Control Systems	11,400	–	11,400
CR02-536	IMPLEMENTATION OF PA-5 OVERHAUL PROGRAM	Planning	Rail Systems	41,000	25,000	66,000

2017- 2026 Capital Project List — Renew

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
CR02-538	REPLACEMENT OF HACK BRIDGE CONTROLS	Planning	Control Systems	4,100	8,400	12,500
CR02-540	REHABILITATION OF POWER SUPPLY FOR VENTILATION SUBSTATION AT 19TH ST	Planning	HVAC, Plumbing & Sprinklers	–	500	500
CR02-541	REHABILITATION OF POWER SUPPLY FOR VENTILATION SUBSTATION AT MORTON	Planning	Electrical Power & Lighting	–	700	700
CR02-542	REHABILITATION OF POWER SUPPLY FOR VENTILATION SUBSTATION AT PAVONIA	Planning	HVAC, Plumbing & Sprinklers	–	500	500
CR02-554	IMPROVEMENT OF DRAINAGE AT JOURNAL SQUARE TRANSPORTATION CENTER	Planning	Underground Utilities	–	900	900
CR02-564	REPLACEMENT OF WEST SIDE CROSSOVER	Design	Rail Systems	6,100	–	6,100
CR02-569	ACQUISITION OF PROPERTY FOR SUBSTATION #8	Design	Electrical Power & Lighting	1,000	–	1,000
CR02-574	REHABILITATION OF 30TH ST MEZZANINE	Design	Buildings & Garages	6,200	–	6,200
CR02-579	REPLACEMENT OF TRACKSIDE CIRCUIT BREAKER CONTROL CABLES	Planning	Electrical Power & Lighting	1,500	–	1,500
CR02-606	INSTALLATION OF TRANSPORTATION MANAGEMENT SOFTWARE	Planning	Control Systems	1,100	–	1,100
CR02-615	REPLACEMENT OF TRACK, THIRD RAIL AND APPURTENANCES IN TUNNELS E & F BETWEEN EXCHANGE PLACE	Planning	Rail Systems	–	2,200	2,200
CR02-619	IMPLEMENTATION OF FIRE STANDPIPE SGR PROGRAM	Planning	HVAC, Plumbing & Sprinklers	2,000	–	2,000
SECURITY PROGRAM						
CR02-504	REPLACEMENT OF DUCTBANK AT UNDERRIVER TUNNELS A/B	Planning	Electrical Power & Lighting	600	59,400	60,000
CR08-066	EXCHANGE PLACE BOLLARD UPGRADE	Design	Paving & Roadways	4,400	–	4,400
CR08-068	UPGRADE OF JOURNAL SQUARE TRANSPORTATION CENTER BOLLARDS	Design	Paving & Roadways	6,200	–	6,200
CR08-079	INSTALLATION OF TUNNEL MITIGATION	Planning / Design	Rail Systems	16,800	45,200	62,000
CR08-081	EXCHANGE PLACE STATION UNDERWATER NETTING	Design	Buildings & Garages	2,200	–	2,200
CR08-105	INSTALLATION OF CCTV AT PATH C, D, AND HARRISON YARDS	Planning	Control Systems	2,900	400	3,300
CR08-106	CONSTRUCTION OF RADIO ROOM AND RELOCATION OF COMMUNICATIONS SYSTEM - PHASE II	Planning	Control Systems	4,500	2,700	7,200
SECURITY PROGRAM, Subtotal				37,600	107,700	145,300
PATH, Subtotal				219,800	275,200	495,000
JOURNAL SQUARE TRANSPORTATION CENTER						
CR21-075	REPLACEMENT OF JOURNAL SQUARE TRANSPORTATION CENTER WATER PUMPS AND PIPING SYSTEMS	Design	HVAC, Plumbing & Sprinklers	5,100	–	5,100
CR21-078	EXPANSION OF JOURNAL SQUARE TRANSPORTATION CENTER PARKING DECKS	Planning	Buildings & Garages	5,100	100	5,200
CR21-080	REPLACEMENT OF JOURNAL SQUARE TRANSPORTATION CENTER BUS TERMINAL LANES	Design	Paving & Roadways	2,000	10,700	12,700
JOURNAL SQUARE TRANSPORTATION CENTER, Subtotal				12,200	10,800	23,000
PATH, Total				232,000	286,000	518,000

2017- 2026 Capital Project List — Renew

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
AVIATION						
LAGUARDIA AIRPORT						
CA02-118	REHABILITATION OF RUNWAYS DECK WEARING SURFACE	Construction	Runway-Taxiway	14,500	–	14,500
CA02-345	REHABILITATION OF PUMP HOUSES ELECTRICAL AND COMMUNICATION SYSTEM	Planning	Electrical Power & Lighting	14,100	–	14,100
CA02-414	INSTALLATION OF AGENCY WIDE TRANSPORTATION MANAGEMENT SOFTWARE	Design	Control Systems	1,000	–	1,000
CA02-425	REHABILITATION OF RUNWAY 4-22 AND ASSOCIATED TAXIWAYS	Planning	Runway-Taxiway	54,000	–	54,000
CA02-430	REHABILITATION OF RUNWAY DECKS STRUCTURAL ELEMENTS – IV	Planning	Runway-Taxiway	11,800	2,600	14,400
CA02-432	REHABILITATION OF TAXIWAY PAVEMENT AND LIGHTING	Planning	Runway-Taxiway	6,900	10,400	17,300
CA02-464	REPLACEMENT OF THE RUNWAY DECK EXPANSION JOINTS	Planning	Bridges	20,000	800	20,800
CA02-465	REHABILITATION OF RUNWAY DECK PRIORITY STRUCTURAL ELEMENTS – 3	Design	Paving & Roadways	13,900	–	13,900
CA02-466	REHABILITATION OF TAXIWAY B FROM TAXIWAY G TO TAXIWAY CY	Construction	Runway-Taxiway	1,300	–	1,300
CA02-467	REHABILITATION OF TAXIWAYS B, AA, BB AND ASSOCIATED TAXIWAYS	Design	Runway-Taxiway	16,800	–	16,800
CA02-468	REHABILITATION OF TAXIWAY A FROM TAXIWAY K TO TAXIWAY B	Planning	Runway-Taxiway	13,400	–	13,400
CA02-489	REPLACEMENT OF PARKING ACCESS AND REVENUE CONTROL SYSTEM (PARCS)	Design	Control Systems	14,700	–	14,700
CA02-490	IMPROVEMENT OF DRAINAGE AT MARINE TERMINAL ROAD	Planning	Underground Utilities	5,100	–	5,100
CA02-494	REHABILITATION OF ROMEO SWITCHGEARS AND FUEL FARM SUBSTATION SWITCHGEARS	Planning	Fueling	5,300	–	5,300
CA02-497	REHABILITATION OF AIRCRAFT PARKING WEST OF RUNWAY 4-22	Planning	Paving & Roadways	–	5,900	5,900
CA02-499	REHABILITATION OF PUMP HOUSE 1 RETAINING WALL	Planning	Underground Utilities	4,000	–	4,000
CA02-500	REHABILITATION OF FRONTAGE ROADWAYS ADJACENT TO THE CENTRAL TERMINAL BUILDING	Planning	Paving & Roadways	20	–	20
SECURITY PROGRAM						
CA02-041	CCTV AT TERMINAL FRONTAGES	Planning	Control Systems	3,900	5,600	9,500
CA02-330	INSTALLATION OF BIOMETRIC CARD READER SYSTEM	Planning	Control Systems	2,900	–	2,900
CA02-346	REPLACE D BARRIERS AT NINE LOCATIONS	Planning	Paving & Roadways	2,300	300	2,600
CA02-506	UPGRADE PIDS END OF LIFE SECURITY EQUIPMENT/SOFTWARE	Planning	Control Systems	2,800	2,300	5,100
SECURITY PROGRAM, Subtotal				11,900	8,200	20,100
LAGUARDIA AIRPORT, Subtotal				208,720	27,900	236,620
JOHN F. KENNEDY INTERNATIONAL AIRPORT						
CA03-518	REHABILITATION OF RUNWAY 4R APPROACH LIGHTING SYSTEM PIER	Planning	Electrical Power & Lighting	2,500	–	2,500
CA03-529	REHABILITATION OF TAXIWAY Q, QG AND RESTRICTED VEHICLE SERVICE ROAD	Design	Runway-Taxiway	53,000	–	53,000

2017- 2026 Capital Project List — Renew

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
CA03-543	REHABILITATION OF TAXIWAY W (NORTH OF RUNWAY 13L)	Planning	Runway-Taxiway	10,000	–	10,000
CA03-546	REALIGNMENT/ REHABILITATION OF TAXIWAY U	Planning	Runway-Taxiway	24,000	200	24,200
CA03-574	REPLACEMENT OF AIRPORT TRAFFIC CONTROL TOWER ROOFS & RELATED EQUIPMENT	Design	Runway-Taxiway	45,000	600	45,600
CA03-599	REHABILITATION OF TAXIWAY CA (RUNWAY 13L-31R TO END)	Planning	Runway-Taxiway	7,400	–	7,400
CA03-600	REHABILITATION OF TAXIWAY CB (RUNWAY 13L-31R TO NORTH END)	Planning	Runway-Taxiway	7,400	–	7,400
CA03-601	REHABILITATION OF TAXIWAY CE	Planning	Runway-Taxiway	7,400	–	7,400
CA03-603	REHABILITATION OF BUILDING 254	Planning	Buildings & Garages	3,800	4,600	8,400
CA03-605	REPLACEMENT OF BUILDING 14 ROOF AT EAST WING	Planning / Design	Buildings & Garages	26,000	800	26,800
CA03-619	REHABILITATION OF TAXIWAY Z, H AND G	Planning	Runway-Taxiway	16,800	–	16,800
CA03-620	REHABILITATION OF VAN WYCK SUBSTATION	Planning	Electrical Power & Lighting	43,000	21,000	64,000
CA03-628	REHABILITATION OF TAXIWAYS A & B EAST (FROM TAXIWAY EA TO TAXIWAY J)	Planning	Runway-Taxiway	–	59,000	59,000
CA03-632	REHABILITATION OF CENTRAL SUBSTATION	Planning	Electrical Power & Lighting	34,000	6,100	40,100
CA03-633	REHABILITATION OF BERGEN SUBSTATION AT JFK	Planning	Electrical Power & Lighting	43,000	21,000	64,000
CA03-634	REHABILITATION OF FARMERS SUBSTATION	Planning	Electrical Power & Lighting	42,000	21,000	63,000
CA03-661	REHABILITATION OF TAXIWAY Y	Planning	Runway-Taxiway	15,500	25,900	41,400
CA03-662	REHABILITATION OF TAXIWAY E (BETWEEN RUNWAY4R-22L AND RUNWAY 4L-22R)	Planning	Runway-Taxiway	9,800	–	9,800
CA03-667	REHABILITATION OF TAXIWAYS A & B NORTH (TAXIWAY TB – TAXIWAY EA)	Planning	Runway-Taxiway	49,000	500	49,500
CA03-668	REHABILITATION OF TAXIWAYS A & B SOUTH (TAXIWAY N – TAXIWAY KF)	Planning	Runway-Taxiway	23,000	42,000	65,000
CA03-670	REHABILITATION OF TAXIWAY YA AND HOLDING PAD	Planning	Runway-Taxiway	10,100	–	10,100
CA03-671	REHABILITATION OF TAXIWAY J (RUNWAYS 4R & 4L)	Planning	Runway-Taxiway	14,600	–	14,600
CA03-672	REHABILITATION OF GREEN GARAGE	Planning	Buildings & Garages	2,200	2,100	4,300
CA03-673	REHABILITATION OF BLUE GARAGE	Planning	Buildings & Garages	2,200	2,100	4,300
CA03-674	REHABILITATION OF ORANGE GARAGE	Planning	Buildings & Garages	1,400	1,100	2,500
CA03-676	REHABILITATION OF 5KV FEEDER DISTRIBUTION SYSTEM	Planning	Electrical Power & Lighting	48,000	300	48,300
CA03-677	REPLACEMENT OF FACILITY-WIDE FIRE ALARM SYSTEMS	Planning	Control Systems	48,000	105,000	153,000
CA03-678	REHABILITATION/REPLACEMENT OF HIGH PRESSURE WATER	Planning	Underground Utilities	62,000	23,000	85,000
CA03-679	REHABILITATION/REPLACEMENT OF LOW PRESSURE WATER	Planning	Underground Utilities	37,000	12,500	49,500
CA03-689	REHABILITATION OF AIRPORT ACCESS ROADWAY (JFK EXPRESSWAY)	Planning	Paving & Roadways	14,900	–	14,900
CA03-691	REHABILITATION OF AIRPORT ACCESS ROADWAY (VAN WYCK)	Planning	Paving & Roadways	10,100	5,600	15,700
CA03-704	REHABILITATION OF FEDERAL CIRCLE ROADWAYS AND RAMPS	Planning	Paving & Roadways	3,100	–	3,100
CA03-762	REPLACEMENT OF FIRE PROTECTION SYSTEM AT HANGAR 19	Planning	Control Systems	13,100	1,400	14,500
CA03-772	REPLACEMENT OF EXISTING 86 PAD SUBSTATION	Design	Buildings & Garages	4,100	–	4,100

2017- 2026 Capital Project List — Renew

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
CA03-774	INSTALLATION OF AGENCY WIDE TRANSPORTATION MANAGEMENT SOFTWARE	Design	Control Systems	1,700	–	1,700
CA03-775	INSTALLATION OF JFK BACKFLOW PREVENTION DEVICES AND WATER METER UPGRADES - PHASE IV	Design	HVAC, Plumbing & Sprinklers	2,100	–	2,100
CA03-777	REPLACEMENT OF PARKING ACCESS AND REVENUE CONTROL SYSTEM (PARCS)	Design	Control Systems	24,000	600	24,600
CA03-782	REHABILITATION OF BRIDGES J31 AND J32 AT ACQUEDUCT ROAD	Planning	Bridges	4,700	–	4,700
CA03-784	JFK COGENERATION PLANT - EQUIPMENT AND SUBSTATION	Planning	Electrical Power & Lighting	14,900	20,100	35,000
JFK FUEL FARM IMPROVEMENTS PROGRAM						
CA03-607	REPLACEMENT OF FUEL STORAGE TANK SYSTEMS (BULK FUEL FARM)	Planning	Fueling	1,600	22,100	23,700
CA03-608	REPLACEMENT OF PUMPS & UNDERGROUND PIPING SYSTEMS AT SATELLITE AND BULK FUEL FARMS	Planning	Fueling	2,100	122,900	125,000
JFK FUEL FARM IMPROVEMENTS PROGRAM, Subtotal				3,700	145,000	148,700
JFK RUNWAYS REHABILITATION						
CA03-516	REHABILITATION OF RUNWAY 4R-22L	Design	Runway-Taxiway	121,000	–	121,000
CA03-612	REHABILITATION OF RUNWAY 13L-31R AND ASSOCIATED TAXIWAYS	Planning	Runway-Taxiway	107,000	–	107,000
JFK RUNWAYS REHABILITATION, Subtotal				228,000	–	228,000
SECURITY PROGRAM						
CA03-057	CCTV AT TERMINAL FRONTAGES	Planning	Control Systems	1,800	6,300	8,100
CA03-061	CCTV AT TERMINAL BAGGAGE AREAS	Design	Control Systems	13,000	–	13,000
CA03-505	INSTALLATION OF BIOMETRIC CARD READER SYSTEM	Planning	Control Systems	3,800	–	3,800
CA03-778	JFK VEHICULAR GUARD POST LIGHTING IMPROVEMENTS	Design	Electrical Power & Lighting	4,000	–	4,000
CA03-796	UPGRADE PIDS END OF LIFE SECURITY EQUIPMENT/SOFTWARE	Planning	Control Systems	4,600	3,400	8,000
CA03-798	REPLACEMENT OF AOA GUARD POST DELTA BARRIERS	Planning	Paving & Roadways	3,500	5,500	9,000
SECURITY PROGRAM, Subtotal				30,700	15,200	45,900
JOHN F. KENNEDY INTERNATIONAL AIRPORT, Subtotal				1,058,300	542,700	1,601,000
NEWARK LIBERTY INTERNATIONAL AIRPORT						
CA04-294	REPLACEMENT OF TERMINAL B FIRE ALARM SYSTEM	Planning	Control Systems	2,200	3,300	5,500
CA04-521	REHABILITATION OF TAXIWAY "Y" (FROM RM TO S)	Planning	Runway-Taxiway	7,000	–	7,000
CA04-524	REHABILITATION OF TAXIWAY Z (FROM RUNWAY EDGE TO UA)	Planning	Runway-Taxiway	15,800	–	15,800
CA04-529	REHABILITATION OF TERMINAL FRONTAGE BRIDGES	Planning	Bridges	9,100	–	9,100
CA04-532	REHABILITATION OF TERMINAL C AND P4 GARAGE DECKS	Planning	Buildings & Garages	1,500	100	1,600
CA04-535	REHABILITATION OF LANDSIDE ROADWAYS PAVEMENT AT VARIOUS LOCATION	Planning	Paving & Roadways	2,800	–	2,800
CA04-549	REPLACEMENT OF TERMINAL B SATELLITE A/C UNIT (CAPITAL MAJOR WORKS PROGRAM)	Planning	HVAC, Plumbing & Sprinklers	1,600	–	1,600

2017- 2026 Capital Project List — Renew

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
CA04-558	REPLACEMENT OF MAINTENANCE COMPLEX EMERGENCY GENERATOR	Planning	Electrical Power & Lighting	–	6,300	6,300
CA04-559	REHABILITATION OF CENTRAL TERMINAL AREA ENTRANCE & BRIDGES – N1, N2, N18, N19, N20, N21 AND N22	Planning / Design	Bridges	17,100	–	17,100
CA04-567	REHABILITATION OF TAXIWAY "R" (FROM B TO Y)	Planning	Runway-Taxiway	5,600	2,900	8,500
CA04-573	REHABILITATION OF RUNWAY 11-29	Planning	Runway-Taxiway	26,000	100	26,100
CA04-578	REHABILITATION TERMINAL A VERTICAL CIRCULATION	Planning	Buildings & Garages	5,600	–	5,600
CA04-579	RENEWAL OF AIRPORT WIDE ELECTRICAL DISTRIBUTION SYSTEM	Construction	Electrical Power & Lighting	49,000	600	49,600
CA04-582	REHABILITATION OF TERMINAL B2 AND B3 RAMP FROM RD TO RF	Planning	Paving & Roadways	21,000	–	21,000
CA04-604	REPLACEMENT OF FUEL FARM BUILDING 117 SWITCHGEAR	Planning	Electrical Power & Lighting	5,300	–	5,300
CA04-606	REHABILITATION OF AIRTRAIN HAMMERHEAD ROOF	Planning	Rail Systems	–	4,400	4,400
CA04-609	REHABILITATION OF TAXIWAY P	Planning	Runway-Taxiway	1,400	36,700	38,100
CA04-611	RECONSTRUCTION OF ESCALATORS 15 AND 21 AT TERMINAL B	Planning	Buildings & Garages	3,800	200	4,000
CA04-613	INSTALLATION OF AC8 AND AC9 IN TERMINAL B	Planning	HVAC, Plumbing & Sprinklers	4,900	100	5,000
CA04-614	REPLACEMENT OF WATER TANK "A"	Planning	Underground Utilities	4,800	100	4,900
CA04-633	REPLACEMENT OF TERMINAL B3 STERILE SECURITY DOOR	Planning	Buildings & Garages	–	3,500	3,500
CA04-640	INSTALLATION OF AGENCY WIDE TRANSPORTATION MANAGEMENT SOFTWARE	Design	Control Systems	800	–	800
CA04-643	REPLACEMENT OF PARKING ACCESS AND REVENUE CONTROL SYSTEM (PARCS)	Design	Control Systems	19,500	–	19,500
CA04-645	REHABILITATION OF THE RESTRICTED VEHICLE SERVICE ROAD (RVSR) AND SNOW EQUIPMENT LOT	Planning	Paving & Roadways	–	6,200	6,200
CA04-646	REHABILITATION OF TAXIWAY B (FROM U TO RL) AND TAXIWAY S (FROM B TO RUNWAY 11-29)	Planning	Runway-Taxiway	4,400	–	4,400
CA04-647	REHABILITATION OF EARHART DRIVE, SOUTH DIRECTORY ROAD & RECIRCULATION ROAD	Planning	Paving & Roadways	3,800	–	3,800
CA04-648	IMPROVEMENT OF FUEL FARM DRAINAGE	Design	Fueling	1,300	–	1,300
CA04-649	REHABILITATION OF FUEL FARM ROADWAY	Planning	Fueling	–	3,300	3,300
CA04-654	REHABILITATION OF TAXIWAY D (FROM N TO B)	Planning	Runway-Taxiway	1,700	–	1,700
CA04-655	REPLACEMENT OF CHRP SOUTH SUBSTATION ROOF	Design	Buildings & Garages	1,000	–	1,000
CA04-659	RECONSTRUCTION OF OPERATIONS CONTROL CENTER AT TERMINAL B	Planning	Buildings & Garages	22,000	9,700	31,700
CA04-665	REHABILITATION OF BLAST FENCE AT RESTRICTED VEHICLE SERVICE ROAD (RVSR)	Planning	Paving & Roadways	2,400	–	2,400
CA04-667	REPLACEMENT OF TERMINAL B BAGGAGE HANDLING SYSTEM	Planning	Buildings & Garages	92,000	1,000	93,000
CA04-669	REPLACEMENT OF AIRCRAFT LOADING BRIDGES AT TERMINAL B	Planning	Buildings & Garages	42,000	600	42,600
CA04-670	REHABILITATION OF INNER CONCRETE APRON AT SATELLITES B2 AND B3	Planning	Runway-Taxiway	5,000	–	5,000
CA04-672	UPGRADE OF BACKUP DATA CENTER FOR CACS/CRS SYSTEMS	Planning	Control Systems	1,400	–	1,400
CA44-041	EWR AIRTRAIN REPLACEMENT PLANNING	Design	Rail Systems	31,000	900	31,900

2017- 2026 Capital Project List — Renew

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
AIRTRAIN NEWARK INTERIM REPAIRS						
CA04-587	MAINTENANCE CAPITAL – EWR AIRTRAIN	Planning	Rail Systems	125,000	175,000	300,000
	AIRTRAIN NEWARK INTERIM REPAIRS, Subtotal			125,000	175,000	300,000
EWR RUNWAYS REHABILITATION						
CA04-608	REHABILITATION OF RUNWAY 4R-22L	Planning	Runway-Taxiway	88,000	9,000	97,000
CA04-610	REHABILITATION OF RUNWAY 4L-22R	Planning	Runway-Taxiway	–	68,000	68,000
	EWR RUNWAYS REHABILITATION, Subtotal			88,000	77,000	165,000
SECURITY PROGRAM						
CA04-045	TERMINAL B EXTERIOR CURTAIN WALL GLASS UPGRADE	Design	Buildings & Garages	83,000	–	83,000
CA04-047	CCTV AT TERMINAL FRONTAGES	Planning	Control Systems	8,800	8,200	17,000
CA04-049	CCTV AT TERMINAL BAGGAGE AREAS	Design	Control Systems	8,600	–	8,600
CA04-053	CCTV IN TERMINAL PRE PASSENGER-SCREENING AREAS	Planning	Control Systems	2,900	1,900	4,800
CA04-397	INSTALLATION OF BIOMETRIC CARD READER SYSTEM	Planning	Control Systems	2,400	–	2,400
CA04-680	UPGRADE PIDS END OF LIFE SECURITY EQUIPMENT/SOFTWARE	Planning	Control Systems	3,900	3,100	7,000
CA04-681	REPLACEMENT OF AOA GUARD POST DELTA BARRIERS	Planning	Paving & Roadways	200	5,200	5,400
	SECURITY PROGRAM, Subtotal			109,800	18,400	128,200
NEWARK LIBERTY INTERNATIONAL AIRPORT, Subtotal				735,600	350,400	1,086,000
TETERBORO AIRPORT						
CA05-127	REHABILITATION OF TAXIWAY G (WEST OF RUNWAY 1-19) AND TAXIWAY E (HIGH SPEED)	Planning	Runway-Taxiway	2,800	–	2,800
CA05-128	REHABILITATION OF RUNWAY 6-24	Planning	Runway-Taxiway	22,000	800	22,800
CA05-129	REHABILITATION OF TAXIWAY L	Planning	Runway-Taxiway	6,100	–	6,100
CA05-141	REHABILITATION OF STORMWATER DRAINAGE SYSTEM	Planning / Design	Underground Utilities	17,200	–	17,200
CA05-143	REHABILITATION OF BUILDING 72	Planning	Buildings & Garages	4,900	5,000	9,900
CA05-148	REHABILITATION OF TETERBORO RUNWAY 1-19	Planning	Runway-Taxiway	11,600	2,900	14,500
CA05-152	REPLACEMENT OF AIRFIELD LIGHTING VAULT	Planning	Electrical Power & Lighting	9,800	8,200	18,000
CA05-153	INSTALLATION OF AGENCY WIDE TRANSPORTATION MANAGEMENT SOFTWARE	Design	Control Systems	–	100	100
CA05-155	REHABILITATION OF SEWAGE PUMPS	Design	Underground Utilities	1,700	–	1,700
SECURITY PROGRAM						
CA05-161	UPGRADE PIDS END OF LIFE SECURITY EQUIPMENT/SOFTWARE	Planning	Control Systems	1,900	1,700	3,600
	SECURITY PROGRAM, Subtotal			1,900	1,700	3,600
TETERBORO AIRPORT, Subtotal				78,000	18,700	96,700

2017- 2026 Capital Project List — Renew

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
STEWART INTERNATIONAL AIRPORT						
CA06-079	INSTALLATION OF BACKFLOW PREVENTER DEVICES	Construction	HVAC, Plumbing & Sprinklers	1,100	–	1,100
STEWART INTERNATIONAL AIRPORT, Subtotal				1,100	–	1,100
AVIATION, Total				2,081,720	939,700	3,021,420

PORT

PORT NEWARK

CP05-242	REHABILITATION OF FIRE PROTECTION SYSTEMS AT NEW JERSEY MARINE TERMINAL	Planning	HVAC, Plumbing & Sprinklers	9,500	31,900	41,400
CP05-244	REPLACEMENT OF FENDER SYSTEMS IN NEW JERSEY MARINE TERMINAL	Planning	Port Wharfs	3,100	19,600	22,700
CP05-248	REHABILITATION OF BUILDING ROOF AT NEW JERSEY MARINE TERMINAL	Planning	Buildings & Garages	11,200	37,200	48,400
CP05-272	IMPLEMENTATION OF AGENCYWIDE TRANSPORTATION MANAGEMENT SOFTWARE	Design	Control Systems	1,000	–	1,000
CP05-277	REHABILITATION OF TYLER STREET PAVING	Design	Paving & Roadways	1,800	–	1,800
CP05-281	IMPLEMENTATION OF HOLDING TANKS AT BUILDINGS 182 & 188	Design	Underground Utilities	500	–	500
SECURITY PROGRAM						
CP05-124	PORT SECURITY PROGRAM-NJMT-BADGE, ID SYS.	Planning	Control Systems	11,000	–	11,000
SECURITY PROGRAM, Subtotal				11,000	–	11,000
WHARF/BERTH REPLACEMENT PROGRAM						
CP05-241	REHABILITATION OF BERTHS 15 & 17 AT PORT NEWARK	Planning	Port Wharfs	21,000	46,000	67,000
CP05-245	REHABILITATION OF BERTHS 10, 12 & 25 AT PORT NEWARK	Planning	Port Wharfs	1,400	57,600	59,000
WHARF/BERTH REPLACEMENT PROGRAM, Subtotal				22,400	103,600	126,000
PORT NEWARK, Subtotal				60,500	192,300	252,800

ELIZABETH PA MARINE TERMINALS

CP08-149	REHABILITATION OF WATER SYSTEM (PHASE II) AT PORT ELIZABETH MARINE TERMINAL	Planning	Underground Utilities	31,000	400	31,400
WHARF/BERTH REPLACEMENT PROGRAM						
CP08-145	REHABILITATION OF BERTHS 56, 58, 94, 96, AND 98 AT PORT ELIZABETH MARINE TERMINAL	Planning	Port Wharfs	8,500	116,500	125,000
WHARF/BERTH REPLACEMENT PROGRAM, Subtotal				8,500	116,500	125,000
ELIZABETH PA MARINE TERMINALS, Subtotal				39,500	116,900	156,400

BROOKLYN MARINE TERMINALS

SECURITY PROGRAM

CP09-085	PORT SECURITY PROGRAM NYMT-BADGE, ID SYS	Planning	Control Systems	2,600	–	2,600
SECURITY PROGRAM, Subtotal				2,600	–	2,600

2017- 2026 Capital Project List — Renew

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
WHARF/BERTH REPLACEMENT PROGRAM						
CP09-122	REPLACEMENT OF BROOKLYN PIER 9A & BULKHEAD BETWEEN PIER 7 & 8	Planning	Port Wharfs	1,000	68,000	69,000
WHARF/BERTH REPLACEMENT PROGRAM, Subtotal				1,000	68,000	69,000
BROOKLYN MARINE TERMINALS, Subtotal				3,600	68,000	71,600
RED HOOK TERMINAL						
CP91-056	REPLACEMENT OF SPRINKLER SYSTEM AT PIER SHED 9B	Planning	HVAC, Plumbing & Sprinklers	1,600	3,000	4,600
CP91-062	REHABILITATION OF PIER 10 AT RED HOOK	Planning	Port Wharfs	9,400	–	9,400
RED HOOK TERMINAL, Subtotal				11,000	3,000	14,000
PORT JERSEY PA MARINE TERMINAL						
CP16-044	CONSTRUCTION OF OPERATIONS CENTER AT PORT JERSEY AND UPGRADE TO ELECTRICAL EQUIPMENT	Planning	Electrical Power & Lighting	16,100	8,900	25,000
CP16-047	REHABILITATION OF BERTH E-1 AND E-2	Planning	Port Wharfs	10,900	9,100	20,000
WHARF/BERTH REPLACEMENT PROGRAM						
CP16-045	REHABILITATION OF BERTHS S2, S3, 1418 & 1419 AT PORT JERSEY MARINE TERMINAL	Planning	Port Wharfs	100	43,400	43,500
WHARF/BERTH REPLACEMENT PROGRAM, Subtotal				100	43,400	43,500
PORT JERSEY PA MARINE TERMINAL, Subtotal				27,100	61,400	88,500
PORT, Total				141,700	441,600	583,300
DEVELOPMENT						
CW03-029	INSTALLATION OF BACKFLOW PREVENTION DEVICES AT TELEPORT	Design	HVAC, Plumbing & Sprinklers	500	–	500
DEVELOPMENT, Total				500	–	500
ALL FACILITIES PROVISION						
CXXX-SGR	FUTURE SGR FUNDING REQUIREMENTS	Planning	Structure Rehabilitation	250,000	250,000	500,000
CXXX-CAP	PROVISION FOR FUTURE CAPITAL MAINTENANCE	Planning	Structure Rehabilitation	50,000	50,000	100,000
ALL FACILITIES PROVISION, Total				300,000	300,000	600,000
FERRIES						
CH02-022	CAPITAL IMPROVEMENTS – BATTERY PARK CITY FERRY TERMINAL	Planning	Buildings & Garages	4,900	4,100	9,000
FERRIES, Total				4,900	4,100	9,000
TOTAL RENEW PROJECTS				4,416,360	4,338,860	8,755,220

Expand and Connect

PROJECTS THAT EXPAND CAPACITY, IMPROVE CONNECTIVITY, MEET THE GROWTH OF THE REGION, AND ADVANCE THE REGION'S TRANSPORTATION NEEDS

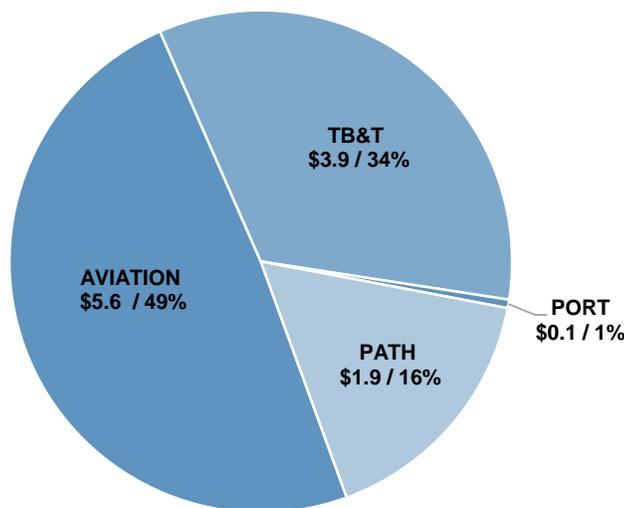
Projects that expand the capacity of the Port Authority's transportation network and systems while improving connectivity throughout the region serve as cornerstones of the Capital Plan. They also support further regional economic growth throughout the entire Port District. This expansion enables greater use of our facilities by the region's citizens and improves the overall customer experience of using Port Authority assets.

Expand and Connect projects represent **\$11.1 billion (34 percent)** of overall programmed spending in the 2017-2026 Capital Plan. Significant projects in this category include:

Highlights

<i>(estimate \$ in millions)</i>	2017-2026
Port Authority Bus Terminal Replacement	\$ 3,500
John F. Kennedy Airport Redevelopment and LaGuardia Airport AirTrain	\$ 2,500
Newark Liberty International Airport — Terminal A Redevelopment	\$ 2,340
PATH Rail Extension to Newark Liberty Rail Link Station	\$ 1,730
LaGuardia Airport — New Terminal C	\$ 600
PATH Railcar Fleet Expansion	\$ 150

EXPAND AND CONNECT BY BUSINESS SEGMENT *



(estimate \$ in billions)

* does not include \$300 million agency provision for efficiency and phasing

Port Authority Bus Terminal Replacement Program

Overview: The existing Port Authority Bus Terminal (PABT), which opened in 1950 and was expanded in 1981, currently operates beyond its reasonable passenger carrying capacity. It therefore offers a negative experience for both daily commuters and first-time visitors. At present, PABT accommodates approximately 230,000 passenger trips and more than 7,000 bus movements per average weekday. But demand is expected to increase to as many as 270,000 daily peak-hour passengers by 2020, and as many as 337,000 daily peak-hour passengers by 2040. The existing facility is also incompatible with current bus configurations; it lacks adequate bus staging and storage, and cannot adequately accommodate customers with disabilities.

TOTAL PROJECT COST	\$7.5-10.0 BILLION
2017-2026 COST	\$3.5 BILLION
CURRENT STAGE	PLANNING

Purpose: The overall program will replace the existing PABT, which has neared the end of its useful life, with a state-of-the-art bus terminal in a location to be selected following robust community outreach and stakeholder engagement. Importantly, the new facility will be constructed so as to be scalable, and therefore prepared to meet the 35 percent to 51 percent growth in passenger traffic forecasted by 2040 while meeting all contemporary standards and code requirements.

Scope: The PABT Replacement Program includes funding for planning, environmental review, public outreach and participation, design and permitting, and construction. The planning, environmental review, and public outreach phases will inform the requirements, design, and construction of the new bus terminal on the West Side of Manhattan. As a result, the estimated total project cost (TPC) is expressed as a range. The agency's goal is to complete the program at the lower end of the range. The TPC will be refined as the planning, environmental review, and public outreach phases are completed. This program also allows for construction of a bus staging/storage facility to assist in creating direct connectivity to and from the Lincoln Tunnel for buses via the XBL, and a dedicated ramp system. The Port Authority will seek federal grant funding to assist in the funding of this critical mass-transportation asset.

Implementation Plan: The phasing and implementation plan for construction of the new PABT depends on the results of the planning and environmental review phases, as well as a campaign of extensive public outreach and participation from the region's stakeholders. Also, the agency will seek to secure federal grant funding. Construction will be staged to minimize disruption to existing terminal operations with the development of a master schedule that facilitates coordination with regional transportation partners and other construction programs, such as those at the Lincoln and Holland tunnels, and the George Washington Bridge.



John F. Kennedy Airport Redevelopment and LaGuardia Airport AirTrain

JFK Overview: John F. Kennedy Airport (JFK) is the region's largest airport and the nation's busiest in terms of international passengers, receiving over 430,000 flights and accommodating 60 million passengers in 2016. JFK is expected to reach capacity by mid-2020 without expansion to its terminals and supporting infrastructure to accommodate passenger growth. The airport, which generates \$15 billion in wages and supports nearly 285,000 jobs throughout the region, is routinely given poor marks by passengers due to an inconsistent, sub-par passenger experience and increasingly cramped facilities.

TOTAL PROJECT COST	TBD
2017-2026 COST	\$2.5 BILLION (\$2.0 BILLION PA SHARE)
CURRENT STAGE	PLANNING

Purpose: For JFK, the program will allocate funding toward the high priority projects that provide airport-wide infrastructure enhancements to support the modernization and transformation of JFK International Airport. Port Authority funds will be used toward supporting infrastructure such as on-airport roadway improvements, utilities, and other landside and airside infrastructure necessary to support and catalyze terminal redevelopment at the airport, which is envisioned to be privately financed by airlines or private terminal operators, under public-private models such as those that are currently employed for the modernization of LaGuardia Airport.

Scope: The JFK program consists of infrastructure improvements to enable private-investment terminal expansion, including airside enhancements to improve efficiency and reduce delays, airport roadway improvements to address existing bottlenecks and choke points and accommodate additional vehicular traffic, utility and landside modifications, and JFK AirTrain enhancements. The JFK redevelopment program is in planning and design, with construction expected to start in 2019 or earlier. The program requires staging coordination with other projects underway at the airport as well as close coordination with the airlines and existing terminal lessees.

LGA AirTrain Overview: LaGuardia Airport (LGA) is the only major airport in New York City/Northern New Jersey, without direct rail transit access. Under current traffic conditions, travel time to LGA by road is unpredictable. From Manhattan, travel time can vary from 35 minutes without traffic to an hour or more with traffic. Such variability and uncertainty makes it difficult for travelers to plan, while also carrying a potential risk of missed flights. Roadway congestion is greatly intensified due to the nearly 90 percent of LGA's passengers accessing the airport by car. The Grand Central Parkway, which provides primary road access to and from the airport, already operates at service level F for major parts of the day — which contributes to the unpredictable airport travel times and constrains further long-term passenger growth. Providing train access would relieve stress on LaGuardia's already overcrowded roadways and terminal frontages. With the number of passengers at LaGuardia expected to grow by 25 percent and the region's population continuing to grow, congestion to and from the airport will only get worse, increasing travel times for passengers and employees.

Purpose: The LaGuardia AirTrain Program is expected to reduce auto congestion and travel time delays and improve the predictability of travel time for air travelers, airport employees, and others having airport-related business. With passenger demand at LGA expected to reach 34 million passengers annually in 2030, reliable and efficient rail service to and from the airport is critical to manage on-site parking, improve drop off and pick up activities at the terminal frontages, and reduce congestion on and off the airport, including its nearby neighborhood streets. Port Authority funds will be used to support an AirTrain connection between the airport and a new intermodal station at Willets Point connecting to existing Long Island Railroad (LIRR) and NYC Transit (NYCT) subway service, together with potential

John. F Kennedy Airport Redevelopment and LaGuardia Airport AirTrain

(continued)

ancillary airport functions and other connections such as a Consolidated Rent-a-Car facility (CONRAC) and employee parking.

Scope: LaGuardia AirTrain will serve air travelers, airport employees, and others having airport-related business. The program will include convenient pedestrian connections to both the LIRR and NYCT stations, and to the airport facilities located at Willets Point. The program is inclusive of the associated facilities and infrastructure (stations, guideway, maintenance/control facility, etc.) as well as the systems (vehicles, train control, power distribution system, etc.) for the AirTrain. These improvements will significantly improve the passengers' experience, address the constrained operations and severe traffic congestion that currently exist, and support economic opportunities in the region. The CONRAC and ancillary airport facilities described above are not included in the existing scope, but are being included in the planning process as not-to-preclude elements requiring further study.

Implementation Plan for LGA AirTrain and JFK Redevelopment: After undergoing a formal planning and design process, the agency will seek to secure federal grant funding and/or identification of an equity partner for a portion of the amounts beyond the \$1 billion for AirTrain LaGuardia. AirTrain LaGuardia construction is expected to start in 2019. Testing and commissioning is expected to start in 2021 with passenger service anticipated by 2023. The phasing and implementation plan for the construction of the new LGA AirTrain is dependent on the results of the planning and environmental review phases, as well as extensive public outreach and participation.

Similarly, the JFK redevelopment program is currently in planning and design, and construction is slated to start in 2019 or earlier. The program requires staging coordination with other projects under-way at the airport as well as close coordination with JFK's operating airlines.

The programs are linked as part of an overall program to redevelop both LGA and JFK. Subject to prior Board approval, capital funds not needed to execute a component of this program at one airport can be redirected to high-priority needs at the other airport.



Newark Liberty International Airport — Terminal A Redevelopment Program

Overview: The existing Terminal A at Newark Liberty International Airport opened in 1973; it is the oldest terminal at the airport. It is nearing the end of its useful life. It does not support modern airline operational requirements and strains to serve more passengers than provided under its original design capacity. This program will create a new terminal building equipped to serve the forecast increase in passengers while providing an open, modern terminal that customers find easy to access. Importantly, the new terminal will, by design, adapt to increasing demands, including evolving requirements for air travel. The accompanying improved airfield layout will increase flow and allow for larger aircraft with, dual taxi-lanes serving all gates.

TOTAL PROJECT COST	\$2.4 BILLION
2017-2026 COST	\$2.3 BILLION
CURRENT STAGE	PLANNING/DESIGN

Purpose: This program will replace the outmoded Terminal A building with a modern facility that meets increasing passenger levels, accommodates larger aircraft, and upgrades all supporting infrastructure while providing a configuration whose layout can adapt and expand to allow for unforeseen changes in demand.

Scope: The Terminal A Redevelopment Program includes four key elements:

- A new, 1-million-square-foot common use terminal with 33 gates that can accommodate 13.6 million annual passengers and future growth (the terminal could be expandable to 45 gates).
- Airfield paving on 140 acres contiguous to the new terminal, plus demolition of the existing Terminal A concourse.
- A new road system that connects the new terminal building to the existing Central Terminal Area, including eight new bridges and frontage roads.
- An “open,” tiered, and naturally ventilated garage and surface lot featuring approximately 3,000 parking spaces.

Implementation Plan: This program is currently in the planning and design stage. A Request for Qualifications was issued at the end of 2016. A Request for Proposals will be likely issued for qualified proposals by the second quarter of 2017, with the preferred designer/builder to be selected by the end of 2017. Current estimates state that the new terminal will be partially opened for operations by the end of 2020, with the full terminal opening by the end of 2022.

For more project information, please visit <https://www.panynj.gov/airports/ewr-redevelopment/index.html>



PATH Rail Extension to Newark Liberty Rail Link Station

Overview: PATH's Newark to World Trade Center Line currently terminates at Newark-Penn Station. Extending the PATH system from its current terminus to the Newark Liberty Rail Link Station at Newark Liberty International Airport would improve transit access for airport customers and commuters coming from many of the communities currently served by PATH including Lower Manhattan, Bergen, Hudson, and Essex Counties in New Jersey, as well as providing new access to transit for the Dayton Street neighborhood, within Newark's South Ward. Currently, there is no pedestrian or bus access to the Newark Liberty Rail Link Station.

TOTAL PROJECT COST	\$1.7 BILLION (\$1 BILLION PA SHARE)
2017-2026 COST	\$1.7 BILLION
CURRENT STAGE	PLANNING

Purpose: To facilitate transit access to Newark Liberty International Airport (EWR) and Newark's Dayton Neighborhood in the City's South Ward, by extending PATH's Newark to World Trade Center line to the Newark Liberty Rail Link Station at EWR. The PATH Extension Program establishes a new PATH station at the Newark Liberty Rail Link Station, providing the Dayton Street Neighborhood in Newark's South Ward and neighboring New Jersey communities with new pedestrian and vehicular access to PATH, NJ Transit and Amtrak Northeast Corridor Rail Service, NJ Transit Buses, and AirTrain Newark. The new PATH station increases regional transit and aims to reduce travel time, increase travel time predictability for air travelers making use of EWR from lower Manhattan, and will provide commuter access from Newark's South Ward and neighboring communities to Lower Manhattan.

Scope: The program will extend PATH rail infrastructure from its existing terminus at Newark-Penn Station to the Newark Liberty Rail Link Station at EWR. Included in this program is a new station at the Newark Liberty Rail Link Station, accessible to pedestrians and buses, construction of a new rail yard facility, and modification of existing platforms at Newark-Penn Station to accommodate increased passenger flow. While its construction is not included in the scope of this project, the new PATH station at the Newark Liberty Rail Link Station will be designed to allow for the construction of a commuter parking garage through a potential public-private partnership, thereby providing the potential for expanded trans-Hudson transit access for commuters.

Implementation Plan: As the planning, environmental review, design, and public outreach and participation processes continue, the program will seek to secure federal grant funding and value capture opportunities. Construction is expected to start in 2020 and be completed with full revenue service operations available in 2026.



LaGuardia Airport — New Terminal C

Overview: As part of the overall redesign of LaGuardia Airport (LGA), Terminals C and D will be redeveloped by Delta Air Lines and its development partner, Empire State Terminal Group, (ESTG), in order to provide a single, structurally unified airport terminal with improved transportation access, increased airside space, and a world-class passenger experience.

TOTAL PROJECT COST	\$4.5 BILLION (\$600 MILLION PA SHARE)
2017-2026 COST	\$600 MILLION
CURRENT STAGE	PLANNING

Purpose: LGA's current terminal layout is composed of multiple, fragmented terminals. This program will replace it with one main, architecturally unified terminal building that connects a new Terminal C with the new Terminal B (see page 47). Redevelopment of Terminals C and D will help provide an improved passenger experience by accommodating projected passenger increases and reducing delays.

Scope: The Port Authority's fixed contribution to the program is capped at \$600 million, which includes an amount for Port Authority costs incurred to support the project. The Port Authority's contribution supports work on the new terminal's related infrastructure, including roadways and utilities, the expansion of the East Garage, and concourse and ramp work, in addition to work on the terminals themselves. ESTG will perform and manage construction of the new 37-gate Terminal C and related infrastructure. As previously stated, the new Terminal will connect with the new Central Hall and Terminal B at LaGuardia.

Implementation Plan: Construction is expected to begin in 2017, with program completion anticipated for 2026. The program requires significant staging coordination with the Terminal B redevelopment projects. Timing for the full delivery of this program will require coordination with the schedule for the redevelopment of Terminal B as well as the development of a comprehensive traffic management program.



PATH Railcar Fleet Expansion

Overview: Completion of the new PATH Communications Based Train Control (CBTC) and Positive Train Control (PTC) Signal System (see page 50) will allow for the operation of trains with reduced headways during the peak period, thus increasing the system’s capacity. To make use of the capacity and service benefits of the CBTC/PTC signal system, approximately 50 new PA-5 railcars are required to complement the existing fleet of 350 PA-5 railcars in service.

TOTAL PROJECT COST	\$150 MILLION
2017-2026 COST	\$150 MILLION
CURRENT STAGE	PLANNING

Purpose: This project will purchase approximately 50 new PA-5 railcars to increase train frequency and system wide capacity. The increased frequency of trains during the peak period is estimated to increase peak hour capacity system wide by approximately 18 percent, or 7,500 passengers per hour. The expanded capacity provides the ability to relieve near-term forecast increased trans-Hudson travel demand.

Scope: Purchase approximately 50 new PA-5 railcars to take full advantage of the new PATH CBTC and PTC Signal System that allows for the operation of trains with reduced headways during the peak period.

Implementation Plan: Railcar delivery is anticipated to commence in 2018, coincident with the completion of the new PATH PTC Signal System, and all new railcars will be in service by 2021.



2017- 2026 Capital Project List — Expand and Connect

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
TUNNELS BRIDGES & TERMINALS						
LINCOLN TUNNEL						
CB03-269	LINCOLN TUNNEL ACCESS PROGRAM – REPLACEMENT OF ROUTE 1 AND 9	Planning / Design	Paving & Roadways	\$ 239,000	\$ 1,000	\$ 240,000
LINCOLN TUNNEL, Subtotal				239,000	1,000	240,000
GOETHALS BRIDGE						
CB07-145	CONSTRUCTION OF INTERCHANGE RAMPS	Planning	Bridges	119,000	1,000	120,000
GOETHALS BRIDGE, Subtotal				119,000	1,000	120,000
PORT AUTHORITY BUS TERMINAL						
CT06-285	REPLACEMENT OF PORT AUTHORITY BUS TERMINAL	Planning	Buildings & Garages	650,000	2,850,000	3,500,000
PORT AUTHORITY BUS TERMINAL, Subtotal				650,000	2,850,000	3,500,000
TUNNELS, BRIDGES AND TERMINALS, Total				1,008,000	2,852,000	3,860,000
PATH						
PATH						
CR02-290	CONSTRUCTION OF PATH RAIL EXTENSION TO NEWARK LIBERTY RAIL LINK STATION	Planning	Rail Systems	856,000	874,000	1,730,000
CR02-457	PATH RAILCAR FLEET EXPANSION	Planning	Rail Systems	150,000	–	150,000
PATH, Subtotal				1,006,000	874,000	1,880,000
PATH, Total				1,006,000	874,000	1,880,000
AVIATION						
LAGUARDIA AIRPORT						
CA02-347	CONSTRUCTION OF RESTRICTED VEHICLE SERVICE ROAD (RVSR) AND RUNWAY DRIVE	Design	Runway-Taxiway	53,000	700	53,700
CA02-487	INSTALLATION OF AIRPORT ACCESS FEE PROGRAM INFRASTRUCTURE	Planning	Paving & Roadways	10,500	–	10,500
CA02-496	INSTALLATION OF PILE SUPPORTED STRUCTURE FOR RUNWAY 4 LOCALIZER	Planning	Runway-Taxiway	5,700	–	5,700
CA02-503	INSTALLATION OF GROUND BASED AUGMENTATION SYSTEM	Planning	Runway-Taxiway	9,900	–	9,900
JFK REDEVELOPMENT & LGA AIRTRAIN						
CA22-005	CONSTRUCTION OF AIRTRAIN	Planning	Rail Systems	700,000	800,000	1,500,000
JFK REDEVELOPMENT & LGA AIRTRAIN, Subtotal				700,000	800,000	1,500,000
LGA NEW TERMINAL C						
CA22-006	DELTA REDEVELOPMENT PROGRAM – EAST CONNECTOR	Planning	Buildings & Garages	75,000	75,000	150,000
CA22-007	DELTA REDEVELOPMENT PROGRAM – TERMINAL	Planning	Buildings & Garages	112,000	38,000	150,000
CA22-008	DELTA REDEVELOPMENT PROGRAM – SUPPORTING INFRASTRUCTURE	Planning	Paving & Roadways	224,000	76,000	300,000
LGA NEW TERMINAL C, Subtotal				411,000	189,000	600,000

2017- 2026 Capital Project List — Expand and Connect

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
LAGUARDIA AIRPORT, Subtotal				1,190,100	989,700	2,179,800
JOHN F. KENNEDY INTERNATIONAL AIRPORT						
CA03-640	REDEVELOPMENT OF NORTH CARGO AREA	Planning	Buildings & Garages	900	–	900
CA03-669	ENHANCEMENT OF TAXIWAYS CA & CB	Planning	Runway-Taxiway	23,000	900	23,900
CA03-776	INSTALLATION OF AIRPORT ACCESS FEE PROGRAM INFRASTRUCTURE	Planning	Paving & Roadways	4,400	–	4,400
CA03-788	INSTALLATION OF GROUND BASED AUGMENTATION SYSTEMS FOR AIRPORTS	Planning	Runway-Taxiway	9,900	–	9,900
JFK REDEVELOPMENT & LGA AIRTRAIN						
CA03-802	JFK REDEVELOPMENT	Planning	Paving & Roadways	560,000	440,000	1,000,000
JFK REDEVELOPMENT & LGA AIRTRAIN, Subtotal				560,000	440,000	1,000,000
JOHN F. KENNEDY INTERNATIONAL AIRPORT, Subtotal				598,200	440,900	1,039,100
NEWARK LIBERTY INTERNATIONAL AIRPORT						
CA04-597	REHABILITATION OF FACILITY DATA ROOM	Planning	Control Systems	700	4,600	5,300
CA04-642	INSTALLATION OF AIRPORT ACCESS FEE PROGRAM INFRASTRUCTURE	Planning	Paving & Roadways	2,800	–	2,800
EWR TERMINAL A REDEVELOPMENT						
CA44-037	TERMINAL A REDEVELOPMENT – TERMINAL	Planning / Design	Buildings & Garages	1,200,000	174,000	1,374,000
CA44-038	TERMINAL A REDEVELOPMENT – AIRSIDE	Planning / Design	Buildings & Garages	240,000	96,000	336,000
CA44-039	TERMINAL A REDEVELOPMENT – LANDSIDE INFRASTRUCTURE	Planning / Design	Paving & Roadways	441,000	19,000	460,000
CA44-040	TERMINAL A REDEVELOPMENT – PARKING	Planning	Buildings & Garages	170,000	–	170,000
EWR TERMINAL A REDEVELOPMENT, Subtotal				2,051,000	289,000	2,340,000
NEWARK LIBERTY INTERNATIONAL AIRPORT, Subtotal				2,054,500	293,600	2,348,100
TETERBORO AIRPORT						
CA05-158	INSTALLATION OF AUGMENTATION OF GROUND BASED SYSTEMS	Planning	Runway-Taxiway	9,900	–	9,900
TETERBORO AIRPORT, Subtotal				9,900	–	9,900
AVIATION, Total				3,852,700	1,724,200	5,576,900
PORT						
GREENVILLE YARD / NYNJ RAIL LLC						
CP17-016	INSTALLATION OF SUPPORT TRACKS	Design	Rail Systems	41,000	300	41,300
CP17-037	MODIFICATIONS TO RAIL ACCESS FOR 65TH STREET YARD	Planning	Rail Systems	9,700	–	9,700
GREENVILLE YARD / NYNJ RAIL LLC, Subtotal				50,700	300	51,000

2017- 2026 Capital Project List — Expand and Connect

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
PORT JERSEY PA MARINE TERMINAL						
CP16-070	CONSTRUCTION OF PORT JERSEY 2ND LEAD TRACK	Planning	Rail Systems	10,100	–	10,100
PORT JERSEY PA MARINE TERMINAL, Subtotal				10,100	–	10,100
PORT, Total				60,800	300	61,100
WORLD TRADE CENTER						
ONE WORLD TRADE CENTER						
CW31-002	INSTALLATION OF INTERIM BUILDING MAINTENANCE UNIT AT ONE WTC	Planning	Mechanical Systems	3,400	–	3,400
CW31-006	INSTALLATION OF PERMANENT BUILDING MAINTENANCE UNIT AT ONE WTC	Planning	Buildings & Garages	29,000	–	29,000
One World Trade Center, Subtotal				32,400	–	32,400
WORLD TRADE CENTER, Total				32,400	–	32,400
ALL FACILITIES PROVISION						
CXXX-EXP	PROVISION FOR EFFICIENCY AND PHASING – EXPAND AND CONNECT PROJECTS	Planning		(150,000)	(150,000)	(300,000)
ALL FACILITIES PROVISION, Total				(150,000)	(150,000)	(300,000)
TOTAL EXPAND & CONNECT PROJECTS				\$5,809,900	\$5,300,500	\$11,110,400

Partner

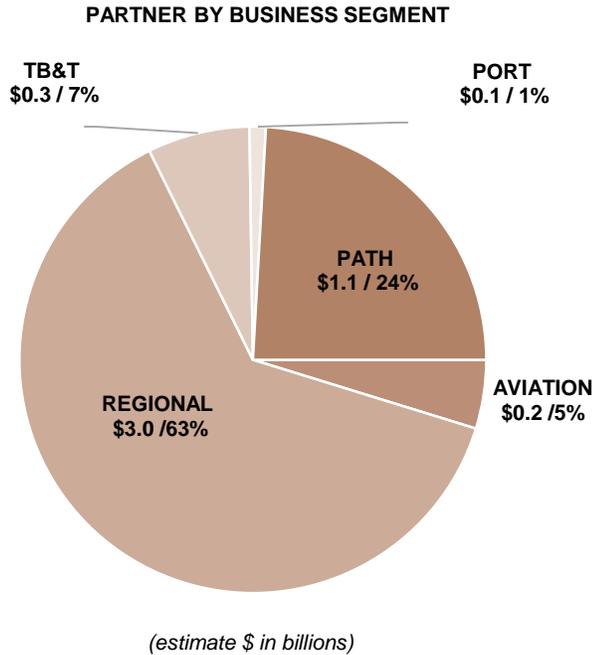
PROJECTS WHERE WE PARTNER WITH FEDERAL AND REGIONAL STAKEHOLDERS TO COMPLETE SUPERSTORM SANDY RESTORATION, FORTIFY AND IMPROVE RESILIENCY OF OUR ASSETS, AND BUILD FOR THE FUTURE

The planning and implementation of large, complex infrastructure projects requires the ability to coordinate and collaborate with external partners. Programs in this category represent shared capital investments with federal and regional partners that will result in restoration of infrastructure damaged by Superstorm Sandy, as well as planning for future infrastructure needs and enhancing the overall resiliency of our assets.

These programs represent **\$4.7 billion (15 percent)** of the programmed spending in the 2017-2026 Capital Plan. Some significant projects from this category include:

Highlights

<i>(estimate \$ in millions)</i>	2017-2026
Superstorm Sandy Capital Program	\$1,760
Gateway Program Support	\$2,700



Superstorm Sandy Capital Program

Overview: Superstorm Sandy was one of the New York/New Jersey region's worst natural disasters, causing billions of dollars of damages to Port Authority transportation facilities, including the PATH rail system the agency's airports, marine terminals, tunnels, and the World Trade Center site.

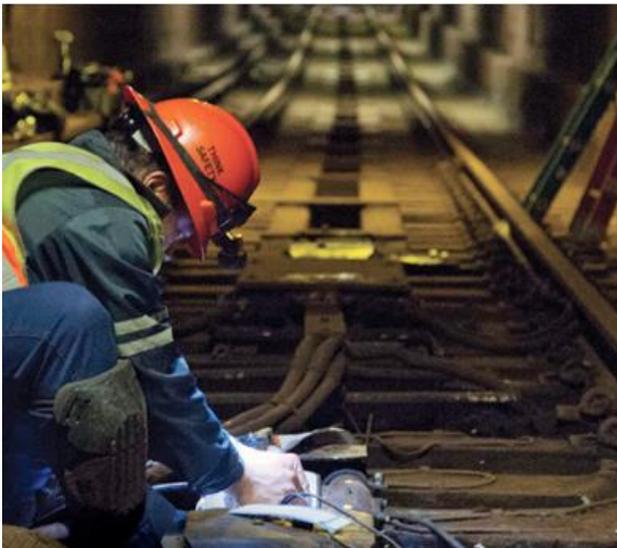
TOTAL PROJECT COST	\$2.0 BILLION
2017-2026 COST	\$1.8 BILLION

Years of construction are still required to recover, protect, rebuild, and add resiliency to our assets in the wake of Superstorm Sandy. This necessitates collaboration with the Federal Transit Administration (FTA) and the Federal Emergency Management Administration (FEMA). Through insurance proceeds and federal disaster recovery and resiliency grants, our federal partners, along with our insurance providers, are the primary sources of funding for the Superstorm Sandy Capital Program.

Purpose: Since 2013, the Port Authority's Storm Mitigation and Resilience Office has overseen the development of the Superstorm Sandy Capital Program. The program includes mitigation and resiliency measures to enhance the agency's infrastructure to better prepare for future extreme weather events and natural disasters. This effort will repair damage and help prevent salt-water intrusion, minimize future damages, and enable the agency to reopen facilities faster.

Scope: Ongoing efforts to clean up and undo the residual damage from Superstorm Sandy's floodwaters include 39 recovery projects and 14 resilience projects. The resilience projects will not only return damaged assets to their pre-storm condition but also enhance the resiliency and flood protection of critical facilities to mitigate potential damage from future severe storm events.

Implementation Plan: The timing of work on these projects must be coordinated and balanced with the operational need to maintain service, as well as other maintenance needs. With over \$250 million in projects under way, the vast majority of projects in the Sandy Capital Program will be completed within the first five years of the plan. Of the 69 projects in total, staff expects that 48, nearly 70 percent, of the projects will reach completion by 2021.



Port Authority Support of the Gateway Program

Overview: The states of New York and New Jersey, in partnership with US Department of Transportation (USDOT), and Amtrak have agreed to the creation of the Gateway Program Development Corporation (GDC) to advance the Gateway Program, one of the region’s most critical pieces of infrastructure and the nation’s largest rail project. This program serves to benefit the Northeast Corridor (NEC) – the most heavily used passenger rail line in the nation, in terms of both ridership and service frequency, carrying over 200,000 NJ TRANSIT and Amtrak daily passenger trips through the existing North River Tunnel’s two tubes.

TOTAL PROJECT COST	TBD
PA Debt Service Support	\$2.7 BILLION

Purpose: In support of the states of New York and New Jersey’s commitment to fund up to 50 percent of the Gateway program, and to the extent consistent with the statutory authority granted to the Port Authority in 1962 to undertake the development of the World Trade Center, the Hudson Tubes (currently referred to as PATH) and “Hudson Tubes extensions” the Port Authority will provide financial support to GDC by providing funds to repay up to \$2.7 billion of GDC’s low interest federal loan proceeds, together with interest. The Port Authority’s commitment is capped at the agreed principal amount and it will not be the primary obligor, nor will it be liable for any construction completion, cost overrun or project funding risk.

Scope: The Port Authority’s support will be applied to the Gateway Program Phase 1, which includes the construction of two new tubes under the Hudson River, the completion of a concrete casing to preserve the right-of-way on the West Side of Manhattan for a tunnel to Penn Station New York (PSNY), the replacement of the Portal North Bridge in New Jersey, and rehabilitation of the existing tunnel. As a non-user/owner of the facility, the Port Authority’s responsibility for this project will be to provide annual funding to GDC in amounts sufficient to pay debt service, including issuance fees, on a portion of the Railroad Rehabilitation and Improvement Financing (RRIF) loan GDC is expected to borrow to fund project construction under Federal infrastructure loan programs which allow for debt service to commence post-construction. These payments by the Port Authority will be subordinate to the Port Authority’s obligations to its Consolidate Bond holders. The Port Authority is not expected to receive any revenues from the Gateway Program.

Implementation Plan: On October 20, 2016, the PANYNJ board committed to support the GDC’s debt service on \$284 million in borrowing for the Portal North Bridge (PNB), plus \$18 million in issuance costs associated with that borrowing. Further commitment up to an aggregate amount of \$2.7 billion to support debt service on GDC low-interest borrowing will be structured in the same manner as the October 2016 commitment for Portal North.

2017- 2026 Capital Project List — Partner

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
TUNNELS BRIDGES & TERMINALS						
HOLLAND TUNNEL						
CB02-225	MITIGATION OF LATENT SALT DAMAGE TO MECHANICAL, ELECTRICAL AND PLUMBING SYSTEMS	Design	Electrical Power & Lighting	\$ 70,000	\$ 120,700	\$ 190,700
CB02-226	MITIGATION OF LATENT SALT DAMAGE	Design	Electrical Power & Lighting	51,000	89,800	140,800
HOLLAND TUNNEL, Subtotal				121,000	210,500	331,500
LINCOLN TUNNEL						
CB03-285	MITIGATION OF LATENT SALT DAMAGE TO MECHANICAL, ELECTRICAL AND PLUMBING SYSTEMS	Design	Electrical Power & Lighting	3,500	–	3,500
CB03-286	MITIGATION OF LATENT SALT DAMAGE	Design	Buildings & Garages	900	–	900
LINCOLN, Subtotal				4,400	–	4,400
TUNNELS, BRIDGES AND TERMINALS, Total				125,400	210,500	335,900
PATH						
PATH						
CR02-378	REPLACEMENT OF SUBSTATION #8	Design	Electrical Power & Lighting	34,000	15,800	49,800
CR02-384	UPGRADE OF SOUTH STREET COMPRESSOR	Design	Rail Systems	4,900	–	4,900
CR02-462	REPLACEMENT OF SUBSTATION #7	Design	Electrical Power & Lighting	39,000	800	39,800
CR02-463	REPLACEMENT OF SUBSTATION #9	Design	Electrical Power & Lighting	53,000	1,300	54,300
CR02-548	REPLACEMENT OF SUBSTATION #14	Design	Electrical Power & Lighting	41,000	6,800	47,800
CR02-556	REPLACEMENT OF ELEVATORS AT HARRISON CAR MAINTENANCE FACILITY	Design	Mechanical Systems	4,200	–	4,200
CR02-576	REPLACEMENT OF ROOF AT MACMILLAN BLOEDEL BUILDING	Design	Buildings & Garages	7,500	–	7,500
CR02-587	IMPLEMENTATION OF HOBOKEN FLOOD RESILIENCY PROGRAM	Design	Buildings & Garages	6,900	–	6,900
CR02-589	REPLACEMENT OF SIGNALS IN TUNNELS E & F	Design	Electrical Power & Lighting	38,000	53,500	91,500
CR02-590	REPLACEMENT OF RADIO AND ELECTRONICS IN TUNNELS E & F	Design	Electrical Power & Lighting	8,900	11,300	20,200
CR02-591	REPLACEMENT OF 27KV, 15KV, TRACTION POWER AND INTER-TRIPPING CABLES IN TUNNELS E & F	Design	Electrical Power & Lighting	75,000	97,400	172,400
CR02-592	REPLACEMENT OF LIGHTING 480V POWER DISTRIBUTION EQUIPMENT IN TUNNELS E & F	Design	Electrical Power & Lighting	24,000	34,800	58,800
CR02-593	REPLACEMENT OF AUXILIARY POWER EQUIPMENT & CABLE REPLACEMENT AT EXCHANGE PLACE	Design	Electrical Power & Lighting	4,200	4,300	8,500
CR02-594	REPLACEMENT OF CORROSION PROTECTION AND CONTROL SYSTEM IN TUNNELS E & F	Design	Control Systems	11,300	10,200	21,500
CR02-595	REPLACEMENT OF TRACK, THIRD RAIL AND APPURTENANCES IN TUNNELS E & F	Design	Rail Systems	9,000	17,600	26,600
CR02-596	REPLACEMENT OF CIVIL INFRASTRUCTURE IN TUNNELS A & B	Planning	Rail Systems	–	7,900	7,900
CR02-597	REPLACEMENT OF EXCHANGE PLACE STATION ESCALATORS	Design	Mechanical Systems	59,000	1,700	60,700

2017- 2026 Capital Project List — Partner

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
CR02-599	INSTALLATION OF HARRISON CAR MAINTENANCE FACILITY AUTOMATIC FLOOD BARRIER	Design	Buildings & Garages	26,000	–	26,000
CR02-600	INSTALLATION OF EXCHANGE PLACE STATION HEAD HOUSE PROTECTION	Design	Buildings & Garages	23,000	13,600	36,600
CR02-601	INSTALLATION OF HARRISON CAR MAINTENANCE FACILITY CONCRETE SEA WALL	Design	Buildings & Garages	31,000	–	31,000
CR02-602	EXTENSION OF RAIL YARDS	Construction	Rail Systems	24,000	300	24,300
CR02-609	REPLACEMENT OF EXCHANGE PLACE STATION ELEVATORS	Design	Mechanical Systems	12,300	100	12,400
CR02-610	REPLACEMENT OF NEWPORT STATION ELEVATORS	Design	Mechanical Systems	10,500	100	10,600
CR02-611	REPLACEMENT OF NEWPORT STATION ESCALATORS	Design	Mechanical Systems	12,600	13,800	26,400
CR02-612	INSTALLATION OF GROVE STREET STATION HEAD HOUSE PROTECTION	Design	Buildings & Garages	9,600	200	9,800
CR02-613	INSTALLATION OF NEWPORT STATION HEAD HOUSE PROTECTION	Design	Buildings & Garages	11,900	–	11,900
CR02-614	INSTALLATION OF HOBOKEN ELEVATOR FLOOD RESILIENCY	Planning	Mechanical Systems	4,400	–	4,400
CR02-624	REPLACEMENT OF GROVE STREET STATION ESCALATORS	Planning	Mechanical Systems	10,600	100	10,700
CR02-629	REPLACEMENT OF HOBOKEN INTERLOCKING	Planning	Rail Systems	28,000	1,000	29,000
CR02-630	REPLACEMENT OF APPROACH SLAB AND PAVEMENT AT HARRISON CAR MAINTENANCE FACILITY	Planning	Paving & Roadways	10,100	100	10,200
CR02-631	RESTORATION OF HOBOKEN, NEWPORT, EXCHANGE PLACE AND GROVE STREET STATIONS	Planning	Buildings & Garages	148,000	2,000	150,000
CR02-632	REPLACEMENT OF OPEN AREA TRACKS ON TRACK G, H & P	Planning	Rail Systems	67,000	–	67,000
PATH, Subtotal				848,900	294,700	1,143,600
PATH, Total				848,900	294,700	1,143,600
AVIATION						
LAGUARDIA AIRPORT						
CA02-484	REPLACEMENT OF AERONAUTICAL OPERATIONS AREA LIGHT CIRCUIT REPLACEMENT	Design	Electrical Power & Lighting	18,300	–	18,300
CA02-488	REHABILITATION OF PUMP HOUSE 6 SUBSTATION	Design	Electrical Power & Lighting	8,100	–	8,100
LAGUARDIA AIRPORT, Subtotal				26,400	–	26,400
JOHN F. KENNEDY INTERNATIONAL AIRPORT						
CA03-764	REPAIR & HAZARD MITIGATION OF CUT & COVER TUNNEL POWER DISTRIBUTION VAULT & PUMP STATION	Planning	Electrical Power & Lighting	12,500	–	12,500
CA03-765	REPLACEMENT OF AIRSIDE SWITCHGEARS	Design	Electrical Power & Lighting	5,800	–	5,800
CA03-766	INSTALLATION OF TIDE GATES/DRAINAGE CHECK VALVES FOR OUTFALLS	Design	HVAC, Plumbing & Sprinklers	7,800	–	7,800
CA03-769	REPLACEMENT OF LIGHT CIRCUIT AT AERONAUTICAL OPERATIONAL AREA	Design	Electrical Power & Lighting	79,000	900	79,900
CA03-783	INSTALLATION OF FLOODGATES AT OUTFALLS	Planning	HVAC, Plumbing & Sprinklers	38,000	200	38,200
JOHN F. KENNEDY INTERNATIONAL AIRPORT, Subtotal				143,100	1,100	144,200

2017- 2026 Capital Project List — Partner

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
NEWARK LIBERTY INTERNATIONAL Airport						
CA04- 639	REPLACEMENT OF EWR AERONAUTICAL OPERATIONS AREA (AOA) LIGHT CIRCUIT	Design	Electrical Power & Lighting	35,000	500	35,500
NEWARK LIBERTY INTERNATIONAL AIRPORT, Subtotal				35,000	500	35,500
TETERBORO AIRPORT						
CA05-151	REPLACEMENT OF TETERBORO AERONAUTICAL OPERATIONS ARIAL LIGHT CIRCUIT	Design	Electrical Power & Lighting	19,900	–	19,900
TETERBORO AIRPORT, Subtotal				19,900	–	19,900
AVIATION, Total				224,400	1,600	226,000
PORT						
PORT NEWARK						
CP05-251	REHABILITATION OF OFFICE SPACE AT BUILDING 260	Design	Buildings & Garages	15,600	–	15,600
CP05-266	RECONSTRUCTION AND RELOCATION OF RESIDENT ENGINEERS OFFICE	Planning	Buildings & Garages	3,000	–	3,000
CP05-273	REHABILITATION OF BUILDING #111 ELECTRICAL AND MECHANICAL EQUIPMENT	Planning	Electrical Power & Lighting	2,300	–	2,300
PORT NEWARK, Subtotal				20,900	–	20,900
BROOKLYN MARINE TERMINAL						
CP09-125	REPLACEMENT OF UNDERGROUND ELECTRICAL DELIVERY LINES AT NEW YORK MARINE TERMINAL	Planning	Underground Utilities	800	–	800
BROOKLYN MARINE TERMINALS, Subtotal				800	–	800
HOWLAND HOOK MARINE TERMINAL						
CP11-089	UPGRADE OF PAVEMENT SUBGRADE AT HOWLAND HOOK MARINE TERMINAL	Design	Paving & Roadways	31,000	700	31,700
HOWLAND HOOK MARINE TERMINAL, Subtotal				31,000	700	31,700
PORT, Total				52,700	700	53,400
REGIONAL TRANSPORTATION PROGRAMS						
CF99-004	GATEWAY (PLANNING)	Planning	Rail Systems	34,000	1,000	35,000
CF99-227	NEW YORK REGIONAL TRANSPORTATION PROGRAM	Planning	Rail Systems	250,000	–	250,000
REGIONAL TRANSPORTATION PROGRAMS, Total				284,000	1,000	285,000
PARTNER DIRECT PROJECTS, Subtotal				\$1,535,400	\$ 508,500	\$2,043,900
GATEWAY PROGRAM SUPPORT						
CF99-XXX	GATEWAY PROJECT (PA SUPPORT FOR PORTAL NORTH AND TUNNEL)	N/A	N/A			2,700,000
GATEWAY PROGRAM SUPPORT, SUBTOTAL				–	–	2,700,000
PARTNER PROJECTS TOTAL						\$4,743,900

Deliver

COMPLETE AND DELIVER THE PROJECTS THAT ARE CURRENTLY UNDER CONSTRUCTION

A critical component of the overall capital plan is ensuring that sufficient capital dollars are allocated to deliver those projects already under construction and complete the achievements of the prior plan. The 2017-2026 plan includes 199 projects in active construction with **\$7.6 billion (24 percent)** in spending. The construction portfolio consists of major projects across all Port Authority business lines including \$3.2 billion in Renew projects, and \$4.1 billion in Expand and Connect projects. With an average construction completion of 70 percent across all projects, this Capital Plan encompasses a mature portfolio of construction projects. Therefore, it is critical for the agency to continue progress with these projects to ensure safe and efficient operation at Port Authority facilities, and deliver on the work that has already begun. The timeline below provides a snapshot of expected completion and delivery of these projects for the region's beneficial use.

Projected Project Timeline

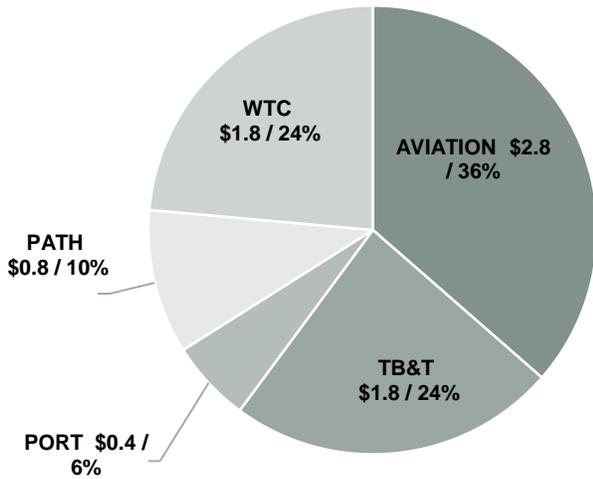


Significant projects from this category include:

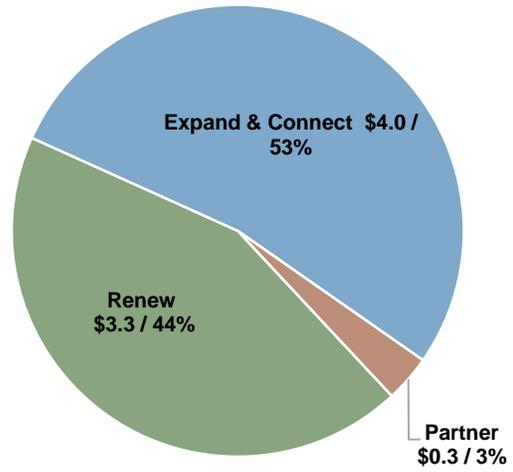
Highlights

<i>(estimate \$ in millions)</i>	2017-2026
LaGuardia Airport — Terminal B Redevelopment	\$ 2,530
World Trade Center Program	\$ 1,786
Bayonne Bridge Navigational Clearance Project	\$ 578
PATH Rail Signal Replacement Program	\$ 278
Port — Greenville Yard	\$ 164
Goethals Bridge Replacement Project	\$ 162
PATH Harrison Station Replacement and Upgrade	\$ 142

DELIVER BY BUSINESS SEGMENT



DELIVER BY CATEGORY



(estimate \$ in billions)

LaGuardia Airport — Terminal B Redevelopment

Overview: As part of the overall redesign of LaGuardia Airport (LGA), Terminal B will be redeveloped, through a design, build, finance, operation and maintain (DBFOM) public-private partnership (P3) with LaGuardia Gateway Partners (LGP). This project will provide a single, structurally unified airport terminal with improved transportation access, increased airside space and a world-class passenger experience.

TOTAL PROJECT COST	\$4.7 BILLION (\$ 2.9 BILLION PA SHARE)
2017-2026 COST	\$2.5 BILLION
CURRENT STAGE	CONSTRUCTION

Purpose: Terminal B opened in 1964 with a design capacity of 8 million passengers and 35 gates. It now serves over 13 million passengers a year, or over half of LGA’s passenger traffic. The current infrastructure at LGA is functionally obsolete. Replacing Terminal B will enable the airport to meet current and future demand and offer an improved passenger experience.

Scope: The existing Terminal B building will be demolished and replaced with a larger structure located closer to the Grand Central Parkway. This includes a new Central Arrivals and Departures Hall, which will link to the new Terminal C (see page 34). Relocating the new buildings will allow for more efficient circulation of aircrafts and reduced taxi-in and taxi-out times, which will yield shorter and fewer gate delays — a dramatic difference from today’s LaGuardia. The project also involves developing supporting infrastructure, including new frontage roads, pedestrian walkway connections, a new parking garage, and additional utilities improvements. The partnership with LGP includes a total fixed project design and construction agreement at the cost of \$4 billion, two-thirds of which is paid for by private funds and existing passenger fees.

Implementation Plan: The redevelopment and subsequent operations of Terminal B is advancing as a DBFOM by LGP as part of the largest P3 in the nation. Groundbreaking on the new Terminal B took place in June 2016, and construction is currently under way. To alleviate terminal roadway congestion, particularly during peak holiday travel periods, the Port Authority announced a series of traffic mitigation measures and will continue to work with stakeholders to monitor and plan additional measures. The new parking garage is expected to be completed by early 2018. Half of the gates will also open to the public in 2018, and the fully redesigned terminal is anticipated to open by the end of 2022.

For more project information, please visit <http://laguardiaairport.com/redevelopment/terminal-b/>



World Trade Center Program

Overview: When fully developed, the 16-acre World Trade Center (WTC) site will provide approximately 10 million square feet of space for transportation infrastructure, offices, retail, and other services. These facilities are either owned and operated by the Port Authority, or net-leased to and operated by the respective stakeholders.

TOTAL PROJECT COST	\$14 BILLION (PA SHARE \$7.6 MILLION)
2017-2026 COST	\$1.8 BILLION
CURRENT STAGE	CONSTRUCTION

Purpose: Complete the design and construction of the various projects at the site, including the retail complex (in coordination with private development partners), the Transportation Hub, the Vehicle Security Center and certain core site infrastructure.

Scope: While many of the public areas of the WTC site are now open, the WTC Program is doing final commissioning and system integration in the Transportation Hub, in the Vehicular Security Center and across the site. The demolition of the temporary PATH station will allow work to begin on the vehicular access ramp on the north-west side of the site and the future performing arts center. On-going One WTC projects include continued tenant improvement work, and small capital projects. Construction of the retail project will continue onto the next phases of the retail facility. A state-of-the-art Property Management Facility and police command station are under development. In addition, the WTC program is implementing a flood mitigation program to protect the Port Authority assets from future storms in light of the damage caused by Superstorm Sandy.

Implementation Plan: To date, significant progress has been made at the WTC site. The Port Authority’s remaining work is noted in the scope section. Other parties are responsible for the completion of construction of Towers 2 and 3, the Saint Nicholas Greek Orthodox National Shrine Greek Church and the future performing arts center. In addition, it is anticipated that the Port Authority will partner with the private sector for the future development of the Tower 5 site.

For more information on the program and site, please visit <http://www.panynj.gov/wtcprogress/index.html>



Bayonne Bridge Navigational Clearance Project

Overview: Container vessels have evolved. Today's larger, more efficient vessels cannot pass under the Bayonne Bridge to reach the Port's marine terminals in New Jersey and Staten Island. The raising of the bridge will usher the port into a new era of international commerce and will maintain its position as one of the world's premier shipping destinations.

TOTAL PROJECT COST	\$1.6 BILLION
2017-2026 COST	\$578 MILLION
CURRENT STAGE	CONSTRUCTION

Purpose: The roadway is being raised by more than 60 feet to allow the new generation of larger, more efficient vessels to call on regional port facilities. These next-generation ships have drafts of 48 feet or more, and the improvements made will ensure their ability to navigate safely.

Scope: The project includes replacing the existing main span deck, the New York and New Jersey approach structures and the access ramps, all at a higher elevation. The project upgrades the bridge's roadway to current design standards by providing wider 12-foot lanes, a median safety barrier, and shoulders. It also includes a bikeway and walkway extending the entire length of the bridge and allows for a future transit corridor. The iconic arch will be left in place.

Implementation Plan: The project was designed to minimize the number of disruptions during construction. Although the roadway has remained open to traffic throughout the construction period, some work requires periodic, temporary closures. The contract was awarded in 2013, and the new navigational clearance will be achieved in 2017. The entire roadway project is anticipated to be completed by mid-2019.

For more project information, please visit <http://www.panynj.gov/bridges-tunnels/bayonne-navigational-clearance-project.html>



PATH Signal System Replacement Program

Overview: The Communications Based Train Control (CBTC) signal system replacement program including Positive Train Control (PTC) is the signaling system upgrade to provide real-time train location data that enhances safety. PTC is mandated by the Federal Railroad Administration (FRA) and requires installation by the end of 2018. The full CBTC program is expected to be complete in 2022.

TOTAL PROJECT COST	\$752 MILLION
2017-2026 COST	\$278 MILLION
CURRENT STAGE	CONSTRUCTION

Purpose: The CBTC/PTC program was developed to replace the existing PATH signal system. This new signal system will allow PATH trains to run closer together safely, increasing the number of trains that can fit on the system during peak times, as well as ensure that PATH is compliant with the federal safety mandate that all FRA-regulated railroads install PTC. (See page 35 for a related project to expand the PATH Railcar Fleet).

Scope: The existing signal control system is being replaced with newly designed, state-of-the-art signal equipment including all required hardware, software and infrastructure elements. PTC and CBTC include the equipment, software and technology systems that will manage all train movements and provide for automatic overrides of train operations to prevent unsafe conditions and accidents.

Implementation Plan: The implementation plan stages construction to minimize disruption of PATH service coordinating with other on-going PATH projects. The contract was awarded in 2009 and construction commenced in 2010. The new PTC signal system is on schedule to be implemented to meet the FRA’s 2018 requirement. The full CBTC program is expected to be complete in 2022.

For more project information, please visit <http://www.panynj.gov/path/cbtc-ptc-video.html>



Port — Greenville Yard

Overview: The Greenville Yard-Port Authority Marine Terminal, located in Jersey City, NJ provides connections between marine facilities and the national rail network. The Greenville Yard Redevelopment Program provides for the construction of the ExpressRail Port Jersey Intermodal Container Transfer Facility (ICTF). It also calls for the development of a modern, multi-modal freight rail terminal to support an upgraded cross-harbor barge service that is critical to improving port efficiency and competitiveness. This facility is utilized, in part, by New York New Jersey Rail, LLC (NYNJR) for cross-harbor rail freight barge service.

TOTAL PROJECT COST	\$438 MILLION (PA SHARE \$220 MILLION)
2017-2026 COSTS	\$164 MILLION
CURRENT STAGE	CONSTRUCTION

Purpose: Greenville Yard is the future rail yard of both the GCT Bayonne ICTF and the NYNJR. This facility will advance the Port Authority’s goals of reducing truck traffic and increasing rail service capacity within the port. It will also allow for greater ease and efficiency in the movement of containerized cargo into and out of the region, resulting in significant environmental benefits, including reductions to vehicle travel time, fuel consumption, and air emissions.

Scope: The program includes final design and construction of the ExpressRail Port Jersey ICTF including support tracks, various site improvements, and an upgraded cross-harbor barge service infrastructure, and provides for the purchase of new ultra-low emissions locomotives, installation of support tracks, construction of two new higher-capacity rail car float barges, and construction of Transfer Bridge #10. An additional aggregate total of approximately \$36 million would be contributed by Conrail and GCT Bayonne for other offsite improvements to ensure that the redeveloped yard functions smoothly with the regional rail network.

Implementation Plan: The Greenville Yard Redevelopment Program is being completed in phases to take advantage of operational improvements as they are completed. Phase 1 includes all work that can be completed without the relocation of other tenants and is currently in progress. Phase 1 also includes completion of all ICTF and cross harbor support/working track. Phase 2 includes acquisition of property, completion of design and construction of an access road between ICTF and GCT Bayonne. It is scheduled for completion in 2019. This project is jointly funded by the Port Authority and the marine terminal operator. It is anticipated, that the full redevelopment of Greenville Yard will be completed by 2020.



Goethals Bridge Replacement Project

Overview: The Goethals Bridge Replacement is the agency’s first new bridge in more than 80 years, and the first surface transportation public-private partnership (P3) in the northeast region. The Port Authority entered into an agreement with NYNJ Link Developer, LLC to design, build, finance, and maintain (DBFM) the new bridge.

TOTAL PROJECT COST	\$1.5 BILLION (PA CONSTRUCTION COST LIMITED TO \$540 MILLION)
2017-2026 COST	\$162 MILLION
CURRENT STAGE	CONSTRUCTION

Purpose: The existing Goethals Bridge opened in 1928. It is now functionally obsolete given the growth in traffic volume and changes in road standards. However, it remains a crucial link in the movement of goods throughout the region. More than \$35 billion of cargo crosses the bridge each year. The current Goethals Bridge is now being replaced with a new bridge that offers improvements to ease congestion, improve safety, and incorporate space for bicyclists and pedestrians. The design for the new bridge also includes a central corridor that can accommodate the development of future mass transit service.

Scope: The new bridge design involves twin structures with dedicated east/west lanes, each with three, 12-foot wide lanes in each direction. The wider lanes and added shoulder space will help ease congestion, and improve safety on the bridge. The new Goethals Bridge also includes a 10-foot-wide shared use path for pedestrians and bicyclists, and includes additional width for future transit options. The Port Authority will contribute up to a capped \$540 million toward the construction of the bridge. In addition, once the bridge is completed, the Port Authority will make fixed payments to the private developer to cover the operating and capital maintenance and to repay the amount invested by the developer, subject to certain deductions for non-performance.

Implementation Plan: Under the partnership with NYNJ Link Developer LLC to implement the project as a DBFM P3, Port Authority construction costs for this project are capped at \$540 million. While this P3 is a financial arrangement between the private sector and the Port Authority to fund the bridge replacement, the Port Authority will retain significant operational control of the new bridge. Also, as part of the P3 effort, NYNJ Link Developer, LLC pursued and obtained federal financing through the Transportation Infrastructure Finance and Innovation Act (TIFIA) credit program. Design work began in 2013, with construction beginning in 2014. It is anticipated that the project will be substantially complete by the first quarter of 2018, and finished in 2018.

For more project information, please visit <http://www.panynj.gov/bridges-tunnels/goethals-bridge-replacement.html>



PATH Harrison Station Replacement and Upgrade

Overview: PATH's Harrison Station, constructed in 1936, is beyond its useful life, does not meet contemporary codes and standards, is not ADA-compliant, and cannot accommodate future PATH service demands as a result of transit-oriented development in the town of Harrison.

TOTAL PROJECT COST	\$243 MILLION
2017-2026 COST	\$142 MILLION
CURRENT STAGE	CONSTRUCTION

Purpose: To replace and upgrade the PATH Harrison Station to provide PATH riders with a new, fully modernized station that accommodates ridership growth and transit-oriented development.

Scope: The new PATH Harrison Station will provide riders with modern stations that feature glass-enclosed entrances with weather-protected facilities, platform-level areas with increased visibility, and clear way-finding signage. The entrances will be updated to meet modern standards and codes. At the completion of this project, Harrison Station will be fully ADA accessible via elevators and will include widened stairs and escalator access. The station's platforms will be extended from eight to 10-car train lengths to support such operations in the future.

Implementation Plan: Construction is under way and is phased to avoid impacting peak service on the Newark to World Trade Center Line.

For more project information, please visit <http://www.panynj.gov/path/harrisonredevelopment.html>



2017- 2026 Capital Project List — Deliver

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
TUNNELS BRIDGES & TERMINALS						
GEORGE WASHINGTON BRIDGE						
CB04-258	IMPLEMENTATION OF FORT LEE STREET IMPROVEMENTS	Construction	Paving & Roadways	\$ 2,400	–	\$ 2,400
CB04-318	UPGRADE OF ACCESS CONTROL SYSTEM	Construction	Control Systems	1,600	–	1,600
CB04-333	REHABILITATION OF FACILITY STEEL AND CONCRETE	Construction	Bridges	70	–	70
CB04-357	UPGRADE OF 800MHZ SIMULCAST TRUNKED RADIO SYSTEM	Multiple	Control Systems	1,800	–	1,800
CB04-361	REHABILITATION OF FACILITY WIDE PRIORITY AREAS	Construction	Bridges	7,200	–	7,200
CB04-377	UPGRADE OF INTEGRATED TOLL COLLECTION SYSTEM	Construction	Control Systems	11,100	–	11,100
CB04-382	IMPLEMENTATION OF LANDSCAPE IMPROVEMENTS BRUCE REYNOLDS BOULEVARD	Construction	Paving & Roadways	200	–	200
RESTORING THE GEORGE PROGRAM						
CB04-261	REHABILITATION OF UPPER LEVEL SPAN OVER NJ ANCHORAGE AND HUDSON TERRACE	Construction	Bridges	28,000	–	28,000
CB04-272	REHABILITATION OF NY/NJ ANCHOR MAIN CABLE STRANDS	Construction	Bridges	1,100	–	1,100
CB04-285	REPLACEMENT OF THE PALISADES INTERSTATE PARKWAY HELIX	Construction	Bridges	62,000	–	62,000
CB04-300	REPLACEMENT OF PAVEMENT FOR THE LOWER LEVEL EAST BOUND MAIN SPAN, APPROACH & RAMPS	Construction	Paving & Roadways	50	–	50
RESTORING THE GEORGE PROGRAM, Subtotal				91,150	–	91,150
GEORGE WASHINGTON BRIDGE, Subtotal				115,520	–	115,520
HOLLAND TUNNEL						
CB02-040	REHABILITATION OF TUNNEL VENTILATION SYSTEM – MECHANICAL AND ELECTRICAL	Construction	HVAC, Plumbing & Sprinklers	30,000	–	30,000
CB02-123	REPLACEMENT OF PIER 9 AND PIER 204	Multiple	Port Wharfs	68,740	260	69,000
CB02-162	REPLACEMENT OF FLOOR DRAINS AND PIPING OF 4 VENT BLDGS	Construction	HVAC, Plumbing & Sprinklers	60	–	60
CB02-166	REPLACEMENT OF HVAC SYSTEM AT ADMINISTRATION AND SERVICE BUILDINGS	Construction	HVAC, Plumbing & Sprinklers	30	–	30
CB02-180	REHABILITATION OF STAIR IN NEW YORK RIVER VENTILATION BUILDINGS	Construction	Buildings & Garages	30	–	30
CB02-184	ENHANCEMENT OF ACCESS CONTROL SYSTEM	Construction	Control Systems	400	–	400
CB02-195	REHABILITATION OF SUPPLY BLOWER PORTS	Construction	Tunnels	8,000	–	8,000
CB02-205	UPGRADE OF 800 MHZ SIMULCAST TRUNKED RADIO SYSTEM	Multiple	Control Systems	1,700	–	1,700
CB02-224	UPGRADE OF INTEGRATED TOLL COLLECTION SYSTEM	Construction	Control Systems	3,600	–	3,600
HOLLAND TUNNEL, Subtotal				112,560	260	112,820
LINCOLN TUNNEL						
CB03-093	REPAINTING OF TUNNEL VENTILATION FANS	Construction	HVAC, Plumbing & Sprinklers	1,400	–	1,400
CB03-231	REPLACEMENT OF VENTILATION LOUVERS IN NEW YORK VENTILATION BUILDINGS	Construction	HVAC, Plumbing & Sprinklers	1,000	–	1,000
CB03-252	UPGRADE OF ACCESS CONTROL SYSTEM	Construction	Control Systems	100	–	100
CB03-266	UPGRADE OF 800 MHZ SIMULCAST TRUNKED RADIO SYSTEM	Multiple	Control Systems	1,700	–	1,700
CB03-280	REPLACEMENT OF CURB PLATES IN THE NORTH AND SOUTH TUBES	Construction	Paving & Roadways	40	–	40

2017- 2026 Capital Project List — Deliver

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
CB03-284	UPGRADE OF INTEGRATED TOLL COLLECTION SYSTEM	Construction	Control Systems	4,500	–	4,500
CB03-287	UPGRADE OF EXPRESS BUS LANE SIGNALS	Construction	Electrical Power & Lighting	1,000	–	1,000
LINCOLN TUNNEL ACCESS PROGRAM						
CB03-267	REHABILITATION OF PULASKI SKYWAY	Multiple	Bridges	396,000	–	396,000
CB03-268	REPLACEMENT OF ROUTE 7 WITTPENN BRIDGE	Multiple	Bridges	370,000	–	370,000
LINCOLN TUNNEL ACCESS PROGRAM, Subtotal				766,000	–	766,000
LINCOLN TUNNEL, Subtotal				775,740	–	775,740
BAYONNE BRIDGE						
CB06-119	IMPLEMENTATION OF TOLLS BY MAIL FUNCTIONALITY	Construction	Control Systems	800	–	800
CB06-087	NAVIGATIONAL CLEARANCE PROGRAM	Multiple	Bridges	578,000	–	578,000
BAYONNE BRIDGE, Subtotal				578,800	–	578,800
GOETHALS BRIDGE						
CB07-152	UPGRADE OF 800MHZ SIMULCAST TRUNKED RADIO SYSTEM	Multiple	Control Systems	1,200	–	1,200
CB07-155	UPGRADE OF INTEGRATED TOLL COLLECTION SYSTEM	Construction	Control Systems	3,000	–	3,000
CB07-103	REPLACEMENT OF GOETHALS BRIDGE PROGRAM	Construction	Bridges	162,000	–	162,000
GOETHALS BRIDGE, Subtotal				166,200	–	166,200
OUTERBRIDGE CROSSING						
CB08-083	REPLACEMENTS OF HVAC UNITS AND ROOF – TOLL CANOPY	Construction	HVAC, Plumbing & Sprinklers	10	–	10
CB08-107	REHABILITATION OF PAVEMENT	Construction	Paving & Roadways	40	–	40
CB08-117	UPGRADE OF INTEGRATED TOLL COLLECTION SYSTEM	Construction	Control Systems	1,700	–	1,700
OUTERBRIDGE CROSSING, Subtotal				1,750	–	1,750
PORT AUTHORITY BUS TERMINAL						
CT06-120	REPLACEMENT OF BUILDING AUTOMATED MONITORING & CONTROL SYSTEM	Construction	Control Systems	200	–	200
CT06-199	REPLACEMENT OF FIRE PUMPS	Construction	HVAC, Plumbing & Sprinklers	700	–	700
CT06-202	REPLACEMENT OF PRIMARY ELECTRIC SERVICE	Construction	Electrical Power & Lighting	6,600	–	6,600
CT06-220	REHABILITATION OF PUBLIC RESTROOMS	Multiple	HVAC, Plumbing & Sprinklers	40	–	40
CT06-230	REPLACEMENT OF SOUTH WING HVAC UNITS AND ASSOCIATED ELECTRICAL DISTRIBUTION SYSTEM	Construction	HVAC, Plumbing & Sprinklers	21,000	–	21,000
CT06-241	UPGRADE CCTV SURVEILLANCE EQUIPMENT	Multiple	Control Systems	600	–	600
CT06-246	UPGRADE OF ACCESS CONTROL SYSTEM	Construction	Control Systems	100	–	100
CT06-266	UPGRADE OF 800MHZ SIMULCAST TRUNKED RADIO SYSTEM	Multiple	Control Systems	2,200	–	2,200
CT06-267	MODIFICATIONS OF ROOM VIDEO PROCESSING EQUIPMENT	Construction	Buildings & Garages	400	–	400
CT06-277	REPLACEMENT OF CEILING SLATS	Construction	Buildings & Garages	400	–	400
CT06-278	IMPLEMENTATION OF ON/OF BUS TRACKING SYSTEM AND SOFTWARE	Multiple	Control Systems	500	–	500

2017- 2026 Capital Project List — Deliver

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
CT06-281	ENHANCEMENT OF BUILDING ENTRANCES AND REPLACEMENT OF ENTRANCE/EXIT DOORS	Multiple	Buildings & Garages	8,400	–	8,400
	PORT AUTHORITY BUS TERMINAL, Subtotal			41,140	–	41,140
GEORGE WASHINGTON BRIDGE BUS STATION						
CB48-056	REDEVELOPMENT OF GWB BUS STATION	Construction	Buildings & Garages	7,300	–	7,300
	GEORGE WASHINGTON BRIDGE BUS STATION, Subtotal			7,300	–	7,300
TUNNELS, BRIDGES AND TERMINALS, Total				1,799,010	260	1,799,270

PATH

PATH

CR08-078	IMPLEMENTATION OF TUNNEL WATER MANAGEMENT PROGRAM	Multiple	Rail Systems	125,810	8,190	134,000
CR02-150	IMPLEMENTATION OF SIGNAL REPLACEMENT PROGRAM	Construction	Control Systems	260,680	17,320	278,000
CR02-212	IMPLEMENTATION OF TIE REPLACEMENT PROGRAM	Construction	Rail Systems	18,140	8,860	27,000
CR02-258	IMPLEMENTATION OF TURNOUT REPLACEMENT PROGRAM (PHASE 3)	Multiple	Rail Systems	14,500	–	14,500
CR02-259	IMPLEMENTATION OF CONTINUOUS WELDED RAIL PROGRAM	Construction	Rail Systems	8,550	5,850	14,400
CR02-261	IMPLEMENTATION OF CONTACT RAIL PROGRAM	Construction	Rail Systems	13,520	4,880	18,400
CR02-328	IMPLEMENTATION OF TUNNEL TRACK AND DRAINAGE PROGRAM	Construction	Rail Systems	7,160	10,540	17,700
CR02-336	REPLACEMENT AND UPGRADE OF CHRISTOPHER ST SUBSTATION	Construction	Electrical Power & Lighting	13,900	–	13,900
CR02-345	FINAL CLOSE-OUT OF PURCHASE OF PA-5 RAILCARS	Construction	Rail Systems	7,200	–	7,200
CR02-352	UPGRADE OF RADIO BASE STATION AND SIMULCAST RADIO SYSTEM	Construction	Control Systems	400	–	400
CR02-358	IMPLEMENTATION OF RESTRAINING RAIL PROGRAM	Construction	Rail Systems	3,500	–	3,500
CR02-382	INSTALLATION OF CONTACT THIRD RAIL HEATERS FROM GRAPE TO NEWARK	Construction	Rail Systems	3,400	–	3,400
CR02-418	REPLACEMENT OF 15KV AND 27KV CABLES AT SUBSTATION #2 AND #15	Construction	Electrical Power & Lighting	1,000	–	1,000
CR02-439	INSTALLATION OF NETWORK MANAGEMENT SYSTEM	Construction	Control Systems	1,300	–	1,300
CR02-477	IMPLEMENTATION OF HARRISON YARD SPECIAL TRACK WORK	Construction	Rail Systems	2,600	–	2,600
CR02-492	REHABILITATION OF VITAL SIGNAL RELAY	Construction	Control Systems	100	–	100
CR02-495	INSTALLATION OF CONTROL CABLES AT CHRISTOPHER ST STATION	Construction	Electrical Power & Lighting	80	–	80
CR02-508	REPLACEMENT OF ROOF FOR SUBSTATION #5 (BACKUS)	Construction	Buildings & Garages	20	–	20
CR02-509	REPLACEMENT OF ROOF FOR SUBSTATION #15 (CAISSON)	Construction	Buildings & Garages	20	–	20
CR02-516	REPLACEMENT OF MITER RAILS HACKENSACK RIVER BRIDGE	Construction	Rail Systems	4,100	–	4,100
CR02-518	REPLACEMENT OF SWITCHING STATION NO. 6	Construction	Electrical Power & Lighting	2,600	–	2,600
CR02-545	REPLACEMENT OF AUTOMATIC TRANSFER SWITCHES EQUIPMENT	Construction	Electrical Power & Lighting	500	–	500
CR02-557	REPLACEMENT OF 650V DC 2,000KCMIL CABLES IN ALL TUNNELS EXCEPT E AND F	Construction	Electrical Power & Lighting	–	1,200	1,200
CR02-573	UPGRADE OF 800 MHZ SIMULCAST TRUNKED RADIO SYSTEM	Multiple	Control Systems	3,400	–	3,400
CR02-580	IMPROVEMENTS OF INFRASTRUCTURE AT SOUTH ST YARD	Construction	Control Systems	800	–	800
CR02-598	REHABILITATION OF GROVE ST. STATION	Construction	Buildings & Garages	2,400	–	2,400

2017- 2026 Capital Project List — Deliver

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
CR02-604	REPLACEMENT OF PATH TIE PLATE IN TUNNEL AREAS, PHASE I	Construction	Electrical Power & Lighting	40	–	40
CR02-608	REPLACEMENT OF POWER DISTRIBUTION CABLES IN PATH TUNNELS A & B	Construction	Electrical Power & Lighting	11,200	–	11,200
CR08-022	REHABILITATION OF TUNNEL EMERGENCY VENTILATION FAN BLADE	Construction	HVAC, Plumbing & Sprinklers	2,200	–	2,200
CR08-096	INSTALLATION OF LENEEL ACCESS CONTROL AND CCTV	Construction	Control Systems	400	–	400
CR08-101	UPGRADE OF CCTV & ACCESS CONTROL STATION	Construction	Control Systems	20	–	20
CR08-104	UPGRADE OF JOURNAL SQUARE TRANSPORTATION CENTER RADIO SYSTEM - PHASE I	Multiple	Control Systems	800	–	800
HARRISON STATION REPLACEMENT AND UPGRADE						
CR02-458	REPLACEMENT AND UPGRADE OF HARRISON STATION	Multiple	Rail Systems	138,000	–	138,000
CR02-496	ACQUISITION, REMEDIATION & DEMOLITION OF PROPERTY AT HARRISON STATION	Multiple	Rail Systems	3,900	–	3,900
HARRISON STATION REPLACEMENT AND UPGRADE, Subtotal				141,900	–	141,900
SANDY PROGRAM						
CR02-434	INSTALLATION OF STANDBY GENERATOR INFRASTRUCTURE	Construction	Electrical Power & Lighting	2,700	–	2,700
CR02-527	REPLACEMENT OF IN-GROUND LIFTS AT HARRISON CAR MAINTENANCE FACILITY	Construction	Buildings & Garages	8,100	–	8,100
CR02-582	REPLACEMENT OF HACKENSACK RIVER BRIDGE EMERGENCY GENERATOR FUEL TANK	Construction	Fueling	5,000	–	5,000
CR02-583	REHABILITATION OF TUNNELS TO ADDRESS LATENT SALT HURRICANE SANDY DAMAGE	Multiple	Rail Systems	9,500	–	9,500
CR02-584	PURCHASE OF EQUIPMENT FOR RECOVERY WORK	Construction	Rail Systems	17,100	–	17,100
CR02-585	DESIGN AND PURCHASE OF RESILIENCY EQUIPMENT	Multiple	Rail Systems	33,000	–	33,000
CR02-586	REPLACEMENT OF HOBOKEN STATION UNDER PLATFORM FAN	Construction	HVAC, Plumbing & Sprinklers	5,800	–	5,800
CR02-588	REHABILITATION OF SUBSTATIONS 7, 8, 9 AND 14	Multiple	Electrical Power & Lighting	400	–	400
SANDY PROGRAM, Subtotal				81,600	–	81,600
PATH, Total				733,840	56,840	790,680
FERRY TRANSPORTATION						
CH02-006	HOBOKEN PERMANENT FERRY TERMINAL	Construction	Buildings & Garages	1,300	–	1,300
FERRY TRANSPORTATION, Total				1,300	–	1,300
AVIATION						
LAGUARDIA AIRPORT						
CA02-401	REHABILITATION OF RUNWAY 13-31 AND ASSOCIATED TAXIWAYS	Construction	Runway-Taxiway	2,900	–	2,900
CA02-417	CONSTRUCTION OF RUNWAY 13 & 22 DECKS SAFETY OVERRUN	Multiple	Runway-Taxiway	12,600	–	12,600
CA02-447	UPGRADE OF 800 MHZ SIMULCAST TRUNKED RADIO SYSTEM	Multiple	Control Systems	3,400	–	3,400
CA02-483	INSTALLATION OF UNIFIED NETWORK SYSTEM INFRASTRUCTURE AT GUARD POSTS 1, 2 & 3	Construction	Underground Utilities	100	–	100

2017- 2026 Capital Project List — Deliver

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
LGA CAPITAL INFRASTRUCTURE RENEWAL PROGRAM						
CA22-440	REPLACEMENT OF UTILITIES EAST OF GUARD POST 1	Multiple	Underground Utilities	3,300	–	3,300
CA22-444	REDEVELOPMENT OF HANGARS 1, 2 AND 4	Multiple	Paving & Roadways	1,900	–	1,900
CA22-469	CONSTRUCTION OF EAST END SUBSTATION BUILDING, EQUIPMENT AND FEEDERS	Construction	Electrical Power & Lighting	500	–	500
CA22-474	CONSTRUCTION OF EAST PARKING GARAGE	Multiple	Buildings & Garages	1,800	–	1,800
LGA CAPITAL INFRASTRUCTURE RENEWAL PROGRAM, Subtotal				7,500	–	7,500
LGA TERMINAL B REDEVELOPMENT						
CA22-001	LGA TERMINAL B REDEVELOPMENT – MASTER PLANNING	Planning	Buildings & Garages	1,000	–	1,000
CA22-002	LGA TERMINAL B REDEVELOPMENT – REDEVELOPMENT OF BUILDING 30	Construction	Buildings & Garages	16,000	–	16,000
CA22-003	LGA TERMINAL B REDEVELOPMENT – CONSTRUCTION OF CENTRAL HALL	Construction	Buildings & Garages	276,420	55,580	332,000
CA22-372	LGA TERMINAL B REDEVELOPMENT – CENTRAL HEATING AND REFRIGERATION PLANT	Construction	Buildings & Garages	18,780	1,220	20,000
CA22-419	LGA TERMINAL B REDEVELOPMENT – CONSTRUCTION OF TERMINAL AND RAMP	Multiple	Buildings & Garages	1,205,670	54,330	1,260,000
CA22-441	LGA TERMINAL B REDEVELOPMENT – AIR TERMINAL RESTRICTED SERVICE ROAD AND TAXIWAY CONNECTIONS	Construction	Runway-Taxiway	10,620	380	11,000
CA22-442	LGA TERMINAL B REDEVELOPMENT – AIR TERMINAL HIGHWAY EAST OF GUARD POST 1	Construction	Paving & Roadways	761,630	28,370	790,000
CA22-443	LGA TERMINAL B REDEVELOPMENT – SURFACE AND STRUCTURE PARKING PROGRAM	Multiple	Buildings & Garages	99,630	370	100,000
LGA TERMINAL B REDEVELOPMENT, Subtotal				2,389,750	140,249	2,529,999
SANDY PROGRAM						
CA02-485	REHABILITATION OF PUMP HOUSES 2 AND 3	Construction	HVAC, Plumbing & Sprinklers	3,800	–	3,800
CA02-486	FLOOD CONTROL AND RESILIENCY IMPROVEMENTS	Multiple	HVAC, Plumbing & Sprinklers	30,000	–	30,000
SANDY PROGRAM, Subtotal				33,800	–	33,800
LAGUARDIA AIRPORT, Subtotal				2,450,050	140,249	2,590,299
JOHN F. KENNEDY INTERNATIONAL AIRPORT						
CA03-025	REHABILITATION OF PAN AM ROAD PAVEMENT	Construction	Paving & Roadways	400	–	400
CA03-141	INSTALLATION OF BOLLARDS AT TENANT TERMINALS	Multiple	Paving & Roadways	4,000	–	4,000
CA03-168	RECONSTRUCTION OF RUNWAY 4L-22R RUNWAY SAFETY AREA (RSA)	Construction	Runway-Taxiway	5,700	–	5,700
CA03-507	UPGRADE OF VEHICLE GATE SECURITY	Multiple	Paving & Roadways	5,700	–	5,700
CA03-591	REDEVELOPMENT OF TERMINAL 3/TERMINAL 4	Construction	Buildings & Garages	6,900	–	6,900
CA03-616	REALIGNMENT OF NORTH BOUNDARY ROAD	Construction	Paving & Roadways	40	–	40
CA03-621	REPLACEMENT OF 5KV FEEDERS	Construction	Electrical Power & Lighting	14,300	–	14,300
CA03-636	INSTALLATION OF SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA)	Construction	Control Systems	30	–	30
CA03-639	UPGRADE OF 800 MHZ SIMULCAST TRUNKED RADIO SYSTEM	Multiple	Control Systems	4,500	–	4,500
CA03-646	UPGRADE OF 800MHZ SIMULCAST TRUNKED RADIO SYSTEM	Construction	Control Systems	70	–	70

2017- 2026 Capital Project List — Deliver

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
CA03-675	REPLACEMENT OF FIRE ALARM SYSTEM AT CONTROL TOWER	Construction	Control Systems	900	–	900
CA03-748	INSTALLATION OF ACCESS AND SAFETY IMPROVEMENTS AT BUILDING 161(FIRE PUMP STATION)	Construction	HVAC, Plumbing & Sprinklers	200	–	200
CA03-755	INSTALLATION OF WEST AREA LIGHTING AT FORMER HANGAR 12 SITE	Construction	Electrical Power & Lighting	4,000	–	4,000
SANDY PROGRAM						
CA03-760	INSTALLATION OF ENGINEERED MATERIAL ARRESTOR SYSTEM	Construction	Runway-Taxiway	100	–	100
SANDY PROGRAM, Subtotal				100	–	100
JOHN F. KENNEDY INTERNATIONAL AIRPORT, Subtotal				46,840	–	46,840
NEWARK LIBERTY INTERNATIONAL AIRPORT						
CA04-041	SCHOOL SOUNDPROOFING PROGRAM (PHASE 3)	Construction	Buildings & Garages	13,400	–	13,400
CA04-482	INSTALLATION OF BOLLARDS AT TENANT TERMINALS	Construction	Paving & Roadways	80	–	80
CA04-528	REPLACEMENT OF CHRP NORTH ELECTRICAL SUBSTATION AND CHILLER UPGRADES	Construction	Electrical Power & Lighting	20,000	–	20,000
CA04-547	REHABILITATION OF FUEL PIT VAULT HATCHES	Construction	Fueling	20	–	20
CA04-583	RENEWAL OF AIRPORT WIDE FUEL DISTRIBUTION SYSTEM	Construction	Fueling	23,440	1,560	25,000
CA04-584	REPLACEMENT OF TERMINAL B INFRASTRUCTURE AND UTILITIES	Multiple	Electrical Power & Lighting	1,000	–	1,000
CA04-589	REHABILITATION OF EXPANSION JOINTS AND STRUCTURAL ELEMENTS OF FACILITY BRIDGES	Multiple	Bridges	400	–	400
CA04-593	REPLACEMENT OF TERMINAL B STERILE CORRIDOR DOORS AND OPERATIONAL MODIFICATIONS	Construction	Buildings & Garages	7,900	–	7,900
CA04-598	UPGRADE OF 800 MHZ SIMULCAST TRUNKED RADIO SYSTEM	Multiple	Control Systems	4,200	–	4,200
CA04-653	INSTALLATION OF BRIDGE N5 UNDERPASS FLOODING MITIGATION	Construction	Bridges	200	–	200
CA44-017	EXPANSION OF LOWER LEVEL AND REHABILITATION OF VERTICAL CIRCULATION AT TERMINAL B1	Construction	Buildings & Garages	800	–	800
AIRTRAIN NEWARK CAPITAL ASSET REPLACEMENT PROGRAM						
CA04-513	REHABILITATION OF AIRTRAIN BASE GUIDEWAY	Construction	Rail Systems	7,300	–	7,300
CA04-514	AIRTRAIN CAPITAL ASSET REPLACEMENT PROGRAM	Multiple	Rail Systems	33,000	–	33,000
CA04-555	REPLACEMENT OF AIRTRAIN HVAC SYSTEM	Construction	HVAC, Plumbing & Sprinklers	700	–	700
AIRTRAIN NEWARK CAPITAL ASSET REPLACEMENT PROGRAM, Subtotal				41,000	–	41,000
NEWARK LIBERTY INTERNATIONAL AIRPORT, Total				112,440	1,560	114,000
STEWART INTERNATIONAL AIRPORT						
CA06-046	INSTALLATION OF POSITIVE AIR PRESSURE FOR PASSENGER LOADING BRIDGES	Construction	HVAC, Plumbing & Sprinklers	50	–	50
CA06-066	REHABILITATION OF RUNWAYS 9-27 AND 16-34	Construction	Runway-Taxiway	50	–	50
CA06-100	MITIGATION OF RUNWAY INCURSION - PHASE 1B	Construction	Runway-Taxiway	100	–	100
STEWART INTERNATIONAL AIRPORT, Total				200	–	200
AVIATION, Total				2,609,530	141,809	2,751,339

2017- 2026 Capital Project List — Deliver

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
PORT						
PORT NEWARK						
CP05-148	CONSTRUCTION OF EXPRESS RAIL TRACK WORK (PHASE 2A)	Multiple	Rail Systems	3,700	–	3,700
CP05-173	REHABILITATION OF BERTH 14	Construction	Port Wharfs	600	–	600
CP05-187	IMPROVEMENTS TO PORT STREET CORRIDOR	Multiple	Paving & Roadways	84,230	28,770	113,000
CP05-193	UPGRADE OF WATER LINES AT NEW JERSEY MARINE TERMINAL	Multiple	Underground Utilities	1,500	–	1,500
CP05-220	REPLACEMENT OF BERTHS 30, 32 AND 34 FENDER SYSTEM	Construction	Port Wharfs	4,600	–	4,600
CP05-233	REHABILITATION OF BERTH 3	Construction	Port Wharfs	7,600	–	7,600
CP05-238	REHABILITATION OF SANITARY LIFT STATIONS AT NEW JERSEY MARINE TERMINAL	Construction	HVAC, Plumbing & Sprinklers	20	–	20
CP05-246	REHABILITATION OF BERTH 19	Construction	Port Wharfs	700	–	700
CP05-249	REPLACEMENT OF TRAFFIC SIGNALS AT NEW JERSEY MARINE TERMINAL	Multiple	Control Systems	8,100	–	8,100
CP05-255	UPGRADE OF 800 MHZ SIMULCAST TRUNKED RADIO SYSTEM	Multiple	Control Systems	1,100	–	1,100
CP05-269	REHABILITATION OF BERTHS 5, 7, 9, 10, 12, 15, 16 AND 17	Construction	Port Wharfs	20	–	20
CP05-278	REHABILITATION OF BERTH 36	Construction	Port Wharfs	300	–	300
CP05-279	REHABILITATION OF BERTHS 11 AND 13	Construction	Port Wharfs	20	–	20
CP05-280	REHABILITATION OF BERTHS 18, 24, 26, AND 34	Construction	Port Wharfs	200	–	200
CP05-282	REHABILITATION OF RAIL ON DISTRIBUTION STREET	Construction	Rail Systems	30	–	30
CP05-286	REHABILITATION OF BERTHS 20, 22, 30, AND 32	Construction	Port Wharfs	10	–	10
50' FOOT DREDGING PROGRAM						
CP05-120	CONSTRUCTION OF CONSOLIDATED 50 FOOT PROJECT (NEW JERSEY, PORT JERSEY, AMBROSE)	Multiple	Port Wharfs	9,890	10,010	19,900
50' FOOT DREDGING PROGRAM, Subtotal				9,890	10,010	19,900
PORT NEWARK, Subtotal				122,620	38,780	161,400
ELIZABETH PA MARINE TERMINAL						
CP08-148	REHABILITATION OF BUILDING 1400 FIRE SUPPRESSION SYSTEM	Construction	HVAC, Plumbing & Sprinklers	20	–	20
50' FOOT DREDGING PROGRAM						
CP08-111	RELOCATION OF UTILITIES FOR 50 FOOT CHANNEL AT KILL VAN KULL AND NEWARK BAY	Construction	Underground Utilities	12,800	–	12,800
CP08-112	IMPLEMENTATION OF CONSOLIDATED 50 FOOT PROJECT (NEW JERSEY, PORT JERSEY)	Construction	Port Wharfs	7,140	10,260	17,400
50' FOOT DREDGING PROGRAM, Subtotal				19,940	10,260	30,200
ELIZABETH PA MARINE TERMINAL, Subtotal				19,960	10,260	30,220
HOWLAND HOOK MARINE TERMINAL						
CP11-073	DEMOLITION OF BUILDINGS AT HOWLAND HOOK MARINE TERMINAL	Multiple	Buildings & Garages	7,300	–	7,300

2017- 2026 Capital Project List — Deliver

Sorted by Department, Facility, and Program (in thousands)

Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
50-FOOT DREDGING PROGRAM						
CP11-039	IMPLEMENTATION OF CONSOLIDATED 50-FOOT PROJECT (NEW JERSEY, AMBROSE)	Construction	Port Wharfs	8,140	6,060	14,200
CP11-044	RELOCATION OF UTILITIES FOR ARTHUR KILL 50-FOOT CHANNEL	Construction	Underground Utilities	23,000	–	23,000
50-FOOT DREDGING PROGRAM, Subtotal				31,140	6,060	37,200
HOWLAND HOOK MARINE TERMINAL, Subtotal				38,440	6,060	44,500
PORT JERSEY PA MARINE TERMINAL & NYNJ RAIL LLC						
CP14-023	IMPLEMENTATION OF REGIONAL RAIL FREIGHT PROGRAM	Multiple	Rail Systems	38,000	–	38,000
CP16-027	DEVELOPMENT OF GLOBAL TERMINAL	Construction	Rail Systems	200	–	200
GREENVILLE YARD PROGRAM						
CP16-035	DEVELOPMENT OF INTERMODAL CONTAINER TRANSFER FACILITY AT GREENVILLE YARD	Multiple	Rail Systems	130,000	–	130,000
CP17-019	CONSTRUCTION OF NEW BARGE	Construction	Port Wharfs	7,300	–	7,300
CP17-027	REHABILITATION OF TRANSFER BRIDGE #10	Construction	Bridges	22,000	–	22,000
CP17-033	MODIFICATIONS TO FENDER SYSTEM AT 65TH STREET TERMINAL	Construction	Port Wharfs	4,900	–	4,900
GREENVILLE YARD PROGRAM, Subtotal				164,200	–	164,200
SANDY PROGRAM						
CP16-066	UPGRADE OF EAST SUBSTATION PROTECTIVE DEVICES & DISTRIBUTION EQUIPMENT	Multiple	Electrical Power & Lighting	5,600	–	5,600
CP17-034	REHABILITATION OF MOORING CELLS AT NY/NJ RAILROAD	Construction	Port Wharfs	4,500	–	4,500
SANDY PROGRAM, Subtotal				10,100	–	10,100
PORT JERSEY PA MARINE TERMINAL & NYNJ RAIL LLC, Subtotal				212,500	–	212,500
PORT, Total				393,520	55,100	448,620

WORLD TRADE CENTER

CR12-001	CONSTRUCTION OF WTC TRANSPORTATION HUB	Multiple	Buildings & Garages	235,000	–	235,000
CW11-001	SITE PLANNING, REDEVELOPMENT AND COORDINATION	Construction	Buildings & Garages	8,700	–	8,700
CW11-003	VEHICULAR SECURITY CENTER AND TOUR BUS PARKING FACILITY	Construction	Control Systems	15,100	–	15,100
CW11-005	PREPARATION AND CONSTRUCTION COORDINATION	Multiple	Buildings & Garages	5,500	–	5,500
CW11-006	CONSTRUCTION AND RECONFIGURATION OF STREETS AND RELATED INFRASTRUCTURE	Multiple	Paving & Roadways	83,000	–	83,000
CW11-007	CONSTRUCTION OF CENTRAL CHILLER PLANT AND RIVER WATER SYSTEM	Construction	HVAC, Plumbing & Sprinklers	26,000	–	26,000
CW11-008	COMPLETION OF MEMORIAL AND MUSEUM PROJECT	Construction	Buildings & Garages	100	–	100
CW11-009	CONSTRUCTION OF EASTSIDE VEHICULAR SECURITY CENTER	Multiple	Buildings & Garages	26,000	–	26,000
CW11-010	CONSTRUCTION OF COMMON INFRASTRUCTURE	Multiple	Buildings & Garages	66,000	–	66,000
CW11-015	SUPPORT OF COMMERCIAL INFRASTRUCTURE	Multiple	Buildings & Garages	66,000	–	66,000
CW11-016	SUPPLEMENT OF OTHER INFRASTRUCTURE	Multiple	Buildings & Garages	52,000	–	52,000

2017- 2026 Capital Project List — Deliver

Sorted by Department, Facility, and Program (in thousands)

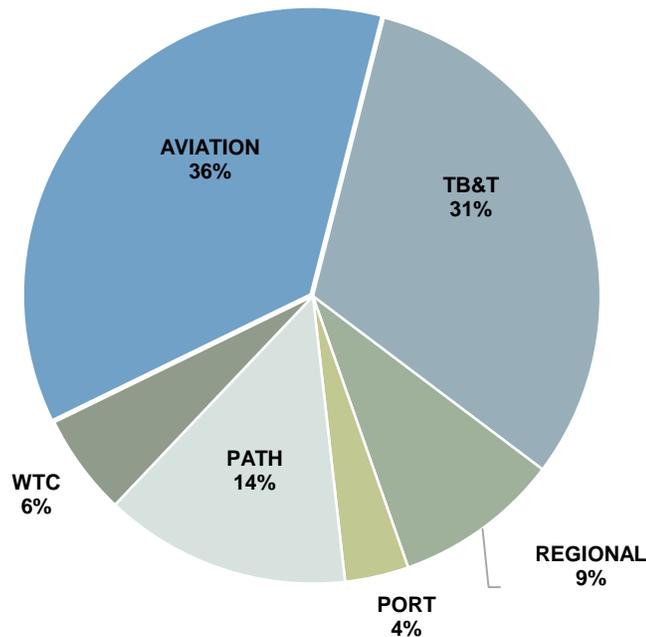
Project ID	Project Title	Stage	Asset Category	2017-2021 Spending	2022-2026 Spending	2017-2026 Spending
CW11-017	IMPROVEMENT OF SUBGRADE INFRASTRUCTURE AND PARKING	Multiple	Buildings & Garages	46,000	–	46,000
CW11-018	CONSTRUCTION OF MONITORING AND COORDINATION	Multiple	Control Systems	29,000	–	29,000
CW11-019	IMPLEMENTATION OF SECURITY OPERATIONS	Multiple	Control Systems	18,700	–	18,700
CW11-020	CONSTRUCTION OF OTHER INFRASTRUCTURE (NON-HUB RELATED)	Multiple	Buildings & Garages	3,600	–	3,600
CW11-021	CONSTRUCTION OF WEST BATHTUB VEHICULAR ACCESS	Multiple	Buildings & Garages	139,000	–	139,000
CW11-022	CONSTRUCTION OF PROPERTY MANAGEMENT FACILITY	Multiple	Buildings & Garages	128,000	–	128,000
CW11-024	CONSTRUCTION OF FOUNDATION FOR PERFORMING ARTS CENTER	Multiple	Buildings & Garages	114,000	–	114,000
CW11-025	INTEGRATION OF LIFE SAFE SYSTEMS	Construction	Control Systems	23,000	–	23,000
CW11-026	UPGRADE OF 800 MHZ SIMULCAST TRUNKED RADIO SYSTEM	Multiple	Control Systems	1,400	–	1,400
CW11-027	IMPLEMENTATION OF CAMPUS SECURITY PLAN	Construction	Control Systems	49,000	–	49,000
CW30-001	REDEVELOPMENT OF RETAIL	Multiple	Buildings & Garages	296,000	–	296,000
CW31-001	IMPROVEMENTS TO ONE WTC MARKETING, LEASING AND BASE BUILDING	Multiple	Buildings & Garages	210,000	–	210,000
CW31-555	CONSTRUCTION OF ONE WTC	Construction	Buildings & Garages	18,000	–	18,000
SANDY PROGRAM						
CW11-028	IMPLEMENTATION OF FLOOD RESILIENCY PROGRAM	Multiple	Buildings & Garages	127,000	–	127,000
SANDY PROGRAM, Subtotal				127,000	–	127,000
WORLD TRADE CENTER, Total				1,786,100	–	1,786,100
ALL FACILITIES						
CW34-002	DESIGN, CONSTRUCTION AND BUILD OUT OF PORT AUTHORITY CORPORATE OFFICES AT 4 WTC	Construction	Buildings & Garages	6,200	–	6,200
ALL FACILITIES, Total				6,200	–	6,200
TOTAL DELIVER PROJECTS				7,329,500	254,010	7,583,509

Capital Spending by Department

The Port Authority is a bi-state agency, created by interstate compact in 1921 under the clause of the United States Constitution permitting compacts between states with the consent of Congress. The compact also created the Port District, which comprises an area of about 1,500 square miles in both states, centered on New York Harbor. The Port Authority was created to promote and protect commerce of the Port District and to undertake port and regional improvements not likely to be financed by private enterprise, or that would not be attempted by either state alone. These include the development of major infrastructure: a modern port for the harbor shared by the two states, tunnel and bridge connections between the states, and, in general, trade and transportation projects that secure the region's economic well-being.

Today, as was envisioned in 1921, the Port Authority is a financially self-supporting entity. It does not receive tax revenue from either state or from any local jurisdiction and has no power to tax, nor does it have the power to pledge the credit of either state or any municipality. The Port Authority relies primarily on revenue generated from facility operations — tolls from its bridges and tunnels between New York and New Jersey; user fees from the ports, airports and bus terminals; fares on its rail transit system; and rent from facilities, consumer services, and retail stores.

The Port Authority operations are composed of four primary lines of business: Aviation; Tunnels, Bridges and Terminals; the Port of New York and New Jersey; and the Port Authority Trans-Hudson (PATH) Rail System. In addition, the World Trade Center, and Real Estate and Development Departments are engaged in substantial capital investment and development projects. The Port Authority's role in its airports and marine terminals is primarily that of a landlord.



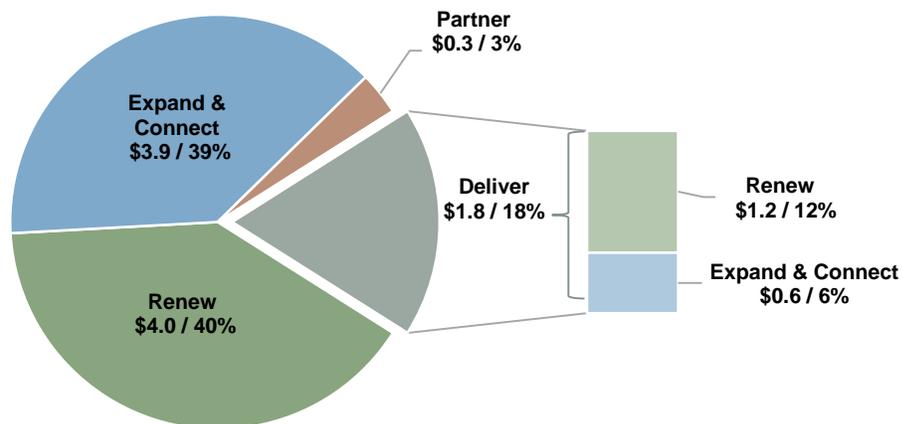
Tunnels, Bridges and Terminals



Did you know that the George Washington Bridge is more than just one span over the Hudson River? it's actually part of a larger network that includes 48 individual bridges; all serving a vital role in keeping our region moving.

Connecting New York and New Jersey's road and commuter network, the agency's six vehicular tunnels and bridges and two interstate bus terminals provide safe, efficient, and convenient access for 40,000 trucks, 570,000 passenger cars, and 235,000 bus passengers every day. Each of these eight facilities is over 50-years old. Substantial investment is required not only to maintain, and on some occasions replace, the facilities, but also to adapt to the growing demands of this network.

Investments of \$10 billion (or 31 percent) in tunnels, bridges, and terminals in the next 10 years will bring significant benefit to the regional transportation network. This will include a new bus terminal for commuters and long-distance passengers, and planning for redevelopment of the largest bus terminal in the country. The on-going Goethals Bridge replacement will be completed, as will the raising of the roadway at the Bayonne Bridge. The Restoring the George projects will renew the busiest bridge in the world, and the Lincoln Tunnel Helix replacement will provide more efficient access to the Lincoln Tunnel for cars, trucks and buses. The capital plan also calls for investment in the planning and design for the future replacement of the Outerbridge Crossing and salt-water mitigation in the Holland Tunnel.



(estimate \$ in billions)

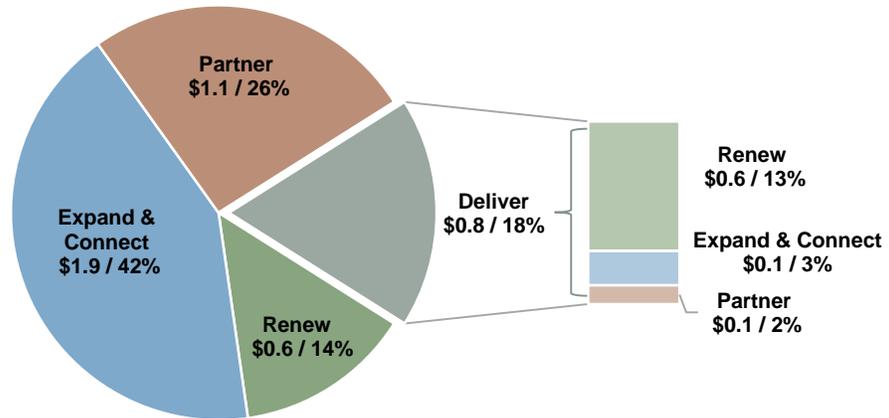
PATH



Communications based train control technology along with new signal systems will enable PATH to safely run trains closer together, increasing the number of trains during peak times

The PATH Rail System transports more than 275,000 people every weekday and over 78 million people a year through tunnels that are over 100 years old. The system plays an increasingly vital role in the trans-Hudson network by providing public transportation to citizens both east and west of the Hudson River. In fact, between the start of the century and now, PATH ridership has grown over 6 percent. To support the growth in system wide ridership and provide a foundation for safe, reliable, high-quality, and cost effective service in the system's second century, PATH has developed the PATH Forward Program. PATH Forward builds upon work to restore and rebuild the system from Superstorm Sandy damage through a series of renewal and system-enhancing projects that are designed to improve the operational reliability and efficiency of the entire system.

From \$4.3 billion (14 percent) in investments throughout the next 10 years, PATH riders will benefit from important system upgrades such as the new Communications Based Train Control (CBTC)/Positive Train Control (PTC) signal system, which will provide riders with safer and more reliable service. PATH will purchase 50 new PA-5 railcars to take advantage of the new technology of the CBTC/PTC signal system which will increase system capacity. In addition to replacing its decades-old signal system, PATH is redeveloping and modernizing some of the oldest stations on the Newark to World Trade Center Line, including the Transportation Hub at the World Trade Center, a new Harrison Station and upgrades at the Grove Street Station, providing the system's customers with comfortable, modern, and fully ADA-accessible facilities.



(estimate \$ in billions)

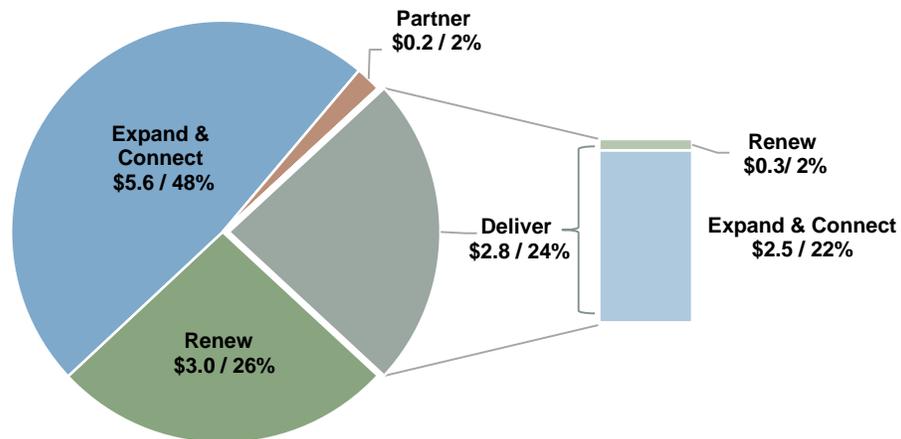
Aviation



(left) This rendering depicts LaGuardia Airport's planned unified main terminal from Grand Central Parkway. (right) Airport AirTrain systems connects passengers to airline terminals, rental car facilities, hotel shuttles, central parking lots, and public transportation.

The Port Authority manages a complex system of five airports that serves nearly 125 million passengers and move 2 million tons of cargo each year. The agency serves as the landlord for the system and leases space to terminal operators and retail. This system includes the major metropolitan airports — JFK International, Newark Liberty International, and LaGuardia. These international gateways are economic engines for the region, by supporting more than 588,800 jobs that pay \$30.6 billion in annual wages, and generating \$84.7 billion in annual sales. Passenger volumes have grown steadily at all three of our major airports. These aging facilities attempt to keep up with demand and industry changes, and as gateways to the region and the world they require significant investments.

The agency is committed to making the necessary investments (approximately \$11.6 billion or 36 percent) to modernize and improve these facilities in the next 10 years. The agency — together with our private partners — will deliver a comprehensive redesign of LaGuardia Airport, including brand-new terminals, with a unified design. This project, estimated at \$8 billion, includes the largest combination of public-private partnerships in the nation, and will take place while the airport remains open to more than 28 million passengers a year. Passengers will also experience a brand new Terminal A at Newark Liberty. In addition, the redevelopment of John F. Kennedy International Airport will be substantially underway and a new AirTrain system at LaGuardia Airport may be completed.



(estimate \$ in billions)

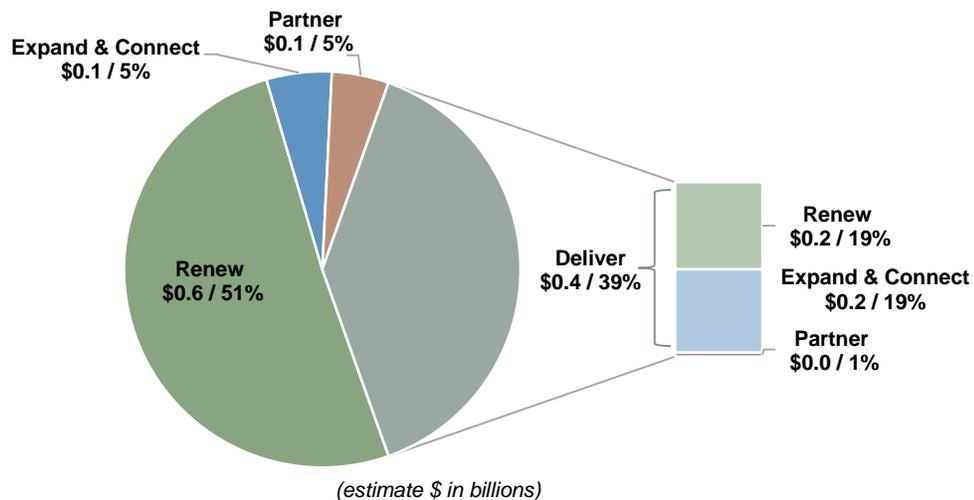
Port



(left) The agency is approaching the final stages of raising the Bayonne Bridge air draft to 215 feet, giving ocean borne vessels, such as this one, another 64 feet of clearance. (right) Major work for the port will focus on preserving and improving the condition of the public wharfs and piers.

The Port Department oversees the New York/New Jersey region's international maritime cargo facilities that make up the Port of New York and New Jersey (PONYNJ), the third largest port in the United States. The agency serves as the landlord for the PONYNJ and leases facilities to maritime terminal operators and other tenants who handles approximately 16 percent of all of the international cargo shipped to and from the United States. As the East Coast's largest port, it features 23 million consumers in its immediate vicinity and supports a diverse workforce of more than 330,000 jobs representing nearly \$21 billion in annual wages. PONYNJ is comprised of six port facilities, including six container terminals and three intermodal ExpressRail facilities, one Class 3 railroad providing rail connectivity for domestic cargo east and west of the Hudson River, and two cruise terminals. The PONYNJ competes with ports throughout the United States for market share.

Capital improvements of \$1.1 billion (4 percent) in the port facilities during the next 10 years will enable the New York and New Jersey region to remain competitive and sustainable. To meet regional growth and anticipated increases in container traffic will necessitate investment at port facilities. These investments will allow for greater ease and efficiency in the movement of containerized cargo into and out of the region. The Port Department will also benefit from the Bayonne Bridge Navigational Clearance Project, which will allow larger more efficient ships access to the ports.



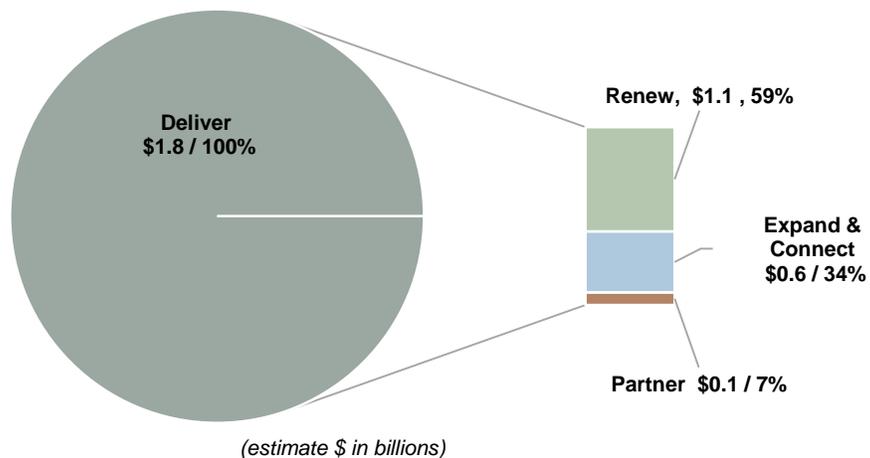
World Trade Center



(left) A new entrance on the northern side of the Hub enables PATH commuters to have direct access to E trains without having to go to street level. (right) Currently well under construction, 3 WTC is scheduled to come online in the near future.

The World Trade Center (WTC) Site is an internationally recognized, architecturally iconic 16-acre campus that serves as an active center of connection, business, culture, and remembrance. Located in downtown Manhattan, the WTC Site is home to the Transportation Hub, Towers One, Two, Three, and Four, the future Performing Arts Center, the 9/11 Memorial and Museum, Liberty Park, and thousands of square feet of retail — all significant assets, many of which the Port Authority helped construct and deliver.

In this 10-year capital plan, the final WTC projects for which the Port Authority is directly responsible — primarily infrastructure projects that support the site — will be completed after investing approximately \$1.8 billion (6 percent). The Port Authority is committed to the revitalization of WTC, and will continue to support its transformation as it grows into an anchor of vitality and connectivity that offers safe, secure, sustainable office, retail, and cultural space, while serving as a site to remember those lost on 9/11. The Port Authority will maintain and operate some of the facility’s assets, and work with the business partners that manage the remainder.





SUPPORTING INFORMATION



Sources

The Port Authority is a municipal corporate instrumentality of the states of New York and New Jersey that has been in existence for 95 years. The agency was created in April 1921 by the two states through a Compact, which was consented to by the Congress of the United States. At the time, the states of New York and New Jersey recognized that working cooperatively through a joint or common agency would provide better coordination of the terminal, transportation and other facilities of commerce in the Port of New York and New Jersey. To that end, the states created the Port Authority and the Port District, which is an area of about 1,500 square miles in both states, centered on the New York Harbor.

The Port Authority's diverse network of facilities and operations generates the agency's substantial revenues and provides the foundation for our significant long-term capital plan.

Although a joint agency of the two states, the Port Authority stands on its own, both operationally and financially. Operationally, the management structure of the Port Authority is similar to that of a traditional corporate entity. Financially, the Port Authority is self-sustaining and raises the funds it needs to acquire, construct or improve its facilities primarily on the basis of its own credit. Except in limited circumstances, the Port Authority does not receive federal or state support. When it was created, the states provided the Port Authority with the power to establish charges for the use of its facilities and to borrow money through its bonds or other obligations. The Port Authority, however, has no power to levy taxes or assessments and its obligations are neither obligations of the two states nor guaranteed by the two states.

In large part, the revenues of the Port Authority are generated from the tolls, fares, landing and dockage fees, rentals and other charges at certain of its facilities. Not all of the Port Authority's facilities produce surplus revenues; additionally, some facilities operate at a deficit or are non-revenue producing to the Port Authority. After covering the operating expenses of the Port Authority, these revenues are used to pay debt service on Consolidated Bonds, and are then available to invest in capital or cover other obligations.

As indicated by the map below, the facilities, spread across the NY/NJ metropolitan region, provide a key network of aviation, ground transportation, infrastructure and marine terminal facilities. Given this wide span of operational facilities that are critical for the regional economy it is imperative that these assets be renewed and expanded in order to keep pace with the regional growth.



Determination of Capital Capacity

The Port Authority employs a comprehensive planning process that considers multiple factors in the development of the annual budget and long-range capital plan and ensures that the agency is consistently moving toward achieving its long-term goals. This comprehensive planning process includes an annual assessment of the factors that impact the continuing operations of the Port Authority’s facilities, such as contractual, municipal lease, and other relationships, as well as the regional needs, customer demands, and industry specific business environments. These factors provide inputs to the Port Authority’s Integrated Financial Model (IFM), which is used to determine the capital capacity for the 10-year period and the size of the capital plan. This capital capacity is then allocated to the various projects under consideration using a comprehensive risk-based approach.

In determining capital capacity for this 2017-2026 period, the Port Authority projected its future net revenues based on its existing contracts and leases and its currently approved rates and charges, subject to contractual or other escalations. The Port Authority also included reasonable assumptions regarding federal or other third-party funding sources that would be available to support various projects in the plan, net proceeds from the sale or net-lease of non-core real estate assets, and potential revenues from various sources of fees and charges at its facilities, including potential changes to reflect inflation that the Board may consider in the future. The projections do not include broad general increases in auto or truck tolls in the period beyond the previously approved adjustments based on inflation.

The sources of funds currently projected to be available for the 2017-2026 Capital Plan are set forth and described in the table and narrative below:

estimate \$ in millions

Capital Program — Direct Port Authority Spending	\$29,500
Port Authority Support of the Gateway Program	2,700
Total Capital Program	\$32,200
Currently Projected Sources	
Consolidated Bond Proceeds	\$11,275
Pay-as-You-Go Capital Investment	11,315
Other Special Obligations	2,700
Federal Funding for Storm Recovery and Resilience	1,600
Passenger Facility Charges — Aviation	2,800
Other Currently Awarded Federal Grants	530
New Federal Grants or Other Third-Party Funding	1,730
Non-Core Real Estate Asset Sales or Net-Leases	250
Total Funds Projected to Be Available	\$32,200
Funding Gap	\$0

Consolidated Bond Proceeds: The plan includes \$11.3 billion in proceeds assumed to be realized from the sale of Port Authority Consolidated Bonds. The amount was determined using our long-term Integrated Financial Model, assuming maintenance of our current strong credit ratios. Consolidated Bonds are senior obligations of the Port Authority.

Pay-as-You-go Capital Investment: The plan includes \$11.3 billion in cash funded or pay-as-you-go capital. The amount was determined using our long-term Integrated Financial Model, assuming an overall ratio of 62 percent pay-as-you-go funding, after including the sources available from grants. This amount assumes that the Board of Commissioners will take certain actions in the future to create or raise certain fees and charges at its facilities in order to maintain a balanced plan.

Other Special Obligation: The plan includes \$2.7 billion in “Other Special Obligations,” which are subordinate to the Port Authority’s Consolidated Bonds and are payable out of Consolidated Bond Reserves. These obligations include the Port Authority’s support of the Gateway Program.

Federal Funding for Storm Recovery and Resilience: The plan includes approximately \$1.6 billion in federal assistance to recover, protect, rebuild, and add resiliency to our assets in the wake of Superstorm Sandy. These amounts have been awarded by FEMA and FTA and are subject to future obligation as the projects progress and the cost estimates are refined.

Passenger Facility Charges — Aviation (PFCs): The plan includes approximately \$2.8 billion in PFCs, which are, pursuant to Federal Aviation Administration (FAA) regulations, collected from passengers using commercial airports at the current maximum rate of \$4.50 per passenger, and which must be invested in airport facilities. The ability to collect and use these amounts are subject to approval from the FAA after a process that requires consultation with the airlines to determine the capital projects to be presented to the FAA for consideration and approval.

Other Currently Awarded Grants: The plan includes \$530 million in awarded grants/earmarks from various federal agencies associated with projects included in the plan. These grants include funds from the FTA for the completion of the WTC Transportation Hub, Federal Highway Administration related to the Greenville Yard Program, and FAA for eligible Airport Improvement Program (AIP)-related projects, as well as grants for certain security projects.

New Federal Grants/Third Party Capital: The plan assumes the award of: \$730 million in grants from the FTA for the PATH Extension to Newark Liberty Rail Link Station; \$500 million in grants or other third-party capital for the construction of AirTrain to LaGuardia Airport; and \$500 million in grants for the construction of the new Port Authority Bus Terminal. This proposed funding is subject to future Board approval grant application processes, further discussions with the FTA and other agencies, and Congressional appropriations.

Non-Core Real Estate Asset Sales/Net-Leases: The plan includes \$250 million in net proceeds from the assumed sale or lease of certain Port Authority non-core real estate assets that are assumed to be realizable in the period. This monetization is consistent with the recommendations of the Special Panel on the Future of the Port Authority. The realization of this amount is dependent upon market conditions at the time of the monetization.

TERMS

The agency continues to prioritize safety, security and a customer-friendly traveler or user experience, while investing capital to modernize and maintain our facilities and develop world-class new facilities that enhance the regional transportation network. The 2017-2026 Capital Plan was developed using a comprehensive planning process and risk-based prioritization that considered asset condition, operational and revenue impact, threat assessment, customer service, regional benefit, and regulatory or statutory requirements.

The materials contained herein are intended to provide readers with the information necessary to understand the capital investments of the agency and how and where capital investments will occur. This Reader's Guide provides basic capital plan terminology and definition of terms.

Appendix C is a complete listing of all of the projects in the plan, with spending in the 2017-2026 period by department. Within each department, projects have been sorted by facility for the convenience of the reader.

Project ID: Unique number identifying a project in the agency's capital program management system

Project Title: Name of the project

Asset Category: Type of asset in which the investment is planned. Assets fall into one of five categories:

- **Mechanical, Electrical, & Plumbing Systems:** includes all the physical systems that control power, mechanics, and utilities within an asset
 - Control Systems
 - Electrical Power and Lighting
 - HVAC, Plumbing, and Sprinklers
 - Fueling
 - Mechanical Systems
- **Roadways and Utility Infrastructure:** Includes all of the physical assets necessary to build or maintain a road, together with the land at its edge and any utilities contained within a roadway
 - Paving and Roadways
 - Underground Utilities
- **Structures/Buildings:** Includes all physical assets that are built or constructed and any rehabilitation work associated with those assets
 - Buildings and Garages
 - Bridges
 - Ports Wharfs
 - Tunnels
 - Structure Rehabilitation
- **Runway-Taxiway:** Includes all physical assets necessary to build or maintain a paved or cleared strip on which planes land and take off
- **Rail System:** Includes all physical assets necessary to operate and maintain a railroad

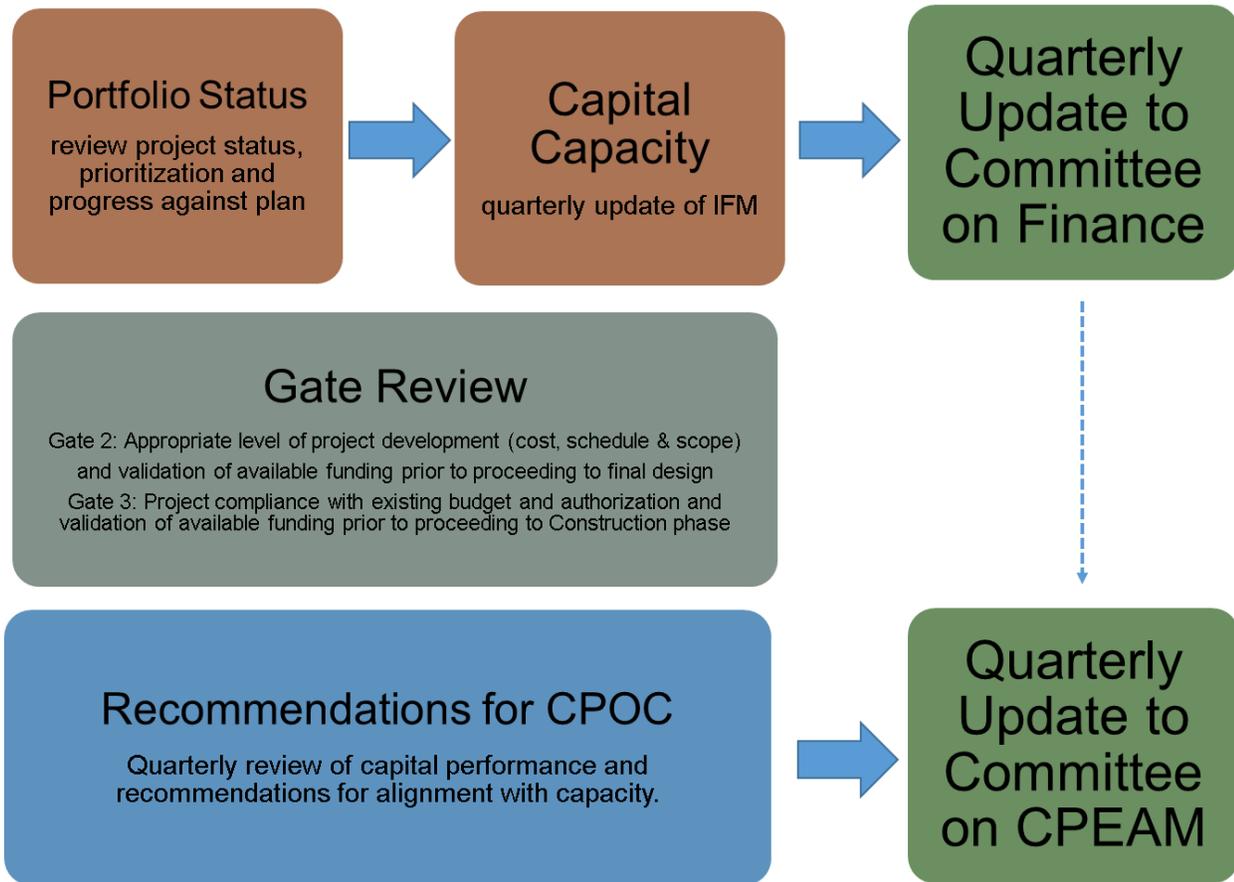
Stage: Project's current stage of completion. Projects fall into one of three stages:

- **Planning:** Includes activities associated with determination of project feasibility and completion of project definition; as well as conceptual design efforts to develop design concepts and criteria, identify and analyze alternatives, and determine conceptual construction cost estimates.
- **Design:** Further development of design concepts and refinement of construction cost estimates; preparation of final contract documents and design drawings that will generally be competitively bid and used for construction.
- **Construction:** Active execution of the construction contract and physical completion of the specified work.

Readers should note that spending estimates for projects in planning or design are subject to change as designs are refined and plans reach more definitive stages.

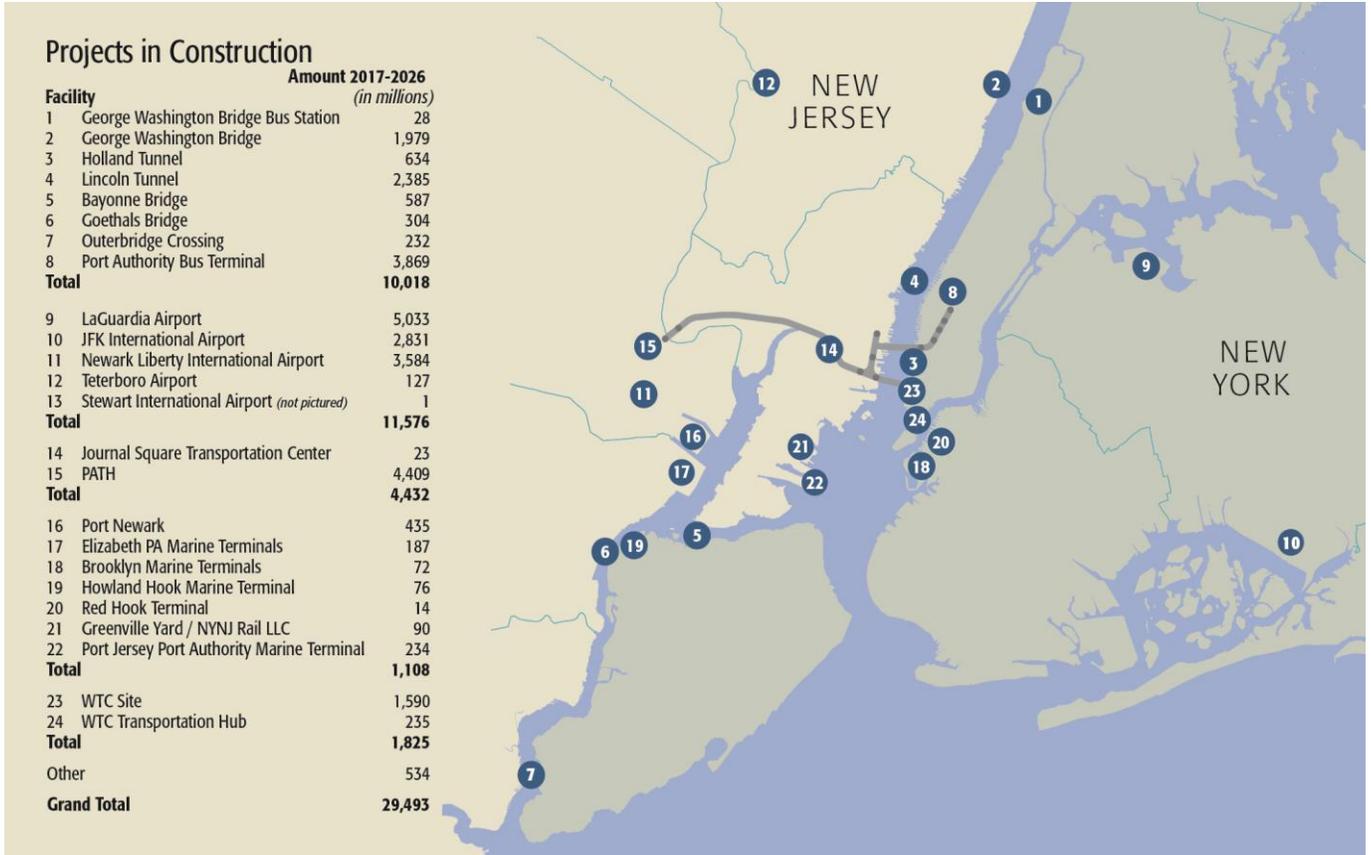
2017-2026 Spending (\$1,000's): Estimated project spending planned in the 10-year Capital Plan.

Appendix A — Monitoring and Delivering the Capital Plan



- **Capital Planning, Execution, and Asset Management (CPEAM):** Committee of the Board of Commissioners that have oversight of the development, implementation and updating of the Port Authority’s capital plans and programs, including its duration, and recommends such capital plans and programs for approval of the Board.
- **Capital Planning Oversight Committee (CPOC):** The Committee is conformed of the Chief of Capital Planning, Chief Financial Officer, Chief Operating Officer, Chief Engineer, and the Secretary of the Board. CPOC is responsible for monitoring the delivery of the capital plan, making recommendations regarding projects based on capital capacity, and a corporate prioritization of projects.

Appendix B — Map of 2017-2026 Capital Plan Investments



Appendix C – List of Projects by Department and Facility

2017- 2026 Capital Project Listing

Sorted by Department, Facility and Program (\$ in thousands)

PROJECT ID	PROJECT TITLE	CATEGORY	STAGE	ASSET CATEGORY	2017-2021 SPENDING	2022-2026 SPENDING	2017-2026 SPENDING
TUNNELS, BRIDGES & TERMINALS							
GEORGE WASHINGTON BRIDGE							
CB04-223	REHABILITATION AND RECOATING OF STRUCTURAL STEEL FOR FORT WASHINGTON AVE	Renew	Planning	Bridges	\$3,900	\$1,500	\$5,400
CB04-224	REHABILITATION AND RECOATING OF STRUCTURAL STEEL FOR AMSTERDAM AVENUE	Renew	Planning	Bridges	4,200	1,500	5,700
CB04-229	REPLACEMENT OF LIGHTING ALONG FIXTURES, FEEDERS AND WIRING RAMP	Renew	Planning	Electrical Power & Lighting	1,700	–	1,700
CB04-241	REHABILITATION OF NJ/NY HIGH TENSION ELECTRICAL SWITCHGEAR	Renew	Planning	Electrical Power & Lighting	9,400	46,600	56,000
CB04-258	IMPLEMENTATION OF FORT LEE STREET IMPROVEMENTS	Deliver	Construction	Paving & Roadways	2,400	–	2,400
CB04-260	REPLACEMENT OF TOLL COLLECTION SYSTEM	Renew	Construction	Control Systems	55,000	–	55,000
CB04-263	REHABILITATION OF TRANS MANHATTAN EXPRESSWAY	Renew	Planning	Paving & Roadways	800	39,100	39,900
CB04-286	REHABILITATION OF STRUCTURAL STEEL, LEAD ABATEMENT & PAINT FOR NEW YORK RAMP	Renew	Planning	Bridges	5,300	7,200	12,500
CB04-310	REPLACEMENT OF CHILLER AT TOLL HOUSES	Renew	Planning	HVAC, Plumbing & Sprinklers	4,900	3,000	7,900
CB04-312	UPGRADE/REPLACEMENT OF SIGNS AND FIELD DEVICES	Renew	Design	Control Systems	49,000	800	49,800
CB04-318	UPGRADE OF ACCESS CONTROL SYSTEM	Deliver	Construction	Control Systems	1,600	–	1,600
CB04-325	REPLACEMENT OF EMERGENCY POWER SYSTEM	Renew	Design	Electrical Power & Lighting	3,300	–	3,300
CB04-328	UPGRADE OF FLAG HOIST SYSTEM ACCESS	Renew	Planning	Bridges	1,500	–	1,500
CB04-330	REHABILITATION OF HUDSON RAMPS COMPLEX - PHASE II	Renew	Planning	Bridges	–	3,400	3,400
CB04-332	REHABILITATION OF ROADWAY DECK OVER EMERGENCY GARAGE AT ADMIN. BUILDING	Renew	Planning	Bridges	–	900	900
CB04-333	REHABILITATION OF FACILITY STEEL AND CONCRETE	Deliver	Construction	Bridges	70	–	70
CB04-334	REHABILITATION OF HUDSON RAMPS COMPLEX - PHASE I	Renew	Planning	Bridges	6,700	62,300	69,000
CB04-335	REHABILITATION OF TRANSMANHATTAN EXPRESSWAY ELECTRICAL SYSTEM INCLUDING LIGHTING	Renew	Planning	Electrical Power & Lighting	5,200	38,600	43,800
CB04-337	REHABILITATION OF NEW JERSEY APPROACH TUNNELS	Renew	Design	Paving & Roadways	–	2,300	2,300
CB04-338	REPLACEMENT OF NEW JERSEY LIGHTING FEEDERS	Renew	Planning	Electrical Power & Lighting	5,200	1,600	6,800
CB04-339	REPLACEMENT OF BRIDGE TOWER TRANSFORMERS	Renew	Planning	Electrical Power & Lighting	–	1,700	1,700
CB04-357	UPGRADE OF 800MHZ SIMULCAST TRUNKED RADIO SYSTEM	Deliver	Multiple	Control Systems	1,800	–	1,800
CB04-359	REHABILITATION OF SANITARY SEWER AT ADMIN BLDG PARKING LOT	Renew	Design	HVAC, Plumbing & Sprinklers	1,500	–	1,500
CB04-361	REHABILITATION OF FACILITY WIDE PRIORITY AREAS	Deliver	Construction	Bridges	7,200	–	7,200
CB04-363	REPLACEMENT OF ELECTRICAL DISTRIBUTION ROOMS IN TOWERS	Renew	Planning	Electrical Power & Lighting	1,200	8,100	9,300
CB04-364	REPLACEMENT OF HALON FIRE SUPPRESSANT SYSTEM IN ADMIN. BUILDING COMPUTER ROOM	Renew	Planning	HVAC, Plumbing & Sprinklers	4,000	–	4,000
CB04-366	REPLACEMENT OF SPRINKLER SYSTEM AT NEW JERSEY ADMIN. BUILDING	Renew	Design	HVAC, Plumbing & Sprinklers	–	4,100	4,100
CB04-367	REPLACEMENT OF SCADA SYSTEM	Renew	Planning	Control Systems	4,000	6,600	10,600
CB04-368	REHABILITATION OF RETAINING WALLS AT NY & NJ APPROACHES	Renew	Planning	Bridges	900	9,400	10,300
CB04-377	UPGRADE OF INTEGRATED TOLL COLLECTION SYSTEM	Deliver	Construction	Control Systems	11,100	–	11,100
CB04-379	INSTALLATION OF AGENCY-WIDE TRANSPORTATION MANAGEMENT SOFTWARE	Renew	Design	Control Systems	2,700	–	2,700
CB04-382	IMPLEMENTATION OF LANDSCAPE IMPROVEMENTS	Deliver	Construction	Paving & Roadways	200	–	200
CB04-383	BRUCE REYNOLDS BOULEVARD REHABILITATION OF LOW VOLTAGE POWER DISTRIBUTION SYSTEM	Renew	Design	Electrical Power & Lighting	1,600	–	1,600
CB04-384	REPLACEMENT OF AUTOMATIC TRANSFER SWITCHES	Renew	Design	Electrical Power & Lighting	300	–	300
CB04-390	REPLACEMENT OF ELECTRICAL FEEDER (PHASE II)	Renew	Planning	Electrical Power & Lighting	2,800	–	2,800
CB04-391	INSTALLATION OF PEDESTRIAN SAFETY FENCING ON VARIOUS PARAPETS	Renew	Planning	Bridges	900	–	900
RESTORING THE GEORGE PROGRAM							
CB04-132	REHABILITATION OF UNDERSIDE OF LOWER LEVEL STRUCTURE. PRIORITY STEEL REPAIR	Renew	Multiple	Bridges	130,000	62,000	192,000
CB04-261	REHABILITATION OF UPPER LEVEL SPAN OVER NJ ANCHORAGE AND HUDSON TERRACE	Deliver	Construction	Bridges	28,000	–	28,000
CB04-272	REHABILITATION OF NY/NJ ANCHOR MAIN CABLE STRANDS	Deliver	Construction	Bridges	1,100	–	1,100

2017- 2026 Capital Project Listing

Sorted by Department, Facility and Program (\$ in thousands)

PROJECT ID	PROJECT TITLE	CATEGORY	STAGE	ASSET CATEGORY	2017-2021 SPENDING	2022-2026 SPENDING	2017-2026 SPENDING
CB04-276	REHABILITATION OF 178TH & 179TH STREET RAMPS, BUS RAMPS, AND BUS TURNAROUND	Renew	Design	Bridges	142,000	78,000	220,000
CB04-285	REPLACEMENT OF THE PALISADES INTERSTATE PARKWAY HELIX	Deliver	Construction	Bridges	62,000	-	62,000
CB04-288	REPLACEMENT OF MEDIAN BARRIERS AND TRAFFIC SAFETY IMPROVEMENTS	Renew	Design	Paving & Roadways	31,000	-	31,000
CB04-300	REPLACEMENT OF PAVEMENT FOR THE LOWER LEVEL EAST BOUND MAIN SPAN, APPROACH & RAMPS	Deliver	Construction	Paving & Roadways	50	-	50
CB04-317	REHABILITATION OF CENTER AVE BRIDGE AND LEMOINE AVE BRIDGE	Renew	Design	Bridges	77,000	10,000	87,000
CB04-319	REPLACEMENT OF SUSPENDER ROPES AND REHABILITATION OF MAIN CABLES	Renew	Design	Bridges	478,000	524,000	1,002,000
CB04-336	REHABILITATION OF TRANSMANHATTAN EXPRESSWAY OVERPASSES (PHASE 1)	Renew	Planning	Bridges	20,000	52,000	72,000
CB04-362	REPAVING OF EASTBOUND UPPER LEVEL	Renew	Design	Paving & Roadways	10,500	-	10,500
CB04-380	REHABILITATION OF BRIDGE MAIN SPAN UPPER LEVEL STRUCTURAL STEEL REHABILITATION (PHASE II)	Renew	Planning	Bridges	86,000	33,000	119,000
CB04-XXX	PROVISION FOR EFFICIENCY AND PHASING - RESTORE THE GEORGE PROGRAM	Renew	Construction	Structure Rehabilitation	(178,260)	(111,740)	(290,000)
RESTORING THE GEORGE PROGRAM, Subtotal					887,390	647,260	1,534,650
SECURITY PROGRAM							
CB04-351	ACCESS RAMP BARRIER UPGRADES	Renew	Construction	Paving & Roadways	1,300	-	1,300
CB04-375	MAIN CABLE PROTECTION	Renew	Design	Bridges	3,900	-	3,900
SECURITY PROGRAM, Subtotal					5,200	-	5,200
GEORGE WASHINGTON BRIDGE, Subtotal					1,092,960	885,960	1,978,920
HOLLAND TUNNEL							
CB02-040	REHABILITATION OF TUNNEL VENTILATION SYSTEM - MECHANICAL AND ELECTRICAL	Deliver	Construction	HVAC, Plumbing & Sprinklers	30,000	-	30,000
CB02-123	REPLACEMENT OF PIER 9 AND PIER 204	Deliver	Multiple	Port Wharfs	68,000	1,000	69,000
CB02-156	REPLACEMENT OF SUPERVISORY CONTROL SYSTEM	Renew	Planning	Control Systems	21,000	11,900	32,900
CB02-162	REPLACEMENT OF FLOOR DRAINS AND PIPING OF 4 VENT BLDGS	Deliver	Construction	HVAC, Plumbing & Sprinklers	60	-	60
CB02-166	REPLACEMENT OF HVAC SYSTEM AT ADMINISTRATION AND SERVICE BUILDINGS	Deliver	Construction	HVAC, Plumbing & Sprinklers	30	-	30
CB02-175	REPLACEMENT OF BULKHEAD DOORS IN VENTILATION BUILDINGS	Renew	Design	Buildings & Garages	3,000	-	3,000
CB02-180	REHABILITATION OF STAIR IN NEW YORK RIVER VENTILATION BUILDINGS	Deliver	Construction	Buildings & Garages	30	-	30
CB02-184	ENHANCEMENT OF ACCESS CONTROL SYSTEM	Deliver	Construction	Control Systems	400	-	400
CB02-189	REHABILITATION OF STRUCTURAL COMPONENTS OF GRANITE WALLS AT PORTALS	Renew	Planning	Buildings & Garages	1,800	32,500	34,300
CB02-191	REHABILITATION OF POWER DISTRIBUTION SYSTEM AND REPLACE EMERGENCY GENERATORS	Renew	Planning	Electrical Power & Lighting	1,100	3,800	4,900
CB02-193	REHABILITATION OF CONCRETE AND STEEL	Renew	Planning	Tunnels	15,600	-	15,600
CB02-195	REHABILITATION OF SUPPLY BLOWER PORTS	Deliver	Construction	Tunnels	8,000	-	8,000
CB02-196	REHABILITATION OF EVASE STACKS ON VENTILATION BUILDINGS	Renew	Planning	Buildings & Garages	8,700	100	8,800
CB02-197	REPLACEMENT OF OVERHEIGHT DETECTION EQUIPMENT AT NEW YORK PLAZA	Renew	Planning	Tunnels	300	6,900	7,200
CB02-202	REPLACEMENT OF TOLL COLLECTION SYSTEM	Renew	Construction	Control Systems	17,100	-	17,100
CB02-205	UPGRADE OF 800 MHZ SIMULCAST TRUNKED RADIO SYSTEM	Deliver	Multiple	Control Systems	1,700	-	1,700
CB02-207	REHABILITATION OF BRONZE DOORS AT SPRING STREET	Renew	Design	Buildings & Garages	300	-	300
CB02-210	REPLACEMENT OF EXISTING INTELLIGENT TRANSPORTATION SYSTEM	Renew	Planning	Control Systems	8,200	22,000	30,200
CB02-211	REHABILITATION OF FRESH AIR STACKS IN VENTILATION BUILDINGS	Renew	Planning	Buildings & Garages	4,200	6,600	10,800
CB02-213	MITIGATION OF WATER LEAKAGE AT VENTILATION DUCTS AND MID-RIVER PUMP ROOM	Renew	Construction	Tunnels	5,900	-	5,900
CB02-217	REPLACEMENT OF ROOF AND PARAPET AT NEW YORK EMERGENCY GARAGE	Renew	Design	Buildings & Garages	1,700	-	1,700
CB02-218	REHABILITATION AND REPLACEMENT OF HIGH VOLTAGE TRANSFORMERS	Renew	Planning	Electrical Power & Lighting	3,400	3,400	6,800
CB02-220	INSTALLATION OF ADDITIONAL SUPERVISORY CONTROL AT MID-RIVER PUMP ROOM	Renew	Design	Control Systems	900	-	900
CB02-223	INSTALLATION OF ADDITIONAL MEANS OF EGRESS FOR NJ ADMINISTRATION BUILDING	Renew	Design	Buildings & Garages	1,100	-	1,100
CB02-224	UPGRADE OF INTEGRATED TOLL COLLECTION SYSTEM	Deliver	Construction	Control Systems	3,600	-	3,600
CB02-227	INSTALLATION OF AGENCY-WIDE TRANSPORTATION MANAGEMENT SOFTWARE	Renew	Design	Control Systems	1,400	-	1,400
CB02-228	INSTALLATION OF EVASE STACK INSPECTION STRUCTURES	Renew	Design	Buildings & Garages	800	-	800
CB02-233	REPLACEMENT OF MIDRIVER PUMP ROOM PUMP	Renew	Design	HVAC, Plumbing & Sprinklers	1,600	-	1,600

2017- 2026 Capital Project Listing

Sorted by Department, Facility and Program (\$ in thousands)

PROJECT ID	PROJECT TITLE	CATEGORY	STAGE	ASSET CATEGORY	2017-2021 SPENDING	2022-2026 SPENDING	2017-2026 SPENDING
SANDY PROGRAM							
CB02-225	MITIGATION OF LATENT SALT DAMAGE TO MECHANICAL, ELECTRICAL AND PLUMBING SYSTEMS	Partner	Design	Electrical Power & Lighting	70,000	120,700	190,700
CB02-226	MITIGATION OF LATENT SALT DAMAGE	Partner	Design	Electrical Power & Lighting	51,000	89,800	140,800
SANDY PROGRAM, Subtotal					121,000	210,500	331,500
SECURITY PROGRAM							
CB02-200	WATERSIDE BUFFER ZONE PROTECTION	Renew	Construction	Buildings & Garages	1,100	–	1,100
CB02-229	HOLLAND TUNNEL VENTILATION BUILDINGS CAMERA INSTALLATION	Renew	Planning	Control Systems	2,100	700	2,800
SECURITY PROGRAM, Subtotal					3,200	700	3,900
HOLLAND TUNNEL, Subtotal					334,120	299,400	633,520
LINCOLN TUNNEL							
CB03-093	REPAINTING OF TUNNEL VENTILATION FANS	Deliver	Construction	HVAC, Plumbing & Sprinklers	1,400	–	1,400
CB03-148	REPLACEMENT OF ELECTRIC FEEDERS AND LIGHT FIXTURES NEW JERSEY PLAZA	Renew	Planning	Electrical Power & Lighting	–	3,300	3,300
CB03-172	REPLACEMENT OF EXHAUST AND BLOWER DUCT ACCESS DOORS	Renew	Planning	HVAC, Plumbing & Sprinklers	400	4,400	4,800
CB03-231	REPLACEMENT OF VENTILATION LOUVERS IN NEW YORK VENTILATION BUILDINGS	Deliver	Construction	HVAC, Plumbing & Sprinklers	1,000	–	1,000
CB03-241	REHABILITATION OF GALVIN PLAZA APPROACH SLABS	Renew	Planning	Paving & Roadways	–	1,200	1,200
CB03-252	UPGRADE OF ACCESS CONTROL SYSTEM	Deliver	Construction	Control Systems	–	100	100
CB03-253	UPGRADE OF LIFE SAFETY MONITORING SYSTEM	Renew	Planning	Control Systems	3,800	2,300	6,100
CB03-259	REHABILITATION OF PRIORITY STRUCTURAL COMPONENTS	Renew	Planning	Paving & Roadways	4,800	100	4,900
CB03-260	REHABILITATION OF PAVEMENT AT LINCOLN TUNNEL NEW YORK APPROACHES FOR NORTH AND CENTER TUNNELS	Renew	Planning	Paving & Roadways	–	3,000	3,000
CB03-262	REPLACEMENT OF TOLL COLLECTION SYSTEM	Renew	Construction	Control Systems	25,000	500	25,500
CB03-264	REPLACEMENT OF HVAC SYSTEM AT ADMINISTRATION BUILDING - PHASE II	Renew	Design	HVAC, Plumbing & Sprinklers	2,500	–	2,500
CB03-266	UPGRADE OF 800 MHZ SIMULCAST TRUNKED RADIO SYSTEM	Deliver	Multiple	Control Systems	1,700	–	1,700
CB03-273	REPLACEMENT OF EXISTING INTELLIGENT TRANSPORTATION SYSTEM	Renew	Planning	Control Systems	5,500	38,400	43,900
CB03-274	REPLACEMENT OF ABOVE-GROUND STORAGE TANKS	Renew	Construction	HVAC, Plumbing & Sprinklers	1,900	–	1,900
CB03-276	REPLACEMENT OF SCADA SYSTEM	Renew	Planning	Control Systems	5,200	16,800	22,000
CB03-277	REPLACEMENT OF MECHANICAL AND ELECTRICAL VENTILATION EQUIPMENT	Renew	Planning	HVAC, Plumbing & Sprinklers	16,600	72,400	89,000
CB03-278	INSTALLATION AND REPLACEMENT OF OVERHEIGHT STRUCTURES AND DETECTORS AT NEW YORK ENTRANCE	Renew	Design	Control Systems	4,800	–	4,800
CB03-280	REPLACEMENT OF CURB PLATES IN THE NORTH AND SOUTH TUBES	Deliver	Construction	Paving & Roadways	40	–	40
CB03-284	UPGRADE OF INTEGRATED TOLL COLLECTION SYSTEM	Deliver	Construction	Control Systems	4,500	–	4,500
CB03-287	UPGRADE OF EXPRESS BUS LANE SIGNALS	Deliver	Construction	Electrical Power & Lighting	1,000	–	1,000
CB03-290	INSTALLATION OF AGENCY-WIDE TRANSPORTATION MANAGEMENT SOFTWARE	Renew	Design	Control Systems	1,400	–	1,400
CB03-291	REHABILITATION AND RELOCATION OF LINCOLN TUNNEL HELIX GUIDERAIL AND MANHOLE COVER - PRIORITY REHABILITATION	Renew	Design	Paving & Roadways	400	–	400
CB03-297	REPLACEMENT OF SIGNALS AT EASTBOUND 495 APPROACH	Renew	Design	Paving & Roadways	1,200	–	1,200
CB03-298	REPLACEMENT OF HVAC SYSTEM AT THE ADMINISTRATION BUILDING - PHASE III	Renew	Planning	HVAC, Plumbing & Sprinklers	1,700	–	1,700
LINCOLN TUNNEL ACCESS PROGRAM							
CB03-267	REHABILITATION OF PULASKI SKYWAY	Deliver	Multiple	Bridges	396,000	–	396,000
CB03-268	REPLACEMENT OF ROUTE 7 WITTPENN BRIDGE	Deliver	Multiple	Bridges	370,000	–	370,000
CB03-269	REPLACEMENT OF ROUTE 1 AND 9	Expand & Connect	Planning/ Design	Paving & Roadways	239,000	1,000	240,000
LINCOLN TUNNEL ACCESS PROGRAM, Subtotal					1,005,000	1,000	1,006,000
LINCOLN TUNNEL HELIX REPLACEMENT							
CB03-213	REPLACEMENT OF HELIX (PLANNING)	Renew	Planning	Paving & Roadways	57,000	–	57,000
CB03-254	REPLACEMENT OF HELIX (CONSTRUCTION)	Renew	Planning	Paving & Roadways	90,000	991,000	1,081,000
LINCOLN TUNNEL HELIX REPLACEMENT, Subtotal					147,000	991,000	1,138,000
SANDY PROGRAM							

2017- 2026 Capital Project Listing

Sorted by Department, Facility and Program (\$ in thousands)

PROJECT ID	PROJECT TITLE	CATEGORY	STAGE	ASSET CATEGORY	2017-2021 SPENDING	2022-2026 SPENDING	2017-2026 SPENDING
CB03-285	MITIGATION OF LATENT SALT DAMAGE TO MECHANICAL, ELECTRICAL AND PLUMBING SYSTEMS	Partner	Design	Electrical Power & Lighting	3,500	–	3,500
CB03-286	MITIGATION OF LATENT SALT DAMAGE	Partner	Design	Buildings & Garages	900	–	900
SANDY PROGRAM, Subtotal					4,400	–	4,400
SECURITY PROGRAM							
CB03-261	WATERSIDE BUFFER ZONE PROTECTION	Renew	Design	Buildings & Garages	5,500	–	5,500
CB03-263	TB&T INTEROPERABILITY RADIO COMMUNICATIONS	Renew	Planning	Control Systems	–	1,200	1,200
CB03-292	LINCOLN TUNNEL VENTILATION BUILDINGS CAMERA INSTALLATION	Renew	Planning	Control Systems	2,100	700	2,800
SECURITY PROGRAM, Subtotal					7,600	1,900	9,500
LINCOLN TUNNEL, Subtotal					1,248,840	1,136,400	2,385,240
BAYONNE BRIDGE							
CB06-087	NAVIGATIONAL CLEARANCE PROGRAM	Deliver	Multiple	Bridges	578,000	–	578,000
CB06-113	REPLACEMENT OF TOLL COLLECTION SYSTEM	Renew	Construction	Control Systems	7,300	–	7,300
CB06-119	IMPLEMENTATION OF TOLLS BY MAIL FUNCTIONALITY	Deliver	Construction	Control Systems	800	–	800
CB06-120	INSTALLATION OF AGENCY-WIDE TRANSPORTATION MANAGEMENT SOFTWARE	Renew	Design	Control Systems	600	–	600
BAYONNE BRIDGE, Subtotal					586,700	–	586,700
GOETHALS BRIDGE							
CB07-103	REPLACEMENT OF GOETHALS BRIDGE	Deliver	Construction	Bridges	162,000	–	162,000
CB07-144	REHABILITATION OF PAVEMENT ON NEW JERSEY ROADWAYS AND ON NEW YORK WESTBOUND APPROACH	Renew	Planning	Paving & Roadways	–	3,200	3,200
CB07-145	CONSTRUCTION OF INTERCHANGE RAMPS	Expand & Connect	Planning	Bridges	119,000	1,000	120,000
CB07-149	REPLACEMENT OF TOLL COLLECTION SYSTEM	Renew	Construction	Control Systems	14,300	–	14,300
CB07-152	UPGRADE OF 800MHZ SIMULCAST TRUNKED RADIO SYSTEM	Deliver	Multiple	Control Systems	1,200	–	1,200
CB07-155	UPGRADE OF INTEGRATED TOLL COLLECTION SYSTEM	Deliver	Construction	Control Systems	3,000	–	3,000
CB07-156	INSTALLATION OF AGENCY-WIDE TRANSPORTATION MANAGEMENT SOFTWARE	Renew	Design	Control Systems	600	–	600
GOETHALS BRIDGE, Subtotal					300,100	4,200	304,300
OUTERBRIDGE CROSSING							
CB08-082	REHABILITATION OF SLAB	Renew	Planning	Paving & Roadways	2,200	92,800	95,000
CB08-083	REPLACEMENTS OF HVAC UNITS AND ROOF - TOLL CANOPY	Deliver	Construction	HVAC, Plumbing & Sprinklers	10	–	10
CB08-090	REHABILITATION OF OUTERBRIDGE CROSSING CATWALKS	Renew	Planning	Bridges	–	4,100	4,100
CB08-100	REPLACEMENT OF OUTERBRIDGE CROSSING	Renew	Planning	Bridges	–	25,800	25,800
CB08-104	PRIORITY STRUCTURAL REHABILITATION	Renew	Planning	Bridges	22,000	27,500	49,500
CB08-107	REHABILITATION OF PAVEMENT	Deliver	Construction	Paving & Roadways	40	–	40
CB08-110	REPLACEMENT OF TOLL COLLECTION SYSTEM	Renew	Construction	Control Systems	12,600	–	12,600
CB08-112	REPLACEMENT OF ROOF AND HVAC AT TOLL BUILDING	Renew	Construction	HVAC, Plumbing & Sprinklers	–	1,900	1,900
CB08-117	UPGRADE OF INTEGRATED TOLL COLLECTION SYSTEM	Deliver	Construction	Control Systems	1,700	–	1,700
CB08-118	INSTALLATION OF AGENCY-WIDE TRANSPORTATION MANAGEMENT SOFTWARE	Renew	Design	Control Systems	600	–	600
CB08-119	REPLACEMENT OF UNINTERRUPTIBLE POWER SUPPLY SYSTEM	Renew	Design	Electrical Power & Lighting	–	100	100
SECURITY PROGRAM							
CB08-109	MAIN SPAN PIER & FENDER UPGRADES	Renew	Design	Bridges	36,000	5,000	41,000
SECURITY PROGRAM, Subtotal					36,000	5,000	41,000
OUTERBRIDGE CROSSING, Subtotal					75,150	157,200	232,350
PORT AUTHORITY BUS TERMINAL							
CT06-285	REPLACEMENT OF PORT AUTHORITY BUS TERMINAL	Expand & Connect	Planning	Buildings & Garages	650,000	2,850,000	3,500,000
PABT IMPROVEMENT PROGRAM							

2017- 2026 Capital Project Listing

Sorted by Department, Facility and Program (\$ in thousands)

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CT06-120	REPLACEMENT OF BUILDING AUTOMATED MONITORING & CONTROL SYSTEM	Deliver	Construction	Control Systems	200	–	200
CT06-199	REPLACEMENT OF FIRE PUMPS	Deliver	Construction	HVAC, Plumbing & Sprinklers	700	–	700
CT06-200	REPLACEMENT OF FIRE ALARM SYSTEM	Renew	Design	Control Systems	19,100	10,000	29,100
CT06-202	REPLACEMENT OF PRIMARY ELECTRIC SERVICE	Deliver	Construction	Electrical Power & Lighting	6,600	–	6,600
CT06-212	REHABILITATION OF ESCALATORS	Renew	Planning	Buildings & Garages	2,400	–	2,400
CT06-220	REHABILITATION OF PUBLIC RESTROOMS	Deliver	Multiple	HVAC, Plumbing & Sprinklers	40	–	40
CT06-228	IMPLEMENTATION OF TERMINAL CEILING PANEL REPLACEMENT PROGRAM	Renew	Construction	Buildings & Garages	–	5,000	5,000
CT06-230	REPLACEMENT OF SOUTH WING HVAC UNITS AND ASSOCIATED ELECTRICAL DISTRIBUTION SYSTEM	Deliver	Construction	HVAC, Plumbing & Sprinklers	21,000	–	21,000
CT06-239	INTERNAL STRUCTURAL ENHANCEMENTS	Renew	Design	Buildings & Garages	34,000	–	34,000
CT06-241	UPGRADE CCTV SURVEILLANCE EQUIPMENT	Deliver	Multiple	Control Systems	600	–	600
CT06-246	UPGRADE OF ACCESS CONTROL SYSTEM	Deliver	Construction	Control Systems	–	100	100
CT06-259	REPLACEMENT OF NORTH WING STANDING BUS LANE WEARING COURSE	Renew	Design	Paving & Roadways	8,300	3,000	11,300
CT06-260	RESTORATION OF CONCRETE & MASONRY OF DETERIORATED AREAS-TERMINAL, 41ST ST VENTILATION BUILDING & ACCESS TUNNEL	Renew	Construction	Buildings & Garages	–	18,000	18,000
CT06-262	REHABILITATION OF SOUTH WING STANDING BUS LANE AND UPPER BUS LEVEL UNLOADING PLATFORMS AND STATIONARY STAIRS	Renew	Construction	Buildings & Garages	–	7,300	7,300
CT06-266	UPGRADE OF 800MHZ SIMULCAST TRUNKED RADIO SYSTEM	Deliver	Multiple	Control Systems	2,200	–	2,200
CT06-267	MODIFICATIONS OF ROOM VIDEO PROCESSING EQUIPMENT	Deliver	Construction	Buildings & Garages	400	–	400
CT06-268	REPLACEMENT OF SPRINKLER SYSTEM	Renew	Planning	HVAC, Plumbing & Sprinklers	16,400	5,500	21,900
CT06-269	REHABILITATION OF EMERGENCY EGRESS DOORS	Renew	Design	Buildings & Garages	11,300	–	11,300
CT06-271	REHABILITATION/REPLACEMENT OF 33 FRESH AIR SUPPLY FANS LOCATED IN THE NORTH AND SOUTH WINGS	Renew	Construction	HVAC, Plumbing & Sprinklers	–	4,600	4,600
CT06-274	IMPLEMENTATION OF SOUTHWING MISCELLANEOUS LEAK REPAIRS	Renew	Design	Buildings & Garages	20,000	600	20,600
CT06-275	REPLACEMENT OF VISUAL PAGING SYSTEM AND MASTER CLOCK SYSTEM	Renew	Design	Control Systems	5,900	–	5,900
CT06-276	REHABILITATION OF ELEVATORS	Renew	Planning	Buildings & Garages	1,400	–	1,400
CT06-277	REPLACEMENT OF CEILING SLATS	Deliver	Construction	Buildings & Garages	400	–	400
CT06-278	IMPLEMENTATION OF ON/OFF BUS TRACKING SYSTEM AND SOFTWARE	Deliver	Multiple	Control Systems	500	–	500
CT06-281	ENHANCEMENT OF BUILDING ENTRANCES AND REPLACEMENT OF ENTRANCE/EXIT DOORS	Deliver	Multiple	Buildings & Garages	8,400	–	8,400
CT06-282	REHABILITATION OF FLOORING, WALLS & FINISHES	Renew	Design	Buildings & Garages	4,000	–	4,000
CT06-283	INSTALLATION OF AGENCY-WIDE TRANSPORTATION MANAGEMENT SOFTWARE	Renew	Design	Control Systems	500	–	500
CT06-289	REHABILITATION OF PRIORITY CONCRETE (PHASE II)	Renew	Design	Buildings & Garages	5,000	2,000	7,000
CT06-290	REPLACEMENT OF TERMINAL DRAINAGE SYSTEM	Renew	Planning	HVAC, Plumbing & Sprinklers	3,400	1,000	4,400
CT06-291	REPLACEMENT OF ELECTRIC PANELS	Renew	Planning	Electrical Power & Lighting	5,600	–	5,600
CT06-292	REPLACEMENT OF BUS RAMP HEATING CONTROLS (SNOW MELTING)	Renew	Planning	Control Systems	1,100	–	1,100
CT06-293	STRAND REPLACEMENT OF PARKING LEVEL TRUSS #1	Renew	Planning	Buildings & Garages	6,700	–	6,700
CT06-294	REHABILITATION OF SANITARY DRAINAGE SYSTEM	Renew	Planning	HVAC, Plumbing & Sprinklers	9,800	–	9,800
CT06-295	DECOMMISSION OF ELECTRICAL SERVICE SWITCHGEAR 2	Renew	Planning	Electrical Power & Lighting	1,800	–	1,800
CT06-296	REPLACEMENT OF SOVALOID SYSTEM	Renew	Planning	Control Systems	700	–	700
CT06-297	MODIFICATIONS TO CHILLED WATER SYSTEM	Renew	Planning	HVAC, Plumbing & Sprinklers	800	–	800
CT06-298	REHABILITATION OF PRIORITIZED CONCRETE AND MASONRY	Renew	Planning	Buildings & Garages	5,900	4,000	9,900
CT06-299	INSTALLATION OF FIRE SPRINKLER HYDRO PNEUMATIC TANKS	Renew	Planning	HVAC, Plumbing & Sprinklers	4,900	–	4,900
CT06-300	REHABILITATION OF HVAC BALANCING AND DUCTWORK	Renew	Planning	HVAC, Plumbing & Sprinklers	6,300	1,700	8,000
CT06-301	REHABILITATION OF NEW VERTICAL CIRCULATION SUBWAY LEVEL TO MAIN LEVEL	Renew	Planning	Buildings & Garages	6,800	–	6,800
CT06-302	RESTORATION OF TWO SAWTOOTH GATES	Renew	Planning	Paving & Roadways	2,600	–	2,600
CT06-303	MODIFICATIONS TO EXISTING ELEVATOR AND LOBBY	Renew	Planning	Buildings & Garages	1,400	–	1,400
CT06-304	REHABILITATION OF ROOF FLASHING AT NORTH WING AND SOUTH WING	Renew	Planning	Buildings & Garages	800	–	800
CT06-306	REHABILITATION OF WEARING COURSE FOR LOWER LEVEL. PARTIAL 3RD AND 4TH FLOOR BUS LEVEL	Renew	Planning	Paving & Roadways	51,000	20,900	71,900
CT06-307	PRESERVATION OF PARKING LEVEL TRUSS	Renew	Planning	Buildings & Garages	6,700	–	6,700
PABT IMPROVEMENT PROGRAM, Subtotal					285,640	83,700	369,340

2017- 2026 Capital Project Listing

Sorted by Department, Facility and Program (\$ in thousands)

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PORT AUTHORITY BUS TERMINAL, Subtotal					935,640	2,933,700	3,869,340
GEORGE WASHINGTON BRIDGE BUS STATION							
CB48-048	REPLACEMENT OF CEILING OVER TRANSMANHATTAN EXPRESSWAY	Renew	Planning	Buildings & Garages	5,800	7,600	13,400
CB48-056	REDEVELOPMENT OF GWB BUS STATION	Deliver	Construction	Buildings & Garages	7,300	–	7,300
CB48-060	STRUCTURAL REHABILITATION OF NORTH & SOUTH BUS PARKING BRIDGES OVER BROADWAY	Renew	Planning	Bridges	–	4,400	4,400
CB48-062	REPLACEMENT OF BLUE FASCIA PANELS	Renew	Planning	Buildings & Garages	–	2,300	2,300
CB48-065	INSTALLATION OF AGENCY-WIDE TRANSPORTATION MANAGEMENT SOFTWARE	Renew	Design	Control Systems	400	–	400
GEORGE WASHINGTON BRIDGE BUS STATION, Subtotal					13,500	14,300	27,800
TUNNELS, BRIDGES & TERMINALS, Total					4,587,010	5,431,160	10,018,170

PATH

PATH

CR02-150	IMPLEMENTATION OF SIGNAL REPLACEMENT PROGRAM	Deliver	Construction	Control Systems	260,000	18,000	278,000
CR02-212	IMPLEMENTATION OF TIE REPLACEMENT PROGRAM	Deliver	Construction	Rail Systems	18,100	8,900	27,000
CR02-233	CONSTRUCTION AND RELOCATION OF SUBSTATION #2	Renew	Planning	Electrical Power & Lighting	20,000	112,000	132,000
CR02-258	IMPLEMENTATION OF TURNOUT REPLACEMENT PROGRAM (PHASE 3)	Deliver	Multiple	Rail Systems	14,500	–	14,500
CR02-259	IMPLEMENTATION OF CONTINUOUS WELDED RAIL PROGRAM	Deliver	Construction	Rail Systems	8,500	5,900	14,400
CR02-261	IMPLEMENTATION OF CONTACT RAIL PROGRAM	Deliver	Construction	Rail Systems	13,500	4,900	18,400
CR02-290	CONSTRUCTION OF PATH RAIL EXTENSION TO NEWARK LIBERTY RAIL LINK STATION	Expand & Connect	Planning	Rail Systems	856,000	874,000	1,730,000
CR02-328	IMPLEMENTATION OF TUNNEL TRACK AND DRAINAGE PROGRAM	Deliver	Construction	Rail Systems	7,100	10,600	17,700
CR02-336	REPLACEMENT AND UPGRADE OF CHRISTOPHER ST SUBSTATION	Deliver	Construction	Electrical Power & Lighting	13,900	–	13,900
CR02-345	CLOSE-OUT OF PURCHASE OF PA-5 RAILCARS	Deliver	Construction	Rail Systems	7,200	–	7,200
CR02-352	UPGRADE OF RADIO BASE STATION AND SIMULCAST RADIO SYSTEM	Deliver	Construction	Control Systems	400	–	400
CR02-358	IMPLEMENTATION OF RESTRAINING RAIL PROGRAM	Deliver	Construction	Rail Systems	3,500	–	3,500
CR02-382	INSTALLATION OF CONTACT THIRD RAIL HEATERS FROM GRAPE TO NEWARK	Deliver	Construction	Rail Systems	3,300	100	3,400
CR02-412	REHABILITATION OF DUCT BANK	Renew	Planning	Electrical Power & Lighting	–	1,700	1,700
CR02-418	REPLACEMENT OF 15KV AND 27KV CABLES AT SUBSTATION #2 AND #15	Deliver	Construction	Electrical Power & Lighting	1,000	–	1,000
CR02-419	UPGRADE OF FIRE ALARM SYSTEM	Renew	Design	Control Systems	47,000	200	47,200
CR02-421	REHABILITATION OF TUNNEL ELECTRICAL LIGHTING SYSTEM	Renew	Planning	Electrical Power & Lighting	7,600	2,300	9,900
CR02-425	REPLACEMENT OF 27 KV CABLES BETWEEN SUBSTATION #1 AND SUBSTATION #2	Renew	Planning	Electrical Power & Lighting	400	900	1,300
CR02-439	INSTALLATION OF NETWORK MANAGEMENT SYSTEM	Deliver	Construction	Control Systems	1,300	–	1,300
CR02-457	PATH RAILCAR FLEET EXPANSION	Expand & Connect	Planning	Rail Systems	150,000	–	150,000
CR02-477	IMPLEMENTATION OF HARRISON YARD SPECIAL TRACK WORK	Deliver	Construction	Rail Systems	2,600	–	2,600
CR02-492	REHABILITATION OF VITAL SIGNAL RELAY	Deliver	Construction	Control Systems	–	100	100
CR02-495	INSTALLATION OF CONTROL CABLES AT CHRISTOPHER ST STATION	Deliver	Construction	Electrical Power & Lighting	80	–	80
CR02-502	INSTALLATION OF TACTILE STRIP AND RUBBING BOARD AT NEW YORK UPTOWN STATIONS	Renew	Planning	Rail Systems	2,000	–	2,000
CR02-505	RESTORATION OF FACADE AND ROOF AT CHRISTOPHER STREET SUBSTATION #1	Renew	Design	Buildings & Garages	7,300	–	7,300
CR02-507	UPGRADE OF FIRE SUPPRESSION SYSTEM	Renew	Planning	HVAC, Plumbing & Sprinklers	17,400	100	17,500
CR02-508	REPLACEMENT OF ROOF FOR SUBSTATION #5 (BACKUS)	Deliver	Construction	Buildings & Garages	20	–	20
CR02-509	REPLACEMENT OF ROOF FOR SUBSTATION #15 (CAISSON)	Deliver	Construction	Buildings & Garages	20	–	20
CR02-511	REPLACEMENT OF VENT LOUVERS AT SUBSTATION #4	Renew	Design	Buildings & Garages	1,100	–	1,100
CR02-513	REHABILITATION OF SUBSTATION #2A TO PREVENT WATER INFILTRATION	Renew	Design	Buildings & Garages	800	–	800
CR02-514	REPLACEMENT OF THE ROOF AT EXCHANGE PLACE SUBSTATION #4	Renew	Design	Buildings & Garages	1,400	–	1,400
CR02-516	REPLACEMENT OF MITER RAILS HACKENSACK RIVER BRIDGE	Deliver	Construction	Rail Systems	4,100	–	4,100

2017- 2026 Capital Project Listing

Sorted by Department, Facility and Program (\$ in thousands)

PROJECT ID	PROJECT TITLE	CATEGORY	STAGE	ASSET CATEGORY	2017-2021 SPENDING	2022-2026 SPENDING	2017-2026 SPENDING
CR02-518	REPLACEMENT OF SWITCHING STATION NO. 6	Deliver	Construction	Electrical Power & Lighting	2,600	–	2,600
CR02-521	REPLACEMENT OF HIGH MAST LIGHTING AT HARRISON CAR MAINTENANCE FACILITY	Renew	Planning	Electrical Power & Lighting	1,800	–	1,800
CR02-529	REPLACEMENT OF TRACKSIDE CIRCUIT BREAKERS	Renew	Planning	Electrical Power & Lighting	1,000	12,100	13,100
CR02-535	REPLACEMENT OF SCADA PROGRAMMABLE LOGIC CONTROLLERS AND INTERFACE EQUIPMENT	Renew	Design	Control Systems	11,400	–	11,400
CR02-536	IMPLEMENTATION OF PA-5 OVERHAUL PROGRAM	Renew	Planning	Rail Systems	41,000	25,000	66,000
CR02-538	REPLACEMENT OF HACK BRIDGE CONTROLS	Renew	Planning	Control Systems	4,100	8,400	12,500
CR02-540	REHABILITATION OF POWER SUPPLY FOR VENTILATION SUBSTATION AT 19TH ST	Renew	Planning	HVAC, Plumbing & Sprinklers	–	500	500
CR02-541	REHABILITATION OF POWER SUPPLY FOR VENTILATION SUBSTATION AT MORTON	Renew	Planning	Electrical Power & Lighting	–	700	700
CR02-542	REHABILITATION OF POWER SUPPLY FOR VENTILATION SUBSTATION AT PAVONIA	Renew	Planning	HVAC, Plumbing & Sprinklers	–	500	500
CR02-545	REPLACEMENT OF AUTOMATIC TRANSFER SWITCHES EQUIPMENT	Deliver	Construction	Electrical Power & Lighting	500	–	500
CR02-554	IMPROVEMENT OF DRAINAGE AT JOURNAL SQUARE TRANSPORTATION CENTER	Renew	Planning	Underground Utilities	–	900	900
CR02-557	REPLACEMENT OF 650V DC 2,000KCMIL CABLES IN ALL TUNNELS EXCEPT E AND F	Deliver	Construction	Electrical Power & Lighting	–	1,200	1,200
CR02-564	REPLACEMENT OF WEST SIDE CROSSOVER	Renew	Design	Rail Systems	6,100	–	6,100
CR02-569	ACQUISITION OF PROPERTY FOR SUBSTATION #8	Renew	Design	Electrical Power & Lighting	1,000	–	1,000
CR02-573	UPGRADE OF 800 MHZ SIMULCAST TRUNKED RADIO SYSTEM	Deliver	Multiple	Control Systems	3,400	–	3,400
CR02-574	REHABILITATION OF 30TH ST MEZZANINE	Renew	Design	Buildings & Garages	6,200	–	6,200
CR02-579	REPLACEMENT OF TRACKSIDE CIRCUIT BREAKER CONTROL CABLES	Renew	Planning	Electrical Power & Lighting	1,500	–	1,500
CR02-580	IMPROVEMENTS OF INFRASTRUCTURE AT SOUTH ST YARD	Deliver	Construction	Control Systems	800	–	800
CR02-598	REHABILITATION OF GROVE ST. STATION	Deliver	Construction	Buildings & Garages	2,400	–	2,400
CR02-604	REPLACEMENT OF PATH TIE PLATE IN TUNNEL AREAS, PHASE I	Deliver	Construction	Electrical Power & Lighting	40	–	40
CR02-606	INSTALLATION OF TRANSPORTATION MANAGEMENT SOFTWARE	Renew	Planning	Control Systems	1,100	–	1,100
CR02-608	REPLACEMENT OF POWER DISTRIBUTION CABLES IN PATH TUNNELS A & B	Deliver	Construction	Electrical Power & Lighting	11,200	–	11,200
CR02-615	REPLACEMENT OF TRACK, THIRD RAIL AND APPURTENANCES IN TUNNELS E & F BETWEEN EXCHANGE PLACE	Renew	Planning	Rail Systems	–	2,200	2,200
CR02-619	IMPLEMENTATION OF FIRE STANDPIPE SGR PROGRAM	Renew	Planning	HVAC, Plumbing & Sprinklers	2,000	–	2,000
CR08-022	REHABILITATION OF TUNNEL EMERGENCY VENTILATION FAN BLADE	Deliver	Construction	HVAC, Plumbing & Sprinklers	2,200	–	2,200
CR08-078	IMPLEMENTATION OF TUNNEL WATER MANAGEMENT PROGRAM	Deliver	Multiple	Rail Systems	125,000	9,000	134,000
CR08-096	INSTALLATION OF LENEL ACCESS CONTROL AND CCTV	Deliver	Construction	Control Systems	400	–	400
CR08-101	UPGRADE OF CCTV & ACCESS CONTROL STATION	Deliver	Construction	Control Systems	20	–	20
CR08-104	UPGRADE OF JOURNAL SQUARE TRANSPORTATION CENTER RADIO SYSTEM - PHASE I	Deliver	Multiple	Control Systems	800	–	800
HARRISON STATION REPLACEMENT AND UPGRADE							
CR02-458	REPLACEMENT AND UPGRADE OF HARRISON STATION	Deliver	Multiple	Rail Systems	138,000	–	138,000
CR02-496	ACQUISITION, REMEDIATION & DEMOLITION OF PROPERTY AT HARRISON STATION	Deliver	Multiple	Rail Systems	3,900	–	3,900
HARRISON STATION REPLACEMENT AND UPGRADE, Subtotal					141,900	–	141,900
SANDY PROGRAM							
CR02-378	REPLACEMENT OF SUBSTATION #8	Partner	Design	Electrical Power & Lighting	34,000	15,800	49,800
CR02-384	UPGRADE OF SOUTH STREET COMPRESSOR	Partner	Design	Rail Systems	4,900	–	4,900
CR02-434	INSTALLATION OF STANDBY GENERATOR INFRASTRUCTURE	Deliver	Construction	Electrical Power & Lighting	2,700	–	2,700
CR02-462	REPLACEMENT OF SUBSTATION #7	Partner	Design	Electrical Power & Lighting	39,000	800	39,800
CR02-463	REPLACEMENT OF SUBSTATION #9	Partner	Design	Electrical Power & Lighting	53,000	1,300	54,300
CR02-527	REPLACEMENT OF IN-GROUND LIFTS AT HARRISON CAR MAINTENANCE FACILITY	Deliver	Construction	Buildings & Garages	8,100	–	8,100
CR02-548	REPLACEMENT OF SUBSTATION #14	Partner	Design	Electrical Power & Lighting	41,000	6,800	47,800
CR02-556	REPLACEMENT OF ELEVATORS AT HARRISON CAR MAINTENANCE FACILITY	Partner	Design	Mechanical Systems	4,200	–	4,200
CR02-576	REPLACEMENT OF ROOF AT MACMILLAN BLOEDEL BUILDING	Partner	Design	Buildings & Garages	7,500	–	7,500
CR02-582	REPLACEMENT OF HACKENSACK RIVER BRIDGE EMERGENCY GENERATOR FUEL TANK	Deliver	Construction	Fueling	5,000	–	5,000
CR02-583	REHABILITATION OF TUNNELS TO ADDRESS LATENT SALT HURRICANE SANDY DAMAGE	Deliver	Multiple	Rail Systems	9,500	–	9,500
CR02-584	PURCHASE OF EQUIPMENT FOR RECOVERY WORK	Deliver	Construction	Rail Systems	17,100	–	17,100

2017- 2026 Capital Project Listing

Sorted by Department, Facility and Program (\$ in thousands)

PROJECT ID	PROJECT TITLE	CATEGORY	STAGE	ASSET CATEGORY	2017-2021 SPENDING	2022-2026 SPENDING	2017-2026 SPENDING
CR02-585	DESIGN AND PURCHASE OF RESILIENCY EQUIPMENT	Deliver	Multiple	Rail Systems	33,000	–	33,000
CR02-586	REPLACEMENT OF HOBOKEN STATION UNDER PLATFORM FAN	Deliver	Construction	HVAC, Plumbing & Sprinklers	5,800	–	5,800
CR02-587	IMPLEMENTATION OF HOBOKEN FLOOD RESILIENCY PROGRAM	Partner	Design	Buildings & Garages	6,900	–	6,900
CR02-588	REHABILITATION OF SUBSTATIONS 7, 8, 9 AND 14	Deliver	Multiple	Electrical Power & Lighting	400	–	400
CR02-589	REPLACEMENT OF SIGNALS IN TUNNELS E & F	Partner	Design	Electrical Power & Lighting	38,000	53,500	91,500
CR02-590	REPLACEMENT OF RADIO AND ELECTRONICS IN TUNNELS E & F	Partner	Design	Electrical Power & Lighting	8,900	11,300	20,200
CR02-591	REPLACEMENT OF 27KV, 15KV, TRACTION POWER AND INTER-TRIPPING CABLES IN TUNNELS E & F	Partner	Design	Electrical Power & Lighting	75,000	97,400	172,400
CR02-592	REPLACEMENT OF LIGHTING 480V POWER DISTRIBUTION EQUIPMENT IN TUNNELS E & F	Partner	Design	Electrical Power & Lighting	24,000	34,800	58,800
CR02-593	REPLACEMENT OF AUXILIARY POWER EQUIPMENT & CABLE REPLACEMENT AT EXCHANGE PLACE	Partner	Design	Electrical Power & Lighting	4,200	4,300	8,500
CR02-594	REPLACEMENT OF CORROSION PROTECTION AND CONTROL SYSTEM IN TUNNELS E & F	Partner	Design	Control Systems	11,300	10,200	21,500
CR02-595	REPLACEMENT OF TRACK, THIRD RAIL AND APPURTENANCES IN TUNNELS E & F	Partner	Design	Rail Systems	9,000	17,600	26,600
CR02-596	REPLACEMENT OF CIVIL INFRASTRUCTURE IN TUNNELS A & B	Partner	Planning	Rail Systems	–	7,900	7,900
CR02-597	REPLACEMENT OF EXCHANGE PLACE STATION ESCALATORS	Partner	Design	Mechanical Systems	59,000	1,700	60,700
CR02-599	INSTALLATION OF HARRISON CAR MAINTENANCE FACILITY AUTOMATIC FLOOD BARRIER	Partner	Design	Buildings & Garages	26,000	–	26,000
CR02-600	INSTALLATION OF EXCHANGE PLACE STATION HEAD HOUSE PROTECTION	Partner	Design	Buildings & Garages	23,000	13,600	36,600
CR02-601	INSTALLATION OF HARRISON CAR MAINTENANCE FACILITY CONCRETE SEA WALL	Partner	Design	Buildings & Garages	31,000	–	31,000
CR02-602	EXTENSION OF RAIL YARDS	Partner	Construction	Rail Systems	24,000	300	24,300
CR02-609	REPLACEMENT OF EXCHANGE PLACE STATION ELEVATORS	Partner	Design	Mechanical Systems	12,300	100	12,400
CR02-610	REPLACEMENT OF NEWPORT STATION ELEVATORS	Partner	Design	Mechanical Systems	10,500	100	10,600
CR02-611	REPLACEMENT OF NEWPORT STATION ESCALATORS	Partner	Design	Mechanical Systems	12,600	13,800	26,400
CR02-612	INSTALLATION OF GROVE STREET STATION HEAD HOUSE PROTECTION	Partner	Design	Buildings & Garages	9,600	200	9,800
CR02-613	INSTALLATION OF NEWPORT STATION HEAD HOUSE PROTECTION	Partner	Design	Buildings & Garages	11,900	–	11,900
CR02-614	INSTALLATION OF HOBOKEN ELEVATOR FLOOD RESILIENCY	Partner	Planning	Mechanical Systems	4,400	–	4,400
CR02-624	REPLACEMENT OF GROVE STREET STATION ESCALATORS	Partner	Planning	Mechanical Systems	10,600	100	10,700
CR02-629	REPLACEMENT OF HOBOKEN INTERLOCKING	Partner	Planning	Rail Systems	28,000	1,000	29,000
CR02-630	REPLACEMENT OF APPROACH SLAB AND PAVEMENT AT HARRISON CAR MAINTENANCE FACILITY	Partner	Planning	Paving & Roadways	10,100	100	10,200
CR02-631	RESTORATION OF HOBOKEN, NEWPORT, EXCHANGE PLACE AND GROVE STREET STATIONS	Partner	Planning	Buildings & Garages	148,000	2,000	150,000
CR02-632	REPLACEMENT OF OPEN AREA TRACKS ON TRACK G, H & P	Partner	Planning	Rail Systems	67,000	–	67,000
SANDY PROGRAM, Subtotal					930,500	294,700	1,225,200
SECURITY PROGRAM							
CR02-504	REPLACEMENT OF DUCTBANK AT UNDERRIVER TUNNELS A/B	Renew	Planning	Electrical Power & Lighting	600	59,400	60,000
CR08-066	EXCHANGE PLACE BOLLARD UPGRADE	Renew	Design	Paving & Roadways	4,400	–	4,400
CR08-068	UPGRADE OF JOURNAL SQUARE TRANSPORTATION CENTER BOLLARDS	Renew	Design	Paving & Roadways	6,200	–	6,200
CR08-079	INSTALLATION OF TUNNEL MITIGATION	Renew	Planning/ Design	Rail Systems	16,800	45,200	62,000
CR08-081	EXCHANGE PLACE STATION UNDERWATER NETTING	Renew	Design	Buildings & Garages	2,200	–	2,200
CR08-105	INSTALLATION OF CCTV AT PATH C, D, AND HARRISON YARDS	Renew	Planning	Control Systems	2,900	400	3,300
CR08-106	CONSTRUCTION OF RADIO ROOM AND RELOCATION OF COMMUNICATIONS SYSTEM -PHASE II	Renew	Planning	Control Systems	4,500	2,700	7,200
SECURITY PROGRAM, Subtotal					37,600	107,700	145,300
PATH, Subtotal					2,806,680	1,502,600	4,309,280
JOURNAL SQUARE TRANSPORTATION CENTER							
CR21-075	REPLACEMENT OF JOURNAL SQUARE TRANSPORTATION CENTER WATER PUMPS AND PIPING SYSTEMS	Renew	Design	HVAC, Plumbing & Sprinklers	5,100	–	5,100
CR21-078	EXPANSION OF JOURNAL SQUARE TRANSPORTATION CENTER PARKING DECKS	Renew	Planning	Buildings & Garages	5,100	100	5,200
CR21-080	REPLACEMENT OF JOURNAL SQUARE TRANSPORTATION CENTER BUS TERMINAL LANES	Renew	Design	Paving & Roadways	2,000	10,700	12,700

2017- 2026 Capital Project Listing

Sorted by Department, Facility and Program (\$ in thousands)

PROJECT ID	PROJECT TITLE	CATEGORY	STAGE	ASSET CATEGORY	2017-2021 SPENDING	2022-2026 SPENDING	2017-2026 SPENDING
JOURNAL SQUARE TRANSPORTATION CENTER, Subtotal					12,200	10,800	23,000
PATH, Total					2,818,880	1,513,400	4,332,280
FERRY TRANSPORTATION							
CH02-006	HOBOKEN PERMANENT FERRY TERMINAL	Deliver	Construction	Buildings & Garages	1,300	–	1,300
CH02-022	CAPITAL IMPROVEMENTS - BATTERY PARK CITY FERRY TERMINAL	Renew	Planning	Buildings & Garages	4,900	4,100	9,000
FERRY TRANSPORTATION, Total					6,200	4,100	10,300
AVIATION							
LAGUARDIA AIRPORT							
CA02-118	REHABILITATION OF RUNWAYS DECK WEARING SURFACE	Renew	Construction	Runway-Taxiway	14,500	–	14,500
CA02-345	REHABILITATION OF PUMP HOUSES ELECTRICAL AND COMMUNICATION SYSTEM	Renew	Planning	Electrical Power & Lighting	14,100	–	14,100
CA02-347	CONSTRUCTION OF RESTRICTED VEHICLE SERVICE ROAD (RVSR) AND RUNWAY DRIVE	Expand & Connect	Design	Runway-Taxiway	53,000	700	53,700
CA02-401	REHABILITATION OF RUNWAY 13-31 AND ASSOCIATED TAXIWAYS	Deliver	Construction	Runway-Taxiway	2,900	–	2,900
CA02-414	INSTALLATION OF AGENCY WIDE TRANSPORTATION MANAGEMENT SOFTWARE	Renew	Design	Control Systems	1,000	–	1,000
CA02-417	CONSTRUCTION OF RUNWAY 13 & 22 DECK SAFETY OVERRUN	Deliver	Multiple	Runway-Taxiway	12,600	–	12,600
CA02-425	REHABILITATION OF RUNWAY 4-22 AND ASSOCIATED TAXIWAYS	Renew	Planning	Runway-Taxiway	54,000	–	54,000
CA02-430	REHABILITATION OF RUNWAY DECKS STRUCTURAL ELEMENTS - IV	Renew	Planning	Runway-Taxiway	11,800	2,600	14,400
CA02-432	REHABILITATION OF TAXIWAY PAVEMENT AND LIGHTING	Renew	Planning	Runway-Taxiway	6,900	10,400	17,300
CA02-447	UPGRADE OF 800 MHZ SIMULCAST TRUNKED RADIO SYSTEM	Deliver	Multiple	Control Systems	3,400	–	3,400
CA02-464	REPLACEMENT OF THE RUNWAY DECK EXPANSION JOINTS	Renew	Planning	Bridges	20,000	800	20,800
CA02-465	REHABILITATION OF RUNWAY DECK PRIORITY STRUCTURAL ELEMENTS - 3	Renew	Design	Paving & Roadways	13,900	–	13,900
CA02-466	REHABILITATION OF TAXIWAY B FROM TAXIWAY G TO TAXIWAY CY	Renew	Construction	Runway-Taxiway	1,300	–	1,300
CA02-467	REHABILITATION OF TAXIWAYS B, AA, BB AND ASSOCIATED TAXIWAYS	Renew	Design	Runway-Taxiway	16,800	–	16,800
CA02-468	REHABILITATION OF TAXIWAY A FROM TAXIWAY K TO TAXIWAY B	Renew	Planning	Runway-Taxiway	13,400	–	13,400
CA02-483	INSTALLATION OF UNIFIED NETWORK SYSTEM INFRASTRUCTURE AT GUARD POSTS 1, 2 & 3	Deliver	Construction	Underground Utilities	–	100	100
CA02-487	INSTALLATION OF AIRPORT ACCESS FEE PROGRAM INFRASTRUCTURE	Expand & Connect	Planning	Paving & Roadways	10,500	–	10,500
CA02-489	REPLACEMENT OF PARKING ACCESS AND REVENUE CONTROL SYSTEM (PARCS)	Renew	Design	Control Systems	14,700	–	14,700
CA02-490	IMPROVEMENT OF DRAINAGE AT MARINE TERMINAL ROAD	Renew	Planning	Underground Utilities	5,100	–	5,100
CA02-494	REHABILITATION OF ROMEO SWITCHGEARS AND FUEL FARM SUBSTATION SWITCHGEARS	Renew	Planning	Fueling	5,300	–	5,300
CA02-496	INSTALLATION OF PILE SUPPORTED STRUCTURE FOR RUNWAY 4 LOCALIZER	Expand & Connect	Planning	Runway-Taxiway	5,700	–	5,700
CA02-497	REHABILITATION OF AIRCRAFT PARKING WEST OF RUNWAY 4-22	Renew	Planning	Paving & Roadways	–	5,900	5,900
CA02-499	REHABILITATION OF PUMP HOUSE 1 RETAINING WALL	Renew	Planning	Underground Utilities	4,000	–	4,000
CA02-500	REHABILITATION OF FRONTAGE ROADWAYS ADJACENT TO THE CENTRAL TERMINAL BUILDING	Renew	Planning	Paving & Roadways	20	–	20
CA02-503	INSTALLATION OF GROUND BASED AUGMENTATION SYSTEM	Expand & Connect	Planning	Runway-Taxiway	9,900	–	9,900
JFK REDEVELOPMENT & LGA AIRTRAIN							
CA22-005	CONSTRUCTION OF AIRTRAIN	Expand & Connect	Planning	Rail Systems	700,000	800,000	1,500,000
JFK REDEVELOPMENT & LGA AIRTRAIN, Subtotal					700,000	800,000	1,500,000
LGA CAPITAL INFRASTRUCTURE RENEWAL PROGRAM							
CA22-440	REPLACEMENT OF UTILITIES EAST OF GUARD POST 1	Deliver	Multiple	Underground Utilities	3,300	–	3,300
CA22-444	REDEVELOPMENT OF HANGARS 1, 2 AND 4	Deliver	Multiple	Paving & Roadways	1,900	–	1,900
CA22-469	CONSTRUCTION OF EAST END SUBSTATION BUILDING, EQUIPMENT AND FEEDERS	Deliver	Construction	Electrical Power & Lighting	500	–	500
CA22-474	CONSTRUCTION OF EAST PARKING GARAGE	Deliver	Multiple	Buildings & Garages	1,800	–	1,800
LGA CAPITAL INFRASTRUCTURE RENEWAL PROGRAM, Subtotal					7,500	–	7,500

2017- 2026 Capital Project Listing

Sorted by Department, Facility and Program (\$ in thousands)

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LGA TERMINAL B REDEVELOPMENT							
CA22-001	LGA TERMINAL B REDEVELOPMENT - MASTER PLANNING	Deliver	Planning	Buildings & Garages	1,000	–	1,000
CA22-002	LGA TERMINAL B REDEVELOPMENT - REDEVELOPMENT OF BUILDING 30	Deliver	Construction	Buildings & Garages	15,900	100	16,000
CA22-003	LGA TERMINAL B REDEVELOPMENT - CONSTRUCTION OF CENTRAL HALL	Deliver	Construction	Buildings & Garages	276,000	56,000	332,000
CA22-372	LGA TERMINAL B REDEVELOPMENT - CENTRAL HEATING AND REFRIGERATION PLANT	Deliver	Construction	Buildings & Garages	18,700	1,300	20,000
CA22-419	LGA TERMINAL B REDEVELOPMENT - CONSTRUCTION OF TERMINAL AND RAMP	Deliver	Multiple	Buildings & Garages	1,205,000	55,000	1,260,000
CA22-441	LGA TERMINAL B REDEVELOPMENT - AIR TERMINAL RESTRICTED SERVICE ROAD AND TAXIWAY CONNECTIONS	Deliver	Construction	Runway-Taxiway	10,600	400	11,000
CA22-442	LGA TERMINAL B REDEVELOPMENT - AIR TERMINAL HIGHWAY EAST OF GUARD POST 1	Deliver	Construction	Paving & Roadways	761,000	29,000	790,000
CA22-443	LGA TERMINAL B REDEVELOPMENT - SURFACE AND STRUCTURE PARKING PROGRAM	Deliver	Multiple	Buildings & Garages	99,000	1,000	100,000
LGA TERMINAL B REDEVELOPMENT, Subtotal					2,387,200	142,799	2,529,999
LGA NEW TERMINAL C							
CA22-006	DELTA REDEVELOPMENT PROGRAM - EAST CONNECTOR	Expand & Connect	Planning	Buildings & Garages	75,000	75,000	150,000
CA22-007	DELTA REDEVELOPMENT PROGRAM - TERMINAL	Expand & Connect	Planning	Buildings & Garages	112,000	38,000	150,000
CA22-008	DELTA REDEVELOPMENT PROGRAM - SUPPORTING INFRASTRUCTURE	Expand & Connect	Planning	Paving & Roadways	224,000	76,000	300,000
LGA NEW TERMINAL C, Subtotal					411,000	189,000	600,000
SANDY PROGRAM							
CA02-484	REPLACEMENT OF AERONAUTICAL OPERATIONS AREA LIGHT CIRCUIT REPLACEMENT	Partner	Design	Electrical Power & Lighting	18,300	–	18,300
CA02-485	REHABILITATION OF PUMP HOUSES 2 AND 3	Deliver	Construction	HVAC, Plumbing & Sprinklers	3,800	–	3,800
CA02-486	FLOOD CONTROL AND RESILIENCY IMPROVEMENTS	Deliver	Multiple	HVAC, Plumbing & Sprinklers	30,000	–	30,000
CA02-488	REHABILITATION OF PUMP HOUSE 6 SUBSTATION	Partner	Design	Electrical Power & Lighting	8,100	–	8,100
SANDY PROGRAM, Subtotal					60,200	–	60,200
SECURITY PROGRAM							
CA02-041	CCTV AT TERMINAL FRONTAGES	Renew	Planning	Control Systems	3,900	5,600	9,500
CA02-330	INSTALLATION OF BIOMETRIC CARD READER SYSTEM	Renew	Planning	Control Systems	2,900	–	2,900
CA02-346	REPLACE D BARRIERS AT NINE LOCATIONS	Renew	Planning	Paving & Roadways	2,300	300	2,600
CA02-506	UPGRADE PIDS END OF LIFE SECURITY EQUIPMENT/SOFTWARE	Renew	Planning	Control Systems	2,800	2,300	5,100
SECURITY PROGRAM, Subtotal					11,900	8,200	20,100
LAGUARDIA AIRPORT, Subtotal					3,872,620	1,160,499	5,033,119
JFK INTERNATIONAL AIRPORT							
CA03-025	REHABILITATION OF PAN AM ROAD PAVEMENT	Deliver	Construction	Paving & Roadways	400	–	400
CA03-141	INSTALLATION OF BOLLARDS AT TENANT TERMINALS	Deliver	Multiple	Paving & Roadways	4,000	–	4,000
CA03-168	RECONSTRUCTION OF RUNWAY 4L-22R RUNWAY SAFETY AREA (RSA)	Deliver	Construction	Runway-Taxiway	5,700	–	5,700
CA03-507	UPGRADE OF VEHICLE GATE SECURITY	Deliver	Multiple	Paving & Roadways	5,700	–	5,700
CA03-518	REHABILITATION OF RUNWAY 4R APPROACH LIGHTING SYSTEM PIER	Renew	Planning	Electrical Power & Lighting	2,500	–	2,500
CA03-529	REHABILITATION OF TAXIWAY Q, QG AND RESTRICTED VEHICLE SERVICE ROAD	Renew	Design	Runway-Taxiway	53,000	–	53,000
CA03-543	REHABILITATION OF TAXIWAY W (NORTH OF RUNWAY 13L)	Renew	Planning	Runway-Taxiway	10,000	–	10,000
CA03-546	REALIGNMENT/ REHABILITATION OF TAXIWAY U	Renew	Planning	Runway-Taxiway	24,000	200	24,200
CA03-574	REPLACEMENT OF AIRPORT TRAFFIC CONTROL TOWER ROOFS & RELATED EQUIPMENT	Renew	Design	Runway-Taxiway	45,000	600	45,600
CA03-591	REDEVELOPMENT OF TERMINAL 3/TERMINAL 4	Deliver	Construction	Buildings & Garages	6,900	–	6,900
CA03-599	REHABILITATION OF TAXIWAY CA (RUNWAY 13L-31R TO END)	Renew	Planning	Runway-Taxiway	7,400	–	7,400
CA03-600	REHABILITATION OF TAXIWAY CB (RUNWAY 13L-31R TO NORTH END)	Renew	Planning	Runway-Taxiway	7,400	–	7,400
CA03-601	REHABILITATION OF TAXIWAY CE	Renew	Planning	Runway-Taxiway	7,400	–	7,400
CA03-603	REHABILITATION OF BUILDING 254	Renew	Planning	Buildings & Garages	3,800	4,600	8,400
CA03-605	REPLACEMENT OF BUILDING 14 ROOF AT EAST WING	Renew	Planning/ Design	Buildings & Garages	26,000	800	26,800
CA03-616	REALIGNMENT OF NORTH BOUNDARY ROAD	Deliver	Construction	Paving & Roadways	40	–	40
CA03-619	REHABILITATION OF TAXIWAY Z, H AND G	Renew	Planning	Runway-Taxiway	16,800	–	16,800

2017- 2026 Capital Project Listing

Sorted by Department, Facility and Program (\$ in thousands)

PROJECT ID	PROJECT TITLE	CATEGORY	STAGE	ASSET CATEGORY	2017-2021 SPENDING	2022-2026 SPENDING	2017-2026 SPENDING
CA03-620	REHABILITATION OF VAN WYCK SUBSTATION	Renew	Planning	Electrical Power & Lighting	43,000	21,000	64,000
CA03-621	REPLACEMENT OF 5KV FEEDERS	Deliver	Construction	Electrical Power & Lighting	14,300	-	14,300
CA03-628	REHABILITATION OF TAXIWAYS A & B EAST (FROM TAXIWAY EA TO TAXIWAY J)	Renew	Planning	Runway-Taxiway	-	59,000	59,000
CA03-632	REHABILITATION OF CENTRAL SUBSTATION	Renew	Planning	Electrical Power & Lighting	34,000	6,100	40,100
CA03-633	REHABILITATION OF BERGEN SUBSTATION AT JFK	Renew	Planning	Electrical Power & Lighting	43,000	21,000	64,000
CA03-634	REHABILITATION OF FARMERS SUBSTATION	Renew	Planning	Electrical Power & Lighting	42,000	21,000	63,000
CA03-636	INSTALLATION OF SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA)	Deliver	Construction	Control Systems	30	-	30
CA03-639	UPGRADE OF 800 MHZ SIMULCAST TRUNKED RADIO SYSTEM	Deliver	Multiple	Control Systems	4,500	-	4,500
CA03-640	REDEVELOPMENT OF NORTH CARGO AREA	Expand & Connect	Planning	Buildings & Garages	900	-	900
CA03-646	UPGRADE OF 800MHZ SIMULCAST TRUNKED RADIO SYSTEM	Deliver	Construction	Control Systems	70	-	70
CA03-661	REHABILITATION OF TAXIWAY Y	Renew	Planning	Runway-Taxiway	15,500	25,900	41,400
CA03-662	REHABILITATION OF TAXIWAY E (BETWEEN RUNWAY4R-22L AND RUNWAY 4L-22R)	Renew	Planning	Runway-Taxiway	9,800	-	9,800
CA03-667	REHABILITATION OF TAXIWAYS A & B NORTH (TAXIWAY TB - TAXIWAY EA)	Renew	Planning	Runway-Taxiway	49,000	500	49,500
CA03-668	REHABILITATION OF TAXIWAYS A & B SOUTH (TAXIWAY N - TAXIWAY KF)	Renew	Planning	Runway-Taxiway	23,000	42,000	65,000
CA03-669	ENHANCEMENT OF TAXIWAYS CA & CB	Expand & Connect	Planning	Runway-Taxiway	23,000	900	23,900
CA03-670	REHABILITATION OF TAXIWAY YA AND HOLDING PAD	Renew	Planning	Runway-Taxiway	10,100	-	10,100
CA03-671	REHABILITATION OF TAXIWAY J (RUNWAYS 4R & 4L)	Renew	Planning	Runway-Taxiway	14,600	-	14,600
CA03-672	REHABILITATION OF GREEN GARAGE	Renew	Planning	Buildings & Garages	2,200	2,100	4,300
CA03-673	REHABILITATION OF BLUE GARAGE	Renew	Planning	Buildings & Garages	2,200	2,100	4,300
CA03-674	REHABILITATION OF ORANGE GARAGE	Renew	Planning	Buildings & Garages	1,400	1,100	2,500
CA03-675	REPLACEMENT OF FIRE ALARM SYSTEM AT CONTROL TOWER	Deliver	Construction	Control Systems	900	-	900
CA03-676	REHABILITATION OF 5KV FEEDER DISTRIBUTION SYSTEM	Renew	Planning	Electrical Power & Lighting	48,000	300	48,300
CA03-677	REPLACEMENT OF FACILITY-WIDE FIRE ALARM SYSTEMS	Renew	Planning	Control Systems	48,000	105,000	153,000
CA03-678	REHABILITATION/REPLACEMENT OF HIGH PRESSURE WATER	Renew	Planning	Underground Utilities	62,000	23,000	85,000
CA03-679	REHABILITATION/REPLACEMENT OF LOW PRESSURE WATER	Renew	Planning	Underground Utilities	37,000	12,500	49,500
CA03-689	REHABILITATION OF AIRPORT ACCESS ROADWAY (JFK EXPRESSWAY)	Renew	Planning	Paving & Roadways	14,900	-	14,900
CA03-691	REHABILITATION OF AIRPORT ACCESS ROADWAY (VAN WYCK)	Renew	Planning	Paving & Roadways	10,100	5,600	15,700
CA03-704	REHABILITATION OF FEDERAL CIRCLE ROADWAYS AND RAMPS	Renew	Planning	Paving & Roadways	3,100	-	3,100
CA03-705	REHABILITATION OF NORTHBOUND AND SOUTHBOUND OF JFK EXPRESSWAY	Renew	Planning	Paving & Roadways	5,600	3,600	9,200
CA03-728	REHABILITATION BUILDING 161 ROOF (FIRE PUMP STATION)	Renew	Planning	Buildings & Garages	4,300	2,400	6,700
CA03-730	REHABILITATION OF BUILDING 142 ROOF	Renew	Planning	Buildings & Garages	5,200	-	5,200
CA03-748	INSTALLATION OF ACCESS AND SAFETY IMPROVEMENTS AT BUILDING 161(FIRE PUMP STATION)	Deliver	Construction	HVAC, Plumbing & Sprinklers	200	-	200
CA03-755	INSTALLATION OF WEST AREA LIGHTING AT FORMER HANGAR 12 SITE	Deliver	Construction	Electrical Power & Lighting	4,000	-	4,000
CA03-762	REPLACEMENT OF FIRE PROTECTION SYSTEM AT HANGAR 19	Renew	Planning	Control Systems	13,100	1,400	14,500
CA03-772	REPLACEMENT OF EXISTING 86 PAD SUBSTATION	Renew	Design	Buildings & Garages	4,100	-	4,100
CA03-774	INSTALLATION OF AGENCY WIDE TRANSPORTATION MANAGEMENT SOFTWARE	Renew	Design	Control Systems	1,700	-	1,700
CA03-775	INSTALLATION OF JFK BACKFLOW PREVENTION DEVICES AND WATER METER UPGRADES - PHASE IV	Renew	Design	HVAC, Plumbing & Sprinklers	2,100	-	2,100
CA03-776	INSTALLATION OF AIRPORT ACCESS FEE PROGRAM INFRASTRUCTURE	Expand & Connect	Planning	Paving & Roadways	4,400	-	4,400
CA03-777	REPLACEMENT OF PARKING ACCESS AND REVENUE CONTROL SYSTEM (PARCS)	Renew	Design	Control Systems	24,000	600	24,600
CA03-782	REHABILITATION OF BRIDGES J31 AND J32 AT ACQUEDUCT ROAD	Renew	Planning	Bridges	4,700	-	4,700
CA03-784	JFK COGENERATION PLANT - EQUIPMENT AND SUBSTATION	Renew	Planning	Electrical Power & Lighting	14,900	20,100	35,000
CA03-788	INSTALLATION OF GROUND BASED AUGMENTATION SYSTEMS FOR AIRPORTS	Expand & Connect	Planning	Runway-Taxiway	9,900	-	9,900
JFK FUEL FARM IMPROVEMENTS PROGRAM							
CA03-607	REPLACEMENT OF FUEL STORAGE TANK SYSTEMS (BULK FUEL FARM)	Renew	Planning	Fueling	1,600	22,100	23,700
CA03-608	REPLACEMENT OF PUMPS & UNDERGROUND PIPING SYSTEMS AT SATELLITE AND BULK FUEL FARMS	Renew	Planning	Fueling	2,100	122,900	125,000

2017- 2026 Capital Project Listing

Sorted by Department, Facility and Program (\$ in thousands)

PROJECT ID	PROJECT TITLE	CATEGORY	STAGE	ASSET CATEGORY	2017-2021 SPENDING	2022-2026 SPENDING	2017-2026 SPENDING
JFK FUEL FARM IMPROVEMENTS PROGRAM, Subtotal					3,700	145,000	148,700
JFK REDEVELOPMENT & LGA AIRTRAIN							
CA03-802	JFK REDEVELOPMENT	Expand & Connect	Planning	Paving & Roadways	560,000	440,000	1,000,000
JFK REDEVELOPMENT & LGA AIRTRAIN, Subtotal					560,000	440,000	1,000,000
JFK RUNWAYS REHABILITATION							
CA03-516	REHABILITATION OF RUNWAY 4R-22L	Renew	Design	Runway-Taxiway	121,000	–	121,000
CA03-612	REHABILITATION OF RUNWAY 13L-31R AND ASSOCIATED TAXIWAYS	Renew	Planning	Runway-Taxiway	107,000	–	107,000
JFK RUNWAYS REHABILITATION, Subtotal					228,000	–	228,000
SANDY PROGRAM							
CA03-760	INSTALLATION OF ENGINEERED MATERIAL ARRESTOR SYSTEM	Deliver	Construction	Runway-Taxiway	–	100	100
CA03-764	REPAIR & HAZARD MITIGATION OF CUT & COVER TUNNEL POWER DISTRIBUTION VAULT & PUMP STATION	Partner	Planning	Electrical Power & Lighting	12,500	–	12,500
CA03-765	REPLACEMENT OF AIRSIDE SWITCHGEARS	Partner	Design	Electrical Power & Lighting	5,800	–	5,800
CA03-766	INSTALLATION OF TIDE GATES/DRAINAGE CHECK VALVES FOR OUTFALLS	Partner	Design	HVAC, Plumbing & Sprinklers	7,800	–	7,800
CA03-769	REPLACEMENT OF LIGHT CIRCUIT AT AERONAUTICAL OPERATIONAL AREA	Partner	Design	Electrical Power & Lighting	79,000	900	79,900
CA03-783	INSTALLATION OF FLOODGATES AT OUTFALLS	Partner	Planning	HVAC, Plumbing & Sprinklers	38,000	200	38,200
SANDY PROGRAM, Subtotal					143,100	1,200	144,300
SECURITY PROGRAM							
CA03-057	CCTV AT TERMINAL FRONTAGES	Renew	Planning	Control Systems	1,800	6,300	8,100
CA03-061	CCTV AT TERMINAL BAGGAGE AREAS	Renew	Design	Control Systems	13,000	–	13,000
CA03-505	INSTALLATION OF BIOMETRIC CARD READER SYSTEM	Renew	Planning	Control Systems	3,800	–	3,800
CA03-778	JFK VEHICULAR GUARD POST LIGHTING IMPROVEMENTS	Renew	Design	Electrical Power & Lighting	4,000	–	4,000
CA03-796	UPGRADE PIDS END OF LIFE SECURITY EQUIPMENT/SOFTWARE	Renew	Planning	Control Systems	4,600	3,400	8,000
CA03-798	REPLACEMENT OF AOA GUARD POST DELTA BARRIERS	Renew	Planning	Paving & Roadways	3,500	5,500	9,000
SECURITY PROGRAM, Subtotal					30,700	15,200	45,900
JFK INTERNATIONAL AIRPORT, Subtotal					1,846,340	984,800	2,831,140
NEWARK LIBERTY INTERNATIONAL AIRPORT							
CA04-041	SCHOOL SOUNDPROOFING PROGRAM (PHASE 3)	Deliver	Construction	Buildings & Garages	13,400	–	13,400
CA04-294	REPLACEMENT OF TERMINAL B FIRE ALARM SYSTEM	Renew	Planning	Control Systems	2,200	3,300	5,500
CA04-482	INSTALLATION OF BOLLARDS AT TENANT TERMINALS	Deliver	Construction	Paving & Roadways	80	–	80
CA04-521	REHABILITATION OF TAXIWAY "Y" (FROM RM TO S)	Renew	Planning	Runway-Taxiway	7,000	–	7,000
CA04-524	REHABILITATION OF TAXIWAY Z (FROM RUNWAY EDGE TO UA)	Renew	Planning	Runway-Taxiway	15,800	–	15,800
CA04-528	REPLACEMENT OF CHRP NORTH ELECTRICAL SUBSTATION AND CHILLER UPGRADES	Deliver	Construction	Electrical Power & Lighting	20,000	–	20,000
CA04-529	REHABILITATION OF TERMINAL FRONTAGE BRIDGES	Renew	Planning	Bridges	9,100	–	9,100
CA04-532	REHABILITATION OF TERMINAL C AND P4 GARAGE DECKS	Renew	Planning	Buildings & Garages	1,500	100	1,600
CA04-535	REHABILITATION OF LANDSIDE ROADWAYS PAVEMENT AT VARIOUS LOCATION	Renew	Planning	Paving & Roadways	2,800	–	2,800
CA04-547	REHABILITATION OF FUEL PIT VAULT HATCHES	Deliver	Construction	Fueling	20	–	20
CA04-549	REPLACEMENT OF TERMINAL B SATELLITE A/C UNIT (CAPITAL MAJOR WORKS PROGRAM)	Renew	Planning	HVAC, Plumbing & Sprinklers	1,600	–	1,600
CA04-558	REPLACEMENT OF MAINTENANCE COMPLEX EMERGENCY GENERATOR	Renew	Planning	Electrical Power & Lighting	–	6,300	6,300
CA04-559	REHABILITATION OF CENTRAL TERMINAL AREA ENTRANCE & BRIDGES - N1, N2, N18, N19, N20, N21 AND N22	Renew	Planning/ Design	Bridges	17,100	–	17,100
CA04-567	REHABILITATION OF TAXIWAY "R" (FROM B TO Y)	Renew	Planning	Runway-Taxiway	5,600	2,900	8,500
CA04-573	REHABILITATION OF RUNWAY 11-29	Renew	Planning	Runway-Taxiway	26,000	100	26,100
CA04-578	REHABILITATION TERMINAL A VERTICAL CIRCULATION	Renew	Planning	Buildings & Garages	5,600	–	5,600
CA04-579	RENEWAL OF AIRPORT WIDE ELECTRICAL DISTRIBUTION SYSTEM	Renew	Construction	Electrical Power & Lighting	49,000	600	49,600
CA04-582	REHABILITATION OF TERMINAL B2 AND B3 RAMP FROM RD TO RF	Renew	Planning	Paving & Roadways	21,000	–	21,000
CA04-583	RENEWAL OF AIRPORT WIDE FUEL DISTRIBUTION SYSTEM	Deliver	Construction	Fueling	23,000	2,000	25,000

2017- 2026 Capital Project Listing

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CA04-584	REPLACEMENT OF TERMINAL B INFRASTRUCTURE AND UTILITIES	Deliver	Multiple	Electrical Power & Lighting Bridges	1,000	-	1,000
CA04-589	REHABILITATION OF EXPANSION JOINTS AND STRUCTURAL ELEMENTS OF FACILITY BRIDGES	Deliver	Multiple	Bridges	400	-	400
CA04-593	REPLACEMENT OF TERMINAL B STERILE CORRIDOR DOORS AND OPERATIONAL MODIFICATIONS	Deliver	Planning/ Design	Buildings & Garages	7,900	-	7,900
CA04-597	REHABILITATION OF FACILITY DATA ROOM	Expand & Connect	Planning	Control Systems	700	4,600	5,300
CA04-598	UPGRADE OF 800 MHZ SIMULCAST TRUNKED RADIO SYSTEM	Deliver	Multiple	Control Systems	4,200	-	4,200
CA04-604	REPLACEMENT OF FUEL FARM BUILDING 117 SWITCHGEAR	Renew	Planning	Electrical Power & Lighting	5,300	-	5,300
CA04-609	REHABILITATION OF TAXIWAY P	Renew	Planning	Runway-Taxiway	1,400	36,700	38,100
CA04-611	RECONSTRUCTION OF ESCALATORS 15 AND 21 AT TERMINAL B	Renew	Planning	Buildings & Garages	3,800	200	4,000
CA04-613	INSTALLATION OF AC8 AND AC9 IN TERMINAL B	Renew	Planning	HVAC, Plumbing & Sprinklers	4,900	100	5,000
CA04-614	REPLACEMENT OF WATER TANK "A"	Renew	Planning	Underground Utilities	4,800	100	4,900
CA04-633	REPLACEMENT OF TERMINAL B3 STERILE SECURITY DOOR	Renew	Planning	Buildings & Garages	-	3,500	3,500
CA04-640	INSTALLATION OF AGENCY WIDE TRANSPORTATION MANAGEMENT SOFTWARE	Renew	Design	Control Systems	800	-	800
CA04-642	INSTALLATION OF AIRPORT ACCESS FEE PROGRAM INFRASTRUCTURE	Expand & Connect	Planning	Paving & Roadways	2,800	-	2,800
CA04-643	REPLACEMENT OF PARKING ACCESS AND REVENUE CONTROL SYSTEM (PARCS)	Renew	Design	Control Systems	19,500	-	19,500
CA04-645	REHABILITATION OF THE RESTRICTED VEHICLE SERVICE ROAD (RVS) AND SNOW EQUIPMENT LOT	Renew	Planning	Paving & Roadways	-	6,200	6,200
CA04-646	REHABILITATION OF TAXIWAY B (FROM U TO RL) AND TAXIWAY S (FROM B TO RUNWAY 11-29)	Renew	Planning	Runway-Taxiway	4,400	-	4,400
CA04-647	REHABILITATION OF EARHART DRIVE, SOUTH DIRECTORY ROAD & RECIRCULATION ROAD	Renew	Planning	Paving & Roadways	3,800	-	3,800
CA04-648	IMPROVEMENT OF FUEL FARM DRAINAGE	Renew	Design	Fueling	1,300	-	1,300
CA04-649	REHABILITATION OF FUEL FARM ROADWAY	Renew	Planning	Fueling	-	3,300	3,300
CA04-653	INSTALLATION OF BRIDGE N5 UNDERPASS FLOODING MITIGATION	Deliver	Construction	Bridges	200	-	200
CA04-654	REHABILITATION OF TAXIWAY D (FROM N TO B)	Renew	Planning	Runway-Taxiway	1,700	-	1,700
CA04-655	REPLACEMENT OF CHRP SOUTH SUBSTATION ROOF	Renew	Design	Buildings & Garages	1,000	-	1,000
CA04-659	RECONSTRUCTION OF OPERATIONS CONTROL CENTER AT TERMINAL B	Renew	Planning	Buildings & Garages	22,000	9,700	31,700
CA04-665	REHABILITATION OF BLAST FENCE AT RESTRICTED VEHICLE SERVICE ROAD (RVS)	Renew	Planning	Paving & Roadways	2,400	-	2,400
CA04-667	REPLACEMENT OF TERMINAL B BAGGAGE HANDLING SYSTEM	Renew	Planning	Buildings & Garages	92,000	1,000	93,000
CA04-669	REPLACEMENT OF AIRCRAFT LOADING BRIDGES AT TERMINAL B	Renew	Planning	Buildings & Garages	42,000	600	42,600
CA04-670	REHABILITATION OF INNER CONCRETE APRON AT SATELLITES B2 AND B3	Renew	Planning	Runway-Taxiway	5,000	-	5,000
CA04-672	UPGRADE OF BACKUP DATA CENTER FOR CACS/CRS SYSTEMS	Renew	Planning	Control Systems	1,400	-	1,400
CA44-017	EXPANSION OF LOWER LEVEL AND REHABILITATION OF VERTICAL CIRCULATION AT TERMINAL B1	Deliver	Construction	Buildings & Garages	800	-	800
CA44-041	EWR AIRTRAIN REPLACEMENT PLANNING	Renew	Design	Rail Systems	31,000	900	31,900
AIRTRAIN NEWARK CAPITAL ASSET REPLACEMENT PROGRAM							
CA04-513	REHABILITATION OF AIRTRAIN BASE GUIDEWAY	Deliver	Construction	Rail Systems	7,300	-	7,300
CA04-514	AIRTRAIN CAPITAL ASSET REPLACEMENT PROGRAM	Deliver	Multiple	Rail Systems	33,000	-	33,000
CA04-555	REPLACEMENT OF AIRTRAIN HVAC SYSTEM	Deliver	Construction	HVAC, Plumbing & Sprinklers	700	-	700
CA04-606	REHABILITATION OF AIRTRAIN HAMMERHEAD ROOF	Renew	Planning	Rail Systems	-	4,400	4,400
AIRTRAIN NEWARK CAPITAL ASSET REPLACEMENT PROGRAM, Subtotal					41,000	4,400	45,400
AIRTRAIN NEWARK INTERIM REPAIRS							
CA04-587	MAINTENANCE CAPITAL - EWR AIRTRAIN	Renew	Planning	Rail Systems	125,000	175,000	300,000
AIRTRAIN NEWARK INTERIM REPAIRS, Subtotal					125,000	175,000	300,000
EWR RUNWAYS REHABILITATION							
CA04-608	REHABILITATION OF RUNWAY 4R-22L	Renew	Planning	Runway-Taxiway	88,000	9,000	97,000
CA04-610	REHABILITATION OF RUNWAY 4L-22R	Renew	Planning	Runway-Taxiway	-	68,000	68,000
EWR RUNWAYS REHABILITATION, Subtotal					88,000	77,000	165,000
EWR TERMINAL A REDEVELOPMENT							
CA44-037	TERMINAL A REDEVELOPMENT - TERMINAL	Expand & Connect	Planning/ Design	Buildings & Garages	1,200,000	174,000	1,374,000
CA44-038	TERMINAL A REDEVELOPMENT - AIRSIDE	Expand & Connect	Planning/ Design	Buildings & Garages	240,000	96,000	336,000

2017- 2026 Capital Project Listing

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CA44-039	TERMINAL A REDEVELOPMENT - LANDSIDE INFRASTRUCTURE	Expand & Connect	Planning/ Design	Paving & Roadways	441,000	19,000	460,000
CA44-040	TERMINAL A REDEVELOPMENT - PARKING	Expand & Connect	Planning	Buildings & Garages	170,000	-	170,000
EWR TERMINAL A REDEVELOPMENT, Subtotal					2,051,000	289,000	2,340,000
SANDY PROGRAM							
CA04-639	REPLACEMENT OF EWR AERONAUTICAL OPERATIONS AREA (AOA) LIGHT CIRCUIT	Partner	Design	Electrical Power & Lighting	35,000	500	35,500
SANDY PROGRAM, Subtotal					35,000	500	35,500
SECURITY PROGRAM							
CA04-045	TERMINAL B EXTERIOR CURTAIN WALL GLASS UPGRADE	Renew	Design	Buildings & Garages	83,000	-	83,000
CA04-047	CCTV AT TERMINAL FRONTAGES	Renew	Planning	Control Systems	8,800	8,200	17,000
CA04-049	CCTV AT TERMINAL BAGGAGE AREAS	Renew	Design	Control Systems	8,600	-	8,600
CA04-053	CCTV IN TERMINAL PRE PASSENGER-SCREENING AREAS	Renew	Planning	Control Systems	2,900	1,900	4,800
CA04-397	INSTALLATION OF BIOMETRIC CARD READER SYSTEM	Renew	Planning	Control Systems	2,400	-	2,400
CA04-680	UPGRADE PIDS END OF LIFE SECURITY EQUIPMENT/SOFTWARE	Renew	Planning	Control Systems	3,900	3,100	7,000
CA04-681	REPLACEMENT OF AOA GUARD POST DELTA BARRIERS	Renew	Planning	Paving & Roadways	200	5,200	5,400
SECURITY PROGRAM, Subtotal					109,800	18,400	128,200
NEWARK LIBERTY INTERNATIONAL AIRPORT, Subtotal					2,937,100	646,500	3,583,600
TETERBORO AIRPORT							
CA05-127	REHABILITATION OF TAXIWAY G (WEST OF RUNWAY 1-19) AND TAXIWAY E (HIGH SPEED)	Renew	Planning	Runway-Taxiway	2,800	-	2,800
CA05-128	REHABILITATION OF RUNWAY 6-24	Renew	Planning	Runway-Taxiway	22,000	800	22,800
CA05-129	REHABILITATION OF TAXIWAY L	Renew	Planning	Runway-Taxiway	6,100	-	6,100
CA05-141	REHABILITATION OF STORMWATER DRAINAGE SYSTEM	Renew	Planning/ Design	Underground Utilities	17,200	-	17,200
CA05-143	REHABILITATION OF BUILDING 72	Renew	Planning	Buildings & Garages	4,900	5,000	9,900
CA05-148	REHABILITATION OF TETERBORO RUNWAY 1-19	Renew	Planning	Runway-Taxiway	11,600	2,900	14,500
CA05-152	REPLACEMENT OF AIRFIELD LIGHTING VAULT	Renew	Planning	Electrical Power & Lighting	9,800	8,200	18,000
CA05-153	INSTALLATION OF AGENCY WIDE TRANSPORTATION MANAGEMENT SOFTWARE	Renew	Design	Control Systems	-	100	100
CA05-155	REHABILITATION OF SEWAGE PUMPS	Renew	Design	Underground Utilities	1,700	-	1,700
CA05-158	INSTALLATION OF AUGMENTATION OF GROUND BASED SYSTEMS	Expand & Connect	Planning	Runway-Taxiway	9,900	-	9,900
SANDY PROGRAM							
CA05-151	REPLACEMENT OF TETERBORO AERONAUTICAL OPERATIONS ARIAL LIGHT CIRCUIT	Partner	Design	Electrical Power & Lighting	19,900	-	19,900
SANDY PROGRAM, Subtotal					19,900	-	19,900
SECURITY PROGRAM							
CA05-161	UPGRADE PIDS END OF LIFE SECURITY EQUIPMENT/SOFTWARE	Renew	Planning	Control Systems	1,900	1,700	3,600
SECURITY PROGRAM, Subtotal					1,900	1,700	3,600
TETERBORO AIRPORT, Subtotal					107,800	18,700	126,500
STEWART INTERNATIONAL AIRPORT							
CA06-046	INSTALLATION OF POSITIVE AIR PRESSURE FOR PASSENGER LOADING BRIDGES	Deliver	Construction	HVAC, Plumbing & Sprinklers	50	-	50
CA06-066	REHABILITATION OF RUNWAYS 9-27 AND 16-34	Deliver	Construction	Runway-Taxiway	50	-	50
CA06-079	INSTALLATION OF BACKFLOW PREVENTER DEVICES	Renew	Construction	HVAC, Plumbing & Sprinklers	1,100	-	1,100
CA06-100	MITIGATION OF RUNWAY INCURSION - PHASE 1B	Deliver	Construction	Runway-Taxiway	-	100	100
STEWART INTERNATIONAL AIRPORT, Subtotal					1,200	100	1,300
AVIATION, Total					8,765,060	2,810,600	11,575,660

PORT

PORT NEWARK

2017- 2026 Capital Project Listing

Sorted by Department, Facility and Program (\$ in thousands)

PROJECT ID	PROJECT TITLE	CATEGORY	STAGE	ASSET CATEGORY	2017-2021 SPENDING	2022-2026 SPENDING	2017-2026 SPENDING
CP05-148	CONSTRUCTION OF EXPRESS RAIL TRACK WORK (PHASE 2A)	Deliver	Multiple	Rail Systems	3,700	-	3,700
CP05-173	REHABILITATION OF BERTH 14	Deliver	Construction	Port Wharfs	600	-	600
CP05-187	IMPROVEMENTS TO PORT STREET CORRIDOR	Deliver	Multiple	Paving & Roadways	84,000	29,000	113,000
CP05-193	UPGRADE OF WATER LINES AT NEW JERSEY MARINE TERMINAL	Deliver	Multiple	Underground Utilities	1,500	-	1,500
CP05-220	REPLACEMENT OF BERTHS 30, 32 AND 34 FENDER SYSTEM	Deliver	Construction	Port Wharfs	4,600	-	4,600
CP05-233	REHABILITATION OF BERTH 3	Deliver	Construction	Port Wharfs	7,600	-	7,600
CP05-238	REHABILITATION OF SANITARY LIFT STATIONS AT NEW JERSEY MARINE TERMINAL	Deliver	Construction	HVAC, Plumbing & Sprinklers	20	-	20
CP05-242	REHABILITATION OF FIRE PROTECTION SYSTEMS AT NEW JERSEY MARINE TERMINAL	Renew	Planning	HVAC, Plumbing & Sprinklers	9,500	31,900	41,400
CP05-244	REPLACEMENT OF FENDER SYSTEMS IN NEW JERSEY MARINE TERMINAL	Renew	Planning	Port Wharfs	3,100	19,600	22,700
CP05-246	REHABILITATION OF BERTH 19	Deliver	Construction	Port Wharfs	700	-	700
CP05-248	REHABILITATION OF BUILDING ROOF AT NEW JERSEY MARINE TERMINAL	Renew	Planning	Buildings & Garages	11,200	37,200	48,400
CP05-249	REPLACEMENT OF TRAFFIC SIGNALS AT NEW JERSEY MARINE TERMINAL	Deliver	Multiple	Control Systems	8,100	-	8,100
CP05-255	UPGRADE OF 800 MHZ SIMULCAST TRUNKED RADIO SYSTEM	Deliver	Multiple	Control Systems	1,100	-	1,100
CP05-269	REHABILITATION OF BERTHS 5, 7, 9, 10, 12, 15, 16 AND 17	Deliver	Construction	Port Wharfs	20	-	20
CP05-272	IMPLEMENTATION OF AGENCY-WIDE TRANSPORTATION MANAGEMENT SOFTWARE	Renew	Design	Control Systems	1,000	-	1,000
CP05-277	REHABILITATION OF TYLER STREET PAVING	Renew	Design	Paving & Roadways	1,800	-	1,800
CP05-278	REHABILITATION OF BERTH 36	Deliver	Construction	Port Wharfs	300	-	300
CP05-279	REHABILITATION OF BERTHS 11 AND 13	Deliver	Construction	Port Wharfs	20	-	20
CP05-281	IMPLEMENTATION OF HOLDING TANKS AT BUILDINGS 182 & 188	Renew	Design	Underground Utilities	500	-	500
CP05-282	REHABILITATION OF RAIL ON DISTRIBUTION STREET	Deliver	Construction	Rail Systems	30	-	30
CP05-286	REHABILITATION OF BERTHS 20, 22, 30, AND 32	Deliver	Construction	Port Wharfs	10	-	10
50' FOOT DREDGING PROGRAM							
CP05-120	CONSTRUCTION OF CONSOLIDATED 50 FOOT PROJECT (NEW JERSEY, PORT JERSEY, AMBROSE)	Deliver	Multiple	Port Wharfs	9,800	10,100	19,900
50' FOOT DREDGING PROGRAM, Subtotal					9,800	10,100	19,900
SANDY PROGRAM							
CP05-251	REHABILITATION OF OFFICE SPACE AT BUILDING 260	Partner	Design	Buildings & Garages	15,600	-	15,600
CP05-266	RECONSTRUCTION AND RELOCATION OF RESIDENT ENGINEERS OFFICE	Partner	Planning	Buildings & Garages	3,000	-	3,000
CP05-273	REHABILITATION OF BUILDING #111 ELECTRICAL AND MECHANICAL EQUIPMENT	Partner	Planning	Electrical Power & Lighting	2,300	-	2,300
SANDY PROGRAM, Subtotal					20,900	-	20,900
SECURITY PROGRAM							
CP05-124	PORT SECURITY PROGRAM-NJMT-BADGE, ID SYS.	Renew	Planning	Control Systems	11,000	-	11,000
SECURITY PROGRAM, Subtotal					11,000	-	11,000
WHARF/BERTH REPLACEMENT PROGRAM							
CP05-241	REHABILITATION OF BERTHS 15 & 17 AT PORT NEWARK	Renew	Planning	Port Wharfs	21,000	46,000	67,000
CP05-245	REHABILITATION OF BERTHS 10, 12 & 25 AT PORT NEWARK	Renew	Planning	Port Wharfs	1,400	57,600	59,000
CP05-280	REHABILITATION OF BERTHS 18, 24, 26, AND 34	Deliver	Construction	Port Wharfs	200	-	200
WHARF/BERTH REPLACEMENT PROGRAM, Subtotal					22,600	103,600	126,200
PORT NEWARK, Subtotal					203,700	231,400	435,100
ELIZABETH PA MARINE TERMINAL							
CP08-148	REHABILITATION OF BUILDING 1400 FIRE SUPPRESSION SYSTEM	Deliver	Construction	HVAC, Plumbing & Sprinklers	20	-	20
CP08-149	REHABILITATION OF WATER SYSTEM (PHASE II) AT PORT ELIZABETH MARINE TERMINAL	Renew	Planning	Underground Utilities	31,000	400	31,400
50' FOOT DREDGING PROGRAM							
CP08-111	RELOCATION OF UTILITIES FOR 50' CHANNEL AT KILL VAN KULL AND NEWARK BAY	Deliver	Construction	Underground Utilities	12,800	-	12,800
CP08-112	IMPLEMENTATION OF CONSOLIDATED 50 FOOT PROJECT (NEW JERSEY, PORT JERSEY)	Deliver	Construction	Port Wharfs	7,100	10,300	17,400
50' FOOT DREDGING PROGRAM, Subtotal					19,900	10,300	30,200
WHARF/BERTH REPLACEMENT PROGRAM							
CP08-145	REHABILITATION OF BERTHS 56, 58, 94, 96, AND 98 AT PORT ELIZABETH MARINE TERMINAL	Renew	Planning	Port Wharfs	8,500	116,500	125,000
WHARF/BERTH REPLACEMENT PROGRAM, Subtotal					8,500	116,500	125,000

2017- 2026 Capital Project Listing

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PROJECT ID	PROJECT TITLE	CATEGORY	STAGE	ASSET CATEGORY	2017-2021 SPENDING	2022-2026 SPENDING	2017-2026 SPENDING
ELIZABETH PA MARINE TERMINALS, Subtotal					59,420	126,800	186,620
BROOKLYN PA MARINE TERMINAL							
SANDY PROGRAM							
CP09-125	REPLACEMENT OF UNDERGROUND ELECTRICAL DELIVERY LINES AT NEW YORK MARINE TERMINAL	Partner	Planning	Underground Utilities	800	–	800
SANDY PROGRAM, Subtotal					800	–	800
SECURITY PROGRAM							
CP09-085	PORT SECURITY PROGRAM NYMT-BADGE, ID SYS	Renew	Planning	Control Systems	2,600	–	2,600
SECURITY PROGRAM, Subtotal					2,600	–	2,600
WHARF/BERTH REPLACEMENT PROGRAM							
CP09-122	REPLACEMENT OF BROOKLYN PIER 9A & BULKHEAD BETWEEN PIER 7 & 8	Renew	Planning	Port Wharfs	1,000	68,000	69,000
WHARF/BERTH REPLACEMENT PROGRAM, Subtotal					1,000	68,000	69,000
BROOKLYN PA MARINE TERMINAL, Subtotal					4,400	68,000	72,400
RED HOOK							
CP91-056	REPLACEMENT OF SPRINKLER SYSTEM AT PIER SHED 9B	Renew	Planning	HVAC, Plumbing & Sprinklers	1,600	3,000	4,600
CP91-062	REHABILITATION OF PIER 10 AT RED HOOK	Renew	Planning	Port Wharfs	9,400	–	9,400
RED HOOK, Subtotal					11,000	3,000	14,000
HOWLAND HOOK MARINE TERMINAL							
CP11-073	DEMOLITION OF BUILDINGS AT HOWLAND HOOK MARINE TERMINAL	Deliver	Multiple	Buildings & Garages	7,300	–	7,300
50' FOOT DREDGING PROGRAM							
CP11-039	IMPLEMENTATION OF CONSOLIDATED 50 FOOT PROJECT (NEW JERSEY. AMBROSE)	Deliver	Construction	Port Wharfs	8,100	6,100	14,200
CP11-044	RELOCATION OF UTILITIES FOR ARTHUR KILL 50' CHANNEL	Deliver	Construction	Underground Utilities	23,000	–	23,000
50' FOOT DREDGING PROGRAM, Subtotal					31,100	6,100	37,200
SANDY PROGRAM							
CP11-089	UPGRADE OF PAVEMENT SUBGRADE AT HOWLAND HOOK MARINE TERMINAL	Partner	Design	Paving & Roadways	31,000	700	31,700
SANDY PROGRAM, Subtotal					31,000	700	31,700
HOWLAND HOOK MARINE TERMINAL, Subtotal					69,400	6,800	76,200
GREENVILLE YARD / NYNJ RAIL LLC							
GREENVILLE YARD PROGRAM							
CP17-016	INSTALLATION OF SUPPORT TRACKS	Expand & Connect	Design	Rail Systems	41,000	300	41,300
CP17-019	CONSTRUCTION OF NEW BARGE	Deliver	Construction	Port Wharfs	7,300	–	7,300
CP17-027	REHABILITATION OF TRANSFER BRIDGE #10	Deliver	Construction	Bridges	22,000	–	22,000
CP17-033	MODIFICATIONS TO FENDER SYSTEM AT 65TH STREET TERMINAL	Deliver	Construction	Port Wharfs	4,900	–	4,900
CP17-037	MODIFICATIONS TO RAIL ACCESS FOR 65TH STREET YARD	Expand & Connect	Planning	Rail Systems	9,700	–	9,700
GREENVILLE YARD PROGRAM, Subtotal					84,900	300	85,200
SANDY PROGRAM							
CP17-034	REHABILITATION OF MOORING CELLS AT NY/NJ RAILROAD	Deliver	Construction	Port Wharfs	4,500	–	4,500
SANDY PROGRAM, Subtotal					4,500	–	4,500
GREENVILLE YARD / NYNJ RAIL LLC, Subtotal					89,400	300	89,700
NEW JERSEY REDEVELOPMENT							
CP14-023	IMPLEMENTATION OF REGIONAL RAIL FREIGHT PROGRAM	Deliver	Planning	Rail Systems	38,000	–	38,000
New Jersey Redevelopment, Subtotal					38,000	–	38,000
PORT JERSEY PA MARINE TERMINAL							

2017- 2026 Capital Project Listing

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PROJECT ID	PROJECT TITLE	CATEGORY	STAGE	ASSET CATEGORY	2017-2021 SPENDING	2022-2026 SPENDING	2017-2026 SPENDING
CP16-027	DEVELOPMENT OF GLOBAL TERMINAL	Deliver	Construction	Rail Systems	200	-	200
CP16-044	CONSTRUCTION OF OPERATIONS CENTER AT PORT JERSEY AND UPGRADE TO ELECTRICAL EQUIPMENT	Renew	Planning	Electrical Power & Lighting	16,100	8,900	25,000
CP16-047	REHABILITATION OF BERTH E-1 AND E-2	Renew	Planning	Port Wharfs	10,900	9,100	20,000
CP16-070	CONSTRUCTION OF PORT JERSEY 2ND LEAD TRACK	Expand & Connect	Planning	Rail Systems	10,100	-	10,100
GREENVILLE YARD PROGRAM							
CP16-035	DEVELOPMENT OF INTERMODAL CONTAINER TRANSFER FACILITY AT GREENVILLE YARD	Deliver	Multiple	Rail Systems	130,000	-	130,000
GREENVILLE YARD PROGRAM, Subtotal					130,000	-	130,000
SANDY PROGRAM							
CP16-066	UPGRADE OF EAST SUBSTATION PROTECTIVE DEVICES & DISTRIBUTION EQUIPMENT	Deliver	Multiple	Electrical Power & Lighting	5,600	-	5,600
SANDY PROGRAM, Subtotal					5,600	-	5,600
WHARF/BERTH REPLACEMENT PROGRAM							
CP16-045	REHABILITATION OF BERTHS S2, S3, 1418 & 1419 AT PORT JERSEY MARINE TERMINAL	Renew	Planning	Port Wharfs	100	43,400	43,500
WHARF/BERTH REPLACEMENT PROGRAM, Subtotal					100	43,400	43,500
PORT JERSEY PA MARINE TERMINAL, Subtotal					173,000	61,400	234,400
PORT, Total					648,320	498,100	1,146,420

DEVELOPMENT

TELEPORT

CW03-029	INSTALLATION OF BACKFLOW PREVENTION DEVICES AT TELEPORT	Renew	Design	HVAC, Plumbing & Sprinklers	500	-	500
TELEPORT, Subtotal					500	-	500
DEVELOPMENT, Total					500	-	500

WORLD TRADE CENTER

WTC PROGRAM

CR12-001	CONSTRUCTION OF WTC TRANSPORTATION HUB	Deliver	Multiple	Buildings & Garages	235,000	-	235,000
CW11-001	SITE PLANNING, REDEVELOPMENT AND COORDINATION	Deliver	Construction	Buildings & Garages	8,700	-	8,700
CW11-003	VEHICULAR SECURITY CENTER AND TOUR BUS PARKING FACILITY	Deliver	Construction	Control Systems	15,100	-	15,100
CW11-005	PREPARATION AND CONSTRUCTION COORDINATION	Deliver	Multiple	Buildings & Garages	5,500	-	5,500
CW11-006	CONSTRUCTION AND RECONFIGURATION OF STREETS AND RELATED INFRASTRUCTURE	Deliver	Multiple	Paving & Roadways	83,000	-	83,000
CW11-007	CONSTRUCTION OF CENTRAL CHILLER PLANT AND RIVER WATER SYSTEM	Deliver	Construction	HVAC, Plumbing & Sprinklers	26,000	-	26,000
CW11-008	COMPLETION OF MEMORIAL AND MUSEUM PROJECT	Deliver	Construction	Buildings & Garages	-	100	100
CW11-009	CONSTRUCTION OF EASTSIDE VEHICULAR SECURITY CENTER	Deliver	Multiple	Buildings & Garages	26,000	-	26,000
CW11-010	CONSTRUCTION OF COMMON INFRASTRUCTURE	Deliver	Multiple	Buildings & Garages	66,000	-	66,000
CW11-015	SUPPORT OF COMMERCIAL INFRASTRUCTURE	Deliver	Multiple	Buildings & Garages	66,000	-	66,000
CW11-016	SUPPLEMENT OF OTHER INFRASTRUCTURE	Deliver	Multiple	Buildings & Garages	52,000	-	52,000
CW11-017	IMPROVEMENT OF SUBGRADE INFRASTRUCTURE AND PARKING	Deliver	Multiple	Buildings & Garages	46,000	-	46,000
CW11-018	CONSTRUCTION OF MONITORING AND COORDINATION	Deliver	Multiple	Control Systems	29,000	-	29,000
CW11-019	IMPLEMENTATION OF SECURITY OPERATIONS	Deliver	Multiple	Control Systems	18,700	-	18,700
CW11-020	CONSTRUCTION OF OTHER INFRASTRUCTURE (NON-HUB RELATED)	Deliver	Multiple	Buildings & Garages	3,600	-	3,600
CW11-021	CONSTRUCTION OF WEST BATHTUB VEHICULAR ACCESS	Deliver	Multiple	Buildings & Garages	139,000	-	139,000
CW11-022	CONSTRUCTION OF PROPERTY MANAGEMENT FACILITY	Deliver	Multiple	Buildings & Garages	128,000	-	128,000
CW11-024	CONSTRUCTION OF THE FOUNDATION FOR THE PERFORMING ARTS CENTER	Deliver	Multiple	Buildings & Garages	114,000	-	114,000
CW11-025	INTEGRATION OF LIFE SAFE SYSTEMS	Deliver	Construction	Control Systems	23,000	-	23,000
CW11-026	UPGRADE OF 800 MHZ SIMULCAST TRUNKED RADIO SYSTEM	Deliver	Multiple	Control Systems	1,400	-	1,400
CW11-027	IMPLEMENTATION OF CAMPUS SECURITY PLAN	Deliver	Construction	Control Systems	49,000	-	49,000

2017- 2026 Capital Project Listing

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PROJECT ID	PROJECT TITLE	CATEGORY	STAGE	ASSET CATEGORY	2017-2021 SPENDING	2022-2026 SPENDING	2017-2026 SPENDING
CW31-001	IMPROVEMENTS TO ONE WTC MARKETING, LEASING AND BASE BUILDING	Deliver	Multiple	Buildings & Garages	210,000	–	210,000
CW31-002	INSTALLATION OF INTERIM WINDOW RIG AT ONE WTC	Expand & Connect	Planning	Mechanical Systems	3,400	–	3,400
CW31-006	INSTALLATION OF BUILDING MAINTENANCE UNIT AT ONE WTC	Expand & Connect	Planning	Buildings & Garages	29,000	–	29,000
CW31-555	CONSTRUCTION OF ONE WTC	Deliver	Construction	Buildings & Garages	18,000	–	18,000
CW30-001	REDEVELOPMENT OF RETAIL	Deliver	Multiple	Buildings & Garages	296,000	–	296,000
WTC PROGRAM, Subtotal					1,691,400	100	1,691,500
SANDY PROGRAM							
CW11-028	IMPLEMENTATION OF FLOOD RESILIENCY PROGRAM	Deliver	Multiple	Buildings & Garages	127,000	–	127,000
SANDY PROGRAM, Subtotal					127,000	–	127,000
CW34-002	DESIGN, CONSTRUCTION AND BUILD OUT OF PORT AUTHORITY CORPORATE OFFICES AT 4 WTC	Deliver	Construction	Buildings & Garages	6,200	–	6,200
WORLD TRADE CENTER, Total					1,824,600	100	1,824,700
REGIONAL TRANSPORTATION PROGRAMS							
CF99-004	GATEWAY (PLANNING)	Partner	Planning	Rail Systems	34,000	1,000	35,000
CF99-227	NEW YORK REGIONAL TRANSPORTATION PROGRAM	Partner	Planning	Rail Systems	250,000	–	250,000
REGIONAL TRANSPORTATION PROGRAMS, Total					284,000	1,000	285,000
ALL FACILITIES							
CXXX-EXP	PROVISION FOR EFFICIENCY AND PHASING - EXPAND AND CONNECT PROJECTS	Expand & Connect	Planning		(150,000)	(150,000)	(300,000)
CXXX-CAP	PROVISION FOR FUTURE CAPITAL MAINTENANCE	Renew	Planning	Structure	50,000	50,000	100,000
CXXX-SGR	FUTURE SGR FUNDING REQUIREMENTS	Renew	Planning	Rehabilitation Structure Rehabilitation	250,000	250,000	500,000
ALL FACILITIES PROVISION, Total					150,000	150,000	300,000
TOTAL PORT AUTHORITY DIRECT INVESTMENT					\$19,084,570	\$10,408,459	\$29,493,030
GATEWAY PROGRAM SUPPORT							
CF99-XXX	GATEWAY PROJECT (PA SUPPORT FOR PORTAL NORTH AND TUNNEL)	N/A	N/A	N/A			2,700,000
GRAND TOTAL							\$32,193,030

