



NYCDOT Bridges & Tunnels Annual Condition Report 2011



**NEW YORK CITY DEPARTMENT OF TRANSPORTATION
DIVISION OF BRIDGES
2011 BRIDGES AND TUNNELS ANNUAL CONDITION REPORT**



Rainbow Over the Brooklyn, Manhattan, and Williamsburg Bridges on the Evening of July 13, 2011.
(Credit: Olympia Beatty)

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Cover Photograph

The Fresh Creek, Rockaway Parkway, and Paerdegat Basin Belt Parkway Bridges Under Construction in Fall 2011, and the Accompanying Tidal Wetland Mitigation Project.

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A Message from the Commissioner



Dear Friends,

On behalf of the many dedicated professionals who staff the Division of Bridges, it is my pleasure to present the 2011 Edition of the New York City Department of Transportation's Annual Bridges and Tunnels Condition Report, as mandated under the New York City Charter. This report provides DOT with an opportunity to display the many achievements, innovations and improvements that were realized by the Division of Bridges during the 2011 calendar year.

The City's bridges are safe, and despite significant budget reductions, they are maintained in a state of good repair. Our bridges are extremely well managed; they are being rebuilt and upgraded by experts and are subject to one of the strongest inspection systems in the United States. DOT has been an early adopter of high-tech bridge monitoring equipment and techniques, and DOT's Division of Bridges is now further enhancing its inspection capabilities with additional technology and expertise. We now have a robust capital bridge program and have seen significant improvement in bridge conditions City-wide.

The Division of Bridges includes 714 DOT employees who manage the City's capital bridge program, conduct bridge inspections and monitorings, and maintenance. Our bridges include, among many others, the notable East River and Harlem River Bridges, the Belt Parkway Bridges, and pedestrian bridges and elevated roadways located City-wide.

Maintaining and upgrading our infrastructure is one of our core responsibilities and is an important part of keeping our fellow New Yorkers safe and our economy moving. That includes high-profile efforts like the \$508 million project to rehabilitate the approach ramps and paint the entire span of the Brooklyn Bridge, and the \$175 million to upgrade the bus ramp bridges at the St. George Ferry Terminal. Both projects received significant funding from the American Recovery and Reinvestment Act.

While the Brooklyn Bridge rehabilitation is certainly the highest profile bridge project underway, it's only part of the \$2.6 billion in capital investments we've made in our bridges in the last four years. This kind of spending helped reduce the number of bridges rated poor from seventy-four —25 years ago—to just three today, all of which are now undergoing rehabilitation.

Every day, more than 65,000 Staten Island Ferry passengers travel through the St. George Ferry Terminal, which was built in the 1940s to connect passengers to bus and train services on Staten Island and ferry service to and from Manhattan. The terminal was targeted for major infrastructure improvements to accommodate increased traffic and to rebuild some of its ramps. The project also involves architectural improvements, as well as improved pedestrian and bicycle access ways. The St. George Ferry rehabilitation project is the largest ARRA (Stimulus) funded project in New York State, with a total cost of \$175 million. Construction began in May 2010 and is expected to be completed by spring 2013.

We recently announced the completion of the first phase of a \$365 million contract to reconstruct three of the Belt Parkway bridges, at Paerdegat Basin, Rockaway Parkway and Fresh Creek Basin, which carry 150,000 cars a day. Started in 2009, this phase included the completion of the new eastbound bridge over Paerdegat Basin. In another contract milestone, the westbound half of the new bridge at Rockaway Parkway, along with entrance and exit ramps, was completed. Both new structures began carrying traffic in December 2011. Work also continues at Fresh Creek Basin, with all three bridges scheduled for completion in 2014.

Preventive maintenance is essential to preserve the City's multi-billion dollar investment in its bridges. These steel and concrete structures must be protected from the stresses of weather, traffic, deterioration and neglect. In the last year alone, 20,488 square feet of concrete were used to renew sidewalks, curbs, and road decks; some 9,743 cubic yards of debris were removed; 1,692 bridge drains were cleaned; and crews eliminated 3,996,213 square feet of graffiti. DOT crews also eliminated 466 safety flag conditions that presented clear vehicle or pedestrian traffic hazards.

New York City has a rich tradition of bridge design, construction, maintenance and administration. The Department of Transportation appreciates the importance of its duties and responsibilities, and the Division of Bridges is proud to shoulder the task of maintaining and rehabilitating our city's vital bridge infrastructure.

Sincerely,



Janette Sadik-Khan
Commissioner

Inventory

In calendar year 2011, the inventory of bridges under the jurisdiction of the Division remained at 787. NYCDOT owns, operates, and/or maintains 757 non-movable bridges, 25 movable bridges, and five tunnels. Over the past 10 years, there has been a decline in the number of bridges rated “Poor,” and an increase in the number of bridges rated “Very Good,” as shown below.

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Poor	8	4	6	4	3	3	3	4	4	3
Fair	451	429	456	458	456	459	455	456	462	459
Good	202	209	212	210	210	215	213	209	207	215
Vgood	94	111	116	118	118	111	116	116	113	109
Closed						1	1	1	1	1
	755	753	*790	790	787	789	788	786	787	787

* In 2004, 32 Department of Parks and Recreation structures, 1 Department of Education structure, and 7 Division of Ferries structures were absorbed into the inventory. 30 of these additions (22 from Parks, 6 from Ferries, and the 1 from Education) were rated “Fair,” which accounted for the increase in Fair rated bridges. 1 of the Parks additions, Flushing Meadow Park Pedestrian Bridge over Willow Lake and 76th Road, was rated “Poor.” It has since been closed.

† In 2009, the newly “Poor” rated Hill Drive Bridge in Prospect Park was closed to vehicular traffic. In 2009, 93 of the Parks bridges accounted for 20.4% of the “Fair” rated structures. In 2010, 96 of the Parks bridges accounted for 20.8% of the “Fair” rated structures. In 2011, 98 of the Parks bridges accounted for 21.3% of the “Fair” rated structures.

The City has three bridges that were rated “poor” after their last inspections. A poor rating means that there are components of the bridge that must be rehabilitated; it does not mean that the bridge is unsafe. If a bridge was deemed unsafe, it would be closed. The term “structural deficiency” is an engineering term-of-art used by the Federal government to indicate a defect requiring corrective action. According to the FHWA, “structurally deficient” means there are elements of the bridge that need to be monitored and/or repaired. The fact that a bridge is “deficient” does not imply that it is likely to collapse or that it is unsafe. It means they must be monitored, inspected, and maintained. Because we use the New York State rating system, we do not use that term and instead use the terms “very good,” “good,” “fair” and “poor.” As with the Federal term, the terms “fair” and “poor” describe the condition of bridge elements and whether they are functioning as designed. Although these elements are not considered hazardous, the ratings are used to determine whether the elements require repair or rehabilitation. Again, any bridge deemed unsafe would be shut to the public. As this document goes to press, two “poor” rated bridges are in construction and the final design phase of the third has been suspended until such time as funding is available.

The three City bridges that are rated “poor” include the pedestrian bridge at 78th Street over the FDR Drive. A Notice to Proceed for the project to replace the bridge was issued to the contractor with a start date of July 12, 2010. The bridge was closed to pedestrians on October 19, 2010. The new bridge will be opened in January 2012, and construction is expected to be complete in early 2012, at which time a new inspection will be conducted.

The second bridge is the Hill Drive Bridge (Terrace Bridge) over Prospect Park Lake, and it is owned by the Department of Parks and Recreation. Repairs requiring immediate attention are performed by the When and Where contractor. This bridge is closed to vehicular traffic.

The third bridge is the Brooklyn Bridge. It was given a “poor” rating during its last inspection because there are certain elements of the bridge that need to be rehabilitated. While the main spans are in good condition, the decks on both the Manhattan and Brooklyn ramps to the bridge are aging and will be replaced during a rehabilitation project that began on January 19, 2010. It

should be noted that of the 75 spans of the bridge, only 6 spans contribute to the low condition rating. None of them are among the three suspended spans (i.e. between the anchorages).

Contract Acceleration

Acceleration measures are a contract provision used in some reconstruction projects that is implemented through a contract pay item. This contract provision provides a mechanism to implement measures to accelerate the contractor's work to maintain critical path milestones. This provision does not apply to measures undertaken by the contractor to make up for time it lost in the progress schedule. Only the NYCDOT representative invokes this provision when the contract schedule is compromised due to unforeseen conditions during construction that are out of the contractor's control, and when it is deemed in the City's interests to accelerate.

Incentive and disincentive (I/D) clauses are another contract provision used in some reconstruction projects that is implemented through a contract pay item. Under this provision, the contractor is compensated a certain amount of money for each day if the identified work in a critical milestone is completed ahead of schedule and is assessed a deduction for each day the contract overruns the allocated time. The amounts for the I/D clauses are based upon such items as traffic safety, maintenance and road user delay costs, Resident Engineering & Inspection (REI) expenses and cost of traffic enforcement agents. These amounts are implemented in accordance with guidelines established by Federal Highway Administration (FHWA).

East River Bridges Anti-Icing Program

The Division's Anti-Icing Program uses the liquid chemical potassium acetate and aggregate chemical sodium acetate. The anti-icing fleet consists of twenty-two spray trucks, six plow trucks and several smaller plows. Ten of the spray trucks are combination spray/plow trucks with a 1,000 gallon tank capacity, and five are spray-spreader/plow trucks with a 360 gallon spray capacity, and a nine cubic yard spreader capacity. There are twenty chemical storage tanks, with a total storage capacity of 114,250 gallons.

In the winter of 2010-2011, a total of 49,950 gallons of potassium acetate and 239 tons of sodium acetate were applied on the roadways of all four East River Bridges.

Marine Borer Remediation

In October 1999, the Department began a study to assess the present damage caused by marine borers as well as the potential for future damage at several waterfront DOT structures, including the supporting structures of the relieving platforms along the FDR and Harlem River Drives, and the timber piles and structures of the Carroll Street and Ocean Avenue bridges in Brooklyn. The underwater inspection of timber piles supporting the FDR Drive began on May 8, 2000. Inspection of the Brooklyn sites was conducted during the week of October 23, 2000. The inspections were completed in October 2000, and the Marine Borer Evaluation Report was published in June 2001. Using the results of the underwater inspections, preliminary plans were developed for the implementation of repairs and remediation measures to protect the structures from attack. These preliminary plans were completed in December 2001. An updated underwater inspection was performed within the limits of the proposed contract in 2009. The final design is now complete. The construction work is expected to commence in April 2012, and to be complete in April 2016.

2011 Awards

In 2011, the outstanding work of the Division was recognized by the receipt of several awards.

In March 2011, *New York Construction Magazine* selected the Manhattan Bridge project (Contract #14) as one of the top 25 project starts in the Tri-State Region in 2010.

In March 2011, the Fund for the City of New York and the Alfred P. Sloan Foundation selected Chief Bridge Officer Henry Perahia for a Sloan Public Service Award, recognizing him as a career public servant who shows exemplary government service that goes above and beyond his assigned duties.

In October 2011, Truck Permit Unit and Special Projects Director Kevin Lobat was selected as the Agency's recipient of the 2011 Excellence in Customer Service Award.

In October 2011, Deputy Chief Engineer Russell Holcomb received an Outstanding Achievement Award from the South Asian American Association.

The dedication and hard work of all members of the Division ensures that the Department is stronger than ever and more capable than ever to meet the challenges of maintaining a diverse and impressive bridge infrastructure.

DIVISION OVERVIEW

As an integral part of New York City's Department of Transportation, the Division of Bridges has a two-fold mission: to maintain an optimal transportation network by ensuring smooth mobility on the city's bridges, and to ensure the safety of the public.

The New York City Department of Transportation's Division of Bridges is comprised of five major bureaus. The **Chief Bridge Officer** is responsible for formulating policy and providing executive direction. He oversees all aspects of the design, construction, rehabilitation and reconstruction, maintenance, operation and administration of the 787 bridges (including 5 tunnels), and 61 culverts presently under the jurisdiction of the New York City Department of Transportation (NYCDOT). In addition to broad supervision, the Chief Bridge Officer also provides overall executive and administrative direction for the Division of Bridges, and ensures that all contractors are promptly paid.

Reporting to the Chief Bridge Officer, the **Community Affairs Unit** maintains liaison with elected officials, community boards, community groups, and civic/neighborhood associations. The Unit takes a pro-active approach in addressing design issues, roadway closures, and detours by reaching out to communities prior to the onset of construction. This enables the Division to proceed with its rehabilitation program with community input, and allows the Agency and its contractors to co-exist in a more harmonious manner with the community surrounding the project. Issues and problems of concern to the communities are brought to the attention of the appropriate Division personnel and addressed.

The **Bureau of Bridge Maintenance, Inspections and Operations** employs almost 500 engineering, professional, administrative, and skilled trades employees in the maintenance and smooth operation of New York City's elevated infrastructure; it is composed of five major sections:

The **Flag Engineering** section is an engineering group that reviews, routes, and tracks hazardous or potentially hazardous safety and structural conditions ("flags") in or on the city's 787 bridges (including 5 tunnels). The Flags staff is on call 24 hours a day to respond to bridge emergencies. The section can be alerted to flag conditions by city and state inspectors and other sources, such as the Communications Center. All conditions undergo an evaluation involving review of the flag report and photographs of the condition, and, if necessary, a visit to the site. Subsequently, a "flag packet" describing the type of repair or response that is required is created and routed to an appropriate group, in-house or contractor, for elimination. Flags engineers supervise repair work performed by contractors. The section monitors the status of each flag, and reports on all activities on a monthly basis.

The in-house engineers and skilled trades personnel of the **Bridge Repair Section** perform repairs to address flagged conditions. Flag repairs include structural and safety work, such as the repair of steel members damaged by corrosion or accident impact, the replacement of box beams and bridge railings, the replacement of roadway gratings, repairs to traffic control devices, and the rebuilding of wooden walkways. Much of this work is performed in the off-hours, either to accommodate traffic or in response to emergencies.

This section also rehabilitates and replaces damaged, worn, or defective components whose failure can affect service. This type of work, known as *Corrective Repair*, primarily involves the electrical, mechanical and operational control systems for the twenty-five movable bridges, as well as the travelers (movable underdeck access platforms) on the four East River bridges. The Bridge Repair Section is also responsible for the lubrication of the movable bridges as well as the mechanical components and the main cables of the East River bridges. In addition, this section administers federally funded contracts for the preventive maintenance of the four East River Bridges.

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The ***Bridge Inspections and Bridge Management*** section performs three essential functions: *Bridge Inspections*, *Bridge Management*, and *Research and Development*.

The *Inspections Unit* inspects the city's bridges in accordance with state and federal standards; monitors bridge conditions with a high hazard potential, such as temporary repairs, outstanding flags, and fire hazards; responds to emergency inspection requests from NYCDOT and external sources; recommends repairs and remedial measures for hazardous conditions; generates flag and inspection reports for the Division; engages in special programs such as non-destructive monitoring of sensitive bridge components by advanced techniques; supervises inspections by consultants working for the Division; conducts inspections and inventories of expansion joints; conducts acoustic emission monitoring; and inspects non-structural cladding.

The *Bridge Management Unit* develops and maintains the database for the City's bridge inventory, condition ratings, and inspection information. The unit is also responsible for maintaining records of privately-owned bridges in the City. The database is the source of information used in a variety of reports, including the present Bridges and Tunnels Annual Condition Report. This unit uses the bridge and span condition database to determine current and future needs for bridge rehabilitation, bridge component rehabilitation, flag forecasting, inspections and monitorings.

This Section is also responsible for investigating new materials and methods to improve existing bridge conditions. It sponsors a series of lectures by experts on subjects relevant to design, construction, and maintenance, such as seismic retrofitting of bridges, salt substitutes, cathodic protection against corrosion, concrete patching materials, new paint strategies, non-destructive bridge testing, and deck resurfacing. The unit also participates in research programs with interested transportation and infrastructure entities. In conjunction with the Port Authority, MTA Bridges and Tunnels, and NYS Bridge Authorities, it sponsored a report on suspension bridge cables that led to a federal project for the entire United States. A number of articles on bridge management are published by the unit in technical journals in the United States, Japan, France, and elsewhere. This section created the system for generating bridge inspection reports with portable computers; a similar system is now being adopted by the NYSDOT.

Preventive Maintenance is a vital part of the overall bridge program. This section is responsible for functions including debris removal; mechanical sweeping; pointing of masonry brick and block; and emergency response, such as snow removal, oil/cargo spills, and overpass hits. The section also performs some corrective repair work such as asphalt and concrete deck repairs, sidewalk patching, fence repair, and brick and masonry repairs. Preventive Maintenance is responsible for conducting the Department's anti-icing operations on the four East River bridges.

Bridge and Tunnel Operations is responsible for operating the 25 City-owned movable bridges that span city waterways. This section operates under a variety of federal mandates that call for 24-hour coverage at many locations; its mission is to provide safe and expedient passage to all marine and vehicular traffic under and on movable bridges. In calendar year 2011 Bridge Operations effected a total of 5,543 openings, 4,901 of which allowed 8,854 vessels to pass beneath the bridges. The remaining 642 openings were for operational and maintenance testing. The section also operates the city's five mechanically-ventilated tunnels, performing electrical maintenance and arranging for roadway cleaning.

The overall mission of the Bureau of Bridge Maintenance, Inspections and Operations is to maintain the structural integrity of elevated structures and tunnels and to prolong their life by slowing the rate of deterioration. While our objective may be seen as "maintaining the status quo" of the infrastructure, we continue to take a new look at our methods, procedures, and general focus as we formulate our operational plans for the next several years.

As more bridges are rehabilitated, it becomes incumbent upon us to protect the government's investment in the infrastructure by developing and implementing a more ***substantive preventive maintenance program*** to keep these bridges in good condition.

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The Deputy Chief Engineer for Bridge Maintenance, Inspections and Operations also acts as the **Deputy Chief Bridge Officer**, assuming the responsibilities of the Chief Bridge Officer in that person's absence.

The **Bureau of Bridge Capital Design & Construction** is made up of two major sections:

The **East River and Movable Bridges Section** is responsible for all design and construction activities for all rehabilitation/reconstruction work that is planned, or currently taking place on the four East River Bridges, as well as all City-owned movable bridges and tunnels. This involves overseeing and supervising design consultants who prepare plans and specifications for bridge rehabilitation/reconstruction projects on the four East River Bridges and all Movable Bridges, as well as overseeing and supervising contractors, Resident Engineers and Inspection Consultants, and Construction Support Services Consultants during the construction phase.

This Section consists of two major areas: **East River Bridges**, and **Movable Bridges**. Each of these areas is headed by a Director to whom Section Heads or Engineers-in-Charge report. Each is assigned a specific bridge, or bridges, where they are responsible for all design and construction activities. The Directors, in turn, report to the Deputy Chief Engineer of the Bureau.

The **Roadway Bridges Section** is responsible for both design and construction activities for all rehabilitation/reconstruction work that is planned, or currently taking place on all City-owned, non-movable bridges, with the exception of the four East River Bridges. This involves overseeing and supervising design consultants who prepare plans and specifications for bridge rehabilitation/reconstruction projects, as well as overseeing and supervising contractors, Resident Engineers and Inspection Consultants, and Construction Support Services Consultants during the construction phase.

This Bureau covers two major geographic areas; **Brooklyn and Manhattan Bridges**, and **Bronx, Queens and Staten Island Bridges**. In each geographic area, the workload is divided by Community Board. Engineers-In-Charge report to the Directors of each major area, who, in turn, report to the Deputy Chief Engineer of the Bureau.

The **Engineering Review and Support Bureau** is responsible for providing Division-wide engineering support services. The following areas make up this Bureau: **In-House Design, Engineering Support, Engineering Review, and Quality Assurance**.

In-House Design staff (comprised of the Structural, Electrical, and CADD Groups) prepare plans and specifications for bridge rehabilitation/replacement projects that enable the Division to restore bridges considered "structurally deficient," to a "very good" condition rating. This unit also handles urgent Division projects, as well as special repair projects of the **Bureau of Bridge Maintenance, Inspections and Operations**. Over the last 20 years, In-House Design has completed contract documents for over 30 major replacement/rehabilitation projects. Some of these structures were in highly environmentally sensitive areas, such as the FDR Drive from 42nd to 54th Streets, Hylan Boulevard over Lemon Creek, Chelsea Road over Sawmill Creek, Cropsey Avenue over Coney Island Creek, the Exterior Street Ramp, Belt Parkway Bridge over Paerdegat Basin, 145th Street Bridge over Harlem River, and the Greenpoint Avenue Bridge over Newtown Creek. The staff also provided plans, working drawings, and shop drawings for in-house built projects such as the temporary Pedestrian Bridge for PS-5, Ferry Terminals at 34th Street, the Hamilton Avenue Asphalt Plant conveyor supports, and the Yankee Stadium Ferry Access.

The Electrical Group reviews and/or prepares contract documents for the electrical and street lighting work for all projects in the Division's capital program. They further review plans and

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specifications prepared by consultants and review test results of electrical systems conducted by vendors on the movable bridges.

The ***Engineering Support Section*** is comprised of four units: *Specifications, Surveying and Load Rating, Records Management, and Special Projects.*

The *Specifications Unit* prepares and reviews specifications for all Federal and City-funded, private developer, City-let in-house and consultant-designed bridge and various other construction projects, processes the contracts for bidding, prepares and transmits addenda, maintains and updates City bridge construction boiler plates in compliance with federal and NYS engineering bulletins and instructions, and maintains an inventory of all NYC and NYS special specifications used in bridge construction projects. This Unit issues item numbers for newly written special specifications for the city funded projects. In addition, it prepares "Revisions to NYSDOT Standard Specifications" (R-pages), which are compiled from NYSDOT Engineering Bulletins and Engineering Instructions.

The *Surveying and Load Rating Unit* performs the survey, inspection and load rating of bridges, monitoring of cracks and movements in bridge structures and settlement of foundations. This unit also performs corrosion potential testing in all bridge resurfacing projects.

The *Records Management Unit* establishes drafting and digital media standards for the archiving of bridge records. It reviews design, as-built and shop drawings prepared by consulting firms, as well as CDs and DVDs. This unit maintains original plan files, upgrades the records database and converts original drawings into electronic media formats. It also answers requests for information regarding records of City-owned bridges.

The *Special Projects Unit* reviews contract bid documents and specifications for public and private agencies to ensure compliance with City, State and Federal standards and guidelines.

The ***Engineering Review Section*** consists of ten units: *Structural Review, Retaining Wall, Bridge Hold, Cost Estimate, Other Agency/Private Developer, Scope Development, Overweight Truck Permit, Geotechnical, Land Use Planning, and Utilities.*

The *Structural Review Unit* reviews all City-let bridge construction contract drawings, oversees seismic design requirements for City-let contracts for bridge projects, reviews analysis and design calculations and ensures that the work to be performed conforms to NYCDOT requirements. This unit establishes design standards, including seismic requirements.

The *Retaining Wall Unit* is responsible for inspecting City-owned retaining walls, identifying walls in poor condition, and creating an inventory of all City-owned retaining walls. Retaining walls in poor condition requiring immediate attention are referred to in-house repair staff or When and Where contractors. Data on poorly rated retaining walls are developed into scope packages and forwarded to the New York City Department of Design and Construction for permanent rehabilitation with DOT funding. Walls of questionable ownership are researched for ownership and jurisdiction. A consultant has been assisting the unit in the inspection, condition assessment, temporary repair design, inventorying and budgeting for the permanent rehabilitation of the retaining walls.

The *Bridge Hold Unit* was established in February 2011, based on OCMC requests to review construction permit applications for any proposed work located within 100 feet of any City-owned bridge structure. The permit applications may also originate from other City agencies, private developers, and utility companies. The Unit reviews the proposed work to ensure that it does not compromise the integrity of the structure and that it is in compliance with Agency requirements. Based on the review's recommendations, OCMC approves or disapproves these permit applications. The Unit receives an average of 70 permit applications per week for review.

The *Cost Estimate Unit* reviews and oversees design and construction cost estimates of City projects.

The *Other Agency/Private Developer Unit* currently provides engineering review supervision of projects from other agencies and private developers such as the Atlantic Yards Project, the

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Eastside Access Project, and the Riverside South Project. In addition, the unit conducts non-bridge engineering projects, such as the annual balloon wind study for the Macy's Thanksgiving Day Parade.

The *Scope Development Unit* reviews inspection reports, as-built drawings, and structural condition ratings, performs field inspection of bridges to develop the scope of work for the rehabilitation of deficient and poorly rated bridges, and initiates the procurement of Design Consultant contracts. The Unit is also responsible for reviewing of quarterly budgetary plans for bridge rehabilitation projects and coordinates these reviews with the Bureau of Bridge Maintenance, Inspections and Operations, and the Capital Procurement and Capital Planning Sections.

The *Overweight Truck Permit Unit* in coordination with the Division's Truck Permit Unit reviews the engineering aspects of overweight and over-dimensional truck and self-propelled crane permit applications, performs load rating analyses, and reviews load postings for City owned bridges. The Unit also reviews resurfacing, snow removal and other heavy equipment permit requests from within the Agency and from other agencies.

The *Geotechnical Engineering Unit* provides geotechnical-engineering services. This unit reviews bridge rehabilitation/reconstruction project reports, soil investigation/geotechnical foundation reports, City-let bridge construction contract drawings and other agency/private developers' geotechnical work which impacts City-owned projects.

The *Land Use Planning Unit* reviews and maintains a database of easement issues, right-of-way, and Uniform Land Use Review Procedures. This unit also reviews Design reports and Environmental Impact Statements of various other Agency projects with respect to their impact on City-owned bridges.

The *Utilities Unit* coordinates all issues related to utility design as they affect City-owned bridge projects and related projects.

The ***Quality Assurance Section*** ensures that materials installed for the Bridge Rehabilitation Program meet contractual requirements and are incorporated in strict compliance with plans and specifications. This section operates under its own formulated Quality Assurance Plan that is based on NYSDOT requirements and procedures. Quality Assurance has contractually retained the services of private inspection/testing firms. The provision of services required for various projects is better coordinated through this centralized method, which is also timely and cost effective.

Off-site Quality Assurance services relative to a wide variety of basic and manufactured construction materials including concrete, asphalt, soils, reinforcing steel, bridge bearings, timber, structural steel and precast/prestressed structural components for all bridge projects, irrespective of the funding source, are handled by this section. Through its engineers at bridge construction sites, Quality Assurance ensures that only acceptable materials are incorporated into rehabilitation/reconstruction work in strict accordance with plans, specifications and acceptable construction practice. Current major projects include the Brooklyn Bridge, Manhattan Bridge, Willis Avenue Bridge, Roosevelt Island Bridge, Belt Parkway Bridge over Paerdegat Basin, Belt Parkway Bridge over Rockaway Parkway, Belt Parkway Bridge over Fresh Creek Basin, 11th Avenue Viaduct over LIRR Westside Yard, East 8th Street Access Ramp over Belt Parkway, St. George Staten Island Ferry Terminal Ramps, Northbound and Southbound Bruckner Expressway Bridges, Wards Island Pedestrian Bridge over Harlem River, 149th Street Bridge over LIRR, East 78th Street Pedestrian Bridge over FDR, Shore Road Circle Bridge, Carlton Avenue Bridge over LIRR Yard, and the Claremont Parkway Bridge. In addition, the Section provides services to the Component Rehabilitation Section on an as-needed basis.

The Section is currently involved in extending its services for inspection of concrete at batching plants for the Sidewalk and Inspection Management Citywide Concrete Program via its contract with a City-contracted inspection firm.

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Through its *Environmental Engineering Unit*, Quality Assurance also oversees the implementation of the Final Environmental Impact Statement on bridge construction projects involving the removal and disposal of lead-based paint. The unit's active involvement in training the supervisors and overseeing the abrasive blasting operations has resulted in the successful completion of various paint removal projects. This unit also oversees the proper and safe disposal of other hazardous waste and regulated waste encountered during construction activities.

In addition to enforcing the lead paint removal protocols, the unit handles other environmental concerns. Typically, the unit participates in the design stage to ensure that any environmental issues are addressed during the construction phase of the project. These issues include, but are not limited to, asbestos abatement, soil sampling, groundwater sampling, remediation of contaminated soils and groundwater, worker exposure to environmental contaminants, management of waste oil, storage of hazardous waste, management of storm water runoff, soil erosion controls, management of concrete washout wastewater, site safety, and OSHA compliance. The role of this unit in ensuring public safety has been recognized and commended by the community.

The unit continues to monitor waste water discharge for numerous projects involving the generation and disposal of waste water, such as the Willis Avenue and Roosevelt Island bridges. The unit is responsible for discharge monitoring in conjunction with the NYS SPDES Discharge Permits for discharges at the Eastern Boulevard Bridge, Hunters Point Avenue Bridge, Greenpoint Avenue Bridge, Cropsey Avenue Bridge, Manhattan Plaza Underpass, Battery Park Underpass, and the Metropolitan Avenue Bridge. The unit continues to provide environmental oversight and compliance on major capital projects such as the 670/676 Grand Concourse Building Demolition, Willis Avenue Bridge, Manhattan Bridge, Williamsburg Bridge, Brooklyn Bridge, Wards Island Pedestrian Bridge over Harlem River, Floyd Bennett Field Wetland Mitigation, Belt Parkway Bridges, and the Borden Avenue Bridge, as well as Component Rehabilitation, Roadway Bridge, and Design/Build projects such as the reconstruction of the ramps at the St. George Ferry Terminal in Staten Island, Bruckner Expressway over the Bronx River and the Bruckner Expressway Bridges over Conrail/Amtrak.

The unit provided expertise and oversight for the cleanup of the previous significant oil spill discovered during the emergency repair of the Borden Avenue Bridge. Corrective action plans and soil remediation designs were developed and coordinated with NYSDEC to remediate the site and enable the continuation of the bridge repair operations. The site was successfully remediated in accordance with the corrective action plan developed with the NYSDEC. DOT completed mitigation tasks in Newtown Creek and its tributaries in coordination with the NYSDEC to satisfy the permit mitigation requirements.

The **Specialty Engineering and Construction Bureau** is responsible for all **Component Rehabilitation** activities, **Design-Build/Emergency Contracts**, **Bridge Painting**, and the **When and Where Unit**.

Component Rehabilitation is the revamping or replacement of damaged, worn or defective bridge components. This type of work is performed primarily on those structures not classified as being "deficient," but which contain specific components that have low condition ratings. By rehabilitating these components, the Division can ensure that these bridges remain in "good" or "very good" condition; usually extending the bridge's useful life by up to 10 years. Section Heads or Engineers-in-Charge report to the Director of Component Rehabilitation. Each is assigned a specific bridge, or bridges, for which they are responsible for all component rehabilitation activities. In addition, the Component Rehabilitation Unit will be administering a new capital When and Where contract. The When and Where Unit will be responsible for the active construction and daily monitoring and supervision of the contract. The Component Rehabilitation Program is an ongoing program with cumulative effects. Each Fiscal Year, a number of bridges

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are selected for inclusion in the program and construction is completed on others. Through fiscal year 2014, the program will obligate approximately \$110 million.

The ***Design-Build/Emergency Contracts Group*** provides technical and procurement expertise related to the following areas: preparing Emergency Declarations for unsafe conditions that require immediate remediation; assisting the Chief Bridge Officer in the contractor selection process for declared emergency situations; providing technical expertise related to the development, procurement and administration of Design-Build contracts throughout the various areas of the Division; preparing and administering Design-Build agreements; and supervision of Design-Build project design, construction, and inspection services.

The ***Bridge Painting*** section's function is to maintain the protective coating of the City's bridges. The section is divided into two programs, the in-house (expense) program and the capital program. The capital program oversees total paint removal and repainting, performed by contractors; this is done at twelve-year intervals on bridges measuring more than 100,000 square feet of painted area, and bridges over railroads. In-house personnel provide the inspection services on East River Bridge preventive maintenance contracts for quality control purposes. The in-house program is responsible for full steel painting of bridges measuring less than 100,000 square feet, and bridges that are not over railroads. This includes local surface preparation of deteriorated areas and overcoating of the entire bridge. In addition, the in-house program is responsible for salt splash/spot painting.

Salt splash/spot painting is performed four years after full steel painting, and again four years later. After another four years, we once again perform full steel painting. The interval between full steel applications remains twelve years.

Members of the in-house program respond to emergency flag repairs alongside the in-house repair forces, to perform surface preparation prior to, and painting upon completion of, the steel work. In-house painting personnel also perform environmental clean-up after the iron workers finish their repair work.

The engineers and inspectors of the ***When and Where Unit*** supervise the contractors' repairs of structural and safety flags citywide under both marine and general repair contracts, as well as a new capital contract. The use of these contracts allows the unit greater flexibility in deploying the contractors' resources as necessary, and in obtaining a variety of construction equipment and materials that are not readily available to in-house forces. In addition, the unit responds to bridge emergencies, providing on-site inspection to verify field conditions, taking measurements for repairs and providing emergency lane closures. The section also supervises the repair work performed during night hours to reduce the impact on traffic and on public safety.

The ***Bureau of Management and Support Services*** provides essential administrative and analytic services to each of the operational bureaus of the Division of Bridges. The Bureau is divided into five primary sections: ***Office of the Executive Director, Administration and Finance, Capital Procurement, Capital Coordination, and the Truck Permit Unit***. Each highly-specialized section is designed to address those issues and requirements that are critical to the operation of the respective Bureaus within the Division.

In addition to the Division-wide responsibility for conflict resolution, Equal Employment Opportunity enforcement, confidential investigations, Bridges' Engineering Service Agreements, space allocation, and special projects, the ***Executive Director*** oversees, on an executive level, the following areas and functions:

The ***Senior Director of the Administration and Finance Section*** oversees and administers all administrative/personnel-related functions for the Division, acting as a liaison with the Central Personnel Coordinator in NYCDOT Personnel including, but not limited to, recruiting for vacancies (this includes reviewing for completeness and submitting the necessary paperwork, and reviewing and distributing candidates' resumes); maintaining all Managerial Position

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Descriptions; maintaining all Division organization charts; scheduling training; confidential investigations; maintaining records of IFA-funded positions; initiating and assisting in resolving disciplinary/grievance actions; serving as Conflicts of Interest and Financial Disclosure Officer; collecting and reviewing managerial and non-managerial performance evaluations; absence control; providing interpretive advice to Division management regarding City and Agency policy and procedures; and overseeing telephone and facility-related issues for personnel located at 55 Water Street and 59 Maiden Lane in Manhattan.

The Senior Director of the Administration and Finance Section also oversees the following three units:

The *Analytic Unit* prepares comprehensive bi-weekly and monthly reports that address major issues confronting the Division; compiles statistical data detailing the Division's productivity; processes and monitors all FOIL requests; frames issues in which oversight assistance is required for use by the Division, NYCDOT Executive Management and the Mayor's Office; and prepares the City Charter-mandated ***Bridges and Tunnels Annual Condition Report***.

The *Vehicle Coordination Unit* tracks the placement and condition of all vehicles under the jurisdiction of Bridges. It maintains a database and prepares reports containing this information; provides information and reports to appropriate inquiring Divisions and Agencies such as the Auditor General's Office, NYCDOT Legal Department and NYCDOT Litigation Support Services; coordinates the assignments of vehicles and their movement throughout various borough field locations and job sites; prepares reports on Vehicle Status and replacement; prepares reports for the purpose of tracking Overnight Vehicle Assignments for all Division vehicles; receives and routes vehicle Accident Reports, Police Reports and Security Incident Reports relating to vehicle accident, theft and/or vandalism; coordinates priorities for vehicle and equipment repair with Fleet Services; prepares reports and memoranda regarding vehicle safety issues and communication procedures for the NYCDOT Communication Center; and collects required documentation from field personnel for checking Driver Certifications with the Department of Motor Vehicles and EZ Pass.

The *Finance Unit* oversees the Division's entire expense budget process including, but not limited to, base-line preparation, spending plans, overtime control, financial plan changes, and budget modifications. The unit further oversees all Division-wide fiscal activities, including the establishment and monitoring of all IFA-related project budgets, while simultaneously ensuring that the budget and plans represent the Division's priorities.

The ***Capital Procurement Section*** serves as a liaison between the Division of Bridges and the Office of the Agency Chief Contracting Officer, other Agency Divisions, the public and private railroads, and the various consulting firms involved with the procurement process. The duties of this unit include: overseeing the Division's capital consultant contract procurement from scope to registration; preparing status reports; processing of the Division's change orders through registration, and coordinating Railroad Force Account Agreements and railroad invoice payments for Division construction projects.

Railroad Force Account Agreements are a vital component in the rehabilitation/reconstruction program since train traffic affects 326 (41%) of City-owned bridges. Careful cooperation between the NYCDOT and the various railroad agencies that service the metropolitan area is required. The Railroad Coordinator provides a single point of contact for all railroad issues. This coordination includes the use of railroad personnel for track safety, approval of reconstruction design drawings, track shutdowns and reductions in train service for bridge construction work. The coordinator informs managers of "typical" railroad problems and attempts to avoid them through proactive measures. Upon registration of the railroad force account contracts between the City of New York and the respective railroad, Notices to Proceed [NTPs] are issued, and invoices are generated. The invoices, once approved by the engineers for the railroad and the corresponding DOT Project Manager, are sent to the Railroad Coordinator for processing and actual payment by the New York City Comptroller's Office.

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NYCDOT bridge designers make every effort to prepare accurate and complete contract documents. Unfortunately, in many instances, the original design drawings for the deteriorating bridges no longer exist, and previous records of modifications and repairs are not available. When the contract documents for the bridge reconstruction projects do not accurately address conditions found in the field, Contract Change Requests (CCR) are needed. Change order work can not proceed until the CCR is registered. Due to the nature of bridge construction projects, change order work is often on the critical path. Any delay in the issuance of a change order affects the overall project, and adds substantial overruns to the final cost. A tracking process for change orders has been implemented that significantly reduces the time for the approval process.

Certificates to Proceed [CPs] are a critical component for the registration of any Construction, Consultant Programs, Force Account, Change Order and Engineering Service Agreement and assigned ESA tasks. Coordinating the submission of New and Revised Certificates to Proceed for submission to the Capital Budget is overseen by the Capital Procurement Unit.

The ***Capital Coordination Section*** is responsible for preparing, coordinating and updating the capital budget and capital program initiative within the Division of Bridges. Currently, the Division's Ten Year Capital Plan is worth approximately \$3.5 billion. This plan is designed to rehabilitate the City's bridges. Responsibilities include: administering and participating in the development and implementation of planning capital projects; acting as liaison with oversight agencies, DOT Administration and all responsibility centers within Bridges; reviewing and processing transfer of fund requests in an attempt to resolve funding issues; and maintaining the Division's registration report for all current year capital contracts. In addition, this section coordinates the Division's submission of Initial Financial Plans, Annual Financial Plan and Construction Management Plans prepared by Project Managers that must be submitted to the Office of Finance, Contracts & Program Management.

The ***Truck Permit Section*** issues approximately 1,230 Annual Overweight Load Permits (renewals only), and approximately 30,821 other permits, including Annual Self-Propelled Crane Permits, Daily Oversize/Overdimensional/Supersize Truck Permits, and Bulk Milk Permits; all in accordance with the New York City Department of Transportation Policy and Procedures and the New York City Traffic Rules and Regulations section 4-15.



In February 2011, a Permit was Issued for the Removal of the Sculpture "The Happy Prince" by Ryan Gander from the Doris C. Freedman Plaza in Central Park. The Sculpture was Exhibited from September 2010 – February 2011. In March 2011, a Permit was Issued for the Delivery of the Tub Girders to the Belt Parkway over Paerdegat Bridge Site.

JANUARY

Anti-Icing

On January 7, 2011, 1.7 inches of snow fell in Central Park, 1.4 inches at La Guardia Airport, and 0.8 inches at JFK Airport. Anti-icing crews were deployed on the East River bridges from 11:00 PM on January 6 until 5:00 AM on January 9; 10 applications of chemicals were made. Priority overpasses were cleared, and icicle patrols monitored the FDR Drive, Battery Park Underpass, and the Cross Bronx and Brooklyn-Queens Expressways.

Harper Street Asphalt Plant (Queens)

On January 8, 2011, Division ironworkers replaced the paddles and performed other repairs.

Tuscon, Arizona Tribute

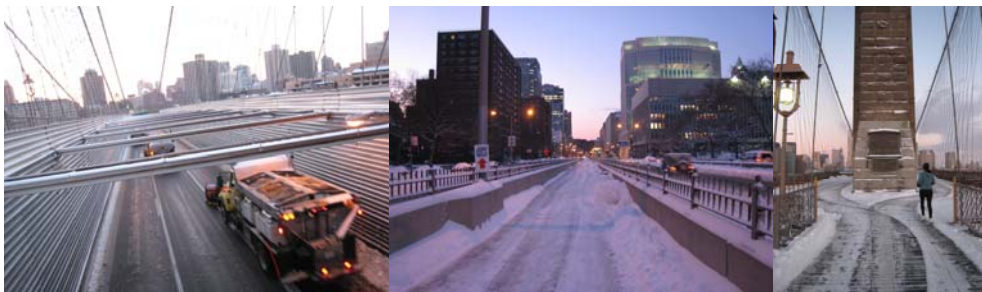
The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on January 10, 2011, as a mark of respect for the victims of the shooting violence that occurred January 8 in Tuscon, Arizona. The flags were raised on January 15, 2011.



Flag at Half-Mast in January 2011.
(Credit: Russell Holcomb)

Anti-Icing

On January 11, 2011, 3 inches of snow fell in Central Park, and 1.9 inches at La Guardia and JFK Airports. On January 12, a record 6.1 inches of snow fell in Central Park, a record 5 inches at La Guardia Airport, and a record 4.2 inches at JFK Airport. Anti-icing crews were deployed on the East River bridges at 1:00 PM on January 11; as of 11:00 AM on January 12, nine applications of chemicals (over 5,000 gallons) had been made. Almost 90 Division staff members were engaged in these activities, as well as the clearing of snow from priority overpasses and the East River and movable bridge walkways. Commissioner Janette Sadik-Khan visited the crews on the Manhattan and Brooklyn Bridges on January 12.



Cleared Brooklyn Bridge Roadway and Walkway After the Storm. (Credit: Russell Holcomb)



Bicyclist Crossing the Bridge After the Storm. Commissioner Janette Sadik-Khan Examining a Truck. (Credit: Russell Holcomb) Chief Bridge Officer Henry Perahia, Interim Director of Bridge Preventive Maintenance Paul Schwartz, Supervisor Bricklayer Joseph Saverino, Commissioner Janette Sadik-Khan, and Supervisor Highway Repairer Richard Valles. (Credit: Russell Holcomb). Highway Repairer Gaetano Messina, Commissioner Janette Sadik-Khan, Assistant City Highway Repairers Carmine Cavitolo and Victor Magagna, and Deputy Chief Engineer Russell Holcomb. Deputy Chief Engineer Russell Holcomb, Highway Repairer Roosevelt Gee Jr., Assistant City Highway Repairer John Tamaro, Supervisor Highway Repairer Steven Borowik, Commissioner Janette Sadik-Khan, Assistant City Highway Repairer Justin Adone, Supervisor Highway Repairer Richard Valles, Chief Bridge Officer Henry Perahia, and Supervisor Highway Repairer Michael Parise.

Harper Street Asphalt Plant (Queens)

On January 15, 2011, Division ironworkers repaired the crusher, recycle bin, and conveyor.

Anti-Icing

On January 17, 2011, 1 inch of snow fell in Central Park, and 1.3 inches fell at La Guardia Airport. Anti-icing crews were deployed on the East River bridges from 11:00 PM on January 17 until 9:30 AM on January 18. 4,850 gallons of liquid anti-icer and 45 tons of solid de-icer were applied. Priority overpasses were cleared, and snow removal and icicle patrols monitored the FDR Drive, Battery Park Underpass, Brooklyn Bridge walkways, First Avenue Tunnel, and the Cross Bronx and Brooklyn-Queens Expressways.

Greenpoint Avenue Bridge over Newtown Creek (Brooklyn/Queens) (a.k.a. J.J. Byrne Memorial Bridge)

The component rehabilitation of this bridge was substantially completed on January 20, 2011.

Anti-Icing

On January 21, 2011, 4.2 inches of snow fell in Central Park, 4.3 inches at La Guardia Airport, and 3.9 inches at JFK Airport. Anti-icing crews were deployed on the East River bridges from 7:00 PM on January 20 until noon the following day; 5 applications of chemicals were made. Priority overpasses were cleared, and icicle patrols monitored the FDR Drive, Battery Park Underpass, and the Cross Bronx and Brooklyn-Queens Expressways.

Anti-Icing

On January 25, 2011, 1 inch of snow fell in Central Park, 1.2 inches at La Guardia Airport, and 0.3 inches at JFK Airport. Anti-icing crews were deployed on the East River bridges from 10:00 PM on January 24 until 3:00 PM the following day; no applications were made. Priority overpasses were cleared, and icicle patrols monitored the FDR Drive, Battery Park Underpass, and the Cross Bronx and Brooklyn-Queens Expressways.

On January 26, 2011, a record 12.3 inches of snow fell in Central Park, a record 9.4 inches at La Guardia Airport, and a record 6 inches at JFK Airport. On January 27, a record 6.7 inches of snow fell in Central Park, a record 7.9 inches at La Guardia Airport, and a record 4.3 inches at JFK Airport. Anti-icing crews were deployed on the East River bridges from 5:00 AM on January 26 until 5:00 AM the following day; 14 applications of chemicals were made. Priority overpasses were cleared, and icicle patrols monitored the FDR Drive, Battery Park Underpass, and the Cross Bronx and Brooklyn-Queens Expressways.



Inspecting and Clearing the Brooklyn Bridge Walkway on January 27. (Credit: Hayes Lord) Clearing Snow at the 11th Avenue Viaduct Project.

Hamilton Avenue Bridge over Gowanus Canal (Brooklyn)

On January 26, 2011, the bridge failed to rise due to excessive snow on the span. It was closed to marine traffic from 11:57 PM until 9:02 AM on January 27.

Harper Street Asphalt Plant (Queens)

On January 28 and 29, 2011, Division ironworkers repaired the catwalks, bin liners, plates, and shelves.

Anti-Icing

On January 29, 2011, 0.2 inches of snow fell at La Guardia Airport, and 0.3 inches at JFK Airport. Anti-icing crews were on stand-by from 6:00 AM on January 28 until 4:00 AM the following day, and from 6:00 AM on January 29 until 6:00 PM the following day; no applications of chemicals were made. Priority overpasses were cleared, and icicle patrols monitored the FDR Drive, Battery Park Underpass, and the Cross Bronx and Brooklyn-Queens Expressways.

Third Street Bridge over Gowanus Canal (Brooklyn)

Cleaning and painting of the bridge operator's house began and was completed in January 2011.

FEBRUARY

Anti-Icing

On February 1, 2011, 1.1 inches of snow fell in Central Park, 0.6 inches at La Guardia Airport, and 0.5 inches at JFK Airport. On February 2, 0.5 inches of snow fell in Central

Park. Anti-icing crews were deployed on the East River bridges from shortly after midnight on February 1 until 4:00 PM the following day; 13 applications of chemicals were made. Seventy-four Division staff members cleared snow from overpasses and five were on icicle patrol. On February 2, all of the movable bridges were taken out of service to marine traffic at 9:15 AM due to icy conditions. The Pulaski and Greenpoint Avenue Bridges were put back in service at 12:20 PM., followed by the remaining bridges at 3:00 PM.

The crews were again deployed from 5:00 AM until 10:30 AM on February 5; no applications of chemicals were made. Priority overpasses were cleared, and icicle patrols monitored the FDR Drive, the Brooklyn-Queens and Cross-Bronx Expressways, and the Battery Park Underpass. The icicle patrols remained active through February 12.



Icicles on FDR Drive and the Cross-Bronx Expressway at Jerome Avenue in February 2011.
(Credit: Louis Garzia)

Willis Avenue Bridge over Harlem River (Bronx/Manhattan)

On February 12, 2011, the old flanking span was floated out from the site, down the East River, to the contractor's facility in Jersey City. The roadway was closed to vehicular traffic and pedestrians at 2:00 AM. The span was operated with the hydraulic engine, in the counterclockwise direction and by 3:00 AM was in the open position. The barge with the flanking span passed through the Willis Avenue Bridge (through the Bronx Channel) from 4:00 to 4:09 AM and through the RFK bridge from 4:17 to 4:23 AM. A total of three tug boats assisted the tow: one at the stern, one at the bow and the third on the side of the barge. The Willis Avenue Bridge opened to traffic at 5:50 AM.



Floating Out the Flanking Span on April 12, 2011.

Manhattan Bridge

The Agency's Urban Art Program enhances public space through art and improved street design and streetscapes. Launched in October 2008, the program brings the vision of the Agency's World Class Streets initiative to life by partnering with community organizations to install murals, sculptures and other art forms in plazas and on medians, triangles, sidewalks, Jersey barriers and construction fences for up to 11 months on NYCDOT properties.

Carl Skelton's "Ultratope 1: Real City" featured visual projections on the Manhattan Bridge's colonnade in Lower Manhattan. Real City paid tribute to everyday New Yorkers, past and present, honoring their role in shaping the character of the city. From dusk to dawn, the frieze of the colonnade bore basic information about one of the millions of people who have settled in the area over the years: given name, year and place of birth. The piece ran from February 17 through March 31, 2011.



"Ultratope 1: Real City" Projections on the Colonnade.
(Credit: Carl Skelton)

Hamilton Avenue Asphalt Plant (Brooklyn)

On February 19, 2011, Division ironworkers repaired the screening bins, conveyor belt, and drying drum.

Anti-Icing

On February 21, 2011, 3.2 inches of snow fell in Central Park, 3.5 inches at La Guardia Airport, and 2.3 inches at JFK Airport. Anti-icing crews were deployed on the East River bridges from 8:00 PM on February 20 until 11:00 the following morning; nine applications of chemicals were made. Crews were again deployed from 10:00 PM on February 21 until 5:00 the following morning; no applications were made. Priority overpasses were cleared, and icicle patrols monitored the FDR Drive, Battery Park Underpass, and the Cross Bronx and Brooklyn-Queens Expressways.

Ed Koch Queensboro Bridge

On the night of February 24, 2011, Division electricians and an ironworker assisted a film crew from the television series "Blue Bloods" at the Queensboro Bridge.

Harper Street Asphalt Plant (Queens)

On February 26, 2011, Division ironworkers repaired the drum, shaker, and hopper.

Department of Transportation Maintenance and Repair Facility at Flatlands Yard (Brooklyn)

Cleaning and painting of this structure, which began in January 2011, was completed in February 2011.

Department of Transportation Coin Collection Facilities on Metropolitan Avenue (Queens)

Cleaning and painting of this structure, which began in January 2011, was completed in February 2011.

Department of Transportation Sign Shop at 59th Street (Manhattan)

Cleaning and painting of this structure, which began in January 2011, was completed in February 2011.

MARCH

Harper Street Asphalt Plant (Queens)

On March 5, 2011, Division ironworkers replaced various damaged and broken machinery parts.

Tidal Wetland Mitigation Project (Brooklyn)

A Notice to Proceed for the tidal wetlands mitigation project associated with the reconstruction of the Belt Parkway Bridges was issued to the contractor with a start date of March 8, 2011.

Award

The Fund for the City of New York and the Alfred P. Sloan Foundation selected Chief Bridge Officer Henry Perahia for a 2011 Sloan Public Service Award, recognizing him as a career public servant who shows exemplary government service that goes above and beyond his assigned duties. The award recipients were honored by Mayor Michael R. Bloomberg and others at a ceremony on March 10, 2011 at The Cooper Union.



The 2011 Sloan Public Service Award Recipients: Chief Bridge Officer Henry D. Perahia, Director Susan Dalmas, Nurse Practitioner Elva Rodriguez, Mayor Michael R. Bloomberg, Senior Designer Emmanuel Thingue, Division Chief Gabriel Taussig, and Principal Ramon M. Gonzalez. (Credit: Kristen Artz, Office of the Mayor) Commissioner Janette Sadik-Khan and Mrs. Perahia. (Credit: Joannene Kidder) Commissioner Marjorie Tiven, Chief Bridge Officer Henry D. Perahia, and Mrs. Perahia.



Mayor Michael R. Bloomberg. (Credit: Dorothy Roses) Commissioner Janette Sadik-Khan, Chief Bridge Officer Henry Perahia, and Sam Schwartz. (Credit: Joannene Kidder)

Hamilton Avenue Asphalt Plant (Brooklyn) and Harper Street Asphalt Plant (Queens)

On March 12, 2011, Division ironworkers repaired machinery at both plants.

Division Years of Service Ceremony

Division personnel were honored on March 14, 2011 for their years of service to the City. The awards were presented by Chief Bridge Officer Henry D. Perahia and the Deputy Chief Engineers.

40 Years of Service

Civil Engineer Saul Basri

35 Years of Service

Highway Repairer Louie Dumeng, Supervisor Bridge Operator Wilbert Holt, and Associate Staff Analyst Vera Ribakove.

30 Years of Service

Associate Staff Analyst William Donley, Associate Staff Analyst Darlene Lucchese, Supervisor Highway Repairer Patrick Macaluso, Area Supervisor Highway Maintenance

CHRONOLOGY

Charles Remi, Electrician Jerry Salzman, Highway Repairer James Torain, and Civil Engineer Matthew Winchell.

25 Years of Service

Principal Administrative Associate Lourdes Acevedo, Principal Administrative Associate Michele Adimu, Highway Repairer Rudolph Bentley, Senior Director of Administration and Finance Patricia Briggs, Research Assistant Fitz-Arthur Brown, Carpenter Stephen Buckley, Highway Repairer Robert Bynes, Civil Engineer Adam Caplan, Highway Repairer Deborah Cavaliere, Supervisor Electrician Ben Cipriano, Bridge Repairer and Riveter Kenneth Cromer, Associate Staff Analyst Charlotte Davis, Bridge Operator Louie Davis, Clerical Associate Marie De Madet, Supervisor Electrician Jose Done, Principal Administrative Associate Paula Friend, Clerical Associate Loraine Fulgham, Associate Staff Analyst Susan Garcia, Area Supervisor Highway Maintenance Louis Garzia, Oiler Ronald Grady, Administrative Engineer Ken Hui, Administrative Engineer Sudhir Jariwala, Electrician James Kane, Oiler Stanley Karolewicz, City Planner Dr. Paul-Michael Kazas, Administrative Superintendent of Bridge Operations George Kern, Electrician Michael Kowalenko, Assistant Civil Engineer John Laurretta, Research Assistant Rita Lebron, Associate Staff Analyst Bryan Leys, Motor Grader Operator Robert Lovdahl, Highway Repairer Dionisio Matos, Supervisor Bridge Operator Edgardo Montanez, Supervisor Carpenter John Motylewski, Supervisor Highway Repairer Albert Nizzari, Associate Project Manager Rosa Ostrovsky, Staff Analyst Earlene Powell, Bricklayer Salvatore Romano, Bridge Repairer and Riveter Philip Rudolph, Civil Engineer Ahmed Shakir, Bridge Painter Joao Silva, Oiler Andrew Sorrentino, Bridge Operator David Stewart, Supervisor Highway Repairer Isidro Suarez, Highway Repairer Johnny Tavarez, Supervisor Highway Repairer Joseph Turchiano, Bridge Painter Willie Tyler, Administrative Staff Analyst Linda Urbanski, Clerical Associate Elena Vega, Principal Administrative Associate Delores Whitfield, and Bridge Repairer and Riveter James Wright III.

Police Officer Alain Schaberge

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on March 14, 2011, in tribute to Police Officer Alain Schaberge of the 84th Precinct, who was fatally injured in Boerum Hill, Brooklyn on March 13, 2011 while making a domestic violence arrest. Officer Schaberge, 42, a 10 year veteran of the department, was a member of the 2001 Police Academy class that was forced into early duty because of the 9/11 attacks. He was a decorated officer, having earned an Excellent Police Duty medal. He also served four years in the Navy. The flags were raised on March 19, 2011.



Police Officer Alain Schaberge

Harper Street Asphalt Plant (Queens)

On March 19 and 26, 2011, Division ironworkers repaired machinery parts.

Anti-Icing

On March 23, 2011, 0.4 inches of snow fell at La Guardia Airport, and a record 0.9 inches at JFK Airport. On March 24, 2011, 1 inch of snow fell in Central Park, a record 0.5 inches at La Guardia Airport, and 0.07 inches at JFK Airport. Anti-icing crews were deployed on the East River bridges from 9:00 PM on March 23 until 8:00 the following morning; 4 applications of chemicals were made.

Brooklyn Bridge

On March 25, 2011, students from the School of Visual Arts were escorted on a tour of the Brooklyn Bridge.



Students, Resident Engineer Douglas Reese (in DOT Vest), Deputy Chief Engineer Russell Holcomb, and Sabrina Lau. (Credit: Ohene Duodu) Brooklyn Bridge Engineer-in-Charge Ohene Duodu Monitoring Pedestrian Traffic as Deputy Chief Engineer Russell Holcomb Explains Bridge Maintenance. (Credit: Douglas Reese)

Congresswoman Geraldine Anne Ferraro Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on March 28, 2011, in tribute to former Queens Congresswoman Geraldine Anne Ferraro, who died on March 26 in Massachusetts. Ms. Ferraro, 75, earned a place in history as the first woman and first Italian-American to run on a major party national ticket, serving as Walter Mondale's Vice Presidential running mate in 1984 on the Democratic Party ticket.

Her successful career in public service included time as Queens County Assistant District Attorney, where she helped create the Special Victims Bureau and the Confidential Unit, specializing in cases involving sex crimes, crimes against the elderly, family violence and child abuse. She served on the Advisory Council for the Housing Court of New York City and as president of the Queens County Women's Bar Association, before being elected to represent Queens in Congress, where she thrived. She tackled issues such as poverty, the environment and, especially, equality for women, ultimately co-sponsoring the 1981 Economic Equity Act. Her work in those areas continued long after she left Congress. After she was diagnosed with cancer, she successfully lobbied Congress for passage of the Hematological Cancer Research Investment and Education Act, which created the Geraldine Ferraro Cancer Education Program. The flags were raised on April 1, 2011.



Congresswoman Geraldine Ferraro.

Williamsburg Bridge

On the night of March 30, 2011, Division electricians and an assistant civil engineer assisted a film crew from the television series "Person of Interest" at the Williamsburg Bridge.

Greenpoint Avenue Bridge over Newtown Creek (Brooklyn/Queens)

Cleaning and painting of the bridge operator's house, which began in January 2011, was completed in March 2011.

CHRONOLOGY

Department of Transportation Facilities at the Harper Street Yard (Queens)

Cleaning and painting of these structures, which began in January 2011, was completed in March 2011.

Department of Transportation Sign Shop in Maspeth (Queens)

Cleaning and painting of this structure, which began in January 2011, was completed in March 2011.

Award

In March 2011, *New York Construction Magazine* selected the Manhattan Bridge project (Contract #14) as one of the top 25 project starts in the Tri-State Region in 2010.

Pulaski Bridge over Newtown Creek (Brooklyn/Queens)

In March 2011, the Mayor's Office of Film, Theatre, and Broadcasting named this bridge as a "Location of the Month." The bridge marks the halfway point of the NYC Marathon each year.



Pulaski Bridge in 2008. (Credit: NYSDOT)

APRIL

Hamilton Avenue Asphalt Plant (Brooklyn) and Harper Street Asphalt Plant (Queens)

On April 2, 2011, Division ironworkers repaired the drum and other machinery parts.

Claremont Parkway over Metro North RR (Bronx)

A Notice to Proceed for the reconstruction of this bridge was issued to the contractor with a start date of April 4, 2011.

National Work Zone Awareness Week

This event, held from April 4 through 8, 2011, and coordinated with the start of the construction season, raised awareness about the need to drive carefully around work zones and aimed to reduce work zone crashes nation-wide. More than 2,000 Agency men and women work in work zones to maintain and enhance our roadways, highways, bridges, sidewalks, traffic signals, street lights, and street signs. To promote work zone safety, the Agency placed orange ribbon magnets on Agency vehicles, posted special signs on City highways, distributed safety materials at several DMV locations in the City and ran work zone safety public service announcements in both New York City and Albany.



Supervisor Highway Repairer Donald Bragg, Highway Repairer Robert Bynes, and DOT Director of Occupational Safety and Health John Massey Distributing Materials at the Bronx DMV as Part of the National Work Zone Awareness Week.
(Credit: Louis Garzia)

Brooklyn-Queens Expressway over Sands Street (Brooklyn)

Contractor cleaning and painting of the bridge, which began on October 15, 2010, was completed on April 5, 2011.

Carroll Street and Union Street Bridges over Gowanus Canal (Brooklyn)

On April 6, 2011, on their annual Exploration Day, a class from St. Edmund Preparatory High School in Brooklyn visited the Carroll and Union Street bridges. Students learned about the retractile and bascule bridge structures, their functions and maintenance, and watched an opening.



Students with Their Teacher, Joan Kowkabany (at Right) and Executive Director of Bridge Preventive Maintenance and Repair Tom Whitehouse. (in Blue Helmet). Mr. Whitehouse Explaining the Maintenance of the Carroll Street Bridge.

Ed Koch Queensboro Bridge

Mayor Michael R. Bloomberg signed legislation on April 11, 2011 to rename the Queensboro Bridge as the “Ed Koch Queensboro Bridge” in honor of the 105th Mayor of the City of New York, Mayor Edward I. Koch. The Mayor proposed the legislation in December 2010, and the legislation passed the City Council on March 23, 2011.



Mayors Michael R. Bloomberg and Edward I. Koch, and City Council Speaker Christine C. Quinn at the Signing of the Legislation in April 2011. (Credit: Edward Reed, Office of the Mayor) Mayors David N. Dinkins, Edward I. Koch and Michael R. Bloomberg Celebrating the Renaming of the Bridge in May 2011. (Credit: Kristen Artz, Office of the Mayor)

Stand Alone Demolition 670 and 676 Grand Concourse (Bronx)

Originally, this project was a part of the scope of work for the construction of the East 153rd Street cable stayed bridge, which has been pushed to Fiscal Year 2022 due to budgetary constraints. To avoid future issues related to security, maintenance and safety of the buildings, the Agency decided to demolish them under a stand-alone contract.

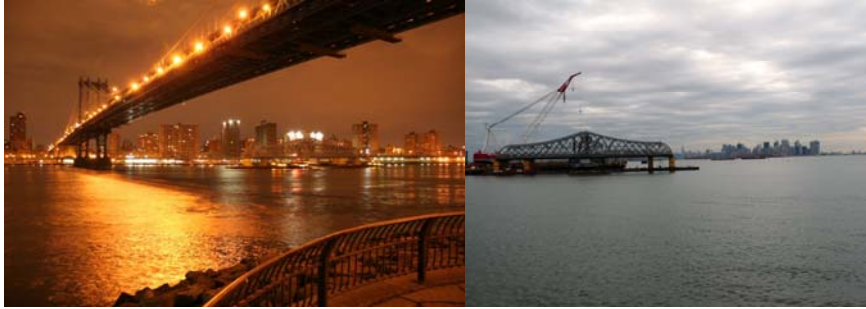
The properties 670 Grand Concourse and 676 Grand Concourse were acquired by the City under its power of Eminent Domain Law to satisfy the street widening and to accommodate the proposed alignment of the cable stay bridge as part of the right-of-way for East 153rd Street between Grand Concourse and Morris Avenue. A Notice to Proceed for the demolition of these buildings was issued to the contractor with a start date of April 11, 2011.



Grand Concourse Project Site.

Willis Avenue Bridge over Harlem River (Bronx/Manhattan)

The old swing span was floated out on April 12, 2011, to the contractor's facility in Jersey City. The Willis Ave Bridge was closed to traffic at approximately 1:00 AM. The swing span was operated in the open position at around 2:00 AM. The two tug boats were in position at approximately 3:00 AM and by 3:20 AM started moving towards south to pass through the Bronx channel of the Willis Avenue Bridge. By 3:37 AM the span passed completely through the Willis Avenue Bridge, was aligned and then passed through the RFK Bridge by approximately 4:00 AM. The Willis Avenue Bridge was moved back to the closed position at around 3:45 AM and by 4:25 AM was re-opened to traffic.



Passing Under the Manhattan Bridge. On the Way to Jersey City.
(Daylight Credit: David Rocco)

Hamilton Avenue Asphalt Plant (Brooklyn)

On April 16, 2011, Division ironworkers repaired the chutes and main drum.

Belt Parkway Bridge over Paerdegat Basin (Brooklyn)

On April 19, 2011, the first major steel erection operation started with the placement of tub girder sections from the west abutment to the temporary supports.



First Major Steel Erection at the Paerdegat Basin Bridge in April 2011. Observing the Placement of the Tub Girder Sections: Administrative Engineer Daniel Hom, Civil Engineer Edvard Jeamgocian (Obscured), Consultant Project Manager Bill Ferdinandsen, and Civil Engineers Ferdinand John and Jagdish Patel.

Riverside Drive over West 125th Street to West 134th Street (Manhattan)

On April 20 through May 6, 2011, Division engineers assisted a film crew from the upcoming movie "The Amazing Spider-Man" at Riverside Drive over West 125th Street to West 134th Street. Engineers from the Engineering Review Section had previously reviewed and approved the setup for the stunt shooting. Two 190-foot longitudinal trusses, 13 feet-5 inches apart, were connected by transverse trusses every 30 feet. These transverse trusses were attached to the existing floor beams of the Riverside Drive Viaduct between 133rd and 134th Streets with span sets, chain hoists, clamps, and wire ropes. The stunt was successfully shot without incident.



Trusses Attached to the Riverside Drive Viaduct for the Film Shoot.

Brooklyn Bridge

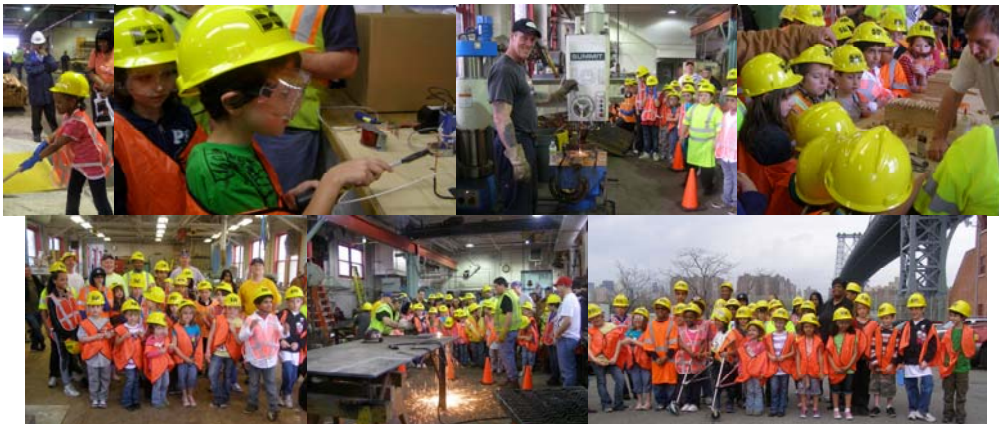
On April 21, 2011 Division personnel escorted cadets from the United States Military Academy at West Point on a tour of the Brooklyn Bridge.



Cadets on the Brooklyn Bridge With Carpenter Stephen Buckley.

Tenth Annual “Take Our Children to Work Day”

On April 28, 2011, as part of the Agency’s 10th annual “Take Our Children to Work Day,” Division bridge painters, carpenters, electricians, and ironworkers explained and illustrated the activities necessary to maintain bridges. This year’s theme was “Invent the Future” to help shape the future for a new generation at work.



Future Bridge Painter and Engineer-in-Charge of East River Bridges Bridge Repair Bala Nair. Future Electricians. Bridge Repairer and Riveter William Dolan and Carpenter Andrew Myjer Demonstrating Equipment. Carpenters Tierney Gavin (Leaning), Andrew Myjer, and Michael Short III, Bridge Repairer and Riveter John McAllister, and Carpenter Patrick Burns with Children. (Credit: Earlene Powell) Bridge Repairer and Riveters Gonzalo Montano (Left) and Peter Sciandra (Right) Conducting a Welding Demonstration. (Credit: Clara Medina). Deputy Director of In-House Painting Earlene Powell with the Children.

Bruckner Expressway Bridges (Northbound and Southbound) over Bronx River (Bronx)

Contractor cleaning and painting of these bridges, which began on June 10, 2010, was completed on April 29, 2011.



Painted Median Curb. Painting the Handrails.

Hamilton Avenue Asphalt Plant (Brooklyn)

On April 30, 2011, Division ironworkers repaired the chutes and main drum.

MAY

34th Annual Five Borough Bike Tour

In preparation for the 42-mile Five Borough Bike Tour on May 1, 2011, Division personnel swept the bridges along the route and patrolled them for potholes. Carpenters installed temporary plywood covers over the finger joints of the Pulaski Bridge, which were removed after the tour concluded that day.



Cyclists on the Pulaski Bridge. Temporary Covers Over the Plywood Finger Joints.
(Credit: Joseph Flood) Office Machine Aide Audrey Woods Near the Ed Koch
Queensboro Bridge. Cyclists on the Bridge. (Road View Credit: Mark Feinman)

Cropsey Avenue Bridge over Coney Island Creek (Brooklyn)

Cleaning and painting of this bridge, which began on June 25, 2010, was completed on May 12, 2011.



Prime Coating on East Side Hand Rails.

Peace Officers Memorial Day Tribute

The Brooklyn Bridge American flags flew at half-mast on May 15, 2011, to commemorate Peace Officers Memorial Day.

Williamsburg Bridge

On May 16 through June 1, 2011, Division electricians assisted a film crew from the upcoming movie "Fiona's Tale" at the Williamsburg Bridge.

Highway Repairer Errol Wilson Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on May 18, 2011 in tribute to Highway Repairer Errol Wilson of the Agency's Roadway Maintenance and Repair Division, who died in the line of duty on May 17, 2011. Mr. Wilson, 59, an 18 year veteran of the department, was killed in an accident while conducting road repair work on the Cross Island Parkway near Northern Boulevard. He is survived by his wife Valerie White, his son Errol, Jr. and his daughter Tanya. The flags were raised on May 27, 2011.



Highway Repairer Errol Wilson.

West 181st Street over ramp to Washington Bridge (Manhattan)

The component rehabilitation of this bridge was substantially completed on May 19, 2011.

Borden Avenue Bridge over Dutch Kills (Queens)

The emergency construction project was substantially completed on May 20, 2011.

Roosevelt Island Avenue Bridge over Flushing Meadow Park Road (Queens)

Cleaning and painting of this bridge, which began on March 31, 2011, was completed on May 20, 2011.

Belt Parkway Bridge over Ocean Avenue (Brooklyn)

Contractor cleaning and painting of the bridge, which began on March 14, 2011, was completed on May 21, 2011.

Memorial Day Tribute

The Brooklyn Bridge American flags flew at half-mast until noon on May 30, 2011, to commemorate those who died serving the nation during war.

Belt Parkway Bridge over Mill Basin (Brooklyn)

Cleaning and painting of the bridge operator's house, which began in February 2011, was completed in May 2011.

JUNE

Division Teamwork Recognition Ceremony

On June 8, 2011, the Division acknowledged the extraordinary efforts and contributions made by the two teams involved with Over Dimensional Truck Permits. The Engineering

Review team is led by Farid Tadros and the Truck Permit Unit is led by Kevin Lobat. Their staff formed a perfect team to get the job done and protect our infrastructure and the public.



Deputy Chief Engineer Robert Collyer, Associate Project Manager Mariya Zhurakhinskaya, Administrative Manager Diana Neal, Truck Permit Unit and Special Projects Director Kevin Lobat, and Civil Engineer Farid Tadros. Associate Project Manager Mariya Zhurakhinskaya, Assistant Civil Engineer Darlyn Alvarez, Assistant Civil Engineer Jafar Haider, Assistant Civil Engineer Alexander Eliopoulos (Obscured), Executive Director of Management And Support Services Dorothy Roses, Chief Bridge Officer Henry D. Perahia, Deputy Chief Engineer Anil Vyas, and Deputy Chief Engineer Jay Patel.

Hutchinson River Parkway Bridge over Hutchinson River (Bronx)

The bridge was out of service to marine traffic from 3:35 PM to 8:00 PM on June 8, 2011 due to heat expansion.

9th Street Bridge over Gowanus Canal (Brooklyn)

The bridge was out of service to marine traffic during the afternoon and evening hours of June 9 and 12, 2011 due to heat expansion. A record high temperature of 97 degrees was recorded at La Guardia Airport.

Hamilton Avenue Asphalt Plant (Brooklyn) and Harper Street Asphalt Plant (Queens)

On June 11, 2011, Division ironworkers repaired the crusher, drum, scales, and chutes.

East 14th Street Pedestrian Bridge over Belt Parkway (Brooklyn)

Contractor cleaning and painting of the bridge, which began on March 14, 2011, was completed on June 11, 2011.

Harper Street Asphalt Plant (Queens)

On June 4, 11, and 18, Division ironworkers repaired the conveyor bin, silo, main drum, and paddles.

CityBench Demonstration on Greenwich Street (Manhattan)

The public bench program will promote walking with the installation of 1,500 benches in New York City; DOT will locate half of the benches in strategic locations, and residents, nonprofit organizations, and businesses will request the rest of the installations, also to be done by DOT. The new bench prototype was installed by Division ironworkers on June 14, 2011 on Greenwich Street between Murray Street and Chambers Street, and the backless bench prototype was installed on June 17 on Second Avenue and 13th Street.



Bridge Repairer and Riveter Ignazio Trapani Drilling the Holes for the Concrete Anchor Bolts to Hold the Bench Securely in Place. Bridge Repairer and Riveters Ignazio Trapani, Fabian Del-Tongier and Salvatore Dimuro - Final Tightening of the Bolts and Installation of the Cover Plates to Hide the Connections. (Credit: Thomas Whitehouse) Bench Prototype and Testing by Citizens.

East Tremont Avenue Bridge over Hutchinson River Parkway (Bronx)

Cleaning and painting of this bridge, which began on April 1, 2011, was completed on June 16, 2011.

Tidal Wetland Mitigation (Brooklyn)

On June 16, 2011, work stopped when ordnance was found during excavation at the mitigation site, Floyd Bennett Field. The bomb squad was on-site to inspect and remove the items, which were determined to be inert World War II era torpedoes that were buried at the site. The contractor was allowed to continue work and was told to contact the bomb squad if any other ordnance was encountered.



World War II Era Torpedoes at Floyd Bennett Field.

Manhattan Bridge

The Agency's Urban Art Program enhances public space through art and improved street design and streetscapes. Launched in October 2008, the program brings the vision of the Agency's World Class Streets initiative to life by partnering with community organizations to install murals, sculptures and other art forms in plazas and on medians, triangles, sidewalks, jersey barriers and construction fences for up to 11 months on NYCDOT properties.

The "Intersection" mural of painted plywood panels was installed by in-house forces on June 21, 2011 on the existing fence of the Division's Front Street Yard near the Manhattan Bridge. The mural was produced by three artists, Heidi Garay, Mikell Fine Isles and Sam Vernon, in partnership with the Dumbo Business Improvement District. This mural symbolizes the constant movement of DUMBO. The curved lines, painted in seven distinct colors, play on the straight, unwavering lines of the corrugated metal fence. The piece is meant to brighten the landscape underneath the Manhattan Bridge, while referencing the New York City Subway map as well as the cross-sections of cultures in this neighborhood.



Bridge Repairer and Riverter Yiu Liu, Supervisor Carpenter Joseph Vaccaro, and Carpenters Stephen Buckley and Joseph Moschella Installing the Mural.
(Credit: Doneliza Joaquin for DUMBO NYC)

Hamilton Avenue Asphalt Plant (Brooklyn) and Harper Street Asphalt Plant (Queens)

On June 25 and 26, 2011, Division ironworkers repaired the mixers and drums.

Water Street Arch

Mayor Michael R. Bloomberg played “Chopsticks” on a baby grand piano in the Water Street Arch on the morning of June 27, 2011 to promote Sing for Hope’s Pop-Up Piano art project. The crocheted piano cover was crafted by artist Agata Olek. The piano remained in the Arch under the Manhattan Bridge in DUMBO (between Adams Street and Anchorage Place), through July 2, 2011.



Mayor Michael R. Bloomberg Playing Piano in the Water Street Arch, Watched by the Artist. (Credit: Doneliza Joaquin for DUMBO NYC)

Harper Street Asphalt Plant (Queens)

On June 28 and 29, 2011, Division ironworkers repaired the conveyor bin and drum.

Belt Parkway Bridge Project (Brooklyn) and Kent Avenue Bridge Facilities (Brooklyn)

On June 28 and 29, 2011, the Agency’s summer interns visited the Belt Parkway project site, as well as the bridge painting, ironworking, carpentry, and electrician shops at the Kent Avenue facility in Brooklyn.



Roadway Bridges Engineers Answering Interns' Questions. Assistant Civil Engineer Svetlana Batalova (Left) with the Interns at the Belt Parkway Project Site. Supervisor Bridge Painter Cesar Pazmino and Bridge Painter Goncalo Lima Demonstrating the Boatswain's Chair.
(Credit: Earlene Powell)

Metropolitan Avenue over English Kills (Brooklyn)

Due to heat expansion, the bridge was closed to marine traffic beginning at 11:22 AM on June 29, 2011. It was returned to service at 11:50 PM.

Belt Parkway Bridge over Sheepshead Bay Road (Brooklyn)

Contractor cleaning and painting of the bridge, which began on May 16, 2011, was completed on June 30, 2011.

Brooklyn, Manhattan, and Williamsburg Bridges

On June 30 through July 2, 2011, Division electricians assisted a film crew from the upcoming movie "Men in Black 3" at the Brooklyn, Manhattan, and Williamsburg Bridges.

Roosevelt Island Bridge over East River/East Channel (Manhattan/Queens)

In June 2011, the Mayor's Office of Film, Theatre, and Broadcasting named this bridge as a "Location of the Month."



Roosevelt Island Bridge in 2010. (Credit: NYSDOT)

JULY

Netherland Avenue Retaining Wall (Bronx)

In June 2011, in response to a complaint, an emergency inspection was performed on a retaining wall on Netherland Avenue in the Bronx, between West 227th Street and Kappock Street. Overall, the wall was in fair condition, but the consultant identified a 5 to 7 foot section of the wall that required prompt attention; it was addressed by in-house forces. The replacement of the damaged and missing stones and the resetting of the missing stones were completed on July 1, 2011.



Bricklayer Salvatore Romano, Highway Repairer Mike Biancanello, and Cement Mason Luigi Mula. (Credit: Russell Holcomb)

Wards Island Pedestrian Bridge over Harlem River (Manhattan)

The bridge was re-opened to pedestrians on July 1, 2011.

Harper Street Asphalt Plant (Queens)

On July 2, 2011, Division ironworkers repaired the pedals and air duct.

Manhattan Bridge

On July 7, 2011, Ubifrance-USA, the French agency for international business development brought a group of bridge engineers to the Agency for presentations by Commissioner Janette Sadik-Khan, Chief Bridge Officer Henry Perahia, and Executive Director of Bridge Inspections and Bridge Management Dr. Bojidar Yanev. The visitors were then escorted on a tour of the Manhattan Bridge to view up close American techniques on inspection, maintenance and repair.



Executive Director of Bridge Inspections and Bridge Management Dr. Bojidar Yanev with the French Visitors at the Manhattan Bridge. (Credit: Brian Gill)

Cropsey Avenue Bridge over Belt Parkway (Brooklyn)

Contractor cleaning and painting of the bridge, which began on September 1, 2010, was completed on July 9, 2011.



Cleaning and Painting the Hand Rails and Sidewalk Curb.

Harper Street Asphalt Plant (Queens)

On July 9, 2011, Division ironworkers repaired the mixer and drum belt.

Ninth Street Bridge over Gowanus Canal (Brooklyn)

Due to heat expansion, the bridge was closed to marine traffic beginning at 2:33 PM on July 10, 2011. It was returned to service at 9:17 AM on July 11.

14th Avenue Bridge over Cross Island Parkway (Queens)

Cleaning and painting of the bridge, which began on July 5, 2011, was completed on July 11, 2011.

Greenpoint Avenue Bridge over Newtown Creek (Brooklyn/Queens), Ninth Street Bridge over Gowanus Canal (Brooklyn), and West 207th Street/West Fordham Road over Harlem River (Bronx/Manhattan) (a.k.a. University Heights Bridge)

Due to heat expansion, the Greenpoint Avenue Bridge was closed to marine traffic beginning at 5:40 PM on July 12, 2011. It was returned to service at 10:50 PM. The Ninth Street Bridge was closed to marine traffic beginning at 6:05 PM on July 12, and was returned to service at 10:55 PM. The 207th Street Bridge was closed to marine traffic beginning at 7:30 AM on July 12, and was returned to service at 4:52 PM.

Harper Street Asphalt Plant (Queens)

On July 16, 2011, Division ironworkers repaired the mixer and main drum.

Williamsburg Bridge

July 19, 2011 marked 100 years since the East River bridge tolls were lifted by Mayor William J. Gaynor. To mark this anniversary, the NYC Bridge Centennial Commission, co-founded by Sam Schwartz, erected a historic replica toll-booth at the Manhattan entrance to the Williamsburg Bridge (Delancey Street at Suffolk Street).



A Unicyclist and NYC Bridge Centennial Commission President Sam Schwartz Hand a Symbolic 1911 Dime to a "Toll Taker" on the Manhattan Side of the Williamsburg Bridge. (Credit: Brian Gill) Manhattan Bridge Engineer-In-Charge Brian Gill.

147th Street Bridge over Cross Island Parkway (Queens)

Cleaning and painting of the bridge, which began on July 12, 2011, was completed on July 20, 2011.



Painted Hand Rails on the Bridge.

Brooklyn Bridge

On July 22 and 23, 2011, Division electricians assisted a film crew from the television series “Blue Bloods” at the Brooklyn Bridge.

Harper Street Asphalt Plant (Queens)

On July 23, 2011, Division ironworkers repaired the plant’s vacuum system exhaust pipe.

9th Street Bridge over Gowanus Canal (Brooklyn)

The bridge was closed to marine traffic from noon on July 22, 2011 until 7:05 AM on July 25 due to heat expansion. On July 22, a record high temperature of 104 degrees was set at Central Park, with another record 100 degrees on July 23.

150th Street Bridge over Cross Island Parkway (Queens)

Cleaning and painting of the bridge, which began on July 14, 2011, was completed on July 26, 2011.

149th Street Bridge over Cross Island Parkway (Queens)

Cleaning and painting of the bridge, which began on July 21, 2011, was completed on July 27, 2011.

East 78th Street Pedestrian Bridge over FDR Drive (Manhattan)

On the night of July 31, 2011, the old bridge and the piers supporting the structure were demolished and moved onto a barge on the East River between 2 AM and 7 AM.



East 78th Street Bridge Before Demolition. Original Tile Signage. Moving the Bridge to the Barge.

Rose Avenue, New Dorp Lane, Bancroft Avenue, Lincoln Avenue, and Midland Avenue Bridges over SIRT South Shore (Staten Island)

Contractor cleaning and painting of these bridges began in July 2011.

Cesar Pazmino

Supervisor Bridge Painter Cesar Pazmino was the subject of the “Staff Spotlight” feature in the July 2011 edition of “Byways,” the official Agency newsletter.



Supervisor Bridge Painter Cesar Pazmino
Preparing to Hoist the Brooklyn Bridge Flag.

AUGUST

Union Turnpike over Cross Island Parkway (Queens)

Cleaning and painting of the bridge, which began on July 27, 2011, was completed on August 1, 2011.

Washington Avenue (Brooklyn)

On August 2, 2011, the Agency's Planning and Sustainability Group placed granite blocks from the old Willis Avenue Bridge on the traffic island at the five-way intersection of Washington Avenue, Park Place, and Grand Avenue to protect it from illegal parking.



Recycling Granite Blocks From the Old Willis Avenue Bridge. (Credit: Kelley Sander)

Belt Parkway Bridge over Rockaway Parkway (Brooklyn)

Steel erection for the northern section of the new bridge was completed during the overnight hours on August 3, 2011.



Completing the Steel Erection for the Northern Section in August 2011. (Credit: Daniel Hom)

Brooklyn Bridge and Division Iron Shop at 59 Adams Street (Brooklyn)

On August 5, 2011, members of the New York chapter of the Young Professionals in Transportation were escorted on a tour of the Brooklyn Bridge and the Division Iron Shop. The organization's mission is to provide career guidance, fellowship, and networking opportunities for young professionals in the transportation field.



The Iron Shop. Bridge Repairer and Riveters Patrick Clowe, Fabien Del-Tongier, and Charlie Zhao Conducting Demonstrations. (Credit: Robin Lester Kenton)

United States and Afghan Soldiers and Governor Hugh L. Carey Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on August 7, 2011, in tribute to the thirty United States and eight Afghan soldiers killed in the eastern Afghanistan Sayedabad district of Wardak province, west of the capital, Kabul, on Friday, August 5, when a rocket struck their helicopter. Twenty-two of the dead were US Navy SEALs, including members of SEAL Team 6.

The flags continued to be flown at half-staff in tribute to former New York State Governor Hugh L. Carey, 92, who died on August 7, 2011. Mr. Carey enlisted in a National Guard cavalry unit in 1939, at a time when the cavalry still rode horses, and served in World War II in the infantry's 104th Division, rising to the rank of Lieutenant Colonel, and earning the Bronze Star, the Croix de Guerre with Silver Star and the Combat Infantryman's Badge. He represented Brooklyn's 12th and 15th congressional districts in the United States Congress from 1961 to 1974, serving on the Ways and Means Committee, where he pushed for equal rights for the developmentally challenged and underserved.

He served as New York State's 51st governor from 1975 through 1982. When the City was on the brink of bankruptcy, Governor Carey created the Municipal Assistance Corporation, known as MAC, to borrow money for the city. He also set up the Emergency Financial Control Board with the power to reject city budgets and labor contracts. His governorship also included the construction of Battery Park City and the Javits Convention Center, and the initiation of the "I Love New York" campaign and the Empire State Games athletic events. Governor Carey said in 2007 that he wanted to be remembered "as a man who loved the people of New York as much as he loved his own family." The flags were raised on August 12, 2011.



Governor Hugh L. Carey

Hamilton Avenue Asphalt Plant (Brooklyn) and Harper Street Asphalt Plant (Queens)

On August 6, 2011, Division ironworkers repaired the hopper, crusher, and ducts.

Brooklyn Bridge

As part of the fourth annual Summer Streets program in August 2011, Division crews closed the Centre Street exit ramp from the Brooklyn Bridge on August 6, 13, and 20 from 6:30 AM until 1:00 PM.



Brooklyn Bridge at Noon on August 20 During the Summer Streets Event. (Credit: Trinity Abbott)

Hamilton Avenue Asphalt Plant (Brooklyn)

On August 20, 2011, Division ironworkers repaired the main drum and silo.

Earthquake

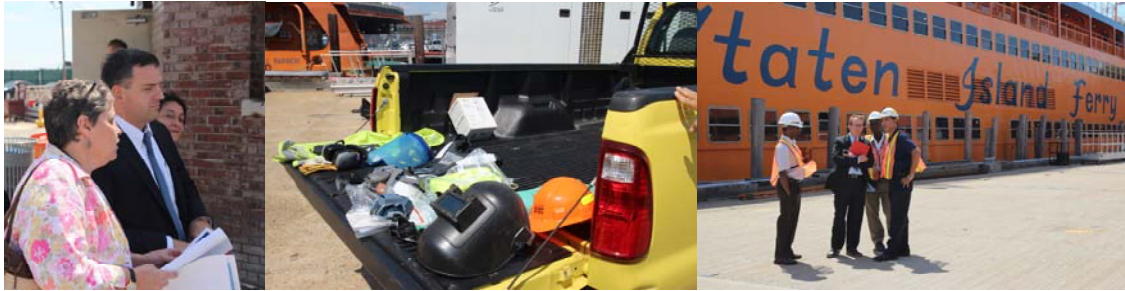
At 1:51 PM on August 23, 2011, a 5.8 earthquake, 3.7 miles deep, struck, with its epicenter in Mineral, Virginia, about 84 miles southwest of Washington. It lasted 20 to 30 seconds. United States Geological Survey officials reported two small aftershocks, of magnitude 2.8 and 2.2, within 90 minutes of the original jolt. Division personnel performed emergency inspections of critical components of 17 structures following the earthquake. While inspectors observed structural evidence of the earthquake in the form of some expansion of existing cracks, no damage requiring remedial measures was found.

White House Recovery Tour of the Staten Island Ferry Terminal Ramp Project (Staten Island)

On August 24, 2011, Frank DiGiammarino, the White House Deputy Coordinator for Recovery Implementation, was escorted around the Staten Island Ferry Terminal Ramp project. Chief Staff Manager/Executive Director of Community Affairs Joannene Kidder, Construction Project Manager Beatriz Duran, and Associate Project Manager Reza Lotfi provided an overview of the bridge and Staten Island Ferry projects. The ARRA funding is rebuilding the St. George Ferry Terminal Ramps, the largest stimulus project in New York State.



Construction Project Manager Beatriz Duran (at Left), Associate Project Manager Reza Lotfi (2nd From Right), and Deputy Coordinator Frank DiGiammarino (at Right). The Construction Site. (Credit: Alexander Engel)



Chief Staff Manager/Executive Director of Community Affairs Joannene Kidder, Deputy Coordinator Frank DiGiammarino, and Construction Project Manager Beatriz Duran. Safety Gear. Deputy Coordinator Frank DiGiammarino and Associate Project Manager Reza Lotfi Reviewing the Project. (Credit: Alexander Engel)

Carroll Street Bridge over Gowanus Canal (Brooklyn)

This designated New York City Landmark is a one-lane bridge carrying eastbound traffic over the Gowanus Canal, linking the Carroll Gardens and Park Slope communities in northern Brooklyn. The bridge has a 17-foot wide roadway and two 4½-foot wide pedestrian sidewalks. It is the oldest known retractile bridge in the United States and the fourth oldest bridge over a waterway in New York City. The bridge was closed to vehicular and pedestrian traffic from August 8 until August 26, 2011 for replacement of the pulling cables, reconstruction of the concrete foundation, refurbishment of sheaves and wooden rollers, and painting.



Carroll Street Bridge Pulling Cable System – Before and After. (Credit: Emily Colasacco)



Painting of the Bridge in Progress. Bridge Painter Joao Silva Applying Top Coat to Hand Rails.

Hurricane/Tropical Storm Irene

In advance of the anticipated landfall on August 28, 2011, Agency contractors secured all construction sites, and reported after the event that there was little to no damage. In-house forces moved equipment to higher ground, secured the oilers’ scaffolding on the Brooklyn Bridge, secured the warning and crash gates at the movable bridges, removed the portable VMS Boards, and relocated equipment from the facilities at Port Ivory, Pulaski Bridge, Kent Avenue, Greenpoint Bridge, Kingsland Avenue and West 206th Street before the storm. The Mill Basin Bridge operations crew was relocated. Agency personnel also assisted at the City’s hurricane shelters.

On August 26, the Truck Permit Unit coordinated critical crane moves with the Department of Buildings and the Metropolitan Transit Authority in anticipation of the hurricane. On August 29-31, they coordinated critical crane moves relating to the recovery with the Office of Emergency Management, the Department of Parks and Recreation, and Con Edison.

During the event, crews were assigned to operate the large trucks to close the bridges and to monitor conditions on the major bridges and at the Battery Park Underpass. In coordination with the TBTA, the Battery Park Underpass was closed from 9:00 PM August 27 until 11:30 AM on August 28, and the North Channel Bridge was closed from approximately 10:45 PM on August 27 until 12:45 PM on August 28.

The hurricane weakened to a tropical storm just before blowing ashore at Brooklyn's Coney Island around 9:00 AM on August 28, 2011. It was still a big storm with winds up to 65 miles per hour, but the water did not rise as high as had been feared, and it receded quickly.

Following the hurricane/tropical storm, Division crews removed tree limbs and other debris and pumped water where necessary. Emergency inspections were performed on 32 structures; no problems were found.

On September 8, 2011, the Division contributed two large trucks, with drivers, to the Greene County debris removal effort coordinated by DOT's Office of Emergency Response.



Highway Transportation Specialist Sharon Borno (at Right) and Other City Volunteers Assisting Ms. Mavis in Celebrating her 91st Birthday at the Hurricane Shelter set up at John Jay High School in Brooklyn. (Credit: Eric Callender) Removing a Tree Limb From the South Pedestrian Walkway of the Manhattan Bridge (Bridge Repairer and Riveters Patrick Clowe, Ignazio Trapani, and Kenneth Cromer), and a Tarp From a Chain Link Fence Along the South Walkway of the Williamsburg Bridge (Cement Mason Victor Porowski). (Credit: Clara Medina)

Williamsburg Bridge

"Plan Ahead," an art installation by internationally recognized knit graffiti artist Magda Sayeg in partnership with nbART (North Brooklyn Public Art Coalition), was officially unveiled on August 31, 2011. Three hundred iron rods were covered, located on Kent Avenue between South 5th and 6th Streets underneath the Williamsburg Bridge in Brooklyn. The materials produced for this project exceeded 600 square feet and took over 200 hours to knit. The 11 month installation is part of the Agency's Urban Art Program.



"Plan Ahead" Art Installation.
(Credit: Ronald Grady)

SEPTEMBER

Brooklyn Bridge

Brooklyn Unicycle Day on September 2, 2011 featured a crossing of the Brooklyn Bridge (for all wheel sizes), and a 13 mile ride (for experienced unicyclists on large wheels) organized by Unicycle NYC Bridge Tour. The long distance ride began at City Hall in Manhattan, crossed the Brooklyn Bridge, and continued to Coney Island.



Demonstration of Unicycle Riding on the Brooklyn Bridge. (Credit: Carlos Medina)

9/11 Memorial

On September 7, 2011, six granite blocks from the old Willis Avenue Bridge were delivered by Division personnel to the World Trade Center site. The blocks will be used to secure the memorial site, while creating a warm and welcoming environment.



Old Willis Avenue Bridge Granite Blocks at Storage Site Near West 207th Street Bridge in July 2011. (Credit: Russell Holcomb) Bridge Repairer and Riveters Randall Palmenta, Mario Russo, John Mcallister and Christopher Davis (Obscured in Truck).

Harper Street Asphalt Plant (Queens)

On September 10, 2011, Division ironworkers repaired the shaker, drum, and motor.

Patriot Day Tribute

The Brooklyn Bridge flags flew at half-mast on September 11, 2011 to commemorate the National Day of Service and Remembrance.



Brooklyn Bridge Flag at Half-Mast at Dusk. (Credit: Michele N. Vulcan)

Belt Parkway Bridge over Bay Ridge Avenue (Brooklyn)

The project to repair eight diagonal diaphragms of the steel structure, which began on June 15, 2011, was completed on September 12, 2011.

Police Officer Sherman Abrams Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on September 13, 2011, in tribute to Police Officer Sherman Abrams. Officer Abrams, 28, who had just entered the Academy in July, collapsed and died after a run with his colleagues on September 12. Prior to joining the NYPD, he was a Correction Officer for four years. The flags were raised on September 24, 2011.



Police Officer Sherman Abrams

Queens Boulevard Access Road over Brooklyn-Queens Expressway Southbound (Queens)

Cleaning and painting of the bridge, which began on September 2, 2011, was completed on September 15, 2011.

11th Avenue Viaduct (West 30th Street to West 33rd Street) over LIRR West Side Yard (Manhattan)

The reconstruction of the bridge was substantially completed on September 15, 2011.



11th Avenue Viaduct.

East 12th Street Bridge over Belt Parkway (Brooklyn)

Cleaning and painting of this bridge, which began on September 28, 2010, was completed on September 16, 2011.

Harper Street Asphalt Plant (Queens)

On September 17, 2011, Division ironworkers installed aluminum siding and repaired the plant's deck apron and vertical duct.

Manhattan Bridge

"As Above – So Below," a video mapping projection art installation by John Ensor Parker, Farkas Fulop, Johnny Moreno, Simon Anaya, Richard Jochum, and Ryan Uzilevsky, was projected onto the base of the Manhattan Bridge anchorage and the roof of the Water Street Arch, as part of the Dumbo Arts Festival 2011, from September 23 through 25. This piece was included in the "Immersive Surfaces" exhibition, which won "Best Exhibition" honors at the festival.

9th Street Bridge over Gowanus Canal (Brooklyn)

In September 2011, the Mayor’s Office of Film, Theatre, and Broadcasting named this bridge as a “Location of the Month.”



9th Street Bridge in 2009. (Credit: NYSDOT)

OCTOBER

Beverly Road Bridge over NYCT (Brooklyn)

On October 3, 2011, crews completed red flag repairs of column C1 and safety flag repairs of the abutment.



Flag Repairs on the Beverly Road Bridge. Bridge Repairer and Riveters Neil Dalton, Brook Budd, and Daniel Jerderlinic. (Credit: Hany Soliman)

Harper Street Asphalt Plant (Queens)

On October 8, 2011, Division ironworkers repaired the screener shed and silo transfers.

160th Street Bridge over Cross Island Parkway (Queens)

Cleaning and painting of the bridge, which began on May 19, 2011, was completed on October 11, 2011.

American Cancer Society’s “Making Strides Against Breast Cancer” Campaign

During September and October 2011, Division personnel and their friends and families participated in bake and book sales and other fundraisers, and sponsored the DOT Teams for the American Cancer Society’s annual “Making Strides Against Breast Cancer” walk.



Fundraiser Committee Members: Clerical Associate Adrienne Foster, Associate Staff Analyst Monique Joseph-Hamilton, Principal Administrative Associate Jocelyne Desroches, Associate Staff Analyst Alice Todd, and Computer Aide Dionne France (Standing), and Associate Staff Analyst Barbara Pedersen and Principal Administrative Associate Milagros Jorge (Seated). Assistant Civil Engineer Jafar Haider, Associate Staff Michael DePompo, Administrative Staff Analyst Michael Tohl at the Sale. Principal Administrative Associate Felecia Villafana Paying for Her Selections. Deputy Director of Personnel Helene Holloway Examining the Raffle Candy Container (Total of 295 Pieces). (Credit: Michele N. Vulcan)

Customer Service Award

On October 14, 2011, Truck Permit Unit and Special Projects Director Kevin Lobat was honored as the Agency's recipient of the 2011 Excellence in Customer Service Award. With his characteristic energy and initiative, Mr. Lobat managed the creation of a seamless web-based system for permitting – a system that has now been demonstrated and connected to other agencies, including the New York State DOT and the MTA. The permitting system, ODVP, has issued close to 100,000 permits in less than three years.

Since 2008 the City has formally observed Customer Service Week, which takes place the first week in October. The Customer Service Group of the Mayor's Office of Operations coordinates the participation of more than 20 agencies in this fun and festive week where agencies recognize the important contributions of frontline staff. The highlight of the week is the awards ceremony where each agency winner receives their Customer Service Excellence Award.



Chief Bridge Officer Henry Perahia, Truck Permit Unit and Special Projects Director Kevin Lobat, Executive Director of Management and Support Services Dorothy Roses, and Assistant Commissioner, Customer Service Division Catherine Messana at the Ceremony.

Hamilton Avenue Asphalt Plant (Brooklyn) and Harper Street Asphalt Plant (Queens)

On October 15, 2011, Division ironworkers repaired the conveyor belts and silo transfers and installed a workbench.

21st Street Pedestrian Bridge over LIRR (Queens)

On October 15, 2011, Publicolor volunteers painted the 21st Street pedestrian bridge. Publicolor is a not-for-profit organization dedicated to engaging high-risk students in their education and teaching them, through a program continuum including academic intervention, how to be part of an educated and productive workforce. Publicolor involves students in painting warm, welcoming colors in the public spaces of their schools and nearby community facilities. The inspiration for this Publicolor project is the Fibonacci series, a math sequence in which each number is the sum

of the two preceding numbers, expressing the synergetic relationship between time and motion. The installation is part of the Agency's Urban Art Program.



Council Member Jimmy Van Bramer (Yellow Shirt) Joined the Beautification Effort. (Credit: Emily Colasacco)

Belt Parkway Bridge over Ocean Avenue (Brooklyn)

The component rehabilitation of this bridge was substantially completed on October 18, 2011.



Repairing the Belt Parkway Bridge over Ocean Avenue. The Bridge on October 18, 2011.

Award

On October 20, 2011, Deputy Chief Engineer Russell Holcomb received an Outstanding Achievement Award from the South Asian American Association.



Chief Bridge Officer Henry Perahia and Deputy Chief Engineer, Maintenance, Inspections and Operations Russell Holcomb.
(Credit: Earlene Powell)

Roosevelt Island Bridge over East River/East Channel (Manhattan/Queens)

On October 21, 2011, Division personnel assisted a film crew from the television series "30 Rock" at the Roosevelt Island Bridge.



Filming on the Bridge. (Credit: Chris George and Ryan Scatenato)

Woodhaven Boulevard Bridge over Atlantic Avenue (Queens)

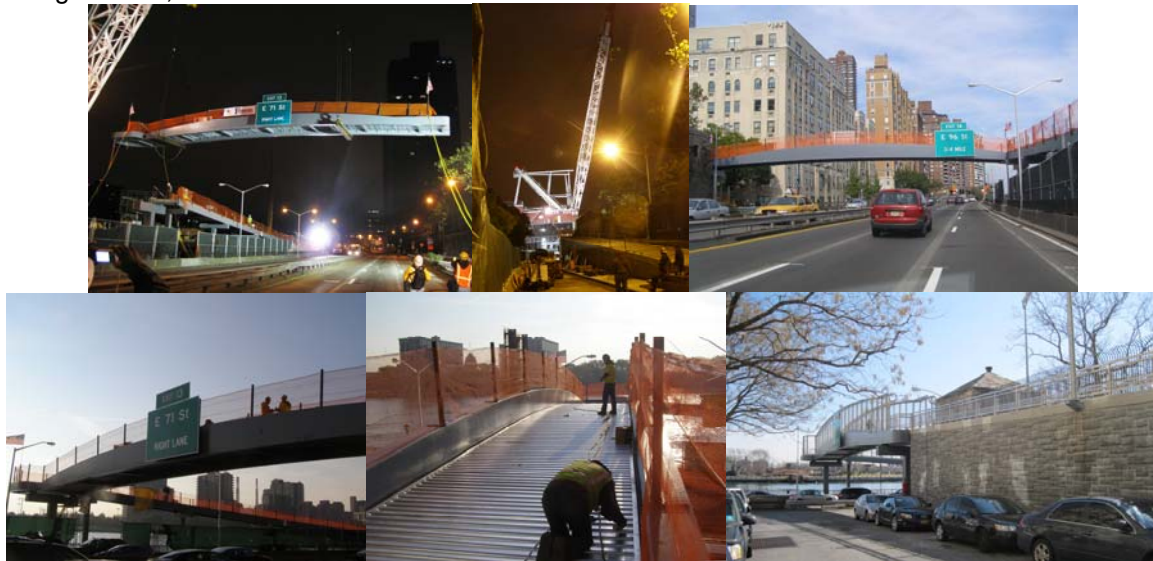
Cleaning and painting of the bridge, which began on June 13, 2011, was completed on October 21, 2011.

Hamilton Avenue Asphalt Plant (Brooklyn) and Harper Street Asphalt Plant (Queens)

On October 22, 2011, Division ironworkers repaired the silo, canopy, and cyclone.

East 78th Street Pedestrian Bridge over FDR Drive (Manhattan)

On the night of October 23, 2011, the new steel for the main span of the bridge was installed, using a crane, between 2 AM and 7 AM.



East 78th Street Bridge Main Span Installation in October 2011. (Installation Credit: Henry Perahia, Follow-up Work Credit: Bojidar Yanev) New West Ramp Masonry Wall.

Anti-icing

On October 29, 2011, a record 2.9 inches of snow fell in Central Park, 1.7 inches at La Guardia Airport, and 1.5 inches at JFK Airport. Anti-icing crews were deployed on the East River bridges from 3:00 PM on October 29 until 5:00 AM on October 30; 3,050 gallons of potassium acetate and 0.5 tons of sodium acetate were applied. The walkways and bikeways were also cleared, as were the sidewalks of the Harlem River bridges.

Wards Island Pedestrian Bridge over Harlem River (Manhattan)

The bridge was closed to pedestrians on October 30, 2011 for electrical component replacement. It is expected to re-open in May 2012.

NOVEMBER***Lincoln Road Bridge over BMT Subway (Brooklyn)***

“Lincoln Road Serape,” an art installation by Katherine Daniels in partnership with LinRoFORMA (the Lincoln Road between Flatbush & Ocean Residents & Merchants Association), was officially unveiled on the chain link fencing of the Lincoln Road Bridge on November 9, 2011. The art is composed of a 70-foot weaving of plastic ribbons installed on the fence that creates a colorful swathe connecting the two neighborhoods surrounding the bridge. The installation is based on the diamond shapes and patterns woven by Navajo craftspeople. The 11 month installation is part of the Agency’s Urban Art Program.



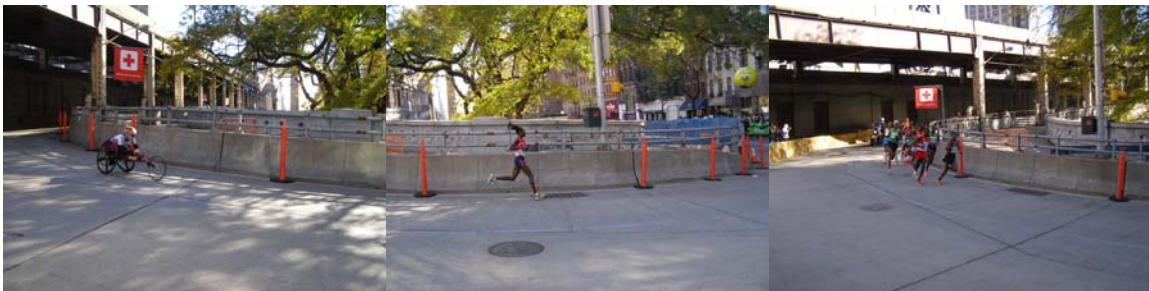
Lincoln Road Bridge Artwork.

Carroll Street Bridge over Gowanus Canal (Brooklyn)

Cleaning and painting of the bridge, which began on July 28, 2011, was completed on November 3, 2011.

New York City Marathon

In preparation for the Marathon on November 6, 2011, Division personnel mechanically swept the Madison Avenue, Pulaski, Ed Koch Queensboro (lower level) and Willis Avenue Bridges, reconfigured the Jersey barriers on the Ed Koch Queensboro Bridge’s outer roadway and 60th Street ramp, and installed hay bales.



At Mile 16 – the Ed Koch Queensboro Bridge. United States’ Amanda McGrory (#342 – Winner Female Pushrim Wheelchair). Kenya’s Mary Keitany (3rd Place). Ethiopia’s Gebre Gebremariam (4th Place – White Hat), Kenya’s Emmanuel Mutai (3rd Place – Red Top and Shorts), Kenya’s Geoffrey Mutai (Winner – 2nd From Right), and Ethiopia’s Tsegaye Kebede (3rd Place – at Right). (Credit: Paul Schwartz)

PS 5 Pedestrian Bridge over 10th Avenue (Dyckman Street) (Manhattan)

On November 9 and 10, 2011 and November 14 and 15, single lanes of 10th Avenue were closed from 9:30 AM until 7:00 PM to replace the timber decking with new material. A light was also repaired.



Repairing the PS-5 Bridge: Director of Bridge Repair Pinakin Patel and Highway Repairers Joseph Davis and George Lee. Carpenters John Horgan and Ruben Urena, and Assistant Civil Engineer Fouad Althaibani. Carpenters Adam Muhleisen, John Horgan, and Ruben Urena. Electrician Angelo Tubiolo. (Credit: Thomas Whitehouse)



Repairing the PS-5 Bridge: Carpenters Adam Muhleisen and John Horgan, and Assistant Civil Engineers Fouad Althaibani and Sohrab Hossain. Supervisor Highway Repairer Joseph Flood and Interim Director of Bridge Preventive Maintenance Paul Schwartz (at Left). Bridge Repairer and Riveter John McAllister. (Credit: Thomas Whitehouse)

Ed Koch Queensboro Bridge

On November 12 and 13, 2011, Division electricians, ironworkers and engineers assisted a film crew from “The Dark Knight Rises” at the Ed Koch Queensboro Bridge.



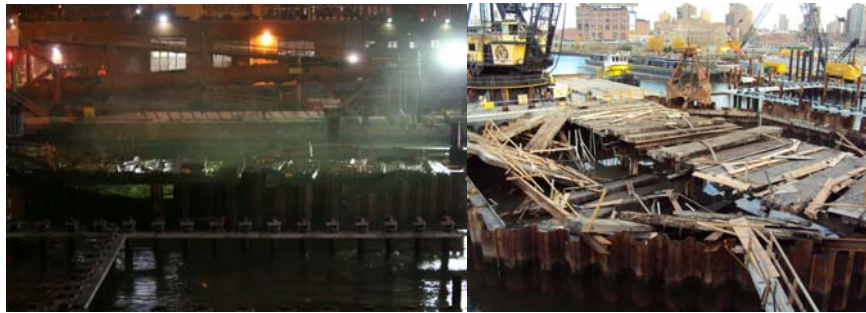
Filming Atop the Bridge. (Credit: Bojidar Yanev)

Willis Avenue Bridge over Harlem River (Bronx/Manhattan)

The blasting demolition of the old Pier 9 was performed at 4:58 AM on November 20, 2011. The contractor’s preparations began at 3:00 AM with the moving of the barges away from the existing Pier 9 to alongside the Bronx bulkhead. The river was closed approximately from 4:30 AM until 6:00 AM. Prior to the traffic closure on the Harlem River Drive, the initial blasting blow was heard. Once the traffic was shut down a few minutes later, the second blast blow was heard, the fish scare was fired and it followed by the blast at 4:58 AM. There was noise, a water splash 6-8’ above the platform inside the cofferdam, the two outer platforms (east and west sides) collapsed inside the cofferdam, while on the center platform only some timber mats fell inside the cofferdam. Traffic on the Harlem River Drive, the bridge, and the local streets, was opened after the inspection of the blaster.



Loading Explosives on November 17. Covering Holes on November 18. Beginning of Blast.



Just After the Blast. Starting the Cleanup.

85th Annual Macy's Thanksgiving Day Parade

Division engineers assisted the NYPD and Macy's representatives in walkthroughs of the parade route along 7th and 6th Avenues. They also reviewed and approved the design specifications of Julius and Sonic the Hedgehog, two new large balloons to be introduced in the parade. A balloon is classified as large if it is larger than 5,000 cubic feet. However, the balloons in the parade cannot be taller than 70 feet, wider than 40 feet, or longer than 78 feet. Division representatives attended the test flights of the balloons at the Meadowlands Sports Complex in New Jersey on November 5, 2011, with NYPD and other agencies.

On November 24, 2011, wind speeds were relatively low and all 15 large balloons flew in the parade without incident. The maximum wind speed was approximately 13.4 miles per hour. Chief Bridge Officer Henry Perahia, Deputy Chief Engineer Anil Vyas, and Acting Director of Engineering Review Udaya Dommaraju were positioned at various locations along the parade route to observe compliance with the approved procedures. Eight anemometers were mounted on top of light poles along the route between 77th Street and 34th Street to measure the wind speed during the parade. Division and consultant engineers were assigned to the anemometer locations to monitor the wind gusts.



Acting Director of Engineering Review Udaya Dommaraju (Left) Reviewing Calculations. Testing the Balloons (Sonic the Hedgehog and Julius) in New Jersey on November 5.



Acting Director of Engineering Review Udaya Dommaraju (Left) and New Sonic the Hedgehog Balloon. New Julius Balloon. Acting Director of Engineering Review Udaya Dommaraju, Administrative Engineer Ayman Jabob, Deputy Chief Engineer Anil Vyas, Assistant Civil Engineer Jana Krettova, Chief Bridge Officer Henry D. Perahia, Assistant Civil Engineer Jafar Haider, and Civil Engineer Zhudong Hu.

Harper Street Asphalt Plant (Queens)

On November 25, 2011, Division ironworkers repaired the plant's mixing drum.

Shore Road Bridge over Hutchinson River (Bronx)

Cleaning and painting of this bridge, which began on July 5, 2011, was completed on November 28, 2011.

Commissioner Matthew P. Sapolin Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on November 30, 2011, in tribute to Commissioner Matthew P. Sapolin, 41, who died on November 29. Mayor Michael R. Bloomberg appointed Mr. Sapolin Executive Director of the Office for People With Disabilities in 2002. Four years later, Mr. Bloomberg decided to elevate the job to the level of commissioner, and Mr. Sapolin rose with it.

Commissioner Sapolin built the nation's largest Disability Mentoring Day, chaired the new Building Code Accessibility Committee that mandated strong Americans with Disabilities Act compliance, took the lead in making sure that the operators at 311 had the latest in accessibility technology for the disabled, worked with neighborhood business associations to create barrier-free shopping districts, helped lead the NYC2012 Paralympics process, and helped create the first Beep Baseball tournament in 2010 with the Parks and Recreation Department. Under his leadership, the Mayor's Office for People with Disabilities spearheaded legislation to provide a rent freeze to qualified disabled tenants, increase the number of wheelchair-accessible taxis in use, create the first accessible taxi base and require that all passenger ferries and ferry terminals be accessible. The flags were raised on December 3, 2011.



Commissioner Matthew Sapolin in 2007.

DECEMBER

East 8th Street Access Ramp (Guider Avenue Ramp to Belt Parkway) over Belt Parkway (Brooklyn)

The new bridge was opened to vehicular traffic on December 2, 2011 with temporary pedestrian fencing in place.



Ramp Open to Traffic.

National Pearl Harbor Remembrance Day

The Brooklyn Bridge flags flew at half-mast on December 7, 2011 to commemorate National Pearl Harbor Remembrance Day, in honor of those who died as a result of their service at Pearl Harbor and to pay special tribute to veterans of World War II.

Belt Parkway Bridge over Rockaway Parkway (Brooklyn)

The northern section of the new bridge was opened to traffic on December 8, 2011.

Harper Street Asphalt Plant (Queens)

On December 10, 2011, Division ironworkers installed a canopy and steel doors, and repaired a motor.

Police Officer Peter Figoski and Sanitation Worker Thomas Lermund Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on December 12, 2011, in tribute to Police Officer Peter Figoski of the 75th Precinct in Brooklyn, who died in the line of duty on December 12. Officer Figoski, 47, a 22 year veteran of the department, had been awarded 12 medals, including eight for exceptional police duty, and made 209 arrests during his career. His highest commendation, the Exceptional Merit medal, was for taking part in a 1996 standoff with a gun-wielding man police later determined to be New York's "Zodiac Killer." Officer Figoski was posthumously promoted (retroactive to one year before) to the rank of Detective First Grade by Police Commissioner Ray Kelly.

The flags remained at half-mast in tribute to Sanitation Worker Thomas Lermund, 48, a 16 year veteran of the Department, who died in the line of duty on December 17, 2011 while on his collection route along Nostrand Avenue in Brooklyn. Mr. Lermund was assigned to the Department's Brooklyn South District 18, which covers Canarsie and Marine Park. The flags were raised on December 24, 2011.



Police Officer Peter Figoski and Sanitation Worker Thomas Lermund.

Rust Street Bridge over Flushing Avenue (Queens)

Cleaning and painting of this bridge, which began on October 3, 2011, was completed on December 14, 2011.

Belt Parkway Bridge over Paerdegat Basin (Brooklyn)

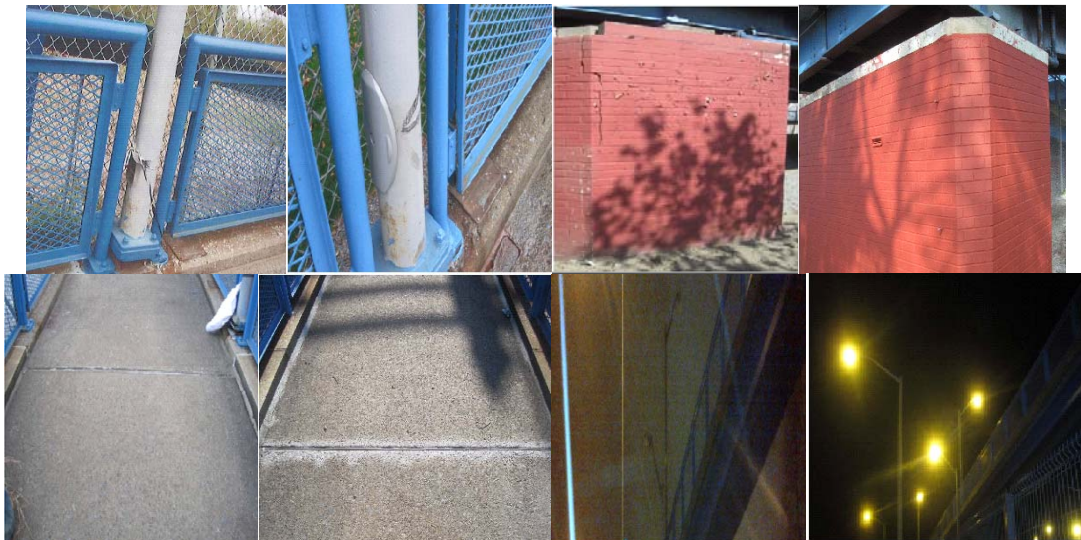
The new eastbound bridge, including the new bicycle/pedestrian path, was formally opened to traffic on December 19, 2011.

Grand Concourse over East 170th Street (Bronx)

Cleaning and painting of this bridge, which began on May 23, 2011, was completed on December 19, 2011.

East 174th Street (South and North) Pedestrian Bridges over Sheridan Expressway (Bronx)

The component rehabilitation of these bridges was substantially completed on December 28, 2011.



East 174th Street (South) Bridge: Missing and Replaced Cover Plate. Repaired and Repainted Brick Joints and Cladding Stones. East 174th Street (North) Bridge: Damaged and Replaced Deck Joint. Inoperable and Repaired Lighting.

Belt Parkway Bridge over Paerdegat Basin (Brooklyn)

Traffic was switched from the existing westbound bridge to the existing eastbound bridge on December 29, 2011 to enable construction of the new westbound bridge.

145th Street Bridge over Harlem River (Bronx/Manhattan)

The reconstruction of the bridge was substantially completed on December 29, 2011.



145th Street Bridge. (Credit: Alexander Berens) Civil Engineers Ferdinand John and Svetlana Kaganovskaya, and Assistant Civil Engineer Alexander Berens at the Walk-Through Inspection on December 29, 2011.

Broadway Bridge over Harlem River (Bronx/Manhattan)

During an attempted vessel opening at 3:00 PM on December 30, 2011, the bridge became stuck in a skewed position. The vessel went south instead, requiring the opening of all of the other Harlem River bridges. Crews replaced the southwest sitting switch. At approximately 7:00 PM, a test opening failed. Continued testing and troubleshooting, coordinated with the MTA, resulted in the replacement of a burnt-out transformer at the north tower. The bridge was closed intermittently until full service was restored at 2:30 AM on January 2, 2012.

Kevin Lobat

Truck Permit Unit and Special Projects Director Kevin Lobat was the subject of the “Staff Spotlight” feature in the December 2011 edition of “Byways,” the official Agency newsletter.



Kevin Lobat Assisting a Truck Permit Customer.

ACCOMPLISHMENTS & PLANNED PROJECTS

Bridge Capital Design & Construction

East River Bridges

Movable Bridges

Roadway Bridges

Brooklyn and Manhattan Roadway Bridges

Bronx, Queens, and Staten Island Roadway Bridges

Specialty Engineering & Construction

Design-Build/Emergency Contracts

Component Rehabilitation

When and Where

Bridge Painting

Engineering Review & Support

In-House Design

Engineering Support

Engineering Review

Quality Assurance

Bridge Maintenance, Inspections & Operations

ACCOMPLISHMENTS & PLANNED PROJECTS

East River Bridges

BROOKLYN BRIDGE

Arguably the most influential bridge in American history, the Brooklyn Bridge remains one of New York City's most celebrated architectural wonders. Designed by the brilliant engineer John Augustus Roebling, and completed by his equally ingenious son Washington Roebling and daughter-in-law Emily Roebling, this elegant structure was, at the time of its completion in 1883, the longest suspension bridge in the world. It was declared a National Historic Landmark in 1967.



Brooklyn Bridge. (Credit: Bojidar Yanev and Russell Holcomb)



Brooklyn Bridge Plaques: Engineering Landmark. (Credit: Michele N. Vulcan) 1899 - Near the Franklin Truss of the Bridge, Marking the Site of George Washington's First Presidential Mansion, Franklin House. (Credit: Hany Soliman) 1991 New York City Landmark. Historic Landmark. 1954 Reconstruction, Two Cities, and Roebling Memorial Plaques. (Credit: Michele N. Vulcan)

The Brooklyn Bridge carried some 123,640 vehicles per day in 2010, and 2,322 commuter bicyclists per day in 2011. The \$832 million reconstruction commenced in 1980 with Contract #1, and continues with Contract #6, scheduled for completion in 2014. This contract includes the rehabilitation of both approaches and ramps, the painting of the entire bridge, as well as the seismic retrofitting of the structural elements that are within the Contract #6 project limits.

Work completed on the bridge to date includes reconditioning of the main cables, replacement of the suspenders and cable stays, rehabilitation of the stiffening trusses, and the replacement of the suspended spans deck and the four travelers.

Contract #6

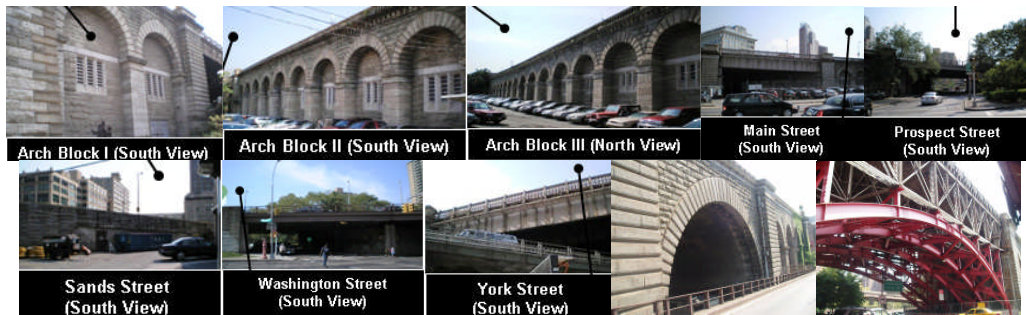
A Notice to Proceed for this \$508 million project was issued to the contractor with a start date of January 19, 2010. The ramps and approaches to the Brooklyn Bridge are in need of rehabilitation and repair, to improve safety and reduce congestion along both the Brooklyn-side and Manhattan-side approaches, particularly from the FDR Drive. With stimulus money from the federal government's American Recovery and Reinvestment Act, the ramps in Brooklyn and

ACCOMPLISHMENTS & PLANNED PROJECTS

Manhattan will be rehabilitated and widened and the entire bridge will be repainted to prevent steel corrosion on the structure.

The approach roadway to the Brooklyn Bridge is aging, with a failed membrane system and deteriorated closure walls. The existing roadway pavement above the historic arch blocks and masonry structures will be rehabilitated. A precast concrete roadway slab will be installed in segments, over sprayed-on waterproofing membrane. Rusted historic railings at Franklin Square, York, and Main Street structures, some from the original bridge construction, will be refurbished and reinstalled. The existing ramp from the FDR southbound roadway will be widened from one to two lanes to reduce bottlenecks and pinch points in traffic flow. All steel structures, including the ramp structures and the main span, will be painted, restoring them to their original Brooklyn Bridge Tan color, as chosen by the Landmarks Preservation Commission.

On all the bridge approach structures on both the Manhattan and Brooklyn sides, the existing deck will be removed by lifting out sections and replacing them panel by panel with precast concrete-filled steel grid deck panels. This approach will greatly reduce noise from drilling and jackhammers, and will also increase the reliability of the start and end times of construction activities every night.



Cliff Street and Franklin Square Arches (on Right).



Main Street Structure (on Left). Park Row Structure and Ramp A (on Right).



Ramp F. Rose Street Structure. Vandewater Street Arch. York Street over Brooklyn-Queens Expressway.

Painting work, to prevent steel corrosion and improve aesthetics, will occur in negative-pressure containment units that travel along the bridge structure, high above the traffic. All three travel lanes will be maintained during the course of this work, and painting will take approximately two years. Equipment will be placed on barges anchored to the Manhattan tower, and on land abutting the Brooklyn tower. Dust collection, vacuum and recycle units will be employed to minimize environmental air quality risks, and there will be continuous air monitoring during operations. All painting work will be conducted in accordance to the US Environmental Protection Act and NYS Department of Environmental Conservation requirements. Noise generated by these units will conform to the NYC Noise Code standards adopted in 2007.

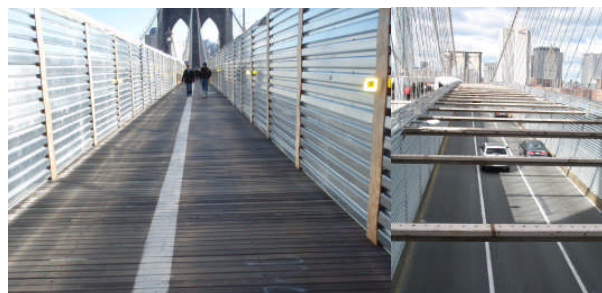
ACCOMPLISHMENTS & PLANNED PROJECTS

In order to facilitate the reconstruction and associated painting work, the contractor began to mobilize in the area known as the Brooklyn Banks and Red Brick Park, between Pearl Street and Park Row on the north side of the Manhattan approach of the Brooklyn Bridge. The area was closed to the public starting June 2, 2010. The security plan for this area requires that the Red Brick area be completely closed to the public for the duration of this phase of work. Pedestrian access between Pearl Street and the Rose Street/City Hall area is maintained through a walkway adjacent to the banks along Avenue of the Finest.

On the Brooklyn side, two lanes of free-flowing traffic will be created at the Cadman Plaza exit, and approach roadways will be rehabilitated to replace the membrane system and deteriorated closure walls. On the Manhattan side, rusted railings and safety barriers will be replaced, and two lanes of free-flowing traffic will be created from the southbound FDR Drive onto the Brooklyn Bridge.

The contract allows for 24 full weekend closures over the duration of the contract; however, the contract also contains clauses that encourage fewer weekend closures with monetary compensation. Although the promenade will be open, there will be sections immediately under the painting area, which will be narrowed by a foot on each side to facilitate work.

In 2010, after mobilization, the contractor started work on the ramp foundation; installed protective shielding under the Brooklyn main and Brooklyn side spans, the Franklin Square structure, and some of the Manhattan ramps; installed vertical walls at both sides of the Brooklyn and Manhattan-bound roadways at the Brooklyn main and Brooklyn side spans; began the set-up of the containment for the lead paint removal at all of these locations; and proceeded with blasting and painting activities. Other activities included detailed surveying, installation of super slabs and the fabrication of precast members.



Bicycle/Pedestrian Path with Protective Shielding in November 2010. Roadway Shielding in October 2010.

In 2011, painting was completed at the Franklin Square structure and is currently in progress at the Manhattan ramps and Brooklyn main and Brooklyn side spans with continuous installation of protective shielding and containment. Painting of the truss top struts was also started, and is currently in progress at the Brooklyn-bound Manhattan side span. The following construction work was started in 2011 and is currently in progress: on the Manhattan approach, activities include Brooklyn-bound roadway removal, waterproofing and super slab installation, Franklin Square floor beam replacement, south cantilever beam excavation and repair, and arch block strengthening. On the Manhattan ramps, work includes bearing replacement, widening, and deck replacement, and fascia removal. Asbestos abatement work is taking place in the Brooklyn maintenance shop. Electrical work is also in progress with activities that include light pole and abandoned equipment removal, temporary lightning installation, and temporary power provisions. Other activities include detailed surveying, testing and repairing of dry-standpipe system, fabrication of precast and steel members.

ACCOMPLISHMENTS & PLANNED PROJECTS



May 2011: Sound Dampening Fence Used as Sections of Roadway Around the Manhattan Approach Outside Pace University Are Saw Cut and Removed. Brooklyn Bridge Manhattan Approach Deck Replacement. Southbound FDR Drive Ramp - April 2011 Steel Erection. December 2011: Painted Top Struts of the Brooklyn-Bound Manhattan Side Span.



Summer 2011: Manhattan Approach - Ramps A and C Deck Replacement. November 2011: Ramp A and Working Near Arch. (Arch Credit: Jagtar Khinda)



December 2011: Ramp C.

NECKLACE LIGHTS

In the fall of 2008, to compare options for energy efficiency, we replaced 20 100-watt mercury vapor lamps of the necklace lights on the Brooklyn and Manhattan Bridges with 10 LED fixtures and 10 induction fixtures. The test was completed in spring 2009; we chose an LED fixture in a dish style and will obtain them for the Ed Koch Queensboro, Williamsburg and Brooklyn Bridges. The test fixtures were removed on April 24, 2009. The replacement of the existing mercury vapor lights on the Ed Koch Queensboro and Williamsburg bridges will take place in early 2012. The replacement of the Brooklyn Bridge necklace lights will not be scheduled until the completion of Contract #6. The replacement of the existing lights on the Manhattan Bridge with the new LED's will begin in the winter of 2011 and be completed in the spring of 2013.



Necklace Light on Williamsburg Bridge Main Cable in September 2010. (Credit: NYSDOT)

ACCOMPLISHMENTS & PLANNED PROJECTS

MANHATTAN BRIDGE

The youngest of the three NYCDOT suspension bridges that traverse the East River, the Manhattan Bridge carries some 440,000 commuters – 74,777 vehicles, 3,617 bicyclists, and 361,606 mass transit riders - between Manhattan and Brooklyn daily. The bridge's total length is 5,780 feet long abutment to abutment at the lower level, and 6,090 feet on the upper roadways portal to portal; its main span length is 1,470 feet and each of its four cables is 3,224 feet. It was designed by Leon Moisseiff and first opened in 1909. The bridge supports seven lanes of vehicular traffic, a bikeway and walkway, as well as four transit tracks upon which four different train lines operate.



Manhattan Bridge Arch and Part of the Colonnades in March 2011. (Credit: Bojidar Yanev) Construction Plaque. (Credit: Jagtar Khinda)



Bridge in July 2009. (Credit: Bernard Ente) July 2011: Rainbow After a Storm. (Credit: Valentin Shakhnovich)

The \$918.6 million reconstruction program commenced in 1982 with Contract #1, and continues with Contract #14 (currently in progress) to rewrap the cables and replace the suspenders and 166 necklace lights. Completion is expected in summer 2013. The reconstruction will end with a future seismic retrofit contract. Work completed on the bridge to date includes reconstruction of the south and north upper roadways, reconstruction of the north and south subway lines, installation of a truss stiffening system to reduce twisting, restoration of the Manhattan Plaza, including the historic arch and colonnades, reconstruction of the south walkway, installation of a new north bikeway, replacement of the lower roadway, and rehabilitation of the Brooklyn Plaza.

Contract #14

Most of the existing suspenders on the Manhattan Bridge were installed under a \$2.2 million contract with Roebling and Sons in 1956 and was one of their last before closing their Bridge Division in 1964. Under Contract #14, the existing main cables will be rehabilitated with new wire wrapping and a neoprene barrier to insulate from weather. In addition, all vertical suspenders will be replaced. A Notice to Proceed for this \$153.4 million construction project was issued to the contractor with a start date of December 28, 2009.

Major activities undertaken during 2010 included the modifications to the approach span subway stringers (to repair flagged cracks), microsurfacing of the North upper roadway, truss vertical rehabilitation, beginning of the main cable rewrapping, suspender replacement, and continuity plate replacement.

ACCOMPLISHMENTS & PLANNED PROJECTS

Major activities undertaken during 2011 included the replacement of all suspenders along two of the four cables, replacement of the wire wrapping with new wire and neoprene wrapping along two of the four cables, and replacement of the cable band bolts along two of the cables.



July 2010: Installation of Under Deck Work Platform at Manhattan Tower. January 2011: Bikeway Protection Shed on North Path. March 2011: Removal of Existing Suspender, 'C' Truss. April 2011: Installation of New Hand Ropes for 'C' Cable.



April 2011: Checking Bolt Tension in New Cable Band Bolts. New Suspender Assembly on 'C' Truss. May 2011: Painting Main Band Cables. June 2011: Reviewing the Bikeway Detour – Assistant Commissioner of Traffic Management Ryan Russo, Director of Bicycle and Pedestrian Programs Joshua Benson (Back Turned), Manhattan Bridge Engineer-in-Charge Brian Gill, Bicycle Program Coordinator Hayes Lord, First Deputy Commissioner Lori Arditto (Orange Top), Deputy Commissioner Gerard Soffian, and Chief Staff Manager/Executive Director of Community Affairs Joannene Kidder (at Right).



August 2011: Repairing Gusset Plates, Checking Bolt Tension. Checking Suspender Loads With an Accelerometer. Installing Containment on Cable D. October 2011: Installation of Transit Platforms.



November 2011: New Suspender Assemblies Along 'C' and 'D' Trusses (Temporary Platforms Shown Above). Main Cable Wrapped With Walking Surface. Power Tool Cleaning Cable Circumferences and Grooves.

ED KOCH QUEENSBORO BRIDGE

At the time of its completion in March 1909, the Queensboro Bridge (popularly referred to as the 59th Street Bridge), was the longest continuous cantilever-truss bridge in the world. While its starring role in the hierarchy of bridges has since been eclipsed by longer and larger structures,

ACCOMPLISHMENTS & PLANNED PROJECTS

the Queensboro Bridge's importance to the mobility and unity of New York City remains undimmed. The bridge was designated as a national landmark on November 23, 1973. The \$807 million reconstruction commenced in April 1981 with Contract #1, continued with a contract for the installation of aviation lights, and will end with a future seismic retrofit contract. Work completed on the bridge to date includes the rehabilitation of the lower inner roadways, the lower outer roadways, the restoration of the Guastavino arches and the Bridgemarket area, rehabilitation of the overhead sign structures in Manhattan, the upgrading of roadway lighting (by replacing all low-pressure sodium lights on the bridge and ramps with high-pressure sodium lights), the geometric improvement of Crescent Street, bikeway and walkway improvement, repair of the south upper roadway concrete overfill and overlay, the promenade platform, the traveler platform, the sidewalk between 61st and 62nd Streets, and the underside of the 59th Street overpass, as well as the rehabilitation of the Sanitation Department area's arch infill, modifications to the maintenance facility beneath the Manhattan approach plaza, and the restoration of the kiosk in the plaza on the Manhattan side of the bridge. This small historical structure was in an advanced state of disrepair and had been damaged by repeated vehicular impacts. The south outer roadway is open to automobile vehicular traffic, and the north outer roadway is open to pedestrians and bicyclists. The work on this vital link between Manhattan and the outer boroughs will enable this 75,000-ton workhorse to better provide the citizens and commerce of New York City with a second century of reliable, prosperous transport. The Ed Koch Queensboro Bridge carried 177,695 vehicles per day in 2010, and 2,904 commuter bicyclists per day in 2011.



Ed Koch Queensboro Bridge in 2009. (Credit: Bernard Ente) Close-up of the 1909 Dedication Plaque. (Credit: Peter Basich) Bridge in February 2011. (Credit: Brian Gill) The Granite Fountain, Built in 1918 for a Farmers' Market Beneath the Bridge, was Rededicated in June 2003 After Restoration. Evangeline Blashfield was the Model for the Fountain's Glass Mosaic of a Woman With a Cornucopia. Her Husband, Artist Edwin Blashfield, Designed the Work. (Description: Greater Astoria Historical Society, Roosevelt Island Historical Society. Credit: Bernard Ente)

A Notice to Proceed for the replacement of the bridge aviation lights was issued to the contractor with a start date of July 12, 2010. The project was substantially completed on December 23, 2010.

Mayor Michael R. Bloomberg signed legislation on April 11, 2011 to rename the Queensboro Bridge as the "Ed Koch Queensboro Bridge" in honor of the 105th Mayor of the City of New York, Mayor Edward I. Koch. The Mayor proposed the legislation in December 2010, and the legislation passed the City Council on March 23, 2011.

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Mayors Michael R. Bloomberg and Edward I. Koch, and City Council Speaker Christine C. Quinn at the Signing of the Legislation in April 2011. (Credit: Edward Reed, Office of the Mayor)



Bridge Details. (Credit: Bernard Ente) DEP Sludge Boat "Red Hook" Passing Under the Ed Koch Queensboro Bridge. (Credit: Bernard Ente) Queensboro Bridge at Dusk. (Credit: Chris George and Ryan Scatenato)

WILLIAMSBURG BRIDGE

The largest of the three suspension bridges that traverse the East River, the Williamsburg Bridge carries some 211,189 daily commuters –111,189 in vehicles and 100,000 via mass transit - on eight traffic lanes, two heavy rail transit tracks, and a pedestrian footwalk, between Manhattan and Brooklyn. It also carried 4,515 commuter bicyclists in 2011. The bridge supports a subway transit line upon which three different train lines operate (J, M, and Z). The \$1.2 billion reconstruction commenced in 1983 with Contract #1, and continues with Contract #8, which began in March 2003 and was substantially completed on September 24, 2010.



Williamsburg Bridge in February 2010. (Credit: Samuel Teaw). Looking West at the Overhead Trusses in November 2010. (Credit: NYSDOT)

In order to minimize disruption to the riding public and ensure that traffic is maintained across the bridge, the rehabilitation of the Williamsburg Bridge was divided into several contracts. In the contracts completed to date, all four main cables have been completely rehabilitated, the south and north roadways of the bridge have been replaced and the BMT subway structure across the bridge was completely reconstructed.

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Contract #8

Contract #8 began on March 3, 2003, and all work will be completed by summer 2012. This \$280 million project saw the rehabilitation of the tower bearings, the truss system, the steel structure of the two main towers and six intermediate towers, the north comfort stations, the replacement and/or adjustment of the main cable suspenders, the installation of two maintenance travelers (inspection platforms) under the main span, as well as painting of the north and south main bridge stiffening trusses. Architectural work included the restoration of decorative lights on the main towers and in the Manhattan Plaza. Work inside the anchorage houses on both the Manhattan and Brooklyn sides included the construction of new stairs, two hoisting systems, a ventilation system, additional lighting, and maintenance/oiling platforms. The project also included the installation of several Intelligent Transportation System components, including variable message signs and closed circuit television cameras.

The final inspection of the maintenance travelers was performed and Division maintenance personnel took over operations in July 2011. Installation of the Brooklyn and Manhattan anchorage maintenance platforms will be completed in 2012.

As Contract #8 concludes the reconstruction of the bridge, extra items deemed necessary were added later, extending the length of the contract. These items included: modification of the footwalk joints, replacement of the south outer roadway overlay system, the seismic retrofit of the steel and concrete portions of the intermediate towers, traffic signal and sign modifications of Delancey Street for the traffic operation, additional steel flag repairs after the biennial inspection, replacement of eight intermediate tower truss bearings, the rehabilitation of the wind tongue casting assembly at the main towers, installation of precast barriers at lane 8 (south outer roadway), safety gate installation at the bus depot, Kent Avenue void rehabilitation, PP29 deck pin replacement, and precast barrier installation at the Manhattan south and Brooklyn north anchorages and approaches.

Work completed in 2010 included the installation of the eight intermediate tower truss bearings, the maintenance travelers, the main tower pier fender system, the lightning protection system for the aviation lights, and FDNY dry standpipe testing.



Manhattan and Brooklyn Approaches and Pedestrian Walkway in October 2010. (Credit: NYSDOT)

Work completed in 2011 included the installation of precast barriers on the south outer roadway at Manhattan Plaza, the installation of a safeguard gate at the bus depot at Brooklyn Plaza, the relocation of a traffic signal at Manhattan Plaza and wind tongue pin rehabilitation. During 2011, work began on rehabilitation of the Kent Avenue yard voids, the rehabilitation of PP29 north and south outer roadway orthotropic deck hinged pressure relief joints, the rehabilitation of the south roadway and anchorage modular joints, flag repairs from 2010 Biennial inspection, precast barrier installation at the north Manhattan and south Brooklyn anchorages, installation of security access doors at the main towers, and removal of all temporary barriers. Contract #8 was substantially completed on September 24, 2010. This work is scheduled to be completed by June 2012.

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February 2011: Looking North at the Replacement of Existing Modular Joint Seals on the South Inner Roadway. April 2011: Looking North at the Replacement of Existing Modular Joint Seals on the North Outer Roadway. May 2011: Looking North at the Placement of a Temporary Barrier at the Manhattan Plaza in Preparation for the Clinton Street Traffic Signal Relocation Work. September 2011: Looking West at the Installation of the Brooklyn Approach Precast Median Barrier and Attenuator.



September 2011: Looking West at the Class GG Tremie Concrete Placement for the Kent Avenue Bulkhead Vertical Wall. October 2011: Looking East at the Placement of Concrete Footing for the New Lane 8 Precast Barrier at the Manhattan Plaza. October 2011: Looking West at the Concrete Placement for the Kent Avenue Yard Bulkhead Rehabilitation. November 2011: Looking East at the Rebar Installation for the Cast-in-Place Transition Barrier on the Brooklyn Approach.

Other work anticipated to be completed in 2012 includes the installation of the lane control panel awning at the Manhattan plaza, PP20 bearing cover installation, project traffic sign installation, and striping at the Brooklyn and Manhattan anchorages and approaches.

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Movable Bridges

As NYCDOT completes reconstruction work on the East River Bridges, more attention is being devoted to other key City-owned bridges, such as the movable bridges. Building on the success of the East River Bridge projects, the Department is implementing many of the innovative concepts originated during the rehabilitation of East River Bridges on these other major reconstruction projects.

BELT PARKWAY BRIDGE OVER MILL BASIN (BROOKLYN)

Opened on June 29, 1940, the Mill Basin Bridge is adjacent to the Jamaica Bay Wildlife Refuge and the Gateway National Recreation Area. It is the only movable bridge on the Belt Parkway. The current clearance over Mean High Water is 35-feet. When the Mill Basin Bridge was constructed during the first half of the 20th century, New York City's inland waterways were among the most heavily navigated thoroughfares in the country. However, as maritime traffic in New York City steadily decreased since the mid-1960s, the need for movable bridges lessened as well. In 1941, during its first full year of operation, the Mill Basin Bridge was opened 3,100 times; by 1953, that figure decreased to 2,173; by 2011, the number of openings declined further to a total of only 236 openings.

In addition, significant and costly traffic congestion results from the operation of this outmoded drawbridge. In 2010, the Mill Basin Bridge carried 140,800 vehicles per day. The average opening and closing time for the bridge (and others like it) is ten minutes. Thus, this structure's operation has a negative and significant effect on the efficiency of New York City's vehicular traffic flow.

In 2011, on a New York State-mandated scale from 1 to 7, this bridge had a condition rating of 3.313, or "fair." While the bridge is not in any immediate danger of structural failure, its reconstruction is required in order to maintain mobility and public safety on this vital artery.

The existing Mill Basin Bridge is 864-feet long and 14 spans, including double movable leaf bascule spans and a steel superstructure, supported on reinforced concrete pier on timber piles, and abutments supported on pre-cast concrete piles. The existing structure and immediate approaches will be demolished and replaced.



Belt Parkway Bridge Over Mill Basin. Aerial View.

The replacement will be a 1,757-foot, 11 span fixed bridge, north of the existing structure. The bridge will have a 36-foot wide roadway with a 12-foot wide right shoulder and a 4-foot wide left shoulder in each direction. The eastbound side will carry a dedicated pedestrian/bicycle path along the south fascia. The new bridge will be a fixed structure with a 60-foot clearance over Mean High Water, obviating the need for opening and closing the structure to accommodate tall vessels. The new design of the bridge will result in increased sight distances, an increase in lane width from 11-feet 4-inches to 12-feet, and the inclusion of safety shoulders in both directions. The channel will remain navigable during construction, and the clear channel width will remain the

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same after the new structure is in place. A new fender system will be installed to protect the bridge substructure from marine traffic. Currently in its final design phase, the reconstruction of the Mill Basin Bridge (part of the second Belt Parkway Group) is scheduled to start in summer 2013, and to last approximately 4 years.

BORDEN AVENUE BRIDGE OVER DUTCH KILLS (QUEENS)

The Borden Avenue Bridge over Dutch Kills is located just south of the Long Island Expressway between 27th Street and Review Avenue in the Sunnyside section of Queens. It is a retractile-type movable bridge. The original bridge construction was completed in 1908 and was opened to traffic on May 25, 1908.



1908 Borden Avenue Bridge Plaque. Waterside View in 2008. (Credit: Bernard Ente)

The bridge structure carries two lanes of vehicular traffic with sidewalks on either side. The roadway is 34 feet wide and the sidewalks are 8 feet wide.

In the spring of 2008, the Department observed that an existing crack in the west abutment's wingwall had opened up further. Following a series of subsequent inspections, it was determined that there is continuing movement of the west abutment wall. In an effort to mitigate this condition, two pressure relief joints were installed in the roadway, and the speed limit for eastbound traffic was posted at 15 miles per hour. Unfortunately, these measures did not stop or slow the abutment wall's movement.

The movement of the wall was undermining the stability of the bridge. Due to the potentially serious danger to life, public safety and property posed by the current condition, it was critical that the repair work be performed as expeditiously as possible.

On October 16, 2008, in the interest of public safety, pursuant to Section 103(4) of the General Municipal Law and Section 315 of the New York City Charter, the Department declared that an emergency exists relative to the movable bridge carrying the Borden Ave. over the Dutch Kills in Queens.

The repairs included the following: removal of the fill material under the roadway and sidewalks from behind the west abutment and between the wingwalls; relocation of the existing utilities; digging of a test pit to inspect the supporting piles; inspection of the condition and the taking of measurements; and the implementation of the appropriate repair solution based on the inspection findings.

The bridge was closed at noon on December 31, 2008. A Letter of Intent for the emergency repair of this bridge was issued to the contractor with a start date of January 6, 2009. The bridge was reopened to vehicular traffic on December 24, 2010. Construction was substantially completed on May 20, 2011.

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Late December 2010: Bridge Open to Vehicular Traffic.
(Credit: Mitch Waxman)

A project to rehabilitate the existing steel bridge and repair the west abutment is scheduled to begin in August 2018. The work will also include upgrades to the mechanical and electrical components of the bridge. Construction is expected to be completed in February 2020.

BROADWAY BRIDGE OVER THE HARLEM RIVER (BRONX/MANHATTAN)

Broadway extends from the southern tip of Manhattan, through the Bronx and terminates in Westchester County. The Broadway Bridge, a lift type movable bridge crossing the Harlem River, is located between West 220th Street in Manhattan and West 225th Street in the Bronx. In 2010, the bridge carried 37,292 vehicles per day. Three tracks of the IRT subway are carried on its upper deck and a five-lane two-way roadway with sidewalks on either side is carried on its lower deck. The two roadways each measure 34 feet and the sidewalks are 7 feet wide.

The vertical lift bridge is the third movable steel structure at this location. The original steam powered single-deck swing span built in 1895 carried only highway and pedestrian traffic. The second structure was built in 1905 to accommodate the extension of IRT subway into the Bronx from Manhattan. The second bridge was again a double deck swing span to carry the subway line on the upper deck and highway traffic on the lower deck. The current structure, a double deck vertical lift bridge to carry the subway and vehicular traffic, was built in 1960.



Broadway Bridge in December 2008.
(Credit: Sergey Parayev)

The bridge underwent a protective coating project to protect the steel components of the bridge against the effects of corrosion. This project was completed in October 2003 at a cost of approximately \$8.7 million.

The bridge also underwent recent component rehabilitation, including miscellaneous steel repairs, grating replacement, sealing and waterproofing of its deck, repair of spalled concrete pavement, new expansion joints and new median barrier at an approximate cost of \$2.14 million. This project was completed in May 2004.

Currently in its final design phase, the reconstruction of the bridge is scheduled to start in August

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2016. The project's scope of work includes a major rehabilitation of the roadway deck, superstructure steel and substructure elements of the vertical lift span, as well as the approach spans. It will also include the replacement and rehabilitation of the electrical and mechanical components of the vertical lift span, as well as replacement of the existing fender system with a new larger and stronger one. Construction is expected to be complete in July 2019.

BRUCKNER EXPRESSWAY (NB & SB SERVICE ROAD) OVER WESTCHESTER CREEK (UNIONPORT BRIDGE) (BRONX)

This double leaf bascule bridge opened in 1953. In 2010, the bridge carried 64,098 vehicles per day. This 17-span structure (three waterway spans and fourteen concrete approach spans) carries five lanes of the Bruckner Boulevard Expressway service road traffic over Westchester Creek. The reconstruction design of the bridge underwent a Value Engineering Study by the Office of Management and Budget which recommended several changes to the design that are being incorporated.

Subsequent to the study, concepts for two temporary movable bridges (for MPT purposes only) were developed in lieu of a complete bridge closure during construction. However, an assessment revealed a significant impact on local traffic would occur, due to the required traffic rerouting via local streets to the temporary bridges, and the location of the temporary bridges would have a severe impact on the operations of the Department of Sanitation and a Department of Environmental Protection pump station. In addition, the cost of implementing the temporary bridges for only a couple of years was very high, in the order of \$40 million. The concept of rehabilitating the bridge by constructing new temporary bridges for MPT purposes was then abandoned.

A follow-up feasibility study was conducted for completely replacing the existing bridge with a new wider bridge in phases while maintaining traffic on the existing bridge. The project's new scope of work includes: a complete replacement of the bascule, flanking, and approach substructures and superstructures, providing six 12-foot travel lanes with 10-foot shoulders on both sides of the bridge; a new 15-foot bicycle/pedestrian path on the south, separated from traffic with a barrier; replacement of the existing mechanical and electrical systems for the bascule span; reconstruction of the bridge operator and control houses, and replacement of the existing fender system, drainage system, street lighting, traffic signal facilities, and gates. Construction is expected to start in fall 2016.



Unionport Bridge in 1953 and 2009.

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Unionport Bridge in 2002. (Credit: NYSDOT) Eastbound View.

MADISON AVENUE BRIDGE OVER HARLEM RIVER (BRONX/MANHATTAN)

A project for electrical, mechanical, and miscellaneous operating system-related work is scheduled to be performed between March 2017 and September 2018. The bridge is currently operating with the very old machinery components, along with a temporary electrical system known as the “Interim Drive System” installed during the 1994 rehabilitation contract. Some of the machinery components currently in service are over 100 years old and have far exceeded their service life. Moreover, the bridge does not have any back-up operating system which renders the bridge inoperable in case of failure of any component of the Interim Drive System. The preliminary design phase of this project began in early 2011. In 2010, the bridge carried 42,966 vehicles per day.



Madison Avenue Bridge Sign in 2007. (Credit: Duane Bailey-Castro) Bridge in 2009. (Credit: Bernard Ente)

PARK AVENUE TUNNEL OVER 34TH STREET (MANHATTAN)

The Park Avenue Tunnel was originally built as an open cut in 1836 to accommodate horse drawn trolley cars between East 33rd Street and East 42nd Street. In 1854, a five course brick arch roof was constructed and the underground tunnel was used by the New York and Harlem River Railroad steam engine trains from East 42nd Street to its terminal then located at East 30th Street and Park Avenue. In 1870 the rail road was converted to electric powered trolleys.

The tunnel in its present form was converted to vehicular traffic only in 1917, when trolley tracks were covered with fill and roadway pavement was built. In its present form, the tunnel is located under the center mall of Park Avenue South. The roadway width inside the tunnel varies from 19'-2" to 22'-5" and used to carry a single lane of traffic in each direction. On August 3, 2008, the traffic in the tunnel was restricted to only a single northbound lane.

Some rehabilitation work was completed on the tunnel in November 2005. That contract included the rehabilitation of the fans and the ventilation system. The new project is currently in its final engineering design phase. The scope of work includes complete rehabilitation of civil and structural components of the tunnel as well as upgrading of fire detection and ventilation system of the tunnel. Construction is expected to start in July 2022 and be complete in December 2024.

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Park Avenue Tunnel in 2003. (Credit: NYSDOT)

ROOSEVELT ISLAND BRIDGE OVER EAST RIVER/EAST CHANNEL (MANHATTAN/QUEENS)

This lift bridge opened in 1955, when it was known as the Welfare Island Bridge. In 2010, the bridge carried 9,800 vehicles per day. The 8 span structure carries two lanes of traffic over the East Channel of the East River. It is the only vehicular access to Roosevelt Island from the Borough of Queens.



American Institute of Steel Construction 1955 Award Plaque. Original Control Desk. Welfare Island Plaque.

A Notice to Proceed for the \$86.5 million reconstruction of this bridge was issued to the contractor with a start date of March 12, 2007. The project's scope of work includes rehabilitation of the existing bridge superstructure, substructure and approaches, replacement of some of the existing mechanical and all of the electrical systems for the lift span, rehabilitation of the bridge operator house, installation of safety fences on the sidewalk, replacement of the street lighting, resurfacing of the approach roadways, installation of pigeon proofing systems and re-painting the entire structure. The project will also include the installation of a dedicated right-hand turn lane onto the southbound Vernon Boulevard in Queens, and the construction of a new back-up generator building under the Queens approach to provide power to allow operation of the bridge in an emergency. Fabrication and testing of mechanical and structural components was in progress by the end of 2007.

By the end of 2008, the rehabilitation of the existing bridge superstructure, substructure and approaches was nearly complete. The roadway was returned to full service on December 2, 2008 after the complete re-decking of the main bridge and approaches. The sidewalks were returned to service in 2009. Due to a design change, the replacement of some of the existing mechanical and all of the electrical systems for the lift span, and the rehabilitation of the bridge operator house was performed during a Navigation Channel closure between October 2009 and August 2010. The installation of safety fences on the sidewalk, replacement of the street lighting, resurfacing of the approach roadways, and installation of pigeon proofing systems was completed in 2009.

The cleaning and repainting of the bridge began in January 2008, and the structure painting was complete by the end of 2009. Local touch up painting followed the installation of the new lift machinery. The Department and its contractor strictly adhered to the safety requirements

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regarding lead paint removal as approved by the United States Environmental Protection Agency and the Occupational Safety and Health Administration, New York City Departments of Health and Environmental Protection, and the New York State Departments of Health and Environmental Conservation.

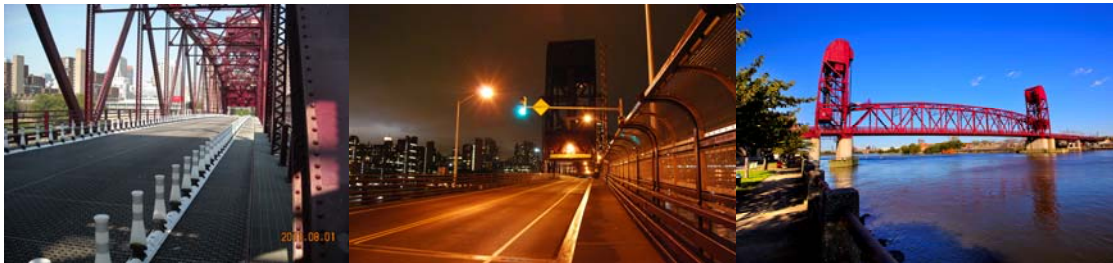
The work was performed within an entirely sealed Class 1A containment system (under negative pressure) which acted as an added safety measure to prevent any materials from escaping into the air. Filtration of the enclosed air prevented paint waste dust from being released. The Department placed several air monitoring stations in the area around the bridge. The Department performed continuous monitoring and testing of the soil and air quality as well as noise levels in the area surrounding the containment enclosure to minimize impacts and ensure the safety and quality of life for workers and residents nearby.

In 2010, the contractor completed the rehabilitation of the machinery, replacement of the bridge's power systems, installation of the bridge control systems, installation of new barrier gates, bridge railings, warning lights, new protective bollards, replacement of the sewer lines with new curbing, and the replacement of pavement. Under-deck temporary work platforms were removed and the bridge is now operational for the passage of marine traffic.

In 2011, the architectural work in the control and machinery rooms was completed. Bird screens were installed around the elevator shafts and a bird prevention system was installed at the piers. Security fences with gates were installed around the generator house and three land piers. Elevators at both east and west towers were rehabilitated and tested. Final acceptance testing of the bridge's electrical and mechanical system is in progress, which will be followed by training of the in-house bridge operators and maintenance crews. Construction is expected to be completed in the summer of 2012.



January 2011: North Sidewalk With New Pedestrian Fence. Vernon Boulevard and 36th Avenue Intersection With New Turn Lane. Recently Painted Bridge With New Traffic Control Equipment.



View of Bridge in August 2011. Sidewalk and Pedestrian Fence in October 2011. (Credit: Chris George and Ryan Scatenato) View of the Bridge in October 2011. (Credit: Rafael Lopez)

UNION STREET BRIDGE OVER GOWANUS CANAL (BROOKLYN)

The original Union Street Bridge over the Gowanus Canal was constructed in 1870 as part of the construction of Prospect Park. A major crossing over the Gowanus Canal, this bridge is the last in a series of five eastbound crossings, and it is 885 feet from the canal's end. The

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neighborhood, located in the Gowanus section of Brooklyn, is primarily industrial; however, public facilities such as schools, parks, and public transportation are nearby.

In its current configuration, the bridge is a double-leaf Scherzer type (rolling lift) bascule bridge, which was opened in 1905. The bridge carries two lanes of eastbound traffic, a delineated bike lane and a sidewalk.

During the preliminary design, eight alternatives were identified for the rehabilitation of the bridge. The recommended design alternative proposes a replacement of the entire bridge structure with a new single leaf fixed trunnion bascule bridge on a reinforced concrete substructure and new pile foundation. Preliminary plans have been developed. However, during the Value Engineering study in 2009, the team recommended converting the movable span into a low level fixed bridge. NYCDOT, OMB and other affected agencies are currently reviewing the feasibility of this alternative. The construction is anticipated to begin around April 2019.



Union Street Bridge in 2010. (Credit: NYSDOT)

WARDS ISLAND PEDESTRIAN BRIDGE OVER HARLEM RIVER (MANHATTAN)

The Wards Island Bridge is a pedestrian bridge connecting the East River Housing Project at East 103rd Street in Manhattan to Wards Island. Located on the East River, this bridge is located between exits 14 and 15 of the FDR Drive. This vertical-lift bridge has a total of twelve spans. Four spans are located on the Manhattan side of the bridge and are oriented in the south/north direction, whereas the remaining spans are oriented in the west/east direction. The curb-to-curb width of the lift span is 3.66 meters, the clear width of the Manhattan approach ramp is 3.66 meters and the clear width of the Wards Island approach ramp measures about 3.76 meters. The bridge's Wards Island approach provides immediate pedestrian access to the 68-acre Wards Island Park.



Wards Island Bridge in April and August 2011. (April Credit: Brian Gill, August Credit: Duane Bailey-Castro)

The bridge was built by the U.S. Army Corps of Engineers in 1951 and was designed by Othmar Hermann Ammann.

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A protective coating project was completed in May 2003 at an approximate cost of \$1.2 million. A Notice to Proceed for the reconstruction of this bridge was issued to the contractor with a start date of June 14, 2010. The project's scope of work includes the replacement of the electrical components, the replacement of the walkway deck on the lift span, the repair and overlay of the deck on the other spans and approaches, the rehabilitation of the steel superstructure members, new fencing and lighting, and restoring the control and tender houses to their original condition.

In 2010, the contractor mobilized and began the installation of protective containment shielding. Following training from Division Bridge Operations personnel, the contractor took over operational control of the bridge on November 12, 2010. Deck cracks were repaired, and the old bridge railing and protective fencing were removed in preparation for removal of the steel grid decking.



Existing Concrete Deck in 2010. Proposed Fencing, Lighting, Access Platform and Handrail Along the Wards Island Bridge.

In 2011, the contractor installed a new concrete-filled steel grid deck on the lift span. Concrete repairs were performed on piers over land as well as in the East River. The bridge was temporarily opened to pedestrians on June 30, 2011 for the summer months and was closed from November 21, 2011 through May 7, 2012 for remainder of the construction. Construction is expected to be completed in June 2012.



January 2011: Under-Deck Shield Installation for Manhattan Approach Span 6. April 2011: Removing Concrete Decking Material. June 2011: Pouring Concrete Decking at Span 7.



Construction in August, October, and December 2011. Installing Handrails Between Spans 7 and 9.

WILLIS AVENUE BRIDGE OVER THE HARLEM RIVER (BRONX/MANHATTAN)

Measuring 3,212 feet in length and opened to traffic on August 23, 1901, the old Willis Avenue Bridge was one of New York City's most heavily traveled bridges. The bridge was a bowstring truss swing bridge which spanned the Harlem River, and connected Manhattan's First Avenue and 125th Street to Willis Avenue and Bruckner Boulevard in the Bronx. Engineered by Thomas C. Clarke, the bridge was designed to relieve traffic congestion on the Third Avenue Bridge.

A major hub between the FDR Drive in Manhattan, the Major Deegan Expressway and the Bruckner Boulevard in the Bronx, the Willis Avenue Bridge carried approximately 56,934 vehicles

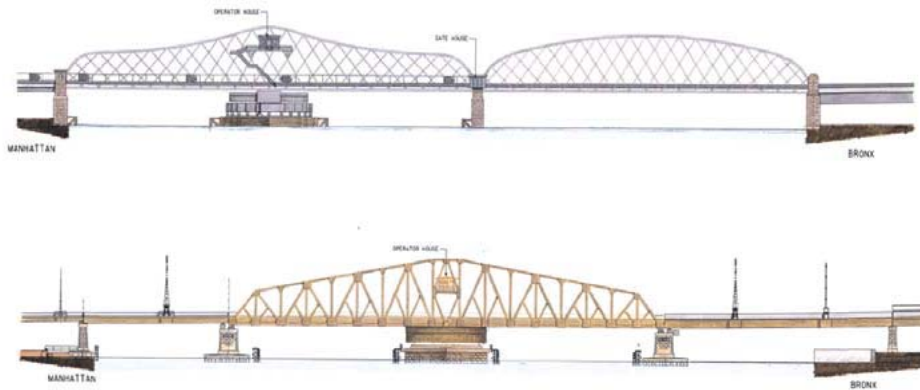
ACCOMPLISHMENTS & PLANNED PROJECTS

per day in 2010. Ten local and interstate bus lines use the bridge as a principal route from New York City to points throughout the northeastern United States.

Because of substandard curves that were present on the structure's approaches, the Willis Avenue Bridge was one of the City's most accident-prone crossings. Between 1992 and 1994, there were 809 vehicular accidents on the bridge, for an average of 269 per year. The ramp from the FDR Drive was put out of service with traffic entering the bridge from a temporary loop ramp installed as part of the project. Under the Department's reconstruction program, these substandard curves were eliminated.

Because of the advanced age and condition of the Willis Avenue Bridge, the City of New York replaced the existing bowstring truss swing bridge with a new swing span bridge constructed just to the south of the existing bridge.

The new pivot pier for the swing bridge is located 118 feet east of the existing pier, but still provides two 109-foot wide channels, as did the old pier. The new pier was shifted to the east, closer to the center of the channel, to facilitate construction of a wider curve alignment on the FDR approach ramp to the bridge. The old swing bridge, which opened for tall vessels, had a vertical clearance of 24 feet above Mean High Water Level (MHWL) when closed. The new swing bridge when closed has a 25 foot clearance above the Mean High Water Line which makes it consistent with other bridges along the river.



Old and New Willis Avenue Bridge Span.

A direct connection to the northbound Major Deegan Expressway in the Bronx is under construction. There will be wider travel lanes with shoulders, and a broader, combined pedestrian/bicycle pathway along the north side of the bridge.

New, tested and inspected materials are being used, including placement of a solid riding surface on the swing span instead of the existing open grating deck. In addition, modern electrical, mechanical and communications systems are being installed.

Traffic continued to use the current bridge until the new bridge opened, resulting in limited impact to motorists and nearby communities. The NYC Marathon was not impacted: runners continued to use the old bridge each year until the new swing span was completed.

Throughout the project, little impact to marine traffic will be experienced. The new swing span was fabricated and assembled off site, and floated into place once the foundations, center pier and rest piers were ready to receive it.

The project also replaced the FDR Drive approach ramp and the ramp onto Bruckner Boulevard, and improve the alignment. NYCDOT will also reconstruct Willis Avenue over the Major Deegan Expressway for the New York State Department of Transportation.

A Notice to Proceed for the replacement of this bridge was issued to the contractor with a start date of August 27, 2007. Foundation construction work was in progress by the end of 2007.

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On January 3, 2008, the East 125th Street exit ramp off the northbound FDR Drive was closed. This closure was necessary so that work on the construction of a temporary loop ramp, as well as construction of the new north-bound FDR Drive ramp to the Willis Avenue Bridge, could begin. The East 125th Street exit ramp, which typically carries only a low volume of traffic, will not reopen until the temporary ramp is removed, all local streets are reconstructed and all remaining contract work on the exit ramp is completed. The East 125th Street exit ramp is not anticipated to reopen until the second quarter of 2012.

In 2008, the project focused on foundation construction work, along with construction of a temporary ramp from the north-bound FDR Drive onto the bridge. At the end of 2008 the loop ramp was nearing completion. It went into service on January 24, 2009. This will allow the removal of the existing ramp and the construction of the new ramp to proceed. One half of the foundations for the new FDR Ramp were installed. Additionally one of the four piers in the river was in place, and work on a second had begun. The foundations in the Harlem River Rail Yard were more than 50 percent complete, and work had begun on the footings for the new Bruckner Boulevard Ramp.

In 2009, the project continued to focus on foundation construction work, with the installation of footings and piers for the new ramp from the FDR Drive as well as the one-half of the 1st Avenue Approach. The precast concrete pier box for River Pier 5 was transported in February 2009 by oceangoing tug and barge from the fabrication yard in Virginia to the contractor's yard in Jersey City, New Jersey. Over 30 automobiles were removed from the Manhattan channel in spring 2009. At the end of 2009 the contractor began the installation of the steel superstructure over the FDR Drive. The work in the river consisted of the installation of the drilled shafts for the four river piers and the installation of three of the four precast pier boxes in the river. The assembly of the new swing span began in Coeymans, near Albany, New York in June 2009, and was completed in July 2010. The span was floated down the Hudson River on July 14, 2010. In the Bronx, a temporary pedestrian bridge was installed in May 2009 over the Major Deegan Expressway, just south of the existing bridge, to carry pedestrians until the new bridge is constructed. More than half of the paving and drainage work on the expressway is complete. One-half of the bridge over the Major Deegan was removed and work on the new abutment wall began. One-half of the abutment at Bruckner Boulevard was reconstructed and the piers to carry the south half of the new bridge were installed. The foundations in the Harlem River Rail Yard were completed and the first phase of the new Bruckner Boulevard exit ramp was also completed.

The contractor began 2010 with construction of the FDR Drive entrance ramp, and the First Avenue Approach on the Manhattan side of the bridge. On the Bronx side, the new Bruckner Boulevard exit ramp was opened to traffic on February 12, 2010. The work then proceeded with the demolition of the existing ramp. In the river, work was initiated on placement of the submarine power cables. All during the winter, swing span truss erection continued at Coeymans in upstate New York. This work also included installation of the bridge machinery components.

In July 2010, the swing span was towed to New York City without incident. After staying for two weeks at a contractor yard in Jersey City, on July 26, it was towed to the bridge site and on August 9, was floated into place on the new center pier.



Voyage up the East River on July 26, 2010. New Willis Avenue Bridge Span Passing Under the Brooklyn Bridge. (Credit: Douglas Reese)

ACCOMPLISHMENTS & PLANNED PROJECTS

Work continued on the new bridge span in August 2010 with the placement of a new lightweight concrete deck surface, bridge machinery and electrical utility work. Demolition of the existing Willis Avenue Overpass over the Major Deegan Expressway was completed by September.

On October 2, 2010, with the completion of the FDR Drive approach, partial First Avenue Approach, and the Willis Approach in Bronx, traffic was allowed over the new swing span and the existing bridge was closed to traffic. The old bridge was retired after 109 years of service.

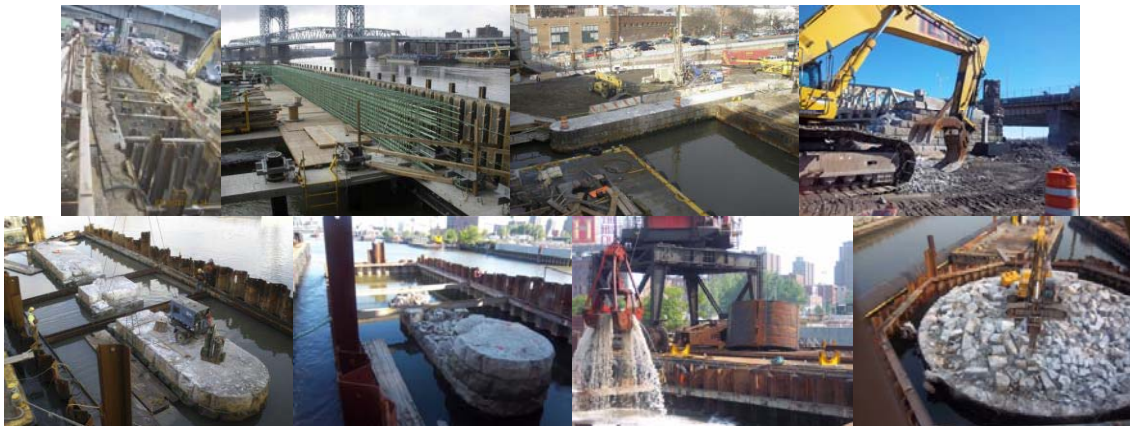


New and Old Willis Avenue Bridges on October 2, 2010. Old Willis Avenue Spans in December 2010.
(Credit: Duane Bailey-Castro) Aerial View in September 2011. (Credit: Hardesty and Hanover)

The float-out of the old existing swing span took place on October 21, 2010, and the adjacent, flanking bow-string arch span was floated out on November 3, 2010. Both spans remained on site through November for the asbestos abatement process before being floated to the contractor yard in Jersey City. The first bridge test operation of the new swing span was conducted successfully during the early morning hours of December 23.

In 2011, the contractor completed work on the existing swing and flanking spans and towed them to the recycling facility in New Jersey. In Manhattan, work continued on the remaining half of the First Avenue approach roadway and spans, the demolition of the temporary loop ramp, and the reconstruction of the 125th Street exit and local streets. In the last quarter of 2011, work also continued on the Manhattan ramp and stairs and the auxiliary bridge operator's house.

In the river, the contractor started removal of the river piers and continues work to complete the demolition of center pier and the west rest pier by blasting. They also worked on the installation of the fender system for the new piers as well as the final alignment of the bridge machinery and testing of the electrical and mechanical system. In the last quarter of 2011, the contractor completed demolition work at pier 10 and carried out blasting of pier 9. Post-blasting excavation continued at Pier 9 for removal of the pier, and fender building work continued in the river. Work also continued for the construction of bridge machinery and testing of the electrical and mechanical systems. Installation of granite continued at pier 5.



March 2011: Completed Placement of Tremie Concrete for the H Pile Footings for Panels N3 through N6 of the Retaining Wall. March 2011 River Work: Installation of the Rebars at the South Fender System at the Pier 6 South Fender. Demolition of the Old Pier at Old Pier 8. Water Installation Along the Inside Perimeter of the Cofferdam at Old Pier 10. June 2011 River Work: Demolition of Old Pier 10. Picking Up Waste With a Clamshell Bucket. July 2011: Demolition of Old Pier 9.

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In the Bronx, the contractor continued work on the relieving platforms, construction of the remaining superstructure and decks for the spans over the Harlem River Yard and mainline. They also worked on the construction of combined pedestrian/bicycle bridge over the Major Deegan Expressway as well as the new direct ramp to the northbound Major Deegan Expressway. The ramp to the northbound Major Deegan Expressway is expected to open in January 2012, and the pedestrian bridge work will continue through the first quarter of 2012. Work on completing the Bruckner Ramp and the local streets within project are in progress. All lanes underneath the bridge on Bruckner Boulevard are expected to open by mid-January 2012.



March 2011: Completed Excavation and Disposal of Existing Approach Slab and Roadway Pavements at B Ramp, Stage III. . Completed Excavation and Disposal of Existing Willis Avenue Abutment Footing and North Retaining Footing for Stage 5B Construction. Stage III Caisson Concrete Placement at Caisson #2 at Pier 11. Setting Granite Stone Facing at Pier 11. Finished Stage VB Removal of Steel Girder at South Bay at Existing Span 15. September 2011: Construction of Sidewalk at Bruckner Boulevard. February 2011: Pedestrian/Bicycle Bridge and Ramp to Major Deegan Expressway. September 2011: Granite Installation for Approach to Connector Ramp.

The contractor started landscaping and planting in the spring of 2011 and continued planting in the fall. Any remaining landscaping will be completed by next spring. The project is slated for completion in December 2012.



March 2011: Began Landscaping the Area Between the A Ramp Approach and the River. Bridge in November 2011. (November Credit: Hardesty and Hanover)

145TH STREET BRIDGE OVER THE HARLEM RIVER (BRONX/MANHATTAN)

The existing 145th Street Bridge is a swing type bridge with two throughtrusses. An eight-span structure, it carries four lanes of vehicular traffic over the Harlem River Drive, the Harlem River and Oak Point Link Railroad. Spans one and two were constructed in 1957 when the bridge was extended to span the Harlem River Drive. Spans six, seven and eight were reconstructed in 1990 in place of the original Bronx flanking span to provide a right-of-way for the Oak Point Link. In 2010, the 145th Street Bridge carried approximately 28,749 vehicles per day. This makes it one of the most essential routes for vehicles and pedestrians traveling between Manhattan and the Bronx. Vehicles, which cross this rim bearing swing bridge each day between the two boroughs, include buses, trucks and cars.

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A Notice to Proceed for the \$69.4 million reconstruction of this bridge was issued to the contractor with a start date of July 15, 2004. The new swing span was assembled in Albany, New York in late 2005, and was floated-in on February 9, 2007.

The project included the complete replacement of the swing span and six approach spans, seismic retrofitting, partial reconstruction of substructures and the reconstruction of the approach roadways, sidewalks, and bridge railing. The design for the bridge utilized elements pre-fabricated off-site so as to allow a very quick replacement of the existing bridge in 3 stages totaling 18 months. Traffic was only impacted for the 15-month period of March 16, 2006 to June 18, 2007. All four lanes of the bridge were opened to vehicular traffic at 7:00 AM on June 16, 2007.



Bridge Sign. June 2007: New 145th Bridge at Night.

Work completed in 2008 included the following: realignment of center lock machinery; touching up the paint on the drum girder; installation of cover plates over the sidewalk gaps at the swing span end dams; installation of retrofit brake wheel couplings; installation of the exhaust fan, damper and exhaust piping; energizing of the Manhattan approach street lighting; and completion of the street lighting inspection in Manhattan and the Bronx.

Work performed in 2009 included: touch-up painting, installation of several access platforms, new navigation lighting on the rest pier; installation of checkered plates to cover the gap in the floor of the machinery room; installation of security fence for the operator house and machinery room entrance; final alignment of the center pier rollers between the track and drum girder; continued work on rack and pinion face contact; installation of retrofit secondary reducer seal at the end lift machinery reducers; completed fabrication and witnessed factory testing of dual opposed CATRAC; removed existing CATRAC and IGUS cables on swing span and rotated the outer drum; setup generator on sidewalk for temporary electrical power to swing span; completed installation and testing of dual opposed CATRAC and IGUS cables onsite; and functional checkout for electrical distribution equipment and control system.

In 2010, work performed included: replacement of machinery room concrete floor panels over the Catrac with the lightweight grating; replacement of the galvanized plates around the perimeter of the grating; and installation of tide gauge signs. Significant progress was made in the electrical system and mechanical bridge machinery work tasks. Work completed included: the rack and pinion face contact, pinion bearing bolting, and secondary reducer bolting; installation of phenolic name plates for lubrication points on machinery items, hydraulic lines rerouted, flushed and tested; began mechanical testing and electrical functional checkout testing; replaced damaged wiring for the warning and barrier gates from the northwest gatehouse to the southwest warning and barrier gates; and removed and replaced the damaged southwest warning gate.

In 2011, work performed included: relocation of the 145th Street Bridge Field Office to the Willis Avenue Engineer's Field Office; final project video was taken; alleyway portion in the vicinity of the Bronx abutment was milled and paved; replaced damaged sidewalk panels on the north sidewalk of the Bronx alley way; small round scupper was installed in the proximity of the south east corner of the swing span to eliminate water ponding; coupling replacement work in progress at the end lift machinery; completed mechanical and electrical manuals; continued final alignment of motor brakes, continued work on electrical and mechanical punchlist items, and replaced the

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northeast barrier gate and tested it. These upgrades have restored the structural integrity and extend the useful life of the 145th Street Bridge. The project was substantially completed on December 29, 2011.



145th Street Bridge in December 2011.



Civil Engineers Ferdinand John and Edvard Jeamgocian Examining the Sidewalk. (Span and Sidewalk Credit: Alexander Berens) At the Walk-Through Inspection on December 29, 2011: Civil Engineers Gregory Novofastovsky and Ferdinand John, Director of Quality Assurance Engineer Muhammad Afzal, Civil Engineers Svetlana Kaganovskaya and Edvard Jeamgocian, and Assistant Civil Engineer Alexander Berens.

ACCOMPLISHMENTS & PLANNED PROJECTS

Roadway Bridges

INNOVATIONS

Innovations in the design and construction of Roadway Bridges continued in 2011. Where feasible, the continued use of precast elements in bridge reconstruction reduces construction duration and the resulting negative impacts on the traveling public. In addition, the implementation of applicable Environmentally Preferable Purchasing (EPP) standards on bridge projects will ease the impact of the increased demands on resources and surrounding environment, and Best Management Practices (BMP) in all applicable projects will mitigate the impact of the project on the surrounding environment.

BROOKLYN AND MANHATTAN BRIDGES

ATLANTIC AVENUE BRIDGE OVER LIRR – ATLANTIC BRANCH (BROOKLYN)

The Atlantic Avenue Bridge is a 75 span viaduct located between Eastern Parkway and Georgia Avenue in Brooklyn. The bridge carries two traffic lanes each eastbound and westbound, divided by a center median. Two LIRR tracks (of the Atlantic Branch) run under and parallel to the bridge for its entire length. The bridge was built in 1942 by the Transit Commission. The bridge superstructure consists of steel stringers and floor beams. The substructure consists of steel piers and concrete bearing walls founded on spread footings. The project will include rehabilitating the deteriorated steel members, concrete abutments and bearing walls; replacing the bridge wearing surface, drainage scuppers, and expansion joints; performing localized concrete deck repairs; and retrofitting the viaduct to meet current seismic requirements. Construction is expected to begin in August 2015.



Aerial View in 2009.

BELT PARKWAY BRIDGES OVER PAERDEGAT BASIN, FRESH CREEK, ROCKAWAY PARKWAY, GERRITSEN INLET, MILL BASIN, BAY RIDGE AVENUE, AND NOSTRAND AVENUE (BROOKLYN)

On a New York State-mandated scale from 1 to 7, these seven bridges possess a condition rating of “fair” (3.001 – 4.999). In 2011, the Paerdegat Basin Bridge was 3.222; the Fresh Creek Bridge was 3.139; the Rockaway Parkway Bridge was 3.792; the Gerritsen Inlet Bridge was 3.463; the Mill Basin Bridge was 3.313; the Bay Ridge Avenue Bridge was 3.313; and the Nostrand Avenue Bridge was 3.986. All are original structures, which were built beginning in 1939. While none of the bridges are in any immediate danger of structural failure, their reconstruction is required in order to maintain mobility and public safety on this vital artery.



The Seven Belt Parkway Bridges.

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Reconstruction of the seven bridges and their approaches on the Belt Parkway (over three local streets and four waterways) began in the fall of 2009. Group 1 (Paerdegat Basin, Fresh Creek, and Rockaway Parkway Bridges) is expected to be complete in fall 2014. Gerritsen Inlet Bridge is expected to start in summer 2012 and to be complete in fall 2016. Mill Basin Bridge is expected to start in summer 2013, and to be complete in fall 2017. Bay Ridge Avenue Bridge is expected to start in summer 2013 and to be complete in spring 2015. Nostrand Avenue Bridge is expected to start in Fiscal Year 2022.

During the past 60 years, traffic demand along the Belt Parkway corridor has increased dramatically. The opening of New York International Airport (now JFK Airport) in 1948, the development of suburban communities on Long Island post World War II, and the opening of the Verrazano-Narrows Bridge in 1964 have dramatically increased demand on the Belt Parkway. When the parkway first opened the two-way average daily traffic was about 20,000 vehicles per day. Presently it is about 150,000 vehicles per day.

Reconstruction of these bridges and their approach roadways is necessary to alleviate substandard conditions and bring these areas into compliance with current state and federal standards. These standards require wider lanes, safety shoulders, concrete median barriers, super-elevation of the roadway around curves, and realignment of the approach roadways to improve sight distances. The Department anticipates that these improvements will reduce the current accident rate on this section of the Belt Parkway by approximately 45%.

NYCDOT conducted research to provide recommendations and design guidelines for the treatment of the parkway corridor. The goals of the analysis were threefold: first, to propose improvements to the parkway to satisfy safety and accessibility standards; second, to preserve and re-establish the historic character of the parkway; and third, to retain and improve public access for all parkway users. The recommendations also include complementary designs of the seven bridges.

The research provided detailed recommendations on how common elements should be incorporated to achieve a consistent and historical character to the corridor. Items considered included trees and vegetation, lighting fixtures, railings and fences, design of bicycle and pedestrian paths across the bridges, as well as stonework detailing on bridge abutments with relief detailing on bridge parapets.

On July 18, 2006, the Art Commission (now known as the Public Design Commission) selected the Seven Belt Parkway Bridge reconstruction project for a Design Award in its 24th annual Excellence in Design Awards.



Belt Parkway Bridge Design Renderings.

All of the bridges, except for the Bay Ridge Avenue and Nostrand Avenue Bridges, are located adjacent to the Gateway National Recreation Area, (GNRA) a division of the National Park Service. This bridge and highway program is in full compliance with New York City Department of Environmental Protection requirements for the initiation of a long-term plan that will increase wetlands, decrease pollution into the bay, and decrease the highway's footprint around the rim of Jamaica Bay. NYCDOT is also working closely with New York City Department of Parks and Recreation, the New York State Department of Environmental Conservation, Gateway National Recreation Area, the US Coast Guard, and the US Army Corps of Engineers to ensure compliance with all environmental protocols.

An upland mitigation project will include the planting of replacement trees to offset the number of trees being removed during the course of the bridge replacement project. The number of trees that will be planted in will be determined in accordance with the caliper rule for tree replacement.

ACCOMPLISHMENTS & PLANNED PROJECTS

In addition to mitigating environmental impacts along the Belt Parkway corridor, an off-site Tidal Wetland Mitigation project is underway; a Notice to Proceed was issued to the contractor with a start date of March 8, 2011. The plan focuses on compensating for wetland losses at the waterway bridges by increasing and improving the quality of habitats at a nearby location. Approximately 2.3 acres of land at Floyd Bennett Field will be cleaned of rubbish and debris and converted to tidal wetland area.

The overall goal of the mitigation project is to restore selected areas of the Floyd Bennett shoreline with productive habitats, including unvegetated intertidal areas, vegetated intertidal areas restored with naturally occurring *Spartina* marsh, and high marsh habitats. A significant portion of the area involves the removal of approximately 20,000 cubic yards of previously filled areas and the restoration of the areas to productive vegetated and unvegetated wetland resources.

Restoration of the area, specifically, the removal of existing fill and debris from the Floyd Bennett Field Mitigation site will increase the functional value of the area. This area is an important contributor to primary production and breakdown of organic materials. In addition, algal communities often found in these areas are producers, and provide a food source for snails and other benthic organisms, which in turn, provide food sources for larger animals that forage along the shorelines of Jamaica Bay.

Planting at the intertidal wetland and the high marsh zones was completed in summer 2011. The installation of cabled concrete erosion control revetment was started in June 2011 and completed in July 2011. The turbidity curtain was removed from the shore line, since a new silt fence will be added as an erosion control system at the west high marsh area. The wetland mitigation project is expected to be complete in early 2017.



Tidal Wetland Mitigation Site. Looking West Towards Mill Basin Bridge – Shoreline Prior to and Post Cleanup. Turbidity Curtain Along Shoreline in Spring 2011. Summer and Fall 2011: Planted Wetland Grasses and Completed Uplands Planting.

ACCOMPLISHMENTS & PLANNED PROJECTS



Summer and Fall 2011: Installing the Revetment. An Articulating Concrete Block Revetment System is Used as Slope Protection in Front of the Existing One Story Warehouse Building. Planting Bayberry; Groudsell Trees; Beach Plum Plants, and SwitchGrass.

The existing Paerdegat Basin Bridge is a 692-foot long, 13 span, multi-girder, simple supported steel superstructure, supported on reinforced concrete pier cap beams and abutments supported on reinforced concrete piles. The bridge has two 34-foot wide roadways carrying three lanes of traffic in each direction; with a 3-foot safety walk on the north side, a 4-foot wide center median/barrier, and an 8-foot wide south pedestrian/bicycle sidewalk. The existing structure and immediate approaches will be demolished and replaced by two new bridges and new approach roadways on split alignments.

The existing bridge consists of 12 cast-in-place concrete bents. Two navigation channels cross under the bridge. At one of these channels (bent number 7) a concrete pier has been damaged. Because of this damage and other structural concerns, the Paerdegat Basin Bridge has been under continuous monitoring since September of 2004.

The replacement bridges will consist of two angled trapezoidal steel box girder structures: the 825-foot, 3 span westbound bridge, north of the existing structure, and the 1,227-foot, 5 span eastbound bridge, south of the existing structure, remaining at 28 feet over the navigable channel. Both bridges will have a 36-foot wide roadway with a 12-foot wide right shoulder. The eastbound bridge will have a 4-foot wide left shoulder, while the westbound bridge will have a 10-foot wide left shoulder. The southern structure will carry eastbound traffic while the northern structure will accommodate westbound traffic. Both the horizontal and vertical alignments will change resulting in improved sight distances on the bridge and its approach roadways. The bridge carrying eastbound traffic will also have a dedicated pedestrian/ bicycle path along the south side. The pedestrian/bicycle path will be separated from traffic lanes by a concrete barrier on the bridge, and by a 15-foot wide grass mall on the approach roadways.



Existing Paerdegat Basin Bridge. Proposed Paerdegat Basin Bridge.

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The existing Fresh Creek Bridge is a 264.5 foot, 5 span, multi-girder, simple supported steel superstructure, supported on pre-cast concrete columns founded on four reinforced concrete piers on concrete piles with concrete gravity abutment walls on timber piles. One navigation channel crosses under the bridge. The bridge has two 34'-2" wide roadways, a 5-foot wide center median/barrier, and a 10-foot wide south sidewalk. The parkway, east and west of the bridge, has a 10-foot wide bicycle/pedestrian path on the south side. The existing structure and immediate approaches will be demolished and replaced.

The replacement bridge will be a 316-foot, 3 span structure; the new structure will have only two support piers, resulting in a wider channel. The bridge deck and approaches will be widened to 126 feet from the existing 86 feet to accommodate three 12-foot lanes in each direction, 12-foot wide shoulders, and a 12-foot wide bicycle/pedestrian path, separated from the traffic lanes by a barrier system. The profiles of the approach roadways and bridge structure accommodate stopping sight distances for a design speed of 60 miles per hour. The proposed construction will result in improved landscaping on the bridge approaches. The existing pedestrian and bicycle pathway will be maintained and open at all times during construction.



Fresh Creek Bridge Aerial View and in 2002. (2002 Credit: NYSDOT) Proposed Fresh Creek Bridge.

The existing Rockaway Parkway Bridge is a 150-foot, 4 span, multi-stringer, simple supported steel superstructure, supported on steel cap beams on concrete filled steel pipe columns, and reinforced concrete abutment walls supported by concrete pile foundations. The bridge has two 34'-2" wide roadways, a 5-foot wide center median/barrier, and a 10-foot wide south sidewalk. The existing structure and immediate approaches will be demolished and replaced.

The replacement bridge will be a single span structure to improve visibility along Rockaway Parkway. The new structure will be built in the same alignment as the existing bridge. The bridge deck will be widened to 109 ½ feet from the existing 84 feet to accommodate three 12-foot lanes with a 12-foot wide right shoulder and 4-foot left shoulder in each direction, including 5 ½ feet for median and parapet width. The right shoulder lane on each approach will be 10 feet (while the width of the right shoulders on the bridge structure will be 12 feet), with the other dimensions the same width as those on the bridge. In addition to reconstruction of the bridge, four access ramps will also be reconstructed as will Rockaway Parkway in the vicinity of the Belt Parkway.

ACCOMPLISHMENTS & PLANNED PROJECTS



Rockaway Parkway Bridge in 2002. (Credit: NYSDOT) Proposed Rockaway Parkway Bridge.

A Notice to Proceed for the reconstruction of the Group 1 bridges was issued to the contractor with a start date of October 26, 2009.

In 2010 and 2011, work on the Paerdegat Basin bridges progressed on the construction of the new eastbound bridge, and the project is currently in Stage III of the proposed construction sequence. Various construction milestones have been completed to date, including the temporary relocation of the bicycle/pedestrian path which runs along the eastbound roadway; the removal of the existing median and installation of temporary roadway lighting; the replacement of the existing sludge force main within the project area using open cut and directional boring methods; the installation of earth embankments for the new eastbound and westbound approach roadways; and the installation of new drainage structures and pipe.

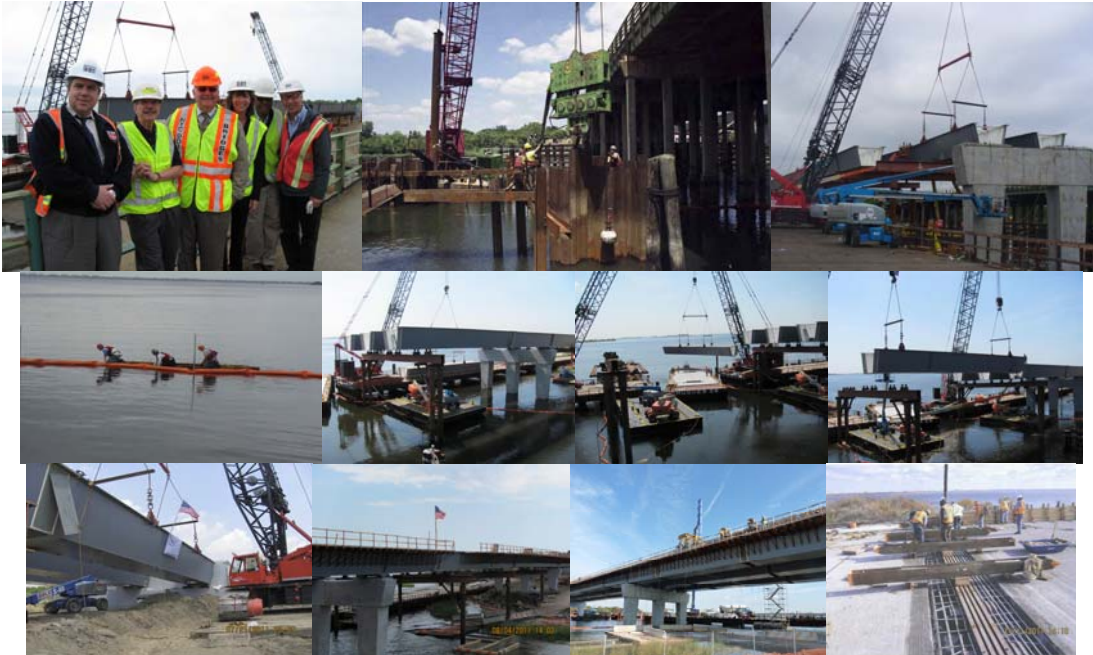
All substructure work for the new eastbound bridge, including the pier and abutment footings, pier columns, pier caps and abutments, was completed during the spring of 2011. The erection of the 51 sections of trapezoidal steel box girders was completed during the summer and was followed by nine concrete deck placements in the early fall. Installation of the concrete barrier sections and modular joints were completed during the fall, as was the construction of the eastbound approach roadway sections, drainage and electrical work. The new eastbound bridge, including the new bicycle/pedestrian path, was formally opened to traffic on December 19, 2011. Traffic was switched from the existing westbound bridge to the existing eastbound bridge on December 29 to enable construction of the new westbound bridge.

For the new westbound bridge, cofferdams have been constructed and pile installation is in progress for the construction of the new bridge piers and abutment substructures. The substructure work will continue during the winter of 2012, and the erection of the superstructure is projected to commence during the spring of 2012.



February 2011: Pumping Concrete at Paerdegat Basin Cofferdam for Pier No.3. February 2011. March 2011. April 2011: Setting Tub Girder Sections at Eastbound Bridge Between West Abutment and Pier No. 1. Civil Engineers Edvard Jeamgocian and Ferdinand John Observing the Operation. May 2011: Eastbound Bridge – New Concrete Pier No. 2 and Temporary Supports for Tub Girders.

ACCOMPLISHMENTS & PLANNED PROJECTS



Paerdegat Basin Bridge Site Visit on May 13: Director of Brooklyn and Manhattan Roadway Bridges David Dunn, Chief Bridge Officer Henry Perahia, Deputy Chief Engineer Robert Collyer, Commissioner Janette Sadik-Khan, Civil Engineer Serge Rigaud, and Administrative Engineer Daniel Hom. June 2011: Hammer Being Positioned to Drive Steel Sheet Piling for Cofferdam at Westbound Bridge – Pier # 2. New Eastbound Bridge East Abutment Prior to Tub Girder Placement. Erecting Beams at Pier 2. June 2011: Restoring Turbidity Curtain at Southeast Project Portion. Erecting the Tub Girders over the Channel in Early June. July 2011: Setting Final Tub Girder Section at East Abutment. Paerdegat Bridge in August 2011. (Credit: Daniel Hom) October 2011. Placing Concrete at Headers for Modular Joints in November 2011.



November Aerial View. December 2011: Working Inside the Northern Cofferdam. New Eastbound Bridge.

To date, various construction milestones have been completed on the Fresh Creek Bridge, including the removal of the existing median, the placement of temporary median asphalt pavement, and the installation of temporary roadway lighting. During 2011, the contractor's Value Engineering proposal to utilize a temporary bridge to facilitate the reconstruction of the existing bridge was implemented. The temporary bridge was opened to traffic in March and traffic was shifted to allow for the demolition of the south half of the bridge during the summer. As demolition was completed, deep foundation cofferdams were constructed in advance of the pile installation work, which was completed in late summer. Substructure work, including the pier and abutment footings, pier columns, pier caps and abutments, proceeded accordingly through the fall and were completed in advance of steel erection. All steel was erected during November and concrete deck placements will continue through the winter in tight adherence to the Agency's winter concrete guidelines and procedures. Relocation of the existing sludge force main within the project area, using open cut and jacking methods, was also completed during 2011, as was the installation of permanent drainage structures and outfalls. The contractor also continued the installation of new permanent lighting, and completed the lead abatement of the existing superstructure steel in advance of demolition.

ACCOMPLISHMENTS & PLANNED PROJECTS

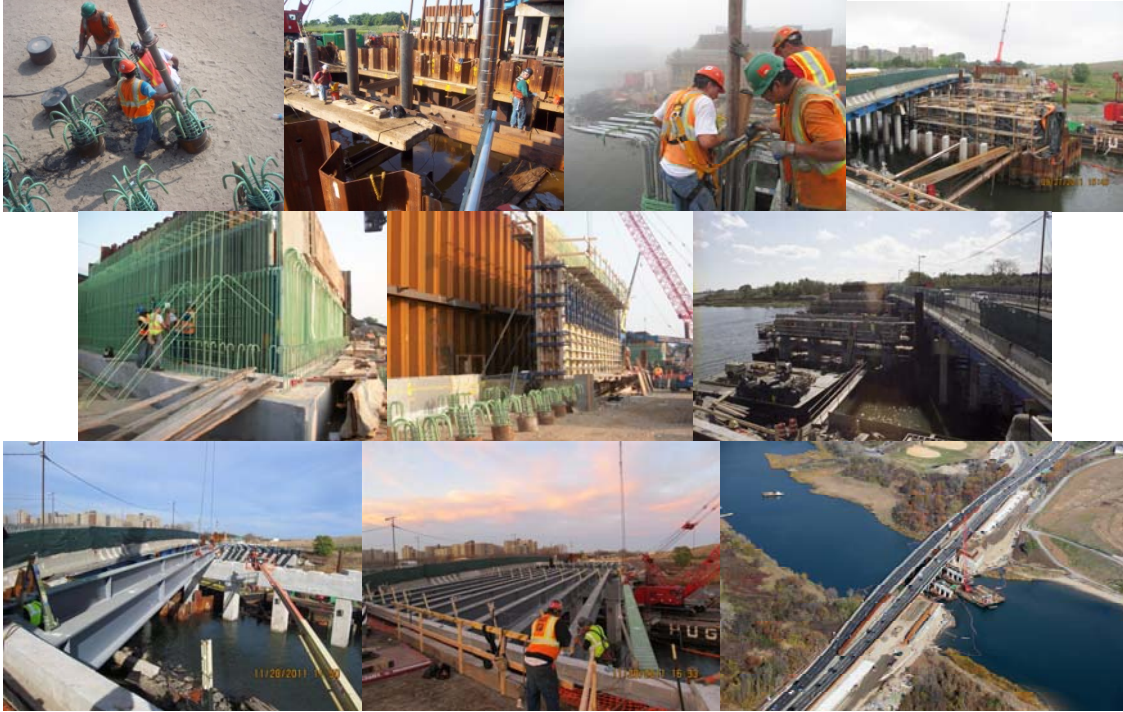


Fresh Creek Bridge in November 2010: Overview of the Existing Bridge and the Installation of the Temporary Bridge and Approaches North of the Existing Roadway. (Credit: Eric Callender)



Fresh Creek Bridge in January 2011: Installing Metal Shielding Along Westbound Lane of Belt Parkway. February 2011: Placing Under Deck Protective Shielding. March 2011: Westbound Belt Parkway Traffic Detoured onto the Temporary Bridge. Westbound Temporary Bridge at Left, Existing Bridge at Right. Removing Lead Based Paint From Steel Cut Line Locations. Westbound Lane Demolition. On March 4, 2011, Westbound Traffic was Detoured on to a Temporary Bridge over Fresh Creek Basin, and Eastbound Traffic was Detoured on to the Westbound Belt Parkway Roadway Within the Contract Limits. Demolition of the South Side of the Bridge started on March 22 and Continued into June 2011. On April 7, Demolition Work of the Deck and Stringers of the East Bound Side of the Bridge was Completed. April 2011: Installing Metal Shielding Along Belt Parkway Median. June 2011: Cofferdam on South Side of Existing Bridge Pier No. 1. Driving Piles for the Southeast Abutment.

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Fresh Creek Bridge in July 2011: Concrete Pouring in Piles. Driving Piles Inside the Cofferdams. September 2011: Pier 1 Column Pour. Fall 2011: Cofferdams and Piers at Future Eastbound Fresh Creek Bridge. Steel Erection in November 2011. Aerial View.



December 2011: Preparing the Decking for the Concrete Pour. Concrete Pours for Southeast and Northeast Roadways. Commenced Installation of Winter Tent Enclosure for Stage IIB Concrete Bridge Deck Placement. (Tent Credits: Daniel Hom)

In 2010, significant progress was made in moving the Rockaway Parkway Bridge through Stage 1 and into Stage 2A. Stage 1 activities that were completed included the removal of the center median slab and curb; the installation of a temporary center median barrier; the paving of the center median and right shoulders to create the additional travel lanes necessary to allow for construction shifts; the installation of temporary street lighting in the center median and along the shoulders; the installation of construction fences and tree protection; the removal of existing trees as specified in the contract; and the installation of soil stabilization and erosion control measures. The existing water main along the east side of Rockaway Parkway was also relocated.

In 2011, construction moved through Stages 2A and 2B, and into Stage 3. Stage 2A began with the shift of traffic to the south side on the approaches and over the bridge to create a work zone for the removal of the north portion of the existing Rockaway Parkway Bridge. Work on the bridge and approaches included the installation of temporary support steel; and the removal of existing deck and support steel. In addition, the widths of the existing westbound entrance and exit ramps were reduced to allow for construction of the new portion of the highway along the west bound shoulder. Excavation, fill and grading to elevation for the new north section of the bridge on the northeast and northwest slopes between the main line and the two ramps was completed and approach pavement sections were placed. The contractor completed the excavation and removal of the existing substructure and the installation of piles and new

ACCOMPLISHMENTS & PLANNED PROJECTS

abutments. Steel erection was completed during overnight hours in early August 2011, and the new concrete bridge deck was placed in late September. Barrier and approach roadway construction, including drainage and electrical work, continued through the fall. The northern section of the new bridge was opened to traffic on December 8 and the traffic pattern shifted to Stage 3 to replace the center portion of the structure. The new ramps were opened in sections with the northern sides of the ramps (Stage 2A) opening in the early summer and the southern sides of the ramps (Stage 2B) opening in line with the December opening of the bridge and the shift to Stage 3. Work also continued on the installation of new street lighting around Canarsie Circle to the south of the bridge.



Rockaway Parkway Bridge in February 2011: Driving Steel Pile for Cast in Place Concrete Piles at East Abutment. March and April 2011.



May 2011: Preparing Rebar for Northeast Abutment Footing. June 2011: New Footing and Wing Walls at Northeast Side. July 2011: Constructing East Abutment, North Side of Belt Parkway. Completing the Steel Erection for the Northern Section in August 2011. (Credit: Daniel Hom) September 2011: Installing Reinforcement Steel for Stage 2 Westbound Lane Decking. October 2011: Pouring Concrete for Northeast Approach. Aerial View in November 2011.

Milestone A consists of all work required to complete the reconstruction of the Paerdegat Basin, Fresh Creek, and Rockaway Parkway Bridges, including all roadway sections and ramps, within the limits of the construction, adjacent to and between the bridge structures. The contract provides for an incentive of \$35,000 per day for each day that milestone A is finished early, with a maximum incentive of \$14.98 million. There is a similar disincentive if the milestone date is exceeded, with no maximum.

The existing Gerritsen Inlet Bridge is a 520-foot long, 9 span, steel girder and reinforced concrete beam superstructure, supported on reinforced concrete piers, and abutments supported on timber piles. The existing structure and immediate approaches will be demolished and replaced.

The replacement bridge will consist of a 496-foot, 3 span bridge, aligned 10'-6" north of the centerline of the existing structure, and remaining 35 feet over the navigable channel. The bridge will have a 36-foot wide roadway with a 12-foot wide right shoulder and a 4-foot wide left shoulder

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in each direction. The eastbound side will carry a dedicated pedestrian/bicycle path along the south fascia.



Gerritsen Inlet Bridge in 2002. (Credit: NYSDOT) Proposed Gerritsen Inlet Bridge.

Opened on June 29, 1940, the Mill Basin Bridge is adjacent to the Jamaica Bay Wildlife Refuge and the Gateway National Recreation Area. It is the only movable bridge on the Belt Parkway. The current clearance over Mean High Water is 35-feet. When the Mill Basin Bridge was constructed during the first half of the 20th century, New York City's inland waterways were among the most heavily navigated thoroughfares in the country. However, as maritime traffic in New York City steadily decreased since the mid-1960s, the need for movable bridges lessened as well. In 1941, during its first full year of operation, the Mill Basin Bridge was opened 3,100 times; by 1953, that figure decreased to 2,173; by 2011, the number of openings declined further to a total of only 236 openings.

In addition, significant and costly traffic congestion results from the operation of this outmoded drawbridge. In 2010, the Mill Basin Bridge carried 140,800 vehicles per day. The average opening and closing time for the bridge (and others like it) is ten minutes. Thus, this structure's operation has a negative and significant effect on the efficiency of New York City's vehicular traffic flow.

The existing Mill Basin Bridge is 864-foot long and 14 spans, including double movable leaf bascule spans and a steel superstructure, supported on reinforced concrete piers on timber piles, and abutments supported on pre-cast concrete piles. The existing structure and immediate approaches will be demolished and replaced.

The replacement will be a 1,757-foot, 11 span fixed bridge, north of the existing structure. The bridge will have a 36-foot wide roadway with a 12-foot wide right shoulder and a 4-foot wide left shoulder in each direction. The eastbound side will carry a dedicated pedestrian/bicycle path along the south fascia. The new bridge will be a fixed structure with a 60-foot clearance over Mean High Water, obviating the need for opening and closing the structure to accommodate tall vessels. The new design of the bridge will result in increased sight distances, an increase in lane width from 11-feet 4-inches to 12-feet, and the inclusion of safety shoulders in both directions. The channel will remain navigable during construction, and the clear channel width will remain the same after the new structure is in place. A new fender system will be installed to protect the bridge substructure from marine traffic.



Current and Proposed Mill Basin Bridge.

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The existing Bay Ridge Avenue Bridge is a 58-foot long, single span, reinforced concrete deck on a multi-girder system superstructure over Bay Ridge Avenue. The superstructure is supported by concrete gravity type abutments on pile foundations. The underpass is access to the NYCDEP Owl's Head Waste Treatment Plant. The existing superstructure will be demolished and replaced.

The replacement bridge superstructure will consist of pre-stressed concrete box beams and a reinforced concrete slab. The bridge will have three 12-foot wide lanes in the eastbound direction and two 12-foot wide lanes separated by a 4-foot wide painted stripe flush median in the westbound direction. There is no pedestrian/bicycle path on the structure. The existing bridge will be reconstructed using pre-cast deck sections. The clearance will be increased to 14-feet 6-inches, which removes the need for clearance signs currently posted for a substandard condition and will obviate the need for underdeck wood shielding.



2009 Inspection: The Entire Underside of the Bay Ridge Avenue Bridge Deck is Shielded With Timber Planking and Steel Wire Mesh Netting. The Shielding was Temporary Removed to Perform the Inspection of the Deck. Shielding was Replaced After the Inspection.
(Credit: NYSDOT)



Bay Ridge Avenue Bridge in 2002. (Credit: NYSDOT) Proposed Bay Ridge Avenue Bridge.

The existing Nostrand Avenue Bridge is a 140-foot long, 3 span, multi-girder superstructure, consisting of a concrete deck with an asphalt overlay over Nostrand Avenue. The superstructure is supported by concrete pier columns with a steel cap beam, and abutments on concrete filled steel pile foundations. The existing structure and immediate approaches will be demolished and replaced.

The replacement will be a single span bridge consisting of standard steel girders with a cast-in-place deck superstructure and reinforced concrete abutments on pile footings, thus eliminating the need for intermediate support piers and resulting in improved sight lines on Nostrand Avenue. The bridge will have three 12-foot wide lanes with a 12-foot wide right shoulder. The approaches will have a 10-foot wide right shoulder and a 4-foot wide left shoulder in each direction. Nostrand Avenue will be widened to 81 feet and realigned with the existing approaches. On the Belt Parkway, the bridge will be widened in order to provide new safety shoulders in both directions.

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New safety-shape parapets will be installed and the existing corrugated metal center guide-rails will be replaced with a reinforced concrete center median, which will result in a safer condition.



Nostrand Avenue Bridge. Proposed Nostrand Avenue Bridge.

A computerized traffic simulation model was developed to analyze traffic conditions in connection with the Division's plans to reconstruct these seven bridges on the Belt Parkway. This model was a useful tool for understanding the impact of construction on the traveling public and helped us determine appropriate construction schedules. It enabled us to rapidly evaluate the impact of a variety of combinations of construction staging.

BEVERLY ROAD BRIDGE OVER BMT SUBWAY (BROOKLYN)

This bridge is a three span structure and was built in 1907. The superstructure consists of two built-up through girders, floor beams and stringers. The stringers are encased in a concrete jack arch deck. The superstructure is supported by concrete gravity wall abutments and piers. The project will involve the replacement of the existing deck with a new floor system using a concrete exodermic deck, and the repair of the existing primary members. The work will also include cleaning and painting the steel, and repairing the bridge seat and deteriorated concrete abutments. The bridge will be constructed in three stages and will remain open to traffic and pedestrians at all times. This project, in the final design stage and currently on hold, is expected to begin in March 2016, and is expected to be completed in March 2018.



Beverly Road Bridge in 2009. (Credit: NYSDOT)

HILL DRIVE BRIDGE (TERRACE BRIDGE) OVER PROSPECT PARK LAKE (BROOKLYN)

The landmark Hill Drive Bridge was built in 1890, and was previously known as the Breeze Hill Bridge. The existing Parks bridge is a three span simply supported steel girder/beam structure, with the center arch span crossing Prospect Park Lake, and the other two spans consisting of underground masonry cellular structures with multiple interior masonry-bearing walls and non-

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composite concrete deck and concrete sidewalk. The substructure of the bridge consists of solid gravity masonry abutments with U-type wing walls.

This project will include the replacement of the existing masonry cellular abutments with new reinforced concrete abutments clad with existing stone and new brick masonry; the removal, storage, and reinstallation of the existing stone wing walls with a new reinforced concrete core; the replacement of the existing stringers and floor beams with new steel stringers; the reinforcement of the existing arch girders with new cover plates; the reinstallation of the steel arch girders at their current locations to replicate original construction; and the replacement of the existing masonry arches spanning between floor beams by masonry cladding on the underside of the new arched concrete deck. The concrete deck, approaches, sidewalk, and roadway will be replaced within the project limits.

The ornamental cast iron and stones will be rehabilitated and reinstalled, replicating all the historic features and aesthetics of the original bridge. New bridge lighting and drainage systems will be installed. The park landscape will be restored, and trees identified by the Prospect Park Alliance as rare and/or historic shall remain undisturbed during construction.

The project's final design phase has been suspended until such time as funding is available. Repairs requiring immediate attention are performed by the When and Where contractor. This bridge is closed to vehicular traffic.



Hill Drive Bridge in 2001. Near End Approach in May 2009: Concrete Flower Pots Close the Roadway. (Credit: NYSDOT)

MARINE BORER REMEDIATION (MANHATTAN & BROOKLYN)

Marine borers pose an immediate and serious danger to the thousands of piles and other structures of timber built in the marine environment. In New York Harbor, as the water quality improved due to many years of clean-up efforts, marine borer (*Limnoria*, *teredo*, etc.) activity has increased significantly in recent years. The recent inspections of timber structures by various local agencies (such as The Port Authority of NY & NJ, NYS Department of Transportation, NYC Department of Sanitation, and NYC Economic Development Corporation) indicate increasing damage to their structures resulting from marine borer activity. These agencies are implementing measures to protect the structures against marine borers.



Marine Borer – *Limnoria* Species. Marine Borer – *Teredo* Species. *Teredo* Damage (Holes up to ¼" Diameter).

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In October 1999, the Department began a study to assess the existing damage caused by marine borers as well as the potential for future damage at several waterfront DOT structures, including the supporting structures of the relieving platforms along the FDR and Harlem River Drives, and the timber piles and structures of the Carroll Street and Ocean Avenue bridges in Brooklyn. The underwater inspection of timber piles supporting the FDR Drive began on May 8, 2000. Inspection of the Brooklyn sites was conducted during the week of October 23, 2000. The inspections were completed in October 2000, and the Marine Borer Evaluation Report was published in June 2001. Using the results of the underwater inspections, preliminary plans were developed for the implementation of repairs and remediation measures to protect the structures from attack. These preliminary plans were completed in December 2001. An updated underwater inspection was performed within the limits of the proposed contract in 2009. The final design is now complete.

The construction project will be performed almost entirely underwater and will include barrier wrapping (placement of plastic barrier wrap around a timber pile to prevent marine borers from settling on and penetration into exposed wood); pile encasement (concrete encasement of selected severely damaged piles to reinforce and protect them from marine borers); pile posting (cutting off deteriorated upper portion of pile and replacing it with a new treated timber post); pile cap encapsulation (encapsulation of submerged timber pile caps and timber fascia with plastic lumber and synthetic mastic); bracing replacement (replacement of structural timber bracing with new treated lumber); timber removal (removing timber stays, bracing and formwork located at the top of the piles); installation of additional two-way bracing (installation of two-way bracing using tread lumber to upgrade the strength of piles by reducing the unbraced length); placement of light weight concrete fill (filling in locations where the distance from underside of the platform deck to the top of the mudline is less than one meter creating insufficient headroom for divers to wrap or jacket piles); and superstructure timber replacement (timber pile caps, railing members and other timber superstructure elements along with severely corroded steel correction hardware located above the high water line will be replaced in kind). The construction work is expected to commence in April 2012, and to be complete in April 2016.

RIVERSIDE DRIVE BRIDGE OVER WEST 158TH STREET (MANHATTAN)

The Riverside Drive Viaduct is located between West 153rd Street and West 161st Street. It is approximately 1,924 feet long and has 77 spans. This viaduct consists of intermittent straight portions, and six curves of different radii. The bridge carries four lanes (two each way). The superstructure is made of two types of framing. The northern part is a steel bent type structure, whereas the southern part is a steel cantilever type structure with half of the deck over Amtrak railroad tracks. The area below the entire bridge is utilized for storage of Agency vehicles and roadway maintenance materials. Construction is expected to begin in 2017.

TRANS-MANHATTAN EXPRESSWAY CONNECTOR RAMP FROM THE HARLEM RIVER DRIVE (MANHATTAN)

The Trans-Manhattan Expressway Connector Ramp is an elevated viaduct that consists of a multi-span steel superstructure supporting a concrete deck. The ramp connects the Trans-Manhattan Expressway to the Harlem River Drive and it was built in 1939. The project will rehabilitate the bridge steel and concrete components. Construction is expected to begin in summer 2013.

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5TH AVENUE BRIDGE OVER LIRR & SEA BEACH NYCT (BROOKLYN)

The bridge is a four span concrete-encased steel girder and floor beam structure, built in 1914. The reconstruction project will include replacement of the superstructure, rehabilitation of the abutments and wingwalls, reinforcement of existing piers, construction of new reinforced concrete sidewalks, approach slabs, new concrete parapet, and bridge fence. Construction is expected to begin in May 2019, and is expected to be complete in June 2021.



5th Avenue Bridge in 2006. (Credit: NYSDOT) Aerial View in 2009.

EAST 8TH STREET ACCESS RAMP (GUIDER AVENUE RAMP TO BELT PARKWAY) OVER BELT PARKWAY (BROOKLYN)

The East 8th Street access ramp (Guider Avenue ramp), built in 1942, provides vehicular access to the westbound Belt Parkway from Coney Island Avenue and the surrounding area, south of the Belt Parkway. The bridge also serves pedestrian traffic crossing the Belt Parkway. The bridge is a four span, simply supported, multi-girder steel superstructure with a reinforced concrete deck. The abutments and wingwalls are also reinforced concrete, as are the three piers. The entire substructure is supported on reinforced concrete pile caps and steel piles. The project will include the replacement of the superstructure with new steel stringers, a cast-in-place deck including a new sidewalk, a new steel bridge railing with protective screen fencing, and the replacement of the tops of the existing pier columns and abutments. In addition, the piers will be modified by adding two columns on new steel pile foundation at each pier, and underdeck and ramp lighting will be installed, as well as new storm drainage systems. The ramp will be closed to both vehicular and pedestrian traffic for the duration of the reconstruction. Traffic will be diverted to local streets.



East 8th Street Bridge in 2002. (Credit: NYSDOT) Rendering of New Bridge. Aerial View in 2009.

A Notice to Proceed for the project was issued to the contractor with a start date of August 10, 2009. The bridge was closed to vehicular and pedestrian traffic on February 16, 2010. A temporary detour route was implemented, routing traffic via local streets to access the westbound Belt Parkway. The bridge deck demolition work began in March 2010 and was completed in June 2010. The north and south abutments were partially removed and were reconstructed. New pile foundations were installed at piers 1, 2, and 3. The new reinforced concrete bridge columns were completed in February 2011.

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The structural steel for the new bridge superstructure was fabricated off site, along with new bridge bearings. The bridge bearings were delivered to the site in March of 2011. The structural steel was delivered in June 2011, and its installation commenced immediately. This was followed by the installation of the bridge deck, which was completed in August 2011. The north and south approach roadways were completed in November 2011. The bridge opened to vehicular traffic on December 2, 2011, and is anticipated to open to pedestrian traffic in March 2012. Construction is expected to be substantially complete in May 2012.



East 8th Street Ramp in June 2011: Steel Installation for Span 1. July 2011: Installation of Steel Girders over the South Service Road and Eastbound Belt Parkway. August 2011: Concrete Deck Placement. November 2011: Completed North and South Approach Roadways. December 2, 2011: Bridge Open to Traffic.

11TH AVENUE VIADUCT (WEST 30TH STREET TO WEST 33RD STREET) OVER LIRR WEST SIDE YARD (MANHATTAN)

This project consisted of the re-decking of the viaduct, the replacement of the sidewalks, the upgrading of the existing bearings to seismic isolation bearings, and the replacement of the street lighting. The work also included performing repairs of the existing pier and abutment walls. The viaduct was constructed in two stages, one half of the viaduct at a time. Three south-bound travel lanes were maintained at all times. A Notice to Proceed for the project was issued to the contractor with a start date of June 1, 2009.

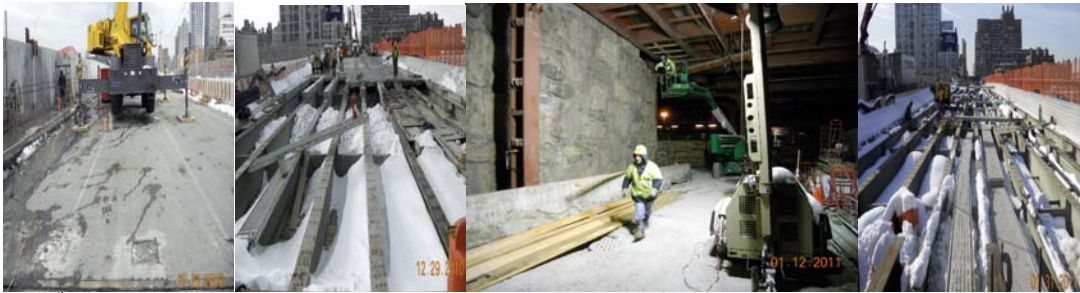


11th Avenue Viaduct Site (West 30th Street to West 33rd Street) in 2006. (Credit: NYSDOT)

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The installation of the LIRR horizontal and vertical protective shield was completed under Stage 1A. The west side sidewalk was modified for the traffic shift at Stage 1B. Demolition and reconstruction of the east half of the viaduct parapet and deck slab began under Stage 1B in December 2009.

The contractor completed Stage 1B deck and parapet removal in March 2010. In 2010, the contractor completed lifting structural steel in order to demolish the existing bearing and pedestals; constructed the new pedestals; installed seismic isolation bearings; modified and painted structural steel in select areas at pier locations in order to install seismic isolation bearing; placed the new bridge deck slab and sidewalk/safety walk; placed the approach slab; and installed the new expansion joint, bridge railings, and street lighting. The pedestrian fence was completed by December 2010 prior to shifting to Stage 2.



11th Avenue Viaduct at South Abutment Looking North in December 2010: Saw Cutting and Preparation for Removal of the West Parapet Wall at Span 1 in Stage 2. Looking South From Bent 32: Bridge Deck Removal at Span 8. January 2011: South Abutment Looking North: Demolition and Removal of Existing West Sidewalk at Span 2. Looking South From Bent 32: Pedestal Demolition at Pier 7.

In 2011, the contractor demolished and reconstructed the western half of the viaduct under Stage 2. Stage 2 deck removal was substantially completed in March. Installation of the overhang to facilitate Stage 2 deck was completed in April, as was demolition of the south approach slab and sidewalk. New pedestals were completed in May, and concrete deck placements were completed in June. Construction was substantially completed on September 15, 2011.



11th Avenue Viaduct Construction in February 2011. April 2011: New Bridge Deck Formwork. May 2011: Installation of Bridge Deck Formwork for Spans 5, 6, 7 & 8 in Stage 2. June 2011.

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11th Avenue Viaduct Construction in June 2011. August 2011. September and October 2011.

11TH AVENUE VIADUCT (NORTH SECTION) (WEST 33RD STREET TO WEST 35TH STREET) OVER AMTRAK (MANHATTAN)

The 11th Avenue Viaduct (North Section), extending between West 33rd and West 35th Streets, was built in 1939. The viaduct's concrete deck slabs are supported by steel stringers, with steel pier caps and steel columns founded on concrete bases. The viaduct carries four traffic lanes (southbound only) between West 33rd and West 34th Streets. Four traffic lanes and one bus lane (southbound), and two traffic lanes and one parking Lane (northbound), are carried between West 34th and West 35th Streets.

The project will include the replacement of the entire approach and a total replacement of the viaduct up to the MTACC Vent Facility, maintaining the existing roadway profiles. The viaduct will be constructed in stages and in coordination with the five Ramp Reconstruction Projects. Construction of this project, currently in the final design stage and on-hold, is expected to begin in May 2020, and is expected to be completed in April 2022.

11TH AVENUE BRIDGE (WEST 59TH STREET) OVER AMTRAK - 30TH STREET BRANCH (MANHATTAN)

The 11th Avenue Bridge, built in 1936, is located between West 58th Street and West 60th Street. The structure is located over the LIRR tunnel. The bridge is not parallel, but skewed with respect to the 11th Avenue/West 59th Street intersection. The structure carries northbound and southbound traffic with two travel lanes and one parking lane in each direction, as well as sidewalks. The superstructure consists of two spans with multi steel stringers encased in concrete that are supported by steel column piers.

The work will include the replacement of the existing deck superstructure with new steel girders, a new bridge deck concrete slab, and wearing surface; the replacement of the existing approach slabs, curbs, sidewalks, parapets, fencing, and expansion joints; the replacement of the existing abutment substructures, elastomeric bearings; and the replacement of the existing piers, pedestals, backwalls, and expansion joints. Construction is expected to begin in December 2021.



11th Avenue Bridge in 2010. (Credit: NYSDOT)

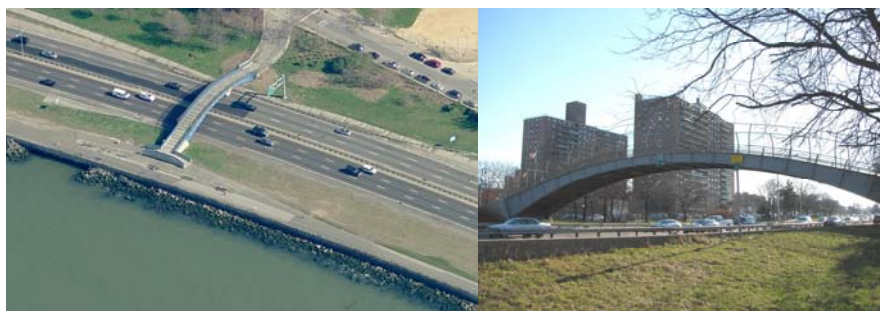
ACCOMPLISHMENTS & PLANNED PROJECTS

17TH AVENUE AND 27TH AVENUE PEDESTRIAN BRIDGES OVER BELT PARKWAY (BROOKLYN)

The 17th Avenue and 27th Avenue Bridges are three-hinged, steel arch girder bridges with granite-faced concrete abutments and Art Deco steel railings. These two pedestrian overpasses have deteriorated over time, and due to low vertical clearance, have suffered impact damage from overheight vehicle traffic on the Belt Parkway below. In addition, these structures are not in compliance with American Disability Act (ADA) requirements.

The 17th Avenue Bridge provides the only pedestrian access to the shoreline promenade from the surrounding Bath Beach and Bensonhurst communities. The 27th Avenue Bridge provides the main pedestrian access from the community to Dreier Offerman-Calvert Vaux Park.

In this project, the overpasses at 17th and 27th Avenues will be completely replaced. The structures will be designed to current codes and standards and all substandard features will be eliminated. Additionally, as the existing bridges were constructed under the Robert Moses era Master Plan for NYC, the proposed bridge designs will follow the Shore (Belt) Parkway Design Guidelines which were developed in November 2006, in order to preserve and reestablish the historic character of the parkway for drivers and pedestrians while enhancing and strengthening the visual cohesiveness of the greenspace connected to the adjacent park and recreation land. Construction is anticipated to begin in July 2013, and is expected to be complete in July 2015.



Aerial View of 17th Avenue Bridge. 27th Avenue Bridge in 2011.

WEST 31ST STREET BRIDGE OVER AMTRAK (MANHATTAN)

This bridge between Ninth Avenue and Dyer Street, is a nine simple span multi-girder jack arch encased in concrete, and was built in 1909. The superstructure is supported by the west abutment, the south retaining wall, and steel columns resting on spread footings. The project will involve installation of new floorbeams and steel stringers with a reinforced concrete deck slab, as well as the bridge seats and steel pier columns. Traffic will be maintained during the relocation of the utilities, but the bridge will be closed during the bridge replacement. This project, currently in the final design stage, is expected to begin in December 2019, and is expected to be complete in March 2023.



West 31st Street Bridge in 2010. (Credit: NYSDOT)

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WEST 33RD STREET BRIDGE OVER LAND ADJACENT TO AMTRAK (MANHATTAN)

The West 33rd Street Bridge over Land Adjacent to Amtrak is a ramp attached to the 11th Avenue Viaduct. The original steel bridge was built in 1939 under the direction of the New York Central Railroad. This bridge is a two span, simply supported structure that carries three lanes of vehicular traffic (one travel lane and two parking lanes) in the westbound direction. The superstructure consists of a concrete deck supported by built-up girders and rolled stringers. The substructure consists of one gravity type abutment and intermediate steel build-up column bents. The project will involve the complete replacement of the existing bridge with a one span concrete box beam and concrete substructure. Construction of this project, currently in the final design stage and on-hold, is expected to begin in May 2020, and is expected to be completed in April 2022.



West 33rd Street Bridge in 2009. (Credit: NYSDOT)

EAST 78TH STREET PEDESTRIAN BRIDGE OVER FDR DRIVE (MANHATTAN)

The old bridge was a nine span reinforced concrete structure over the FDR Drive. The bridge provides access from East 78th Street to the East River esplanade by going over the entrance ramp to the southbound FDR Drive and six travel lanes of the Drive. There is a ferry house on the East River Esplanade which was used for storage for the old ferry when the bridge was built in 1940. The bridge was supported on the ferry house structure on the Esplanade side. This project will include the removal of the entire superstructure; concrete deck, floor beams, parapet, girders, railing, protective screening, encased steel beams in the ferry house, existing concrete stair case on the esplanade side, existing substructure of piers, and ramp walls and wall of the ferry house, as well as a portion of the pier foundations below grade. The new fourteen span bridge includes steel piers with caisson foundations, a ramp retaining wall, and new superstructure using welded structural tubing, vertical steel railing, and horizontal hand rails, as well as protective fencing. A new cast-in-place reinforced concrete deck was installed. The west ramp is enclosed with a stone masonry wall to match the existing park wall. The new bridge complies with ADA regulations.



Old East 78th Street Bridge. Proposed Bridge and Fencing – Looking West.

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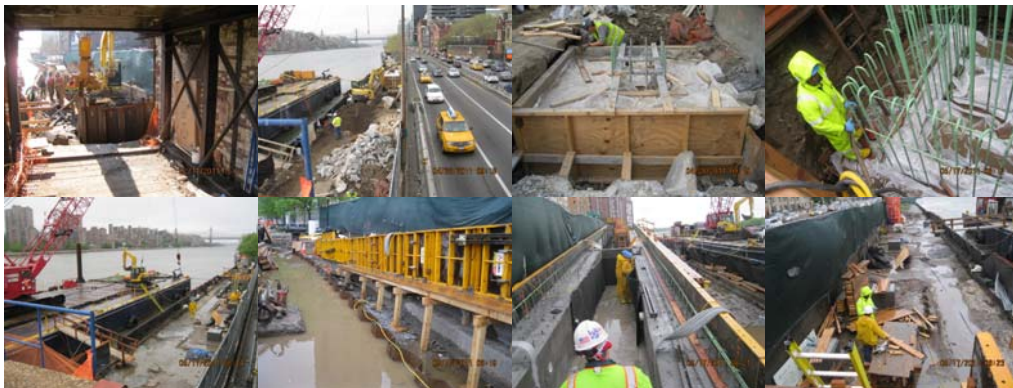


View of the Approach to the New Pedestrian Bridge
as seen from the north west corner of East 78th and the FDR Drive, looking south
Rendering of the Approach to the New Bridge.

During construction, pedestrian traffic was detoured to the 71st and 81st Street pedestrian bridges. A Notice to Proceed for the project was issued to the contractor with a start date of July 12, 2010. The bridge was closed to pedestrians on October 19, 2010.



February 2011 at the East Ramp Area: Installing Interim Steel Sheetting on East Side, at Pier Footings # 10 and 11. Debris Loaded out Onto Barge and Removed by Tugboat.



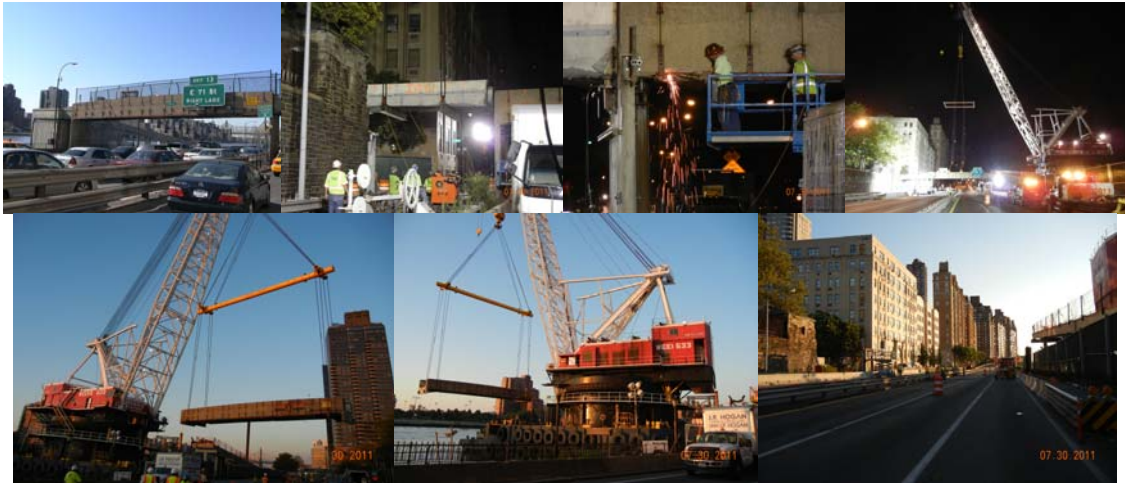
February 2011: Excavation Completed on East Abutment. The New Longer ADA-Compliant Ramp is Snug Against the FDR Drive. This Layout Improves Through Traffic Along the Esplanade. April 2011: Remove Bracing Abutment Piers and Pedestals. Continuing Excavation. May 2011.

In summer 2011, construction of the ramps was in progress. On the night of July 31, 2011, the old bridge and the piers supporting the structure were demolished and moved onto a barge on the East River between 2 AM and 7 AM. To speed the process, temporary support columns, brackets and hydraulic jacks were installed in advance, and the superstructure and pier walls were saw cut. Both the side and main spans were removed using a 500 ton crane.

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July 2011: Steel Erection for the West Side Ramp Along the North Side of John Jacobs Park.



Removal of the Old Bridge in July 2011.

On the night of October 23, 2011, the new steel for the main span of the bridge was installed, using a crane, between 2 AM and 7 AM. It had previously been assembled in the steel fabricator's yard and transported to the site on barges. The bridge was opened to traffic on January 20, 2012. Construction is expected to be complete in early 2012.



The New Bridge Span in Transit from Just North of Philadelphia to Jersey City. It was Then Loaded on the Barge and Brought up the East River to the Site. The Span Size was 26' x 135' and Weighed Approximately 80 Tons.
New Main Span Steel Erection in October 2011.

ACCOMPLISHMENTS & PLANNED PROJECTS



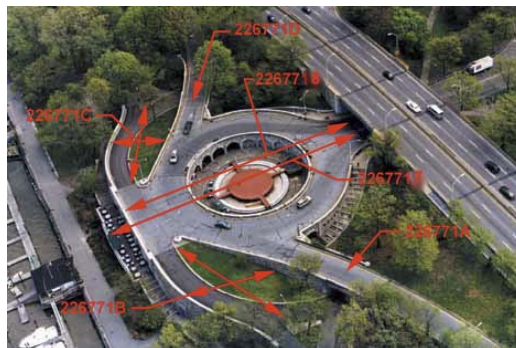
New Main Span Steel Erection in October 2011.

WEST 79TH STREET BRIDGE OVER AMTRAK, 79TH STREET PEDESTRIAN PLAZA OVER 79TH STREET BOAT BASIN GARAGE, 79TH STREET TRAFFIC CIRCLE OVER 79TH STREET PEDESTRIAN PLAZA, 79TH STREET RAMP TO HENRY HUDSON PARKWAY OVER 79TH STREET BOAT BASIN GARAGE, 79TH STREET RAMP TO GARAGE OVER 79TH STREET BOAT BASIN GARAGE, GARAGE RAMP TO 79TH STREET OVER 79TH STREET BOAT BASIN GARAGE, AND SOUTHBOUND HENRY HUDSON PARKWAY RAMP TO 79TH STREET OVER 79TH STREET BOAT BASIN GARAGE (MANHATTAN)

The West 79th Street Bridge over Amtrak, built in 1937, is a single span structure, with steel, non-composite girders and a reinforced concrete slab. The bridge carries two lanes of traffic in each direction and has a sidewalk on each side. The project work will include the removal of the existing concrete deck, sidewalks and the pedestrian safety barrier. The deck will be replaced with a 9.5 inch concrete slab with integral wearing surface, a new sidewalk and safety barriers on a rehabilitated superstructure. Construction is expected to begin in March 2017.

The West 79th Street Rotunda Complex consists of six (6) Bridges: The West 79th Street Traffic Circle consists of 34 steel spans over Pedestrian Plaza. There are two traffic lanes. The project work will include the removal of the existing roadway, concrete slab, and steel superstructure. A new steel superstructure and roadway slab will be provided along with new approach roadways, and the existing stone masonry will be rehabilitated.

The West 79th Street Pedestrian Plaza is below the Traffic Circle and over the Boat Basin Garage. It consists of ten simply supported spans. This Rotunda has landmark status and includes Gustavino type arches, a promenade, a fountain and a restaurant built in 1939 as part of the Riverside Drive Park improvements. The project work will include the structural rehabilitation and extensive architectural restoration of the plaza. This Rotunda complex also contains four ramps that will be part of the reconstruction project.



Aerial View of 79th Street Ramps. (Credit: NYSDOT)

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BRONX, QUEENS, AND STATEN ISLAND BRIDGES

TEN CULVERTS: GALLOWAY AVENUE OVER MARIANNE STREET, FOREST AVENUE OVER CRYSTAL AVENUE, NAUGHTON AVENUE OVER PATTERSON AVENUE, MIDLAND AVENUE OVER HYLAN BOULEVARD, ROCKLAND AVENUE OVER BRIELLE AVENUE, FOREST AVENUE OVER RANDALL AVENUE, GREGG PLACE OVER RANDALL AVENUE, ARTHUR KILL ROAD OVER MULDOON AVENUE, RICHMOND HILL ROAD OVER RICHMOND ROAD, AND ARTHUR KILL ROAD OVER RIDGEWOOD AVENUE (STATEN ISLAND)

This ten culvert reconstruction project is in the final design stage.

The Galloway Avenue culvert is a single span timber pedestrian bridge supported on a concrete abutment. The existing bridge will be removed and a new bridge will be constructed. The bridge will be closed during construction.

The Forest Avenue culvert over Crystal Avenue is a single span reinforced concrete box culvert. The reconstruction will consist of the demolition of the existing culvert, clearance of debris from the channel, replacement of the culvert with a concrete deck slab supported on steel beams on reinforced concrete abutment and wingwalls. The construction work is planned to be performed in four stages with proposed two traffic lanes being maintained in each direction (during rush hours) and two lanes at other times.

The Naughton Avenue culvert consists of three parallel reinforced concrete pipes at the north and south ends separated by a twin barrel box culvert. The rehabilitation will include repairing the concrete cracks and spalls, cleaning the debris, and replacing the missing anchor bolts for the retractable steel grates.

The Midland Avenue culvert consists of a single span reinforced concrete box, which will be replaced with a new pre-cast box culvert. The work will be performed in two stages, with one lane of traffic maintained in each direction.

The Rockland Avenue reinforced concrete culvert project will include concrete repair and a lined and stabilized north embankment.

The Forest Avenue culvert over Randall Avenue is a single span concrete box culvert. It will be replaced with a new precast concrete box culvert with new sidewalks and asphalt pavement. The work will take place in three stages while maintaining one traffic lane in each direction during construction.

The Gregg Place culvert is a single span reinforced concrete box culvert. It will be replaced at the southern portion with a new precast box culvert with new pavement. The north side of the road will remain open to through traffic.

The Arthur Kill Road culvert over Muldoon Avenue consists of a reinforced concrete pipe at north and a reinforced box culvert at south. The box culvert will be replaced with a new box culvert, and a structural lining will be installed in the pipe culvert. The construction will be performed in one stage with one lane of traffic maintained in each direction.

The Richmond Hill Road culvert consists of a single span stone masonry arch. The rehabilitation work will include removing and re-pointing the stone masonry, removing and replacing the fill and asphalt wearing surface above the arch, and cleaning the vegetation and sedimentation. The work is proposed to be completed in one stage utilizing night time hours, when the northbound lanes on Richmond Hill Road will be closed and a detour route will be offered.

The Arthur Kill Road culvert over Ridgewood Avenue consists of a non-reinforced concrete pipe at south and a corrugated metal pipe at north. The rehabilitation work will include installing a structural lining inside the concrete pipe and repairing the concrete at the head walls and catch

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basins. There will be two stages of construction and one lane of traffic will be maintained in each direction.

This project to rehabilitate and/or replace the ten culverts is currently in the final design stage, and is expected to begin in August 2014 and to be complete in 2015.



Galloway Avenue over Marianne Street, Forest Avenue over Crystal Avenue. Naughton Avenue over Patterson Avenue, Midland Avenue over Hylan Boulevard. Rockland Avenue over Brielle Avenue, Forest Avenue over Randall Avenue. Gregg Place over Randall Avenue, Arthur Kill Road over Muldoon Avenue. Richmond Hill Road over Richmond Road, Arthur Kill Road over Ridgewood Avenue.

BRYANT AVENUE BRIDGE OVER AMTRAK AND CSX (BRONX)

This project will include replacing the existing superstructure with a conventional concrete reinforced deck, new multi plate girder stringers, and new elastomeric bearings. The existing substructure will be rehabilitated by replacing the top portion of the concrete abutment, and installing new bearings, and the abutments will be retrofitted to meet seismic criteria. The bridge will be closed during construction, but a temporary pedestrian bridge will be constructed and maintained. The Division's in-house design staff will now complete the design for this project. Construction is expected to begin in April 2013, and is expected to be complete in October 2014.

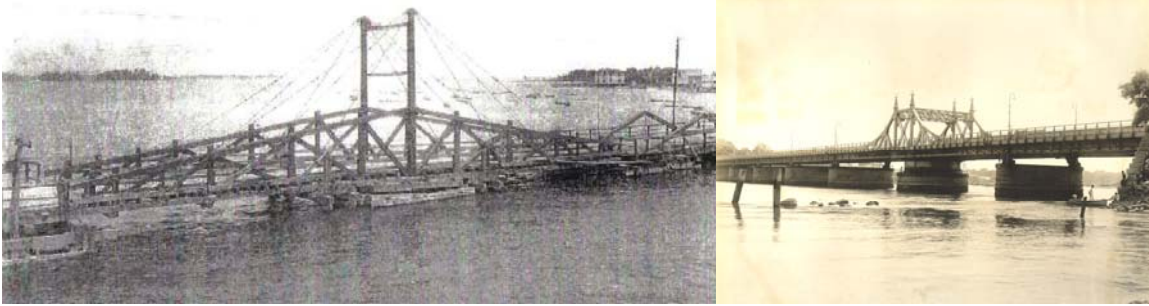


Bryant Avenue Bridge in 2011. (Credit: NYSDOT)

CITY ISLAND ROAD BRIDGE OVER EASTCHESTER BAY (BRONX)

The existing City Island Road Bridge was built in 1901 and is the only vehicular, bicycle and pedestrian access between the mainland Bronx and City Island. In 2010, the bridge carried 15,380 vehicles per day. The bridge is part of City Island Road, which is located within Pelham Bay Park and crosses over Eastchester Bay. With seven spans and six piers in the water, the bridge has outlived its useful life and requires extensive continuous maintenance.

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Original City Island Bridge in 1873. Bridge in 1928.



Aerial View of Current Bridge. Welcome Sign.

The existing bridge will be replaced along the same alignment with a new single span, single tower cable-stayed bridge which will be a unique structure type in the NYC area. The new bridge will be approximately 17 feet wider than the existing one to accommodate three standard 12-foot wide traffic lanes, a 6-foot wide bicycle lane and a 6-foot wide pedestrian walkway on each side. The tower and concrete counterweight for backstay anchorage of the new bridge will be located in Pelham Bay Park. The new bridge will be designed to current standards and with its wider roadway width, will allow future repair and rehabilitation to be carried out while maintaining one 12-foot lane in each direction. It will also eliminate the vehicle height restriction caused by the existing overhead truss. In order to maintain traffic during the demolition of the existing bridge and construction of the new bridge, a temporary bridge will be constructed on the south side of the existing bridge. Marine traffic will remain undisturbed beneath the bridge during peak boating season.

At the City Island side there is a seawall along the shore which is about 500 feet in length starting from the bridge and heading in a southerly direction. This seawall will be rehabilitated and turned over to the Department of Parks and Recreation along with the esplanade which it is supporting.

Turtle Cove Culvert is located under City Island Road approximately half a mile west of the existing bridge. As part of the wetland impact mitigation activities for the project, this culvert will be replaced with a larger one that will allow for greater tidal flooding from Eastchester Bay to the upland portions of Turtle Cove.



City Island Road Bridge in 2010. (Credit: Bojidar Yanev) Vertical Clearance Posting. (Credit: NYSDOT) 9 Foot Tall Ornamental Finial.

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The project is currently in its final design phase. The construction phase for this Federally-funded project is scheduled to begin in summer 2012 with an approximate duration of 3 years.



Rendering of New City Island Road Bridge. Side View Rendering of New City Island Road Bridge.

CLAREMONT PARKWAY BRIDGE OVER METRO NORTH RR (BRONX)

The Claremont Parkway Bridge was built in 1889, with major reconstruction in 1938. Claremont Parkway is a roadway link in the Crotona Park section of the Bronx where the street system features few continuous east-west routes. The existing bridge is a steel superstructure encased in concrete supported on the original stone masonry abutments. It spans the tracks of the extremely busy Harlem Valley and New Haven lines of Metro-North Railroad, an essential regional commuter link between the northern areas of the metropolitan region, key points in the Bronx and Harlem, and the Manhattan central business district. Reconstruction will extend the life of the bridge by 40 years.



Claremont Parkway Bridge. (Credit: NYSDOT) Looking Northwest in 2008.

The reconstruction of the bridge will include removal of the entire superstructure and approaches. The new bridge will consist of pre-stressed concrete box beams supporting a reinforced concrete deck and approach slab, concrete sidewalks and reinforced concrete parapet walls with protective fencing, and reconstructed approach roadways. A portion of both existing abutments will be removed to accommodate the new bridge profile. The utility work will include the installation of two new water mains, a gas main, and electrical conduits. The bridge will be constructed in four stages, with one traffic lane and one sidewalk open in each direction at all times during construction. A Notice to Proceed for the project was issued to the contractor with a start date of April 4, 2011.

The contractor began setting up the maintenance and protection of traffic for stage 1 construction on July 11, 2011. One lane of vehicular traffic continues to cross the bridge in each direction; pedestrian traffic may cross the bridge on each side of the temporary roadway. The project is currently in the Stage I construction and the contractor has removed the existing utilities and the deck stringers. All Stage 1 demolition was completed in October. The contractor completed the installation of vertical protective shielding above the existing abutment, the demolition of the existing abutment caps and forming, the placement of reinforcing bars, and the placement of concrete on each of the abutment caps. Construction is expected to be complete by May 2013.

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Existing North Side Guardrail and Fence. Proposed Guardrail and Fence. Stage 1 in October 2011: Removal of the Existing Bridge Girders.



Installation of Pre-Cast Box Beams for Stage 1 in November 2011.

CONCOURSE VILLAGE AVENUE BRIDGE OVER METRO NORTH (BRONX)

This project will include demolishing the existing bridge deck, removing loose encasement on the structural members, localized steel repairs, and restoring the encasement. A new concrete deck will be installed, and new approach slabs, an east parapet, steel faced curbs, and concrete sidewalks will be built. The existing granite blocks will be repointed as necessary. The bridge will be reconstructed in four stages, with one 14.11 foot wide southbound lane maintained during construction. Construction is expected to begin in November 2019, and is expected to be complete in May 2021.



Concourse Village Avenue Bridge. (Credit: NYSDOT)

GRAND CONCOURSE BRIDGE OVER METRO NORTH (BRONX)

The bridge was originally built in 1906. It is a single span bridge consisting of a concrete deck supported on five steel plate girders, one truss, and a steel truss subway structure located in the center of the bridge. The bridge carries three lanes of vehicular traffic in each northbound and southbound direction as well as NYCT subway traffic underneath the Grand Concourse Boulevard and above the Metro North railroad right of way. The upper portion of the bridge carrying the roadway is now structurally supported by the lower portion carrying the subway. The two portions of the bridge are dependent upon each other for support and stability but are being maintained individually by two separate agencies, the NYC Department of Transportation, and

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NYC Transit Subways respectively. The subway portion of the structure, comprised of four warren trusses, is stabilized by the roadway portion floor beams and the roadway portion is supported by the subway trusses.

In the new rehabilitation scheme, the roadway will be supported independently from the subway structure: the structures will be physically separated. Steel members will be added to the subway trusses to provide the stability previously provided by the roadway portion floor beams. The substructure consists of two concrete abutments bearing on rock ledges. The tops of these abutments lie at two levels, an upper level which supports the bridge stringers and a lower level which supports the subway trusses. The bridges stringers over the subway tracks bear on a composite steel beam/concrete backwall which will be replaced as part of this project. The foundation for the new trusses being installed to carry the roadway superstructure will bear on the rock behind the existing abutments.

The reconstruction project will also include building new sidewalks, as well as bridge railings with protective fencing, expansion deck joints, electrical conduits and fixtures, and the relocation of the existing water main under the sidewalk. Two lanes of vehicular traffic and the pedestrian walkway will be maintained in each direction on the Grand Concourse. Deterioration was discovered during a final design inspection to assess the structural condition of the bridge, and the consultant has been instructed to prepare an interim load rating to establish the structural capacity. This project, currently in the final design phase, is expected to begin construction in February 2018, and is expected to be complete in May 2020.



Grand Concourse Bridge over Metro North in 2002.
(Credit: NYSDOT)

HIGHLAND PARK PEDESTRIAN BRIDGE OVER PEDESTRIAN PATH (QUEENS)

The Highland Park Pedestrian Bridge, built in 1935, is a single span arch structure with a clear opening of 60 feet under the bridge. Unlike a conventional steel or concrete bridge structure, the main structure is a brick masonry arch, with wing walls and parapet walls consisting of stacks of random size rocks set in mortar. The height of the parapet walls from the roadway surface varies from two to four feet. The bridge, located inside Highland Park, spans a hiking trail, and carries pedestrian and bicycle traffic. It is 27 feet wide with neither sidewalks nor shoulders.

A recent inspection revealed significant deterioration of the masonry arch. The project, currently in the preliminary design phase, will include the rehabilitation of the existing brick masonry arch structure and the specialized wearing surface. The bridge will be closed to all traffic and will be reconstructed in one stage. Construction is expected to begin in July 2014, and is expected to be complete in eighteen months.

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Highland Park Bridge. (Credit: NYSDOT)

METROPOLITAN AVENUE (FRESH POND) BRIDGE OVER LIRR -NY&ATL (QUEENS)

This bridge is a two span structure built between 1914 and 1915. It carries parts of the intersection of Metropolitan Avenue, Fresh Pond Road and the adjoining property of the former Mobil gasoline station (which was acquired by City) over the Long Island Railroad Montauk branch. The superstructure consists of concrete encased steel beams with a concrete deck and varying depths of paved wearing surface. The substructure consists of a reinforced concrete pier and gravity type plain concrete abutments and wing walls.

This project, currently in its final design phase, will rehabilitate the bridge. The concrete substructure and steel girder superstructure will be retained and repaired. All of the surface elements, such as the concrete deck, approach slabs, sidewalks, parapet, fencing and lighting will be completely replaced. The construction will be staged to maintain traffic flow in both directions at all times. Construction is expected to begin in September 2013, and is expected to be complete by the end of 2016.



Metropolitan Avenue Bridge in 2009.
(Credit: NYSDOT)

ROOSEVELT AVENUE BRIDGE OVER VAN WYCK EXPRESSWAY (QUEENS)

The existing bridge is a two level dual-use steel viaduct consisting of 27 spans. The first level, which carries Roosevelt Avenue, consists of a plate girder floor beam system supported by steel columns, intermediate piers supporting a bascule span spanning over the Van Wyck Expressway, and end abutments. The second level of the viaduct supports and carries the overhead NYC Transit Authority's #7 – Flushing line subway structure.

Concrete deck repairs were performed in July, August, and October of 2003, June and July of 2004, April, May, June, and July of 2005, and June and July of 2006. In the summer of 2005, the When and Where contractor repaired red and yellow flag conditions caused by damage by over-

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sized trucks using the Van Wyck Expressway. Red-flagged steel shoring and yellow-flagged cracked stringer connection angles were repaired in the spring of 2008.

In April 2009, the reconstruction plans of the bridge underwent a Value Engineering Study by the Office of Management and Budget which recommended several changes to the design that are being incorporated.

The project, currently in the final design phase, will include the construction of a new concrete-filled steel grid deck, rehabilitation of the existing east and west viaduct sections, bascule span, piers, abutments, and painting of the entire bridge. In addition, a new bicycle/pedestrian path will be constructed on the north and south sides of the bridge.

The lower level carrying Roosevelt Avenue will be reconstructed in three stages. Both vehicular and pedestrian traffic will be maintained throughout the construction of the bridge, with one lane in each direction.

This federally-funded project is currently in the final design phase with construction anticipated to start in January 2014 and to be complete in October 2017.



Roosevelt Avenue Bridge (#2240507) in 2002 and 2004. (Credit: NYSDOT)

SHORE ROAD CIRCLE BRIDGE OVER AMTRAK (BRONX)

This project will include the removal of the existing two span bridge and the construction of a new single span bridge structure with a reinforced concrete deck over steel girders. The work will also include the construction of new reinforced concrete abutments and wing walls, as well as new parapet walls with protective steel fences. The bridge will be reconstructed in three stages, with one lane of traffic maintained in each direction during construction. A Notice to Proceed for the project was issued to the contractor with a start date of May 18, 2008.



Shore Road Circle Bridge in June 2009 and August 2010. (Credit: NYSDOT)

Construction was expected to begin in May 2008, however, due to Amtrak's inability to provide the electric traction crew services for track outage, the construction activities on this project were on hold from September 21, 2008 until April 15, 2009.

Construction activity during 2010 included the following: High voltage overhead cables were relocated, allowing construction work to proceed at the west abutment; temporary shoring towers were erected to allow the demolition of the super structure; and soldier piles were drilled behind the abutments and excavation supporting systems installed prior to start of the removal of the existing stone abutments. In the fall of 2010, the contractor started excavating behind the abutments to prepare for the removal of the old abutments and wing walls.

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Construction activity during 2011 included the following: Removal of existing sidewalk and steel beams for Stage-1B; installation of protective shielding for Stage-2; demolition of Stage-1A/3A and 1B/3B east and west abutments; pouring of concrete for abutments Stage-1A/3A and 1B/3B; installation of prefabricated structural drain behind Stage-1A/3A and 1B/3B abutments; backfilling behind Stage-1A/3A and 1B/3B east and west abutments; application of protective sealant for Stage-1A/3A and 1B/3B substructure; erection of steel beams for Stage-1A and Stage-1B superstructure; installation of protective shielding for Stage-1A and 1B; pouring of concrete for Stage 1A and Stage 1B superstructure slabs; installation of conduits for Street lighting, high voltage, and communications; and placement of temporary asphalt concrete pavement for stage-1A and Stage-1B east and west approaches. Construction is expected to be complete in spring 2013.



Shore Road Circle Bridge in April 2011 – July 2011. September 2011: Steel Installation. November and December 2011: Concrete Parapet and Deck Placement.

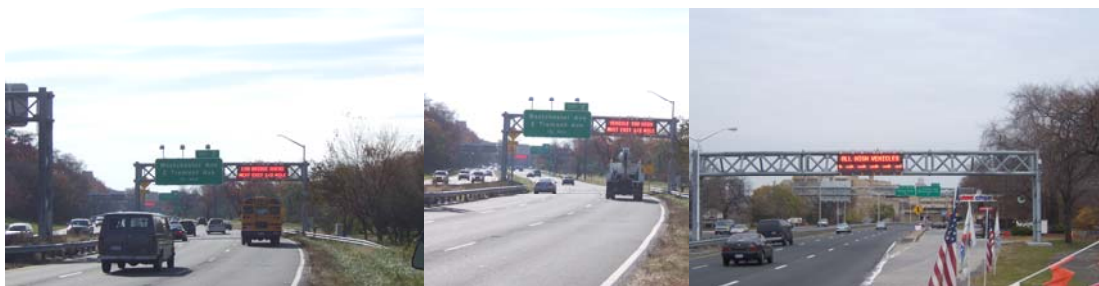
WESTCHESTER AVENUE BRIDGE OVER THE HUTCHINSON RIVER PARKWAY (BRONX)

This two span continuous multi-stringer bridge is supported by reinforced piers and abutments. The bridge spans over the Hutchinson River Parkway and it supports the NYCT elevated subway structure of the Pelham Bay Line. It was built in 1940 by the Triborough Bridge Authority. No major modifications to the bridge are recorded except for minor repairs at the south approach sidewalk and temporary flag repairs to bridge girders damaged by vehicle impacts in the southbound and northbound roadway. A project to install an ITS solution, which includes an overheight vehicle detection system that flashes signs directing vehicles identified as being over 9' in height to exit the parkway, was substantially completed on December 3, 2004. The contractor completed extra work associated with landscaping in the spring of 2006. The underdeck at both spans is currently covered by approximately 154 square feet of timber planking. In addition, the underdeck at span 1 is covered with approximately 18 square feet of steel wire mesh netting.



Westchester Avenue Bridge in 2001 and 2006. (Credit: NYSDOT) Overheight Sensor Unit on the Hutchinson River Parkway. (Credit: Roly Parroco)

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Vehicle Detection System.

The Westchester Avenue Bridge's vertical clearance over the Hutchinson River Parkway is sub-standard. Due to the number of truck and bus vehicles that mistakenly enter the Hutchinson River Parkway, where commercial vehicles are not allowed, the fascia steel girders of the bridge have been severely impacted and damaged numerous times. The designer is currently studying ways to increase the vertical clearance of the bridge over the parkway without adversely impacting the NYCT elevated structure and its transit train operations. This may entail temporary support of the transit structure in order to replace the existing roadway bridge structure in stages with a thinner more efficient structure to gain additional clearance over the parkway below.



Damaged Truck After Striking the Bridge in October 2011. (Credit: Andrew Hoang)

The rehabilitation of the bridge will include the replacement of the existing reinforced concrete deck slab with a new reinforced concrete deck, steel faced curbs, a new parapet wall and protective screenings, concrete sidewalks, rehabilitation of the damaged steel fascia girders, and replacement of the diaphragms and other bridge elements, including a new steel water main.

In March 2011, a value engineering study was conducted in which it was recommended that further studies of alternative options be performed to raise the bridge clearance through a shallower bridge structure and/or by raising the roadway profile above the bridge. The consultant is currently investigating the feasibility of the study's recommendations to modify the bridge superstructure in order to improve the vertical clearance under the bridge without lowering the highway.

This rehabilitation project is currently in final design. Construction is expected to begin in September 2015, and is expected to be complete in May 2018.

EAST 175TH STREET BRIDGE OVER METRO NORTH (BRONX)

The East 175th Street Bridge over Metro North was originally built in 1889 and it underwent reconstruction in 1938. The reconstruction work included a new steel superstructure, concrete deck slab and sidewalk in conjunction with repairs to the existing stone masonry substructure and relocation of various utilities. It is a single span multi-girder steel structure with a steel reinforced concrete deck, and it measures 61.68 feet long from abutment to abutment and 60 feet wide from parapet to parapet.

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The consultant completed the field survey and in-depth inspection of the bridge in 2009. Construction is expected to begin in 2019.



East 175th Street Bridge in 2002. (Credit: NYSDOT)

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Specialty Engineering and Construction

Design-Build

In 2011 the Department continued to use the Design-Build process to expedite capital bridge rehabilitation. These contracts retain the same company for both design and construction on selected projects. It is evident that there are many advantages to the Design-Build program, including the use of one consolidated procurement rather than two or more, resulting in significant time savings; the ability to commence construction before design completion; the avoidance of project escalation costs as construction commences two or three years earlier than with the conventional design-bid-build method; minimization of design change orders; and better coordination between design and construction, as critical field issues are addressed expeditiously. In addition, the design is custom made and reflects the capabilities and strength of the specific contractor; the Department establishes a single point of contact for communicating its goals and objectives; and overall costs are reduced substantially.

BRUCKNER EXPRESSWAY BRIDGES (NB AND SB) OVER AMTRAK & CSX (BRONX)

The Bruckner Expressway, named in honor of former Bronx Borough President and Congressman, Henry Bruckner (1871-1942), opened in 1973 and was one of the last roads on the New York City Expressway system to be built. It is a major connecting link between the Robert F. Kennedy (Triborough) Bridge and the New England Thruway. The Bruckner Expressway Bridges are single span bridges on the Bruckner Expressway which run over the Amtrak/CSX railroads. Built over 60 years ago, the Bruckner Expressway Bridges carry over 140,000 motorists and cyclists daily. The existing northbound bridge is a 124-foot single-span multi-girder steel superstructure with a cast-in-place concrete deck.

Amtrak operates their Northeast Corridor commuter rail lines on two tracks underneath the Northbound and Southbound Bridges. The tracks provide service between Penn Station in New York City and South Station in Boston. CSX operates freight trains on two tracks underneath the Northbound and Southbound Bridges. The tracks facilitate transportation of freight throughout the region.

The new bridge will consist of precast concrete deck panels supported by new steel girders. The existing southbound bridge is a 115-foot single-span steel superstructure consisting of three thru-type trusses. The floor beams hang from the truss bottom chords and steel stringers span between floor beams. The existing cast-in-place concrete deck is supported by the steel stringers. The new deck will be a precast concrete deck which spans the floor beams.

A tanker truck carrying home heating fuel overturned and caught fire on the northbound bridge on the evening of October 4, 2005. The traffic on the bridge, and on the Amtrak and CSX railroad lines below, was adversely affected. The bridge was inspected and core samples of the concrete from the fire-affected deck were tested. Division crews assisted in emergency repairs and clean-up, re-setting all expansion plates on the abutment, and performing deck repair. The crews worked continuously, and the roadway was reopened in time for the morning rush hour on October 6, 2005.

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Bruckner Expressway Bridge NB in 2002. Bruckner Expressway Bridge SB in 2008. (Credit: NYSDOT)
2005: The Tanker Truck. (Credit: Bojidar Yanev)

To protect the trains and railroad facilities below the bridge after the October 4, 2005 tanker truck fire, contractor crews began the nighttime installation of protective timber shielding under the bridge on October 5, 2005. The project was completed on November 8, 2005. The Division's Surveying Unit assisted the Inspections Unit in monitoring the deflection of the bridge.

The fire on the bridge weakened its members. While the immediate results of the fire were addressed by in-house forces, the aftereffects remain unresolved. The inspection conducted on September 14, 2006 revealed that at least four girders have sagged and they are hit by CSX railroad cars below. The concrete deck has separated from the steel girder and there is a one to two inch gap between the top of the flange and the bottom of the haunches. In addition, the diaphragms between the girders have been burned and their capacity has been weakened. Repairs requiring immediate attention were handled by the When and Where contractor. The contractor installed additional timber bracing of the bridge's timber shielding in January and February 2007, performed emergency removal of loose underdeck concrete in July and August 2007, and repaired a red flag condition at the bridge stringers in September 2007. The replacement of the bridge's northbound superstructure and the southbound deck is being done under a Design-Build contract. The scope of work for the northbound bridge includes superstructure replacement, reconstruction of abutment back walls and bridge seats, bearing replacement, highway reconstruction 200 feet from the beginning and end abutments, and the installation of a new 20-inch diameter water main and new electrical ducts. The scope of work for the southbound bridge includes deck replacement, bearing replacement, back wall reconstruction, rehabilitation and painting of the existing steel truss superstructure, highway reconstruction 200 feet from the beginning and end abutments, and the installation of a new 12-inch diameter water main and electrical ducts.

A Notice to Proceed was issued to the contractor with a start date of October 27, 2008. Due to delays in obtaining the railroad force account agreements, the contractor focused on work off-structure, such as the water main and the installation of complex maintenance and protection of traffic. Demolition of the northbound structure commenced in November 2009.

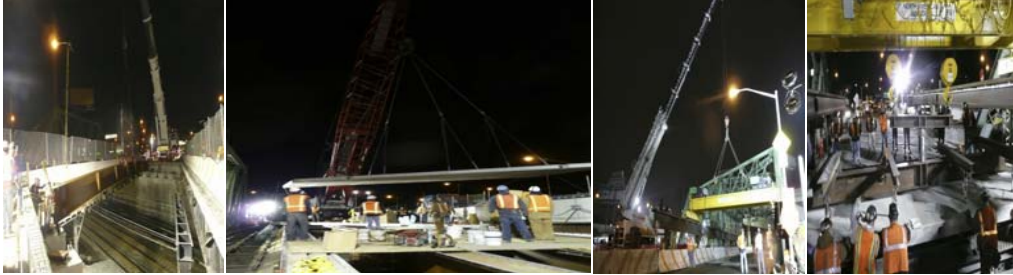
Girder removal for Stage 1 and the lead paint removal were completed in February 2010. Demolition of the northbound back wall at both the beginning and end abutments was completed in March. The precast back wall and bridge seats were installed, and bearing placement on the northbound bridge was completed in April. The southbound bridge floor beam encasement removal was completed in June, as was installation of northbound deck panels.

Stage II on the northbound bridge began in August 2010. Painting of the southbound bridge floor beams and counter weight work was completed in September. South bound bridge shielding and deck panel removal was completed. Installation of the precast back wall of the northbound bridge was completed and northbound girders were installed in November. Stage II deck panels were placed in December.

Excavation of the east approach for the new roadway alignment was completed in January 2011. Steel repairs on the southbound structure and deck panel installation were completed in April. Bridge bearing removals and replacement, lead abatement and the excavation of the west side approach on the southbound bridge were completed in May. Installation of the sidewalk on the south bound bridge was completed in June. Southbound Stage 2 saw-cutting of deck panels, northbound Stage 3 approach work, asbestos removal, water main removal, and Installation of

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the temporary deck panels for the southbound bridge were completed in August. Installation of the Stage 3 northbound bridge formwork for the beginning abutment back wall concrete, and demolition of the southbound bridge were completed in December 2011. Other southbound and northbound Stage 3 work was in progress by the end of the year, as well. Construction is expected to be completed in October 2012.



Northbound Bridge - Using Hydraulic Crane to Remove the Existing Girders and Install New Ones. Using Crawler Cranes to Install the Precast Deck Panels. The Contractor Opted to Use Hydraulic Cranes and Crawler Cranes to Perform all Lifting Operations Because There are no Overhead Structures to Restrict the Crane Boom Length Required for the Pick. Gantry Crane Installation. Because of the Low Overhead Clearance Inside the Truss From the Lateral Bracing Members, the Contractor Opted to use a Gantry Crane for all Lifting Operations. It was Placed on Running Rails Supported by the Existing Superstructure.



Southbound Bridge Existing Deck Demolition and Deck Panel Installation. August 2011: Stage 2 Assembling and Welding Steel Packs for Southbound Bridge.

HARLEM RIVER DRIVE AT EAST 127TH STREET (MANHATTAN)

The Harlem River Drive Bridge over the ramp from East 127th Street is an eleven-span structure consisting of seven main spans of multiple steel stringers and concrete deck and four approach spans of reinforced concrete structural slabs supported by reinforced concrete girders and retaining walls. The bridge currently carries three traffic lanes in the southbound direction and two lanes plus a wide striped shoulder in the northbound direction. This project involves the replacement of the existing 11 span bridge and the reconstruction of the Harlem River Drive between the Willis Avenue and Third Avenue Bridges, in addition to various highway improvements. It eliminates a major weaving problem between the southbound Harlem River Drive traffic destined for the Second Avenue exit and the Third Avenue Bridge exit ramp. One weave (from the Third Avenue Bridge to the Harlem River Drive mainline) is accomplished by some vehicles with no lane change, and the other weave (from the Harlem River Drive mainline to Second Avenue) requiring at least two lane changes of all weaving vehicles. The project will also allow at-grade access for a future Park/Promenade to be developed by the Department of Parks at 127th Street between the Harlem River Drive and the Harlem River. The viaduct currently serves approximately 79,000 vehicles per day. This area currently has 40 times the State average number of accidents. Construction is expected to begin in spring 2014, and is expected to be complete in spring 2016.

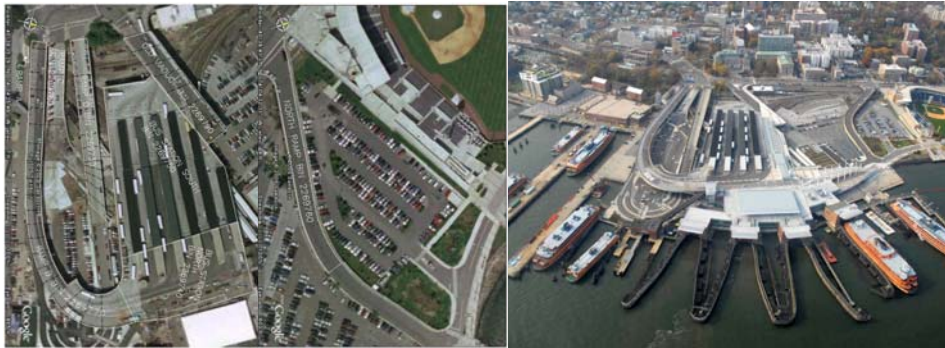
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Harlem River Drive at East 127th Street. Left and Right Views of the Bridge in 2003.

EIGHT RAMPS AND ONE PEDESTRIAN BRIDGE AT THE ST. GEORGE STATEN ISLAND FERRY TERMINAL (STATEN ISLAND)

Ferry service between Staten Island and Manhattan began in 1898, and its operations were taken over by the City's Department of Docks and Ferries in 1905. Today it is run by NYCDOT's Passenger Transport Division and services more than 19 million passengers each year, according to Captain James C. DeSimone, the ferry's Chief Operations Officer. The St. George Ferry Terminal itself recently underwent a major reconstruction project. The old drab, dingy building was converted into a well-lit, modern multi-modal facility. In addition to ferry service, the terminal also includes a very active MTA bus station and a Staten Island Railway Station. The ramps that will be rehabilitated serve 23 NYC Transit bus routes that contribute significantly to ferry ridership. To complete the make-over of the St. George Terminal, the Division's Design-Build Unit is undertaking a major rehabilitation project to upgrade vehicular access to the site.



Arial Views of the Staten Island Ferry Terminal Ramps.

Currently a series of eight ramps carry bus and passenger car traffic in and out of the facility. The eight vehicular ramp structures consist of 73 spans that provide access to the Staten Island Ferry Terminal for pedestrians, private vehicles, taxis, and New York City Transit buses. The ramps span over the Staten Island Railway, terminal buildings, and terminal parking. Two of the structures serve as a bus station as well as providing a roof over the rail station below. Limited parking is provided on several of the ramps. The North Ramp provides access to the North Municipal Parking Field and the Richmond County Bank Stadium and stadium parking lot, which provides supplemental parking to the Ferry Terminal. The five span pedestrian bridge provides access between the main Ferry Terminal building and the 69th Street Terminal building as well as access to the Bus Entrance Ramp (Ramp B) above and the Commuter Pick-Up and Drop-Off Area below.

Seven of the eight ramps were constructed in 1948, with the eighth dating back to the early part of the 20th century. The last major structural work on these bridges was a deck replacement project in 1985 that only addressed three of the eight bridge structures. The planned design-build project will upgrade these eight vehicular structures (and one pedestrian bridge), and provide a design life of 75 years. For seven of the ramps, the project will provide new decks and eliminate

ACCOMPLISHMENTS & PLANNED PROJECTS

joints where feasible, retrofit poorly detailed steel connections, and rehabilitate/replace deteriorated steel superstructure and substructure members, as well as install new paint systems. Lead paint removal and the installation of a new drainage system as well as a pigeon deterrent system will also be included. The eighth ramp is the existing load-restricted north ramp adjacent to the Richmond County Bank Stadium. It will be demolished and reconstructed on a more efficient alignment in order to alleviate traffic congestion at the intersection of Richmond Terrace and Wall Street. In addition, this project will replace the superstructure of a pedestrian bridge (the 69th Street Terminal Building Overpass) connecting the terminal to an office facility, and will address traffic improvements for the entire stretch of Richmond Terrace outside the terminal.

A Notice to Proceed for the reconstruction of these structures was issued to the contractor with a start date of July 27, 2009. During the demolition of the concrete encasement at the old viaduct, which began in October 2009, lead paint on the underlying structural steel was discovered. Lead paint and underlying rust is being removed from all structures and non-lead paint is being reapplied. This protective coating is an essential preventive maintenance operation used to protect and extend the life of bridge infrastructure. All lead paint removal work is being performed within an entirely sealed Class 1A Containment System which prevents materials from leaving the work zone. Soil and air in the St. George area are being monitored and tested in accordance with safety requirements set forth by the United States Environmental Protection Agency and Occupational Safety and Health Administration, New York City Departments of Health and Environmental Protection and the New York State Departments of Health and Environmental Conservation.



Temporary Shoring of Stringers at Ramp D East Abutment for Steel Repair Work. November 2010: New Bridge Seat and Pedestals Installed at Ramp D West Abutment.

Active construction began in early 2010 when modifications were made to the Kiss and Ride area. These modifications allowed the area to accommodate the closure of Ramp D (Kiss and Ride exit ramp) for demolition (on June 21, 2010) and the resulting two-way operation of Ramp C (Kiss and Ride entrance ramp). Ramp A and D demolition was completed in September. Bus gates A and B were relocated as of September 12, and the south half of the old viaduct was closed on September 13. The buses were relocated and pedestrians were routed to the opposite sidewalk. By the end of the year, the reconstruction of Ramp A and rehabilitation of Ramp D were underway. The pedestrian breezeway, located above the Kiss and Ride and linking the ferry terminal with the Ferry Administration building, is also being rehabilitated. Demolition was completed in March of 2011 and the structure is currently being rebuilt.

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January 2011: Panoramic View. February 2011: Sidewalk and Decking Demolition at Bus Station North. March 2011: Ramp D South Side Fascia Repair. Kiosk Wall Demolition. Breezeway Containment and Abatement.



April 2011: Steel Replacement and Rivet Bursting at Ramp D. May 2011: Stay-in-Place Forms and Studs. Overhang Brackets. View of Pedestrian Breezeway Facing East. Ramp D East Abutment. Old Bus Gate. The Refurbished Bus Gates A and B Will Include Enhancements for Pedestrian Safety and Comfort, as Seen in this Rendering. Existing North Ramp (Foreground) and New North Ramp (Background).

Shielding installation and red flag repairs were completed in August 2011. Construction of the new north ramp's T-wall and piers was completed in September. Ramps A and D were completed in November. Ramp D opened on November 17, and Bus Ramps A and B opened on November 18. Stage 1 of the Old Viaduct was opened on November 18, as well. The North Ramp (leading into the North Municipal Parking Lot and NYCEDC Parking facilities), closed for construction on December 1, and demolition began. A new ramp is currently being constructed on a new alignment, adjacent to the Richmond County Bank Ball Park. By the end of the year, the reconstruction of Bus Gates A and B and the Old Viaduct were underway. Construction is expected to be complete by winter 2013.



August 2011: Ramp A Looking East. Ramp A West Abutment Pedestals. Ramp D Looking Southwest.

ACCOMPLISHMENTS & PLANNED PROJECTS



August 2011: Bus Ramp A Canopy. Span 1 – Looking North. North Ramp Center Pier.
December 2011: Breezeway. Bus Ramp D. Taxi Ramp. Stage II Demolition. Ramp A Open to Traffic.

Emergency Contracts

BORDEN AVENUE BRIDGE OVER DUTCH KILLS (QUEENS)

The Borden Avenue Bridge over Dutch Kills is located just south of the Long Island Expressway between 27th Street and Review Avenue in the Sunnyside section of Queens. It is a retractile-type movable bridge. The original bridge construction was completed in 1908 and was opened to traffic on May 25, 1908.

The bridge structure carries two lanes of vehicular traffic with sidewalks on either side. The roadway is 34 feet wide and the sidewalks are 8 feet wide.



Borden Avenue Bridge. (Credit: Peter Basich) General and Close Up View of the Crack in the Wingwall. (2nd View Credit: NYSDOT)

In the spring of 2008, the Department observed that an existing crack in the west abutment's wingwall had opened up further. Following a series of subsequent inspections, it was determined that there is continuous movement of the west abutment wall. In an effort to mitigate this condition, two pressure relief joints were installed in the roadway, and the speed limit for eastbound traffic was posted at 15 miles per hour. Unfortunately, these measures did not stop or slow the abutment wall's movement.

On September 11, 2008, the Department and its consultant met to discuss the problem, and it was determined that there were two possible solutions: either to install a tieback-supported anchoring system, which would restrain the west abutment wall's movement, or, to fully replace the bridge's west abutment wall and its wingwalls. The Department would not be able to determine which solution would be the best long-term solution until further detailed inspections of the abutment wall and wingwalls were performed.

In early 2009, based on the findings of the underwater inspection, the consultant provided its recommendation to the Department to proceed with the second option, and the Department concurred. The movement of the wall was undermining the stability of the bridge. Due to the

ACCOMPLISHMENTS & PLANNED PROJECTS

potentially serious danger to life, public safety and property posed by the current condition, it is critical that the repair work be performed as expeditiously as possible.

On October 16, 2008, in the interest of public safety, pursuant to Section 103(4) of the General Municipal Law and Section 315 of the New York City Charter, the Department declared that an emergency existed relative to the movable bridge carrying the Borden Ave. over the Dutch Kills in Queens. The repairs included the following: removal of the fill material under the roadway and sidewalks from behind the west abutment and between the wingwalls; relocation of the existing utilities; digging of a test pit to inspect the supporting piles; inspection of the condition and the taking of measurements; and the implementation of the appropriate repair solution based on the inspection findings.

The bridge was closed at noon on December 31, 2008. A Letter of Intent for the emergency repair of this bridge was issued to the contractor with a start date of January 6, 2009. The contractor began the excavation work behind the west abutment in February 2009. Installation of the cofferdam sheeting began in March 2009.

A supplement to the Declaration of Emergency was added on August 3, 2009. During the excavation portion of the abutment wall repair work, the contractor encountered oil contaminated sediments in the Dutch Kills requiring the Department to notify the relevant federal and state regulatory agencies. The New York State Department of Environmental Conservation subsequently mandated that the Department prepare a Corrective Action Plan to address the contaminated sediments and dewatering fluids generated by the work. Since the environmental remediation work is incidental to the abutment wall repair work, the remediation work was added to the current emergency contract.

In addition, during the course of the abutment wall repair work, it was discovered that many areas of the superstructure of the moveable span exhibit deterioration. The additional repairs will include steel repairs on the stringers, floor beams and brackets; the installation of a new 5.5 inch concrete slab, and localized cleaning and painting.

The contractor began the demolition of the concrete deck in September 2009 and the repair of the structural steel in October 2009.

The Division identified a pocket of contaminated soil which was classified as "contaminated non-hazardous." As such, it poses no significant health risk to workers or the surrounding community. However, precautionary measures were taken and every effort is being made to remove and dispose of the contamination quickly, yet safely, within all New York City and State guidelines. A Corrective Action Plan (CAP) for the removal and disposal of the contamination was submitted to the NYS Department of Environmental Conservation (NYSDEC) for review and approval. Upon receipt of the NYSDEC approval in November 2009, the contractor proceeded with the environmental work.

Cofferdam reinforcement was completed in March 2010. The driving of piles started in May and was completed in June. Steel repairs were completed in September. The grid deck concrete placement was completed in October. The bridge was reopened to vehicular traffic on December 24, 2010.

Construction was substantially completed on May 20, 2011. The mitigation work at Newtown Creek was completed in June 2011. A total of 77 cubic yards of debris was collected from the creek, which exceeded the permit requirement of 75 cubic yards.

ACCOMPLISHMENTS & PLANNED PROJECTS



May 2010: Pile Driving. Steel Deck Removed. (Deck View Credit: Bernard Ente) June 2010: Removing the Motor for Replacement and the Main Machinery Shaft for Rehabilitation. Oiler Carl Wharton, Mechanical Engineer Ibrahim Ibrahim, Oilers Tom Strommen and Richard Morreale, and Construction Project Manager Ali Mozaffari. (Credit: Vera Ovetskaya)



Late December 2010: Bridge Open to Vehicular Traffic. (Credit: Mitch Waxman) Executive Director of Bridge Preventive Maintenance and Repair Thomas Whitehouse and Director of Bridge Repair Pinakin Patel at the Substantial Completion Inspection in May 2011. Supervisor Electrician Jose Done and Electricians Michael Kowalenko and Gary Emmanuel. (Credit: Samuel Teaw)

Component Rehabilitation

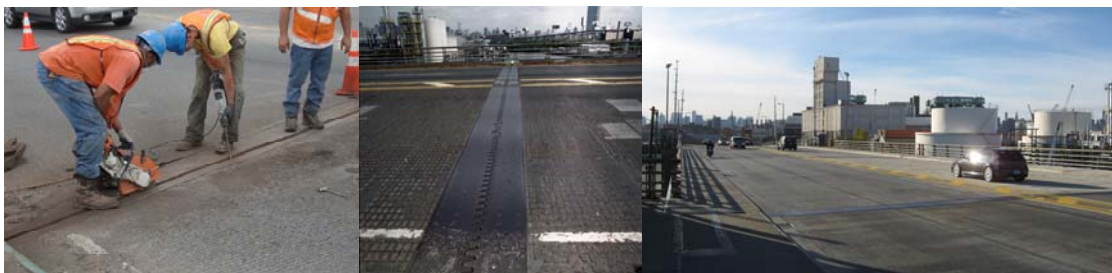
GREENPOINT AVENUE BRIDGE OVER NEWTOWN CREEK (BROOKLYN/QUEENS) (a.k.a J.J. BYRNE MEMORIAL BRIDGE)

The Greenpoint Avenue Bridge over Newtown Creek connects the boroughs of Brooklyn and Queens. It is situated between Kingsland Avenue in Greenpoint and Review Avenue in Blissville. Greenpoint Avenue is a key corridor that links light industry in northern Brooklyn with freight distribution hubs and Interstate highway routes in western Queens. The existing bascule span bridge was built in 1990 and carries two lanes of traffic in each direction, with a sidewalk on either side. The roadway is 56 feet wide and sidewalks are 7 feet wide. The bridge consists of eleven fixed spans and a bascule span. In 2009, the bridge carried approximately 22,746 vehicles per day.

The roadway surface of the movable span is a concrete-filled steel grid deck. The grid deck was severely deteriorated and required frequent maintenance. Forty-two safety flags related to this condition were closed between 2007 and the first quarter of 2009. Due to the large number of repeated safety flags, and the expected continued deterioration of the deck, an urgent and permanent solution was deemed necessary. The Department decided to replace the deck. In addition, the scope of work included replacement of all the compression seals, the roadway joints, the cracked stringers, and the resurfacing of the intersection at the Queens end. A Notice to Proceed for the American Recovery and Reinvestment Act-funded component rehabilitation of this bridge was issued to the contractor with a start date of March 26, 2010.

Construction began on April 5, 2010. Installation of temporary shielding under the movable span and deck joint repair work was completed in July 2010. The contractor began Phase I construction work on August 29, 2010. The replacement of the roadway grating continued for the next six weeks. The Queens-bound half of the bridge was closed, and the Brooklyn-bound lanes were converted to one lane in each direction.

ACCOMPLISHMENTS & PLANNED PROJECTS



Deck Joint Repair Work in June 2010. Finished Greenpoint Avenue Bridge Roadway and Sidewalk in November 2010.

Stage 1 work (Queens-bound) was completed on October 8, 2010, and Stage 2 work (Brooklyn-bound) began on October 9. The Queens-bound travel lanes were converted to one lane in each direction. The bridge was closed to marine traffic from October 25 to November 1, 2010 to facilitate the removal of the old grating and installation of the new one. The bridge was fully opened to vehicular traffic on November 23, 2010. The component rehabilitation project was substantially completed on January 20, 2011.



Greenpoint Avenue Bridge in April 2011. (Credit: Sergey Parayev)

When and Where Unit

In 2011, the following structures were worked on under the Division's When and Where contracts: Henry Hudson Parkway Viaduct over West 72nd to West 79th Street, Trans-Manhattan Expressway over Harlem River Drive, Riverside Drive over West 158th Street, Ed Koch Queensboro Bridge, West 155th Street Pedestrian Bridge over Amtrak 30 Street Branch, West 207th Street Bridge over West Fordham Road, Boston Post Road Bridge over Hutchinson River, Henry Hudson Parkway over Amtrak 30th Street Branch, Dykman Street Bridge over Henry Hudson Parkway, Morris Street Pedestrian Bridge over Brooklyn Battery Tunnel Exit, Broadway Bridge over Harlem River, Henry Hudson Parkway Northbound over Ramp to 96th Street, Williamsburg Bridge, Henry Hudson Parkway Southbound over Ramp to 96th Street, Linden Boulevard over Cross Island Parkway, Hempstead Avenue over Cross Island Parkway Ramp Northbound, 14th Avenue Bridge over Cross Island Parkway, 149th Street over Cross Island Parkway, 49th Street over Grand Central Parkway, 150th Street Bridge over Cross Island Parkway, Northern Boulevard Westbound over Flushing River, Northern Boulevard Eastbound over Flushing River, 35th Street over Brooklyn-Queens Expressway, 44th Street Bridge over Grand Central Parkway, 37th Street over Brooklyn-Queens Expressway, Morning Star Road over Railroad, 79th Street Traffic Circle over 79th Street Pedestrian Plaza, 79th Street Ramp to Garage over 79th Street Boat Basin, Corlears Park Road over FDR Drive, East 78th Street Pedestrian Bridge over FDR Drive, 79th Street Pedestrian Plaza over 79th Street Boat Basin, Pedestrian Bridge at 73rd Street over Conrail, East 6th Street Pedestrian Bridge over FDR Drive, West 181st Street Pedestrian Bridge over Henry Hudson Parkway Northbound, Delancey Street Pedestrian Bridge over FDR Drive, Fort Tryon Park over Underpass, West 173rd Street Pedestrian Bridge over Amtrak, Inwood Hill Park over Amtrak 30 Street Branch, Brooklyn Promenade over Brooklyn-Queens Expressway, 28th Avenue Pedestrian Bridge over Cross Island Parkway, Forest

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Park Drive Bridge over Abandoned LIRR, Foot Bridge over Brooks Lake, Crocheron Park Pedestrian Bridge over Cross Island Parkway, West 8th Street Pedestrian Bridge over Surf Avenue, and Brooklyn-Queens Expressway Eastbound over Brooklyn-Queens Expressway Westbound.



Addressing a PIA Flag on the Broadway Bridge in February 2011.



Working on the 44th Street Bridge over Grand Central Parkway in March 2011. (Credit: Artemio Angeles)



73rd Street Pedestrian Bridge Over Amtrak – Red Flag Repair of the Steel Beam Grid. Span 5 – Stringer S3 Exhibited Severe Corrosion With Holes. After Repair with Bolted Web Plates. Span 5 – Floorbeam exhibited Severe Deterioration on Web and Bottom Flanges. Span 5 - New Floorbeam Under Stringers S2 & S3. (Credit: Artemio Angeles)



Working on the Ed Koch Queensboro Bridge in September and October 2011. When and Where Contract Unit Director Sudhir Jariwala (Background) Inspecting Repair Materials at the Henry Hudson Viaduct in September 2011.

Currently scheduled projects include the Harlem River Drive Northbound Ramp over Harlem River Drive.

MARINE WHEN AND WHERE

New York State DOT conducts the underwater inspections of our waterway structures. A contract was needed to facilitate the performance of marine repairs and to maintain structures in need.

ACCOMPLISHMENTS & PLANNED PROJECTS

The objective is to perform marine structural repairs and maintenance together with other appurtenant work, which constitutes repairs of defective and deteriorated parts of bridge structures due to, and in a water environment. The Department has neither the staffing nor the equipment to handle this type of special work. These repairs could not be handled under the usual time and materials When and Where contract, because the work is unique, in that it requires a consultant with licensed underwater capability to supervise and inspect the work for compliance and adequacy. Furthermore, detailed note taking is necessary by the inspectors to check and approve payments for the contractor's work.

Marine bridge repairs already addressed include City Island Road Bridge over Eastchester Bay, 207th Street/West Fordham Road Bridge over the Harlem River, Shore Road (Pelham Parkway) Bridge over the Hutchinson River and additional safety flags on the Broadway Bridge over the Harlem River.

Some of these locations experience repeated damage due to heavy marine traffic and/or a narrow channel, such as the Shore Road (Pelham Parkway) Bridge over the Hutchinson River. The issuance of new flags occasionally necessitates new visits to even recently completed projects. Timber fender systems especially susceptible to recurring hits by barge traffic, and consequently require periodic restoration in relatively short time periods. In addition to damage due to impact, timber elements are also replaced because of deterioration and attack by marine borers, whose activity has vastly increased as the water quality in the New York City area has improved.

Numerous barge hits at the Shore Road Bridge occurred since the Unit last made repairs to the fender system protecting the channel piers. As a result, a significant amount of timber planking and walers had to be replaced at this location. Also, in an attempt to preclude future damage from typical barge hits, a special plastic material called "UltraPoly" was installed at the top portion of the fender planking and at selected dolphin piles. So far, this material has been shown to protect against rubbing damage. In addition, cleaning off and refurbishing was performed on the safety netting previously installed beneath the bridge decks to protect the waterway from falling deteriorated concrete.



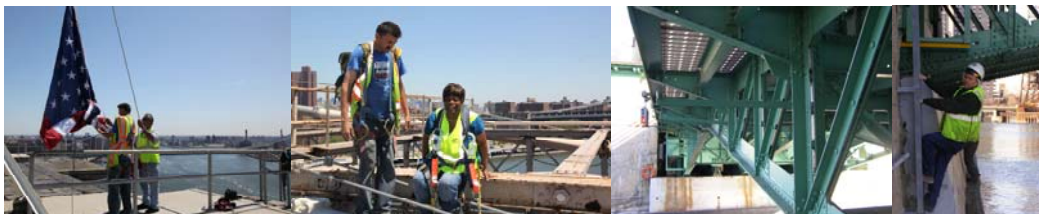
Working on the Shore Road Bridge in December 2011. (Credit: Artemio Angeles) When and Where Contract Unit Director Sudhir Jariwala at the Shore Road Site to Inspect the Fender System Repairs as well as the Safety Flags Repair Under the Arch Spans.

The Broadway Bridge over the Harlem River experienced a continuation of the deterioration of the clip angles, with deteriorated concrete falling into the waterway. At this location, it was not feasible to use safety netting for the protection of marine traffic. A previous operation had been carried out in which such suspect clip angle locations were identified by hammer-testing the entire underside of the bridge, and all those that failed were removed. Unfortunately, additional rapid deterioration occurred to such an extent, that additional angles had fallen into the waterway. At this point the decision was made to remove all of the clip angles from the underside of the bridge to ensure that this problem was eliminated.

ACCOMPLISHMENTS & PLANNED PROJECTS

PAINTING

In 2011, the following bridges were painted: Carroll Street Bridge over Gowanus Canal, Cropsey Avenue Bridge over Coney Island Creek, East Tremont Avenue Bridge over Hutchinson River Parkway, Grand Concourse over East 170th Street, Queens Boulevard Access Road over Brooklyn-Queens Expressway Southbound, Roosevelt Island Avenue Bridge over Flushing Meadow Park Road, Rust Street over Flushing Avenue, Shore Road Bridge over Hutchinson River, Union Turnpike over Cross Island Parkway, Woodhaven Boulevard Bridge over Atlantic Avenue, East 12th Street Bridge over Belt Parkway, 14th Avenue over Cross Island Parkway, 147th Street Bridge over Cross Island Parkway, 149th Street Bridge over Cross Island Parkway, 150th Street Bridge over Cross Island Parkway, and 160th Street Bridge over Cross Island Parkway.



Bridge Painter Vlatko Zic and Supervisor Bridge Painter Cesar Pazmino Atop the Brooklyn Bridge Tower in July 2011, Preparing to Change the Flag. Bridge Painter Vlatko Zic and Deputy Director of In-House Painting Earlene Powell After Completing their Descent From the Brooklyn Bridge Tower in July 2011. (Credit: Alexander Engel) Shore Road Bridge After Painting. (Credit: Hughie Flood) Supervisor Bridge Painter Hughie Flood.



Bridge Painters Willie Tyler and Andrew Law at the Shore Road Bridge. Bridge Painters Brian Kavanagh, Michael Scotti, Andrew Law, Willie Tyler, and Efrosini Katanaki at a Bridge Near the Jacob Javits Convention Center. (Credit: Hughie Flood)

During 2011, the following structures were also painted: Belt Parkway Bridge over Mill Basin (Brooklyn) Bridge Operator House, Maintenance and Repair Facility at Flatlands, Department of Transportation Facilities at the Harper Street Yard, Sign Shop at the Maspeth Maintenance and Repair Facility, Department of Transportation Coin Collection Facilities at 66-26 Metropolitan Avenue, Department of Transportation Sign Shop at 59th Street, Greenpoint Avenue Bridge over Newtown Creek Bridge Operator House, and Third Street Bridge over Gowanus Canal Bridge Operator House.

GRAFFITI REMOVAL

In 2011, 3,996,213 square feet of graffiti were eliminated. This program focuses its primary attention on the four East River bridges, as well as the following 21 arterial highways: Clearview Expressway, Gowanus Expressway/Belt Parkway, Major Deegan Expressway, Harlem River Drive, Van Wyck Expressway/Whitestone Expressway, Brooklyn-Queens Expressway, Jackie Robinson Parkway, Sheridan Expressway, Hutchinson River Parkway, Henry Hudson Parkway, West Shore Expressway, Richmond Parkway, Martin Luther King Jr. Expressway, Staten Island

ACCOMPLISHMENTS & PLANNED PROJECTS

Expressway, Bruckner Expressway, Prospect Expressway, Grand Central Parkway, Long Island Expressway, Cross Bronx Expressway, Nassau Expressway, and Bronx River Parkway.



Before and After Graffiti Removal on the Manhattan Bridge in 2011. Bridge Painter Joao Silva Removing Graffiti. (Credit: Earlene Powell)

During 2011, graffiti was also removed from the following structures: Adams Street, Avenue S at West 7th St, Concrete Wall at Bay Ridge Avenue, Belt Parkway Bridge over Bay Ridge Avenue, Belt Parkway and North Conduit Avenue, Belt Parkway at Exit #24B, Belt Parkway at Exit #23A, Broadway Bridge over Harlem River, Bruckner Boulevard, Bruckner Expressway at Balcom Avenue, Crescent Street Yard, Cross Island Parkway, FDR Drive, Five Borough Bicycle Tour Route, Flushing Avenue, Forsythe Street and Canal Street, Francis Lewis Boulevard, Front Street, Furman Street, Grand Concourse over East Tremont Avenue, Grand Concourse over East 167th Street, Grand Concourse over East 204th Street, Hamilton Avenue at Brooklyn-Queens Expressway, Marathon Route, North Conduit Avenue and 88th Street, Park Avenue from 42nd to 46th Streets, Pearl Street, Pulaski Bridge over Newtown Creek, Queens Boulevard Bridge over Access Road Brooklyn-Queens Expressway SB, Queens Boulevard at 65th Place, Skillman Avenue at Queens Boulevard, South Street under the Brooklyn Bridge, Thomson Avenue at Queens Boulevard, Trotting Course Lane, Yankee Stadium Vicinity, 5th Avenue Bridge over LIRR and Sea Beach, South 6th Street Garage, 9th Avenue at Atlantic Avenue, 9th Street Bridge over Gowanus Canal, East 12th Street Bridge over Belt Parkway, 18th Avenue at 50th Street, 18th Avenue at 53rd Street, 59th Street and 1st Avenue, 73rd Avenue and Motor Parkway, 78th Avenue and Woodhaven Boulevard, 91st Avenue and 87th Street, 94th Street Pedestrian Bridge over LIRR Port Washington Branch, 97th Street and Atlantic Avenue, 97th Avenue and Woodhaven Boulevard, 163rd Street Pedestrian Bridge over Hawtree Basin, 167th Street and Depot Road, and 205th Street and 9th Avenue.



Bridge Painters Nicholas Krevatas and Branko Grzancic Removing Graffiti. (Credit: Earlene Powell)

ACCOMPLISHMENTS & PLANNED PROJECTS

Engineering Review and Support

IN-HOUSE DESIGN

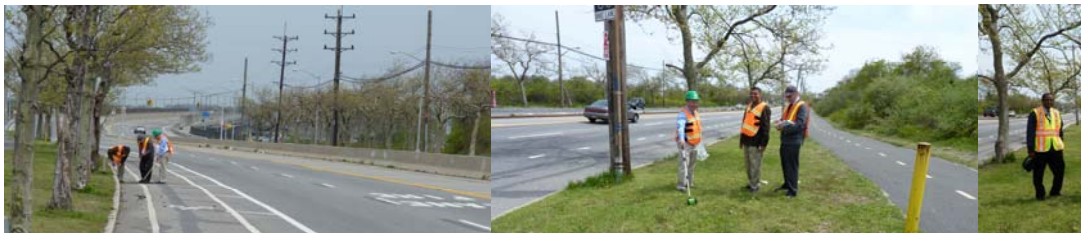
In-House Design staff prepares plans and specifications for bridge replacement/rehabilitation projects that enable the Division to restore bridges considered “structurally deficient” to a “very good” condition rating. This unit handles urgent Division projects, as well as special projects under construction by the Bureau of Bridge Maintenance, Inspections and Operations.

The unit continued the design of the Bryant Avenue Bridge over Amtrak and CSX in the Bronx. This is a one span structure constructed in 1908, with a span length of 90 feet. This project includes replacement of the steel superstructure, bearings, approaches, water mains, and rehabilitation of both abutments. The proposed superstructure will consist of a reinforced concrete deck over prestressed concrete adjacent box beams. The two existing water mains will be removed, and replaced with two new pipes on the north sidewalk. Both water mains will be enclosed in a steel protective structure. Six existing Con Edison electrical conduits will be removed from the bridge. The construction of this bridge is scheduled to commence in spring 2013, and is expected to last eighteen months.



Bryant Avenue Bridge Looking North Towards the North Sidewalk. Looking South Towards the Pedestrian Overpass. Looking East Along the South Fascia of the Bridge.

In-House Design prepared the contract documents for guide rail installation at Cross Bay Boulevard southbound from the Addabbo Bridge to East 1st Road in Queens. The scope of work will include installation of approximately one mile of guide rail including transition and anchorage along the southbound roadway. The construction of guide rail is scheduled to commence in spring 2012, and is expected to last three months.



Taking Measurements at Cross Bay Boulevard in May 2011: Civil Engineers Gregory Novofastovsky and Jagdish Patel and Assistant Civil Engineer Leonid Sagalovskiy. Interim Director of In-House Design Ferdinand John.

As the designer of the ongoing contract to replace the Belt Parkway Bridge over Paerdegat Basin, this unit is currently involved in the construction support services.

This unit also handled the following emergency projects that required expeditious response by the Division: the design for installation of rumble strips at the Ed Koch Queensboro Bridge's south outer roadway near the Queens exit ramp; the design of the modification to the bridge rail at the north west corner of the Van Name Avenue Bridge to prevent errant vehicles from dropping into the area below the bridge near the railroad tracks; and the design of collision protection beams

ACCOMPLISHMENTS & PLANNED PROJECTS

adjacent to the Westchester Avenue Bridge over the Hutchinson River Parkway to protect the bridge's superstructure from strikes by illegal trucks on the parkway.

Other projects underway include the interim repair of the Henry Hudson Parkway Bridge from West 72nd Street to West 82nd Street, and the reconstruction of the Springfield Boulevard Bridge over the Belt Parkway. The Henry Hudson Parkway project was developed to the advanced design plans phase by NYSDOT, and then transferred to our Division. The In-House Design unit will now proceed with the design. Construction is scheduled to start in FY 2013. The Springfield Boulevard Bridge is a two span rigid frame concrete structure. This project is in the preliminary design phase, with construction currently scheduled to start in 2016.

In-House Design's Electrical Group reviews and/or prepares contract documents for all electrical and street lighting work on all projects on the Division's Capital Program. Some of the contracts reviewed during 2011 included the Willis Avenue and Broadway Bridges over the Harlem River, the Wards Island Pedestrian Bridge over the Harlem River; the Union Street Bridge over the Gowanus Canal; the Belt Parkway Bridge over Paerdegat Basin in Brooklyn; the Roosevelt Island Bridge over East River Channel; and the Manhattan Bridge.

ENGINEERING SUPPORT

BRIDGE PROJECT SPECIFICATIONS

In 2011, the Specifications Unit of the Engineering Support Section prepared and/or reviewed contract proposal books and/or specifications for 23 contracts, including 13 bridge rehabilitation and new construction/reconstruction contracts and 10 non-bridge contracts, in addition to replying to specification requests for 5 on-going construction projects. Three Six of the above contracts totaling approximately \$102 million in construction costs were advertised for bid and were bid in 2011.

Notable among the construction contracts prepared and /or reviewed, advertised and sent for bid were: preventive maintenance of 25 movable bridges, and marine borer remediation.

CONVERSION OF DIVISION ENGINEERING ARCHIVES

The Records Management Unit started the conversion of all TIFF (Tag Image File Format) drawings to PDF (Portable Document Format) format and the indexing of these drawings. Some 200,000 TIFF drawings will be converted to PDF format. To date, approximately 54,000 drawings have been converted and about 41,000 have been indexed.

The switch to electronic media and server-based archiving will save money on drawing submissions as well, and will lead to the establishment of a unified electronic database for bridge archives. Digitizing documents and storing them online, where they are easy to access and print, will simplify contract submission process and cut project costs in a long run.

SURVEYING AND LOAD RATING

Unit staff monitored five bridges and one retaining stone wall in 2011: Depot Place Bridge over Conrail Yard, Third Street Bridge over Gowanus Canal, Pelham Parkway Bridge, Stone Arch Bridge in Central Park, Ninth Street Bridge over Gowanus Canal, and the retaining stone wall on Cannon Place.

ACCOMPLISHMENTS & PLANNED PROJECTS

ENGINEERING REVIEW

MACY'S THANKSGIVING DAY PARADE

As in past years, the staff of the Engineering Review Section actively participated in the 2011 Macy's Thanksgiving Parade. Months before the parade, the engineers reviewed the balloon specifications and flight analyses, and were involved in walkthroughs along the parade route to ensure the adequacy of the available envelope and the removal of any obstructions. This project was coordinated with Macy's and various City agencies such as City Hall, NYPD, DOB, and OEM.

CRP/EXTELL PARCEL H PROJECT

The CRP/Extell Parcel H, LP project (Riverside Drive between 59th and 72nd Streets) includes the construction of seven new bridges, a ramp, two relieving platforms, and connector roads along Riverside Drive as a part of the residential and commercial development over the former Penn Central Rail Yard. The project also includes a half tunnel section in what was formerly known as the Miller Highway Tunnel. When completed, the infrastructure network will be transferred to DOT for maintenance. The Division is providing engineering review of the design drawings, as well as quality assurance inspections, to ensure the developer's compliance with DOT's construction and design standards. The bridges are substantially completed and open to traffic, except for a connection between West 71st Street and West 72nd Street. The first phase of construction for the half tunnel section is complete and phase two is in progress.

RETAINING WALLS

659 City-owned retaining walls (along major streets and highways) have been inspected and inventoried since 2005, 40 of which have been estimated to be in poor condition. Out of the 40 walls, 28 retaining walls have been scoped and forwarded to DDC with capital funding for rehabilitation. These retaining walls are now in various stages of design and construction. As of September 2011, DDC has completed or nearly completed construction of 10 retaining walls. DDC has been requested to accelerate the rehabilitation of walls that are being forwarded to them. The retaining walls which are in fair to poor condition will be in a capital program for future rehabilitation.



Riverside Drive Retaining Walls: Riverside Drive Between West 99th Street and 104th Street, and Riverside Drive Between West 158th Street and West 165th Street. Riverside Drive Retaining Walls: Left Side of Riverside Drive Northbound, Holds Ramp to George Washington Bridge.

ACCOMPLISHMENTS & PLANNED PROJECTS

OVERWEIGHT TRUCK PERMIT REVIEWS

The Overweight Truck Permit Unit receives an average of 100 permit applications per week for overweight/over-dimensional trucks, self-propelled cranes, and occasional superload moves from utility companies crossing City-owned bridges, including critical bridges such as the Manhattan and Ed Koch Queensboro Bridges. Most of the permit requests must be reviewed and approved on the same day. To meet the demand, the Unit now utilizes a comprehensive bridge rating tool developed by AASHTO, which reduces the time required for structural analysis.

PROJECT SCOPING

In 2010, the unit was requested to prepare the scopes of work for the Design Investigative Study for 43 bridges owned by the Department of Parks and Recreation (DPR). As part of this commitment, the Unit prepared the scope of work for the Request for Proposals (RFP) for the procurement of a design consultant for CPSD package #1, consisting of eight bridges. The project was awarded in April 2011. Five more bridges owned by DPR were later added to the list. Based on DPR confirmation, the Unit is currently working on CPSD Package #2, consisting of 9 bridges. The scope of work for other bridges will be planned depending upon funding availability.

BRIDGE SEISMIC DESIGN AND RETROFITTING

The seismic retrofitting of bridges in New York City is part of the inspection and rehabilitation program mandated by Congress and administrated by the FHWA through the local authorities. During the period of 1993 to 1996, four major bridge owners in the New York City area (NYCDOT, NYSDOT, MTA, and the Port Authority of New York and New Jersey) retained seismologists to study hard rock seismic ground motions. The rock motions generated by these studies differed from each other and from the AASHTO spectrum as modified by NYSDOT. The differences were such that the resulting retrofit costs varied widely, depending upon which motions were adopted. To resolve this issue, NYCDOT, in association with NYSDOT and the FHWA, retained a consultant to assemble an expert panel to develop recommendations for rock motions that would be adopted uniformly by the New York City region. The panel consisted of a team of six internationally recognized experts in the fields of seismology, geology, earthquake engineering, ground motion, and geotechnical studies. There were several brainstorming workshops held in New York, where the senior officials from NYCDOT, NYSDOT, and the FHWA provided their input to the panel members.

The expert panel formulated recommendations regarding rock motions and corresponding time histories. Subsequently, the consultant derived soil generic response spectra, based on the hard rock motions and NEHRP amplification factors. The consultant also established bridge performance criteria to be used for critical, essential or other bridges undergoing structural analyses. The recommendations are described in the report entitled "New York City, Seismic Hazard Study and its Applications, Final Report, December 1998." This report is now extensively used by NYCDOT, NYSDOT, the FHWA, their consultants, and other agencies in the New York area for bridge projects. Thus, NYCDOT's leading role and efforts to establish ground motion standards have brought uniformity in seismic design to the New York City area.

In 2002, the consultant convened a second panel of seismologists to update the 1998 Hazard Study and associated rock motions. On June 3, 2004, after the USGS national hazard maps were adopted by NEHRP, in a meeting attended by NYCDOT, NYSDOT and FHWA, it was unanimously agreed to adopt the new hard rock ground motions recommended by the panel of seismologists.

Following the adoption of the very hard rock motions, the consultant started the preparation of a new edition of the NYCDOT Seismic Design Guidelines for Bridges. Data from geotechnical bridge studies performed within the five boroughs of NYC were compiled. A series of generalized subsurface soil and bedrock profiles were developed to be representative of the range of soil

ACCOMPLISHMENTS & PLANNED PROJECTS

profiles, overburden thickness, and rock types found within NYC. A fully probabilistic approach, utilizing Random Vibration Theory (RVT) in conjunction with the new hard rock ground motions, (from the 2002 Hazard Study) and the generalized NYC subsurface profiles, was used to develop vertical and horizontal Uniform Hazard Spectra (UHS), which, in turn, served as the starting point to derive design rock and soil response spectra. The method allowed computation of soil UHS, while preserving the hazard level of the very hard rock UHS. It accounted, in a rigorous probabilistic manner, for variations and uncertainties in soil stiffness, stress-strain nonlinearity, and material damping; depth of soil to rock; and, stiffness of the rock under the soil.

Generic horizontal and vertical design spectra were derived using the calculated UHS as the starting point. Generic design V/H ratios to be used in site-specific studies to generate site specific vertical motions, were also produced. All the generic soil curves are presented as a function of three parameters: soil class; depth to rock; and, rock class under the soil.

The development of these parameters for the NYCDOT Guidelines represent a significant improvement to the previous guidelines and other codes, since it will result in better representation of the ground motions at a bridge site, bringing closer the generic ground motions to those that could be obtained from site-specific studies. The fact that the new guidelines better fit the specific characteristics of the NYC region, will permit the engineers to evaluate the need for retrofitting existing bridges or strengthening new ones at the right places.

Recommendations for liquefaction evaluation are also provided in the guidelines, including recommendations for earthquake magnitude and peak ground surface accelerations, which are critical parameters for evaluating liquefaction potential and which have not been included in previous guidelines. The new document also includes recommendations for site-specific studies, providing guidelines and minimum requirements that must be satisfied. These include: procedures to establish soil horizontal and vertical design motions; recommendations to evaluate the effects of the depth to the rock surface; recommendations to account for uncertainties in the soil properties; minimum requirements to establish lower bound horizontal design motions; recommendations for time history analysis of bridges; recommendations for the incorporation of spatial variation effects in the analysis; and different requirements for critical and non-critical bridges site-specific studies.

The final draft of the new NYCDOT Seismic Design Guidelines for Bridges was submitted to NYS DOT for peer review in September 2008. Upon completion of their review, these guidelines will be adopted for the seismic and retrofit design of bridges in New York State. The review is expected to be complete by the end of March 2012.

ENVIRONMENTAL ENGINEERING

In 2011, the Environmental Engineering staff of the Quality Assurance section provided expertise and oversight for the cleanup of the oil spill discovered during the emergency repair of the Borden Avenue Bridge. The unit extensively coordinated corrective action plans and soil remediation designs with NYSDEC to remediate the site and enable the continuation of the bridge repair operations. The site was successfully remediated in accordance with the corrective action plan developed with the NYSDEC. The NYSDEC approved the successful cleanup operations and closed the spill in their database. As part of the remedial activities, NYCDOT was required to provide mitigation in the surrounding area. This mitigation consisted of cleaning debris from the Newtown Creek and its tributaries. Approximately 75 cubic yards of debris and garbage were removed from the shoreline in the creek and tributaries.

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Administrative Engineer Uday K Dommaraju and Assistant Civil Engineer Jana Krettova After Inspecting the Installation of Strain Gauges on the Manhattan Bridge in March 2011. Assistant Civil Engineer Zakhar Vayntrub Reviewing Conditions on the Ed Koch Queensboro Bridge Near the Exit to Queens Plaza South in May 2011.

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Bridge Maintenance, Inspections and Operations

EAST RIVER BRIDGES ANTI-ICING PROGRAM

Traditional snow and ice control practices rely heavily on the use of salt, a material known to corrode steel and accelerate the deterioration of concrete and asphalt surfaces. A new method of snow and ice control was needed to protect the City's \$2.5 billion investment in the rehabilitated East River Bridges. This method, known as anti-icing, involves the application of a chemical freezing point depressant to the roadway surface to prevent snow and ice from bonding to the roadway. Frequent plowing removes any accumulation of unbonded snow or ice before traffic is affected.

The Division's Anti-Icing Program uses the liquid chemical potassium acetate and aggregate chemical sodium acetate. The anti-icing fleet consists of twenty-two spray trucks, six plow trucks and several smaller plows. Ten of the spray trucks are combination spray/plow trucks with a 1,000 gallon tank capacity, and five are spray-spreader/plow trucks with a 360 gallon spray capacity, and a nine cubic yard spreader capacity. There are twenty chemical storage tanks, with a total storage capacity of 114,250 gallons.

New anti-icing yards storing both chemicals have been established under all four East River bridges. Supervisors monitor the bridge decks during storm events by traversing them and using thermal instrumentation installed in their vehicles to make informed decisions as to when to apply chemicals. GPS capabilities have been installed in key vehicles to assist supervisors with the decision making process.

In the winter of 2010-2011, a total of 49,950 gallons of potassium acetate and 239 tons of sodium acetate were applied on the roadways of all four East River Bridges.



Anti-Icing Trucks. Anti-Icing Truck on the Brooklyn Bridge After a Storm in January 2011. (Credit: Russell Holcomb)

INSPECTIONS

In 2011, Inspections covered 88 bridges and 574 spans. Emphasis was placed on ensuring public safety through the monitoring of potentially hazardous conditions and temporary repairs. The unit performed 580 monitoring inspections, and 208 special winter monitoring inspections of cellular structures, shorings, and potential fire hazards. In addition, 168 emergency inspections were conducted in response to hot line calls, in-house requests, or citizen complaints.

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Emergency Inspection of the Queensboro Bridge in February 2011. (Credit: Bojidar Yanev) Inspecting Miller Highway Shielding at 72nd Street in April 2011. (Credit: Russell Holcomb)

The Bridge Data System (BDS) allows inspection reports to be generated and transmitted electronically. It provides access to data from the latest inspection reports on all bridges to all Division units. In addition, when an emergency arises, our inspectors are able to send photographs and other information to the main office via a wireless connection to the internet. This feature enables bridge repair engineers to assess the condition and dispatch repair crews with the appropriate equipment in a timely manner. The updated version of the system was field tested by the contractor and the Bridge Management Unit in 2011 and is scheduled for full implementation in 2012.

A future contract is anticipated to expand the BDS capabilities by incorporating data from capital reconstruction projects. Additional features will include in-depth inspection reports by consultants as well as GPS data.

Since 2002, the Division stores all bridge inspection reports in electronic format. Flag reports are now also transmitted electronically. As of September 2003, standard inspection work is funded by a federal grant. Emergency response inspections and administrative support remain city funded.

In 2011, the Bridge Management Unit developed a map of truck routes and bridges under capital contracts for the purposes of the Truck Permits Unit. This unit also provided Bridge Maintenance with estimates of the life-cycle benefits of various maintenance tasks, obtained by the software package designed for that purpose.

NON-DESTRUCTIVE TESTING

The Bridge Inspection and Research and Development Units have pioneered the use of various nondestructive tests on City bridges, including X-ray diffraction, fiber optics, strain-gauging, ground penetrating radar, and ultrasonic testing. Future applications of such technologies are under consideration. For demonstration purposes, the Manhattan Bridge was surveyed with a radar scanner. The results indicated that the stiffening of the bridge has reduced its torsional motion under subway traffic very significantly. The results matched independent measurements by Global Positioning Systems (GPS).

In November 2010, the cable research project moved to its final phase as sensors were installed on Cable "D" of the Manhattan Bridge with the help of bridge maintenance personnel. The data collection from the instruments in the cable was concluded in October 2011. The final report will recommend appropriate non-invasive technology for monitoring of suspension cables.

As part of the project, a unique magnetic flux field test was conducted on the cable. The method was developed by Japanese researchers specifically for this test. Its purpose is to estimate the amount of healthy steel in the cable without exposing the wires. The findings were presented at the Agency by the researchers in February 2011. This capability will be considered for future inspections of suspension cables.

ACCOMPLISHMENTS & PLANNED PROJECTS



Manhattan Bridge Engineer-in-Charge Brian Gill Inspecting Cable "D."

In 2011, the Bridge Management Unit selected a consultant for the design and installation of a real time on-line system monitoring of the abutments of three bridges in the Bronx identified as vulnerable to scour. The contract is expected to start in 2012.

In 2011, borescope inspections were conducted on various bridges. In October and November 2011, the bridge carrying the Belt Parkway over Ocean Parkway was inspected with the borescope in order to assist the Engineering Review Section in developing appropriate repair recommendations. Based on the findings of the borescope inspection, the approaches of the bridge were scanned with ground penetrating radar, and the results formed a basis for the overall structural assessment.

CLEANING

In 2011, 9,743 cubic yards of debris were removed from bridges and their surrounding areas, and 1,692 drains were cleaned.



Drain Crew After Hand-Tool Cleaning the Clogged Catch Basins at Night on the Eastbound Brooklyn-Queens Expressway in April 2011: Highway Repairers Linda Rose and Sharon Britt, Supervisor Highway Repairer Joseph Turchiano, and Highway Repairers John Latona and Alfred Black. (Credit: Russell Holcomb) The "SnakeCam" is a Camera that is Fed Into a Drain/Sewer to Show the Crew What is Occurring. Executive Director of Bridge Preventive Maintenance and Repair Thomas Whitehouse, Supervisor Highway Repairer Anthony Irizarry, and Assistant City Highway Repairer John Tammaro Using the Camera on a Drain on the Eastbound Brooklyn-Queens Expressway in September 2011. Supervisor Highway Repairer Anthony Irizarry, Highway Repairer Michael Cunningham, and Assistant City Highway Repairer John Tammaro Using the Scupper Truck to Clean the Drain. (Credit: Paul Schwartz)

ACCOMPLISHMENTS & PLANNED PROJECTS



Highway Repairer Ruben Sanchez Washing the Staircase at the PS-5 Pedestrian Bridge over 10th Avenue in Manhattan in November 2011. (Credit: Joseph Flood)

PIGEON DETERRENCE

Excessive numbers of pigeons cause property deterioration, unsafe working conditions and health hazards. Besides being unsightly, accumulation of pigeon droppings and feathers is corrosive to steel structures and raises concerns about health hazards. Many disease organisms have been associated with pigeons. They harbor ectoparasites which can infest or bite humans. Pigeon droppings also harbor fungi that can trigger serious, even fatal, lung diseases such as Histoplasmosis, Cryptococcosis and Toxoplasmosis, when the spores are transmitted to humans who breathe in the harmful dust.

The Division utilizes a relatively low tech, and passive, approach to deterring pigeons. In 2006, the type of barrier used to cage out pigeons was changed from the drop ceiling method to netting. The netting is supported by steel cables that are clipped to the beams. This method is currently in use under the Brooklyn Queens Expressway (over Prospect Street), at the Pulaski Bridge, under the Brooklyn Bridge at “Ash Alley,” and at the anti-icing tank storage area under the Brooklyn Bridge at Dover Street. In addition, a pigeon deterrent system involving low voltage wires is in place at the Belt Parkway Bridge over Ocean Parkway. The wires are installed along the web of the girders and are hardly visible, yet highly effective. The system has been in operation for over five years now and no pigeons have been observed under or by the bridge ever since. The community is pleased that we addressed one of their most serious and longstanding complaints. The system requires minimum maintenance and is extremely easy to operate.

In 2011, pigeon dropping removal and/or pigeon proofing were performed at the Broadway Bridge, Pennsylvania Avenue over the Belt Parkway, along the Dyre Avenue Subway Line in the Bronx, the 59th Street Shop (Trolley Barn), and 125th Street at Marginal Street.



Nature's Pigeon Deterrent—A Falcon on the Brooklyn Bridge South Side Tower. Falcon at the Brooklyn Bridge Manhattan Tower Top in July 2010. Falcons Have Lived on the Brooklyn Bridge Since 1995. Falcon Family on the Williamsburg Bridge. According to the New York State Department of Environmental Conservation, New York State now has the largest population of peregrines in the eastern United States. There Are Now 17 Falcon Pairs in New York City. (Family Credit: Russell Holcomb)

ACCOMPLISHMENTS & PLANNED PROJECTS



"Owl" Guarding the Machinery Room of the Broadway Bridge. A Hawk on the Broadway Bridge. (Owl and Hawk Credit: Albert Hong)

BRIDGE CLASSIFICATION

The Coast Guard regulations, which govern the operation of the City's movable bridges, define the owner's responsibility to the mariner by classifying a bridge as "open on demand" or "open on advance notice." An "on demand" bridge provides an immediate opening to any vessel wishing to pass the bridge. An "advance notice" bridge opens after the mariner requests an opening several hours in advance. "On demand" bridges must be staffed at all times. "Advance notice" bridges are staffed only when necessary. DOT redesigned the work process in order to reduce personnel costs to the City and improve the delivery of services to the maritime community.



Pulaski Bridge Opening in February 2010.
(Credit: Bernard Ente)

In October 2000, the Department implemented the United States Coast Guard-approved changes, establishing a four-hour notice for the Harlem River bridges, and a two-hour notice for the remaining "advance notice" bridges. The "on demand" classification remains for three bridges. The revised advance notice requirements allowed the formation of mobile crews with overlapping responsibilities, meeting the mariners' needs and, in some instances, improving service by providing two mobile crews to expedite a vessel's travel along a waterway.

The reduction in planned personnel will save approximately \$1,042,480 annually. In addition, bridge operational capabilities, general maintenance, and debris and snow removal have been enhanced through the more efficient utilization of existing personnel.

Currently in its final design phase, the reconstruction of the Mill Basin Bridge (part of the second Belt Parkway Group) is scheduled to start in summer 2013. The new bridge will be a fixed structure with a 60-foot clearance over Mean High Water, obviating the need for opening and closing the structure to accommodate tall vessels.

The Shore Road Bridge over Hutchinson River will be replaced with a new bridge built with a higher clearance, thereby reducing the number of times the bridge must be opened. At that time, we can determine if advance notice is justified.

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Summary of Vessel Openings 1997 - 2011

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Brdn Ave. (Q)	15	0	3	0	28	0	0	0	1	0	0	0	0	0	0
Brdwy (B/M)	7	2	0	6	27	83	49	16	2	18	42	58	57	15	11
Brecknr Expwy (Estrn Blvd) (B)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brecknr Expwy (Unnprt Brdg) (B)	363	257	345	385	420	332	300	309	253	250	281	323	349	308	198
Carroll St. (K)	142	110	174	102	80	124	186	49	22	28	13	38	91	146	29
Grand St. (K/Q)	37	23	24	17	50	19	10	8	5	2	5	0	0	0	3
Grnpoint Ave. (K/Q)	626	669	787	688	641	659	738	1093	1045	905	641	485	428	388	667
Hmltn Ave. (K)	1157	996	982	933	832	946	824	757	677	1077	354	0	150	905	1060
Hntrs Point Ave. (Q)	15	0	1	0	36	0	0	0	0	0	1	0	0	0	0
Htchnsn River Pkwly (B)	32	75	46	5	120	30	5	37	10	2	51	61	170	224	169
Macombs Dam (B/M)	3	0	0	0	0	0	0	0	0	0	4	2	0	3	1
Mdsn Ave. (B/M)	0	0	0	0	0	0	0	7	0	9	35	8	0	3	1
Metrpltn Ave. (K)	423	448	513	279	366	339	342	153	0	104	329	245	240	254	413
Mill Bsn (K)	628	591	433	336	317	142	173	164	162	174	182	190	183	197	236
Pulaski (K/Q)	291	332	383	276	208	308	599	694	734	433	489	639	611	467	591
Rsvlt Islnd (M/Q)	0	4	0	58	48	125	63	669	150	54	48	0	62	0	0
Shore Rd (Pelham Pky) (B)	2158	2274	2162	2168	2222	1897	1910	2011	1683	1704	1645	1446	806	1197	811
Union St. (K)	144	103	144	85	101	62	24	21	11	9	5	10	28	32	4
Ward's Islnd Pdstrn (M)	2	1	0	0	279	0	0	7	2	8	4	6	3	5	0
Willis Ave. (B/M)	9	0	4	4	40	0	7	25	2	41	67	17	9	1	1
3 rd Ave. (B/M)	9	0	2	1	1	0	0	0	0	6	60	7	0	3	3
3 rd St. (K)	149	112	157	178	117	212	152	99	43	31	39	49	89	74	27
9th St. (K)	0	0	192	513	808	733	547	457	360	480	333	287	387	475	670
145 th St. (B/M)	3	0	0	1	6	0	0	9	0	0	0	0	0	0	1
W.207 th St. (B/M)	7	2	0	6	14	4	6	10	1	12	24	2	3	7	5
TOTAL	6220	5999	6352	6041	6761	6015	5935	6595	5163	5347	4652	3873	3666	4704	4901

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RESEARCH AND PRESENTATIONS

In 2011, research work and/or case histories of the Division were presented in the following proceedings:

Transportation Research Board 90th Annual Meeting, Washington, D.C., 23 – 27 January 2011. Mcelwee, William. *Special Construction Techniques for Steel and Concrete Highway Bridges – Willis Avenue Bridge*.

Transportation Research Board 90th Annual Meeting, Washington, D.C., 23 – 27 January 2011. Yanev, B., and Richards, G. *Bridge Maintenance in New York City: Network- and Project-Level Interaction*.

Municipal Engineers of the City of New York, New York City, 27 January 2011. Hedayati, A., Sanghvi, S., and Faouri, H. *Willis Avenue Bridge*.

Brobyggardagen 2011 ("Swedish Builders Day"), Svenska Mässan in Göteborg, Sweden, 31 January 2011. *The Bridges over the East River, New York, USA*.

American Society of Highway Engineers, New York City, 15 February 2011. Faouri, H. *Replacement of Willis Avenue Bridge Over the Harlem River*.

28th Annual International Bridge Conference, Pittsburgh, Pennsylvania, 5 – 8 June 2011. Holman, T. P., Tuozzolo, T. J., and Pastore, J. *Micropile Construction for the Willis Avenue Bridge Replacement – Geologic Challenges meets Urban Construction Logistics*.

6th New York City Bridge Conference, New York City, July 25 – 26, 2011. Perahia, H. *Rehabilitation of the Brooklyn Bridge*.

6th New York City Bridge Conference, New York City, July 25 – 26, 2011. Raggett, J., Virlogeux, M., and Gandhi, K. *Wind Study for City Island Cable-Stayed Bridge Over Eastchester Bay in the Bronx, New York City*.

6th New York City Bridge Conference, New York City, July 25 – 26, 2011. Gandhi, K. *The St. Louis Bridge, the Brooklyn Bridge, and the Feud Between Eads and Roebling*.

6th New York City Bridge Conference, New York City, July 25 – 26, 2011. Mallick, A., Pullaro, J., and Zamiskie, G. M. *Rehabilitation of the Historic High Bridge over the Harlem River*.

6th New York City Bridge Conference, New York City, July 25 – 26, 2011. Patel, R., Goldberger, M., and Gandhi, K. *Replacement of the East 78th Street Bridge over FDR Drive in New York City*.

6th New York City Bridge Conference, New York City, July 25 – 26, 2011. Nyman, W. E. *Design of Willis Avenue Swing Bridge Replacement, New York City*.

6th New York City Bridge Conference, New York City, July 25 – 26, 2011. Hedayati, A. *Replacement of Willis Avenue Bridge: Highlights of Construction Challenges*.

6th New York City Bridge Conference, New York City, July 25 – 26, 2011. Buyson, M., and Shams, M. *Rehabilitation of the Northbound and Southbound Bruckner Expressway Bridges, New York City*.

4th Annual Bridges Middle East, Doha, Qatar, November 27 – 30, 2011. Yanev, B. *Determining Maintenance Strategies From the Design Stage to Ensure Integrity of Inspections*.

4th Annual Bridges Middle East, Doha, Qatar, November 27 – 30, 2011. Yanev, B. *Investigating Strategic Bridge Maintenance Systems and Processes for Bridge Structures*.

In addition, Dr. Bojidar Yanev continued his participation on the FHWA project "Structural Safety Appraisal Guidelines for Suspension Bridge Cables" along with the principal investigator, Columbia University. He guided a team of researchers installing sensors on the Manhattan Bridge during the final phase of the project. Bridge Maintenance provided the technical support for the installation. As part of the project, a unique magnetic flux test was performed by the Tokyo Rope company, demonstrating that the method could be used for non-destructive

ACCOMPLISHMENTS & PLANNED PROJECTS

investigations of suspension bridge main cables.

Dr. Yanev is a member of the Transportation Research Board Committees on Bridge Maintenance, Management, and Seismic Design.

In addition, the Division sponsors an in-house lecture series, inviting speakers from industry and academia several times a month. Highlight topics of the presentations in 2011 included: inspection of the Manhattan Bridge Main Cable, aluminum decks, epoxy asphalt systems, bridge management systems, bascule bridge design and construction, applying spray-on waterproofing membrane, bridge health monitoring, carbon fiber and fiberglass reinforced concrete, and polyester polymer concrete.



Inspecting a Loose Concrete Safety Flag at the Abandoned West Side Highway Ramp at 72nd Street and Riverside Park in May 2011: Interim Director of Bridge Preventive Maintenance Paul Schwartz, Bridge Repairer and Riveter Liu Yiu, Supervisor Bridge Repairer and Riveter Gean Pilipiak, Director of Bridge Repair Pinakin Patel, and Engineer-in-Charge Bala Nair. (Credit: Thomas Whitehouse)



Performing Structural Repairs of the Entrance to the Cellular Structure at Joralemon Street Under the Brooklyn-Queens Expressway Triple Cantilever in June 2011. Loose Concrete was Removed and Replaced, and Rebar was Cleaned and/or Replaced. Cement Mason Victor Porowski Placing Concrete in the Forms While Standing on a Wooden Platform Raised by a Hi-Lo. He is Wearing the Appropriate Fall Protection Gear. Bridge Repairer and Riveter Brook Budd, Cement Masons Victor Porowski on Raised Platform and Lawrence Marks Operating the Hi Lo, and Carpenter Stephen Buckley. (Credit: Thomas Whitehouse)



Assembling Three Pedestrian Prototype Fence Sections (Curved, Angled, and Straight), That Were Installed Underneath the Williamsburg Bridge in East River Park In December 2011. (Credit: Thomas Whitehouse)

Appendix A

BRIDGE CAPITAL PROGRAM

East River Bridge Rehabilitation Plans A-1

Bridges Under Construction A-2

Component Rehabilitation A-3

Bridges Under Design A-4

MANHATTAN BRIDGE
REHABILITATION ITEMS
TOTAL ESTIMATED COST

	Est. Cost (\$ in millions)
• Repair floor beams. (1982)	0.70*
• Replace inspection platforms, subway stringers on approach spans. (1985)	6.30*
• Install truss supports on suspended spans. (1985)	0.50*
• Partial rehabilitation of walkway. (1989)	3.00*
• Rehabilitate truss hangers on east side of bridge. (1989)	0.70*
• Install anti-torsional fix (side spans) and rehabilitate upper roadway decks on approach spans on east side; replace drainage system on approach spans, install new lighting on entire upper roadways east side, including purchase of fabricated material for west side of bridge. (1989)	40.30*
• Eyebar rehabilitation - Manhattan anchorage Chamber "C." (1988)	12.20*
• Replacement of maintenance platform in the suspended span. (1982)	4.27*
• Reconstruct maintenance inspection platforms, including new rail and hanger systems and new electrical and mechanical systems; over 2,000 interim repairs to structural steel support system of lower roadway for future functioning of roadway as a detour during later construction contracts. (1992)	23.50*
• Install anti-torsional fix on west side (main and side spans); west upper roadway decks, replace drainage systems on west suspended and approach spans; walkway rehabilitation (install fencing, new lighting on west upper roadways and walkways); rehabilitate cables in both Brooklyn and Manhattan anchorage chambers; dehumidify Brooklyn and Manhattan anchorages. (1997)	141.82*
• Installation of test panels. (1982)	1.55****
• Removal of existing suspender ropes and sockets in the suspended spans; replacement with new suspender ropes and sockets in the suspended spans and re-tensioning of suspender ropes bearing plates; re-tensioning of cable band bolts; removal of existing main cable wrapping; cleaning of main cables; application of new protective paste on main cables; replacement of new main cable wrapping; reinforcement of truss verticals and gusset plates. Replacement of necklace lighting and multirotational bearings at truss "C" and "D," installation of access platforms at towers, rehabilitation of south upper Roadway Lighting. (2010)	149.38**
• Interim Steel Rehabilitation and Painting - cable and saddle repairs lower roadway floorbeams @PP 37/38 on approaches and at anchorages; west side truss rockers and grillages on approaches; cable and suspender repairs. Removal of parking desk. Painting entire west side, all four cables. (2001)	127.98*

MANHATTAN BRIDGE
REHABILITATION ITEMS
TOTAL ESTIMATED COST

	Est. Cost (\$ in millions)
<ul style="list-style-type: none"> • Stiffening of Main Span; Reconstruction of North Subway framing; reconstruction of North upper roadway deck at suspended spans; rehabilitation of north approach span trusses; replace overlay on north upper roadway approach spans; rehabilitation of north elevated structures and subway tunnels; removal of railing on truss "D" in the north spans; painting of north side of bridge; new inspection platforms and debris protection in approach spans; construction of new north bikeway, replacement of approach span bearings and grillages; installation of Intelligent Vehicle Highway System for North and South Upper Roadways as well as for Lower Roadway. (In Progress) 	184.78*
<ul style="list-style-type: none"> • Rehabilitation of Lower Roadway; rehabilitation of anchorage roofs under lower roadway; rehabilitation of substructures and retaining walls in Brooklyn and Manhattan approaches; installation of new signage on bridge and at plaza areas; installation of new lighting on lower roadway and plaza areas; clean and paint lower roadway; installation of grating platform under towers at lower roadway; canopy lighting at towers. (Present) 	143.80*
<ul style="list-style-type: none"> • Seismic Retrofit. (2020) 	40.00
	to
	60.00***
	TOTAL: \$ 880.78
	to
	\$ 900.78

- * Construction Complete
- ** In Construction
- *** In Design
- **** Research and Development (completed)

Revised 10/31/11

ED KOCH QUEENSBORO BRIDGEREHABILITATION ITEMS
TOTAL ESTIMATED COST

	Est. Cost (\$ in millions)
• Repair lower outer roadways / reconstruct two ramps in lower Queens. (1984)	18.80*
• Reconstruct south upper roadway, replace inspection platforms, lighting. (1986)	31.50*
• Interim rehabilitation, contracts A, B, & C (repairs to lower deck and main bridge approaches). (1985)	2.80*
• Interim rehabilitation, contract D (repairs to lower deck, main bridge, and new median barrier). (1988)	3.00*
• Reconstruct north upper roadway and Queens approaches A & B, rehabilitate bearings at Queens approach. (1989)	50.00*
• Reconstruct ramps C & D (Queensboro only, not Thompson Avenue). (1988)	10.40*
• Rehabilitate bridge bearings, pier tops, and truss lower chords. (1989)	18.00*
• Rehabilitate Queens approach trusses, lower inner roadways on the main span and approaches. (1996)	172.00*
• Rehabilitate lower outer roadways main span and approaches, (bikeway) cleaning and painting. (2001)	227.05*
• Cleaning and painting main bridge upper trusses. (2009)	167.75*
• Miscellaneous Items – Component Rehabilitation. (In Progress)	43.88*
• Eye bar investigation. (In Progress)	0.62****
• Seismic Retrofit. (2020)	40.00
	to
	60.00***
• Installation of aviation lighting (2010)	1.76*
	TOTAL: \$ 787.56
	to
	\$ 807.56

* Construction Complete

** In Construction

*** In Design

**** Research and Development

Revised 10/31/11

WILLIAMSBURG BRIDGE
 REHABILITATION ITEMS
 TOTAL ESTIMATED COST

	Est. Cost (\$ in millions)
• Replace main span outer roadway. (1983)	11.20*
• Replace one third of suspenders. (1984)	3.20*
• Repair pier 20E foundation, and replace bulkhead. (1986)	2.30*
• Paint side spans and towers. (1985)	1.10*
• Paint main and approach spans. (1989)	4.24*
• Emergency interim repairs. (1989)	10.00*
• Install temporary hand-rope system on main cables. (1990)	0.63*
• Main cable preservation (field test - oiling). (1991)	0.44*
• Main cable strand splicing at Manhattan anchorage. (1991)	0.29*
• Interim pedestrian walkway. (1994)	1.05*
• Component repairs of flag conditions on the north outer roadway and north inner roadway. (1994)	4.12*
• Rehabilitate main cables and new redundant suspender system. (1996)	88.30*
• Demolish existing building under approaches. (1993)	1.50*
• Testing Program for bored-in piles. (1993)	0.74*
• Demolish DOS and DOH buildings, replace entire south outer roadway approach structures, rehabilitate south outer roadway deck and south inner roadway deck of the main bridge, and replace south inner roadway substructure of the approaches. (1998)	198.00*

WILLIAMSBURG BRIDGE
REHABILITATION ITEMS
TOTAL ESTIMATED COST

	Est. Cost (\$ in millions)
• Portion of Contract #6 BMT track structure work transferred to Contract #5 south approach roadway reconstruction work. (1998)	65.00*
• Paint main and intermediate towers. (2001)	14.90 *(1)
• Reconstruct BMT Subway structure; install new signals, tracks and communication system. (2000)	166.65*
• Miscellaneous rehabilitation work: rehabilitation of towers, replace bearings, travelers, architectural work, painting of north and south trusses, suspender adjustment, tower jacking, construction of colonnades, purchase of barrier transfer machine (BTM) and contra-flow barriers, lane control signal field system. Seismic retrofit – reinforce concrete with granite cladding, bearing replacement at PP10 & 15, rehabilitation of wind tongue casting assembly at main towers, contra-flow of south inner roadway – installation of contra-flow barriers, lightning protection grounding system. Kent Avenue Yard soil erosion and deck pins at PP29 E/W rehabilitation, modular joint repairs and structural flag repairs. (In Progress)	280.00**
• Replace north approach structures (Manhattan / Brooklyn), and rehabilitate north half of bridge. (2002)	233.00*
TOTAL: \$1,086.66	

* Construction Complete

** In Construction

*** In Design

(1) Painting suspended in 1996 pending publication of Environmental Impact Statement (EIS) in 1998. Painting resumed under a new schedule in 1999 and was completed in 2001.

Revised 11/12/10, No change

BROOKLYN BRIDGE
 REHABILITATION ITEMS
 TOTAL ESTIMATED COST

	Est. Cost (\$ in millions)
• Brooklyn Tower protection and new sign gantries. (1981)	2.72*
• Rehabilitate promenade between towers. (1983)	0.94*
• Rehabilitate cables in anchorage and replace short rod suspenders; rehabilitate balance of promenade and construct bikeway and new pedestrian ramp. (1988)	22.68*
• Rehabilitate and paint York, Main, William and Prospect Street structures and main bridge roadway deck overlay. (1988)	6.21*
• Replace suspenders, cable posts, stay cables, hand-rope necklace lights, main cable wrapping; paint suspended spans. (1991)	53.57*
• Rehabilitate ramp E. concrete piers of ramp C and abutment at ramps C & I, and rehabilitate Sands and Washington Street structures in Brooklyn. (1991)	4.73*
• Rehabilitate ramp D and H in Manhattan; permanent improvement of promenade at Manhattan approach. (1993)	17.92*
• Rehabilitate floor systems, stiffening trusses, roadways of suspended spans and Franklin Square trusses. (1994)	66.30*
• Rehabilitate Manhattan traveler (electrical work). (1997)	1.83*
• Rehabilitate ramp D and widening along the FDR Drive. (1996)	11.50*
• Arch supports for Franklin Square truss structure.	9.50*
• Replacement of Suspended Span Deck. (2000)	36.2*
• Resurfacing of the main spans. (1998)	6.67*

BROOKLYN BRIDGE
 REHABILITATION ITEMS
 TOTAL ESTIMATED COST

	Est. Cost (\$ in millions)
• Improvement of Manhattan end of promenade. (2001)	4.50*
• Rehabilitate Brooklyn approach & ramps (B, S, F), Rehabilitate Manhattan approaches and remaining ramps (A,B,C,F,G,I,J), and Paint entire bridge. (2010)	514.12***
• Seismic Retrofit. (2020)	30.00
	to
	60.00**
• Replacement of Travelers.	22.34*
	TOTAL: \$ 817.73
	to
	\$ 841.73

- * Construction Complete
- ** In Design
- *** In Construction

Revised 10/31/11

BRIDGES UNDER CONSTRUCTION*CALENDAR YEAR 2011***CONTRACT # BRIDGE**

HBX1029	145 th Street Bridge over Harlem River
HBX1123	Bruckner Expressway SB & NB over Amtrak & CSX
HBX1160	Claremont Parkway over Metro North RR
HBX1195	Shore Road Circle Bridge over Amtrak
HBX1199A (aka HBX199B)	Stand Alone Building Demolition (670 & 676 Grand Concourse)
HBM1117	Roosevelt Island Bridge over East River/East Channel
HBM1120	11 th Avenue Viaduct (West 30 th Street to West 33 rd Street) over LIRR West Side Yard
HBM1124	Willis Avenue Bridge over Harlem River
HBM1159	Wards Island Pedestrian Bridge over Harlem River
HBMC029	East 78th Street Pedestrian Bridge over FDR Drive (NB & SB)
HBK668	East 8 th Street Access Ramp (Guider Avenue Ramp to Belt Parkway) over Belt Parkway
HBK1024	Belt Parkway Bridge over Paerdegat Basin
HBK1072	Belt Parkway Bridge over Fresh Creek
HBK1091	Belt Parkway Bridge over Rockaway Parkway
HBK1072WM	Tidal Wetland Mitigation (4 Belt Parkway bridges)
HBQ1162E	Borden Avenue Bridge over Dutch Kills
HBR1217	Staten Island Ferry Terminal - Parking Exit Ramp over SIRT
HBR1217	Staten Island Ferry Terminal - Bus Station North over SIRT
HBR1217	Staten Island Ferry Terminal - Bus Station South over SIRT
HBR1217	Staten Island Ferry Terminal - North Ramp over SIRT
HBR1217	Staten Island Ferry Terminal - Bus Station Entrance Ramp over SIRT
HBR1217	Staten Island Ferry Terminal - Parking Entrance Ramp over SIRT
HBR1217	Staten Island Ferry Terminal - Bus Station Exit Ramp over SIRT
HBR1217	Staten Island Ferry Terminal - Pedestrian Overpass at Breezeway
HBR1217	Staten Island Ferry Terminal - Ramp A
BRC156R	Manhattan Bridge - Contract #14
BRC253CC	Williamsburg Bridge – Contract #8
BRC270C (#6)	Brooklyn Bridge (Ramps and painting)

BRIDGE CONSTRUCTION*PROJECTS COMPLETED IN CALENDAR YEAR 2011***CONTRACT # BRIDGE**

HBM1120	11 th Avenue Viaduct (West 30 th Street to West 33 rd Street) over LIRR West Side Yard
HBX1029	145 th Street Bridge over Harlem River
HBQ1162E	Borden Avenue Bridge over Dutch Kills

Component Rehabilitation

The following table illustrates the program's performance over the last eight years:

	#FY 04	FY 05	*FY 06	##FY 07	FY 08	###FY 09	FY 10	*FY 11
Number of Bridges	12	9	0	0	10	0	13	0
Construction Cost	\$8.25	\$5.63	\$0	\$0	\$14.93	\$0	\$12.74	\$0

*No contracts were bid during the 2006 and 2011 calendar years.

One contract was bid during the 2004 calendar year, but was not registered until February 2005.

One contract was bid during the 2007 calendar year, but was not registered until April 2008.

Two contracts were bid during the 2009 calendar year, but were not registered until March and May 2010.

In 2011, work was completed at the following bridges, in the indicated boroughs, at the final cost shown, in millions:

Greenpoint Avenue over Newtown Creek (KQ)	\$4.758
West 181 st Street over ramp to Washington Bridge (M)	\$0.894
Belt Parkway over Ocean Avenue (K)	\$2.889
East 174 th Street (North) Pedestrian Bridge over Sheridan Expressway (BX)	\$0.417
East 174 th Street (South) Pedestrian Bridge over Sheridan Expressway (BX)	\$0.302

TOTAL **\$9.260 M**

During calendar year 2011, work commenced at the following bridges:

- East 174th Street (North) Pedestrian Bridge over Sheridan Expressway (BX)
- East 174th Street (South) Pedestrian Bridge over Sheridan Expressway (BX)

Revised 1/5/12

Component Rehabilitation

There are five projects “still under construction” since the 2010 *Annual Report* was issued.

149th Street over LIRR (Q)
United Nations Plaza over 1st Avenue Tunnel (M)

Superior Road over Cross Island Parkway (Q)
Jackie Robinson Parkway & Union Turnpike over Austin Street (Q)
37th Street over Brooklyn-Queens Expressway (Q)

22 component rehabilitation projects are slated to continue, commence or be completed in the 2012 calendar year. They are:

149th Street over LIRR (Q)
United Nations Plaza over 1st Avenue Tunnel (M)
Ocean Avenue over LIRR (K)

37th Street over Brooklyn-Queens Expressway (Q)
Superior Road over Cross Island Parkway (Q)
15th Avenue over LIRR Bay Ridge (K)
13th Avenue over LIRR & Sea Beach (K)
East Drive over East Wood Arch (K)
West 148th Street Pedestrian Bridge over Amtrak 30th Street Branch (M)
Inwood Hill Park Footbridge over Amtrak 30th Street Branch (M)
Jackie Robinson Parkway & Union Turnpike over Austin Street (Q)
Albee Avenue over SIRT South Shore (R)

Union Street over Brooklyn-Queens Expressway (K)
Brooklyn-Queens Expressway over Adams St. NB (K)
Brooklyn-Queens Expressway over Adams St. SB (K)
4th Avenue over Belt Parkway (K)
Belt Parkway over Bedford Avenue (K)
Carroll Street over Gowanus Canal (K)
Crown Street over Franklin Shuttle (K)
Bedford Avenue over LIRR Bay Ridge (K)
(Hill Drive) Cleft Ridge Span over Pedestrian Path South of Boathouse (K)
5th Avenue over Greenwood Cemetery

Revised 1/5/12

BRIDGES UNDER DESIGN BY NEW YORK CITY

BIN NO.	CAPIS NO.	FEATURE CARRIED	FEATURE CROSSED	FY CNST	PHASE	BORO
2230300	HBCR01B	MOSHOLU PARKWAY	CONRAIL (ABANDONED)	2014	FD	B
2241139	HBCR01B	LEGGETT AVENUE	AMTRAK - CSX	2014	FD	B
2241620	HBCR01B	EAST 162 ND ST	METRO NORTH RR HAR	2014	FD	B
2241630	HBCR01B	EAST 165 TH ST	METRO NORTH RR HAR	2014	FD	B
2241820	HBCR01B	EAST 187 TH ST	METRO NORTH RR HAR	2014	FD	B
2242029	HBCR01B	SOUTHERN BOULEVARD	EAST FORDHAM ROAD	2014	FD	B
2242280	HBCR01B	GRAND CONCOURSE	EAST 167 TH ST	2014	FD	B
2242400	HBCR01B	EAST 180 TH ST	BRONX RIVER	2014	FD	B
2230290	HBCR02A	MOSHOLU PARKWAY	EQUESTRIAN PATH	2015	PD	B
2242350	HBCR02A	EAST FORDHAM ROAD	GRAND CONCOURSE	2015	PD	B
2269030	HBCR02A	MATTHEWSON ROAD	MAC CRACKEN AVENUE	2015	PD	B
2241080	HBCR02B	SOUTHERN BLVD	CSX PORT MORRIS	2015	PD	B
2241129	HBCR02B	EAST 149 TH STREET	AMTRAK & CSX	2015	PD	B
2241330	HBCR02B	UNIONPORT ROAD	AMTRAK & CSX	2015	PD	B
2242071	HBCR02B	BRONX BLVD S.B.	BRONX RIVER	2015	PD	B
2242072	HBCR02B	BRONX BLVD N.B.	BRONX RIVER	2015	PD	B
2241790	HBX190	EAST 180 TH STREET	METRO NORTH RR	2020	PD	B
2241570	HBX199	EAST 153 RD ST	METRO NORTH RR	2022	FD	B
2075837	HBX1086	WESTCHESTER AVENUE	HRP	2016	FD	B
2241590	HBX1103	CONCOURSE VILL AVE	METRO NORTH RR HAR	2020	FD	B
2241800	HBX1139	EAST 183 RD ST	METRO NORTH RR HAR	2022	FD	B
NEW 2240200	HBX1148B	SHORE ROAD (NEW)	HUTCHINSON RIVER	2021	PD	B
2241210	HBX1152	BRYANT AVE	AMTRAK	2014	FD	B
2240210	HBX1164	CITY ISLAND ROAD	EASTCHESTER BAY	2012	FD	B
2241810	HBX1172	EAST 188 TH ST	METRO NORTH RR HAR	2022	FD	B
2241409	HBX1190	GRAND CONCOURSE	METRO NORTH RR HUD	2018	FD	B
2242319	HBX1191	GRAND CONCOURSE	EAST 174 TH ST	2018	PD	B
2242220	HBX1214	SNUFF MILL ROAD (SOUTHERN BLVD)	BRONX RIVER	2022	PD	B
2241740	HBX1215	EAST 175 TH ST	METRO NORTH RR	2019	PD	B
2230250	HBX1216	MOSHOLU PARKWAY	BRONX RIVER	2022	PD	B
2240137	HBM1147	BROADWAY	HARLEM RIVER	2017	FD	BM
2240079	HBX644S	MADISON AVE	HARLEM RIVER	2017	PD	BM
1240090	BRX287S	MACOMBS DAM BRIDGE	HARLEM RIVER	2015	FD	BM
2240027	BRC156S2	MANHATTAN BRIDGE (LL)	EAST RIVER	2020	PD	KM
2240028	BRC156S2	MANHATTAN BRIDGE (UL)	EAST RIVER	2020	PD	KM
2240019	BRC270S	BROOKLYN BRIDGE	2781 (B.Q.E.)	2020	FD	KM
2230360	HBCR01A	UNION ST	2781 (B.Q.E.)	2013	FD	K
2230440	HBCR01A	2781 (B.Q.E.)	ADAMS ST N.B.	2013	FD	K
2230450	HBCR01A	2781 (B.Q.E.)	ADAMS ST S.B.	2013	FD	K
2231270	HBCR01A	4 TH AVE	BSHP	2013	FD	K
2231429	HBCR01A	BSHP	BEDFORD AVE	2013	FD	K
2240260	HBCR01A	CARROLL ST	GOWANUS CANAL	2013	FD	K
2243230	HBCR01A	CROWN ST	FRANKLIN SHUTTLE	2013	FD	K
2243490	HBCR01A	BEDFORD AVE	LIRR BAY RIDGE	2013	FD	K
2244060	HBCR01A	CLEFT RIDGE SPAN	PROSPECT PARK	2013	FD	K
2244480	HBCR01A	5 TH AVE	GREENWOOD CEMETERY	2013	FD	K
2230420	HBCR02A	B.Q.E. (S.B.)	WASHINGTON STREET	2015	PD	K

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BIN NO.	CAPIS NO.	FEATURE CARRIED	FEATURE CROSSED	FY CNST	PHASE	BORO
2244030	HBCR02A	EAST DRIVE	BRIDLE PATH	2015	PD	K
2230370	HBCR02B	SACKETT STREET	B.Q.E.	2015	PD	K
2243710	HBKC062	19TH AVE	BMT SEA BEACH	2022	FD	K
2243100	HBKC064	BEVERLY ROAD	BMT SUBWAY, BRIGHTON	2016	FD	K
2243020	HBK530	PARKSIDE AVE	BMT SUBWAY, BRIGHTON	2020	FD	K
2243820	HBK548	21 ST AVE	BMT SEA BEACH	2020	FD	K
2243050	HBK531	CATON AVENUE	BMT SUBWAY, BRIGHTON	2022	FD	K
2231450	HBK643	BSHP	GERRITSEN INLET	2012	FD	K
2231479	HBK1023	BSHP	MILL BASIN	2012	FD	K
2243080	HBK1032	CHURCH AVENUE	BMT SUBWAY, BRIGHTON	2022	FD	K
2243510	HBK1046	FLATBUSH AVE	LIRR BAY RIDGE	2022	PD	K
2231249	HBK1089	BSHP	BAY RIDGE AVE	2013	FD	K
2231439	HBK1090	BSHP	NOSTRAND AVE	2021	FD	K
2230887	HBK1151	278I W.B. (B.Q.E.)	CADMAN PLAZA	2022	FD	K
2230888	HBK1151	278I E.B. (B.Q.E.)	CADMAN PLAZA	2022	FD	K
2243140	HBK1153	NEWKIRK AVE	BMT SUBWAY, BRIGHTON	2022	FD	K
2243040	HBK1154	CROOKE AVE	BMT SUBWAY, BRIGHTON	2022	FD	K
2243569	HBK1201	ATLANTIC AVE	LIRR ATLANTIC AVE	2016	FD	K
2240270	HBK1213	UNION STREET BRIDGE	GOWANUS CANAL	2019	PD	K
2231319	HBK1202	BELT PARKWAY	BAY PARKWAY	2022	PD	K
2243400	HBK1204	50 TH STREET	LIRR BAY RIDGE	2022	FD	K
2243580	HBK1205	5 TH AVENUE	LIRR & SEA BEACH	2019	PD	K
2243150	HBK1208	FOSTER AVENUE	BMT SUBWAY BRIGHTON	2022	FD	K
2240047	BRC231S	ED KOCH QUEENSBORO BRIDGE (LL)	EAST RIVER	2020	PD	MQ
2240048	BRC231S	ED KOCH QUEENSBORO BRIDGE (UL)	EAST RIVER	2020	PD	MQ
2246980	HBCR01B	RIVERSIDE DRIVE	WEST 138 TH ST	2014	FD	M
2267130	HBCR01B	RIVERSIDE DRIVE	WEST 145 TH ST	2014	FD	M
2245220	HBCR02A	WEST 57 TH STREET	AMTRAK 30 TH ST BRANCH	2015	PD	M
2245319	HBCR02A	EAST 97 TH STREET	METRO NORTH	2015	PD	M
2245090	HBMC032	W 43 RD ST	AMTRAK 30 TH ST BRANCH	2022	PD	M
2245130	HBMC033	W 47 TH ST	AMTRAK 30 TH ST BRANCH	2022	PD	M
2245150	HBMC034	W 49 TH ST	AMTRAK 30 TH ST BRANCH	2022	PD	M
2245340	HBMC035	W 50 TH ST	AMTRAK 30 TH ST BRANCH	2022	PD	M
2245180	HBMC036	W 53 RD ST	AMTRAK 30 TH ST BRANCH	2022	PD	M
224501C	HBMC037	W 33 RD ST	LAND ADJ TO AMTRAK	2020	FD	M
2233059	HBM1027	HARLEM RIVER DRIVE	RAMP TO HRD N.B.	2013	DB	M
2245010	HBM1120	11 TH AVE VIADUCT [NORTH]	LIRR WEST SIDE YARD	2020	FD	M
2232040	HBM1056	HOUSTON STREET	FDR DRIVE	2015	DB	M
223204A	HBM1056	FDR DRIVE NB RAMP TO HOUSTON STREET	RELIEF	2015	DB	M
223204B	HBM1056	HOUSTON STREET RAMP TO FDR DRIVE NB	RELIEF	2015	DB	M
2246720	HBM1165	RIVERSIDE DRIVE	WEST 158 TH ST	2017	PD	M
226672A	HBM1171	W 31 ST ST	AMTRAK LAYUP TRACKS	2020	FD	M
2229289	HBM1172	HHP VIADUCT	AMTRAK (W 72 ND – W 79 TH STREETS	2013	FD	M
2245070	HBM1174	W 38 TH ST	AMTRAK 30 TH ST BRANCH	2022	PD	M

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2245080	HBM1175	W 39 TH ST	AMTRAK 30 TH ST BRANCH	2022	PD	M
2245100	HBM1176	W 44 TH ST	AMTRAK 30 TH ST BRANCH	2022	PD	M
2245120	HBM1177	W 46 TH ST	AMTRAK 30 TH ST BRANCH	2022	PD	M
2245140	HBM1178	W 48 TH ST	AMTRAK 30 TH ST BRANCH	2022	PD	M
2245210	HBM1179	W 42 ND ST	AMTRAK 30 TH ST BRANCH	2022	PD	M
2245440	HBM1180	W 40 TH ST	AMTRAK 30 TH ST BRANCH	2022	PD	M
2245330	HBM1183	W 41 ST ST	AMTRAK 30 TH ST BRANCH	2022	PD	M
224501B	HBM1184	W 33 RD ST	AMTRAK 30 TH ST BRANCH	2022	FD	M
224501D	HBM1185	W 34 TH ST	AMTRAK 30 TH ST BRANCH	2022	FD	M
224501E	HBM1186	W 35 TH ST	AMTRAK 30 TH ST BRANCH	2022	FD	M
224501F	HBM1187	W 36 TH ST	AMTRAK 30 TH ST BRANCH	2022	FD	M
2245209	HBM1188	11 TH AVE	AMTRAK 30 TH ST BRANCH	2022	PD	M
2229290	HBM1189	W 79 TH ST	AMTRAK	2017	PD	M
2267717	HBM1189	79 TH ST PED PLAZA	79 TH ST BOAT BASIN GARAGE	2017	PD	M
2267718	HBM1189	79 TH ST TRAFFIC CIRCLE	79 TH ST PED PLAZA	2017	PD	M
226771A	HBM1189	79 TH ST RAMP TO HHP	79 TH ST BOAT BASIN GARAGE	2017	PD	M
226771B	HBM1189	79 TH ST RAMP TO GARAGE	79 TH ST BOAT BASIN GARAGE	2017	PD	M
226771C	HBM1189	GARAGE RAMP TO 79 TH ST	79 TH ST BOAT BASIN GARAGE	2017	PD	M
226771D	HBM1189	SB HHP RAMP TO 79 TH ST	79 TH ST BOAT BASIN GARAGE	2017	PD	M
2232070	HBM1221	E 25 TH STREET PEDESTRIAN BRIDGE	FDR DRIVE	2024	PD	M
224004D	HBCR01C	RAMP TO ED KOCH QUEENSBORO BRIDGE	E 59 TH ST	2014	FD	M
224004H	HBCR01C	RAMP FROM ED KOCH QUEENSBORO BRIDGE	BRIDGE PLAZA SOUTH	2014	FD	Q
2247220	HBCR01C	80 TH ROAD	LIRR	2014	FD	Q
2248300	HBCR01C	71 ST AVE	COOPER AVENUE	2014	FD	Q
2266129	HBCR01C	DOUGLASTON PARKWAY SB	BCIP	2014	FD	Q
2266139	HBCR01C	DOUGLASTON PARKWAY NB	BCIP	2014	FD	Q
2267160	HBCR01C	ROOSEVELT AVE	PARK ROAD	2014	FD	Q
2231880	HBCR02A	CROCHERON PARK PEDESTRIAN	CROSS ISLAND PARKWAY	2015	PD	Q
2266160	HBCR02A	WHITESTONE EXPRESSWAY S.B. TO CROSS ISLAND PARKWAY E.B.	ACCESS ROAD FROM WHITESTONE EXPRESSWAY	2015	PD	Q
2230890	HBCR02B	49 TH STREET	GRAND CENTRAL PARKWAY	2015	PD	Q
1247560	HBQ1112	METRO AVE (FRESH POND)	LIRR MONTAUK DIV	2014	FD	Q
2231780	HBQ1114	HEMPSTEAD AVE	BCIP	2021	PD	Q
2266149	HBQ1114	HEMPSTEAD AVE	RAMP TO BCIP NB	2021	PD	Q
2231850	HBQ1115	UNION TPKE	BCIP	2021	PD	Q
2247120	HBQ1130	WOODSIDE AVE	LIRR MAIN LINE	2022	FD	Q

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BRIDGES UNDER DESIGN BY NEW YORK CITY

BIN NO.	CAPIS NO.	FEATURE CARRIED	FEATURE CROSSED	FY CNST	PHASE	BORO
2248159	HBQ1134	WOODHAVEN BLVD	QUEENS BLVD	2022	FD	Q
2248160	HBQ1137	ELLIOT AVE	QUEENS BLVD	2022	PD	Q
2240410	HBQ1162	BORDEN AVENUE	DUTCH KILLS	2019	PD	Q
2231760	HBQ1173	BCIP	DUTCH BRDWAY-115 AVE	2022	PD	Q
2231630	HBQ1200	SPRINGFIELD BOULEVARD	BELT PARKWAY	2017	PD	Q
2240507	HBQ1203	ROOSEVELT AVE	VAN WYCK EXPRY	2014	FD	Q
2248280	HBQ1206	HIGHLAND PK PED BRDG	PEDESTRIAN PATH	2014	PD	Q
2231840	HBQ1207	HILLSIDE AVE	BCIP	2020	PD	Q
2266160	HBQC064	WHITESTONE EXPRY/VAN WYCK EXPRY SB TO BCIP EB	ACCESS ROAD FROM WHITESTONE EXPRY/VAN WYCK EXPRY	2019	PD	Q
2249520	HBCR01C	HANNAH STREET	SIRT SOUTH SHORE	2014	FD	R
2249800	HBCR01C	FOREST AVE	CLOVE LAKES PARK STREAM	2014	FD	R
2249240	HBCR02B	ARTHUR KILL ROAD	SIRT SOUTH SHORE	2015	PD	R
R00010	HBRC036	GALLOWAY AVE	MARIANNE ST	2015	FD	R
R00011	HBRC037	FOREST AVE	CRYSTAL AVE	2015	FD	R
R00013	HBRC038	NAUGHTON AVE	PATTERSON AVE	2015	FD	R
R00023	HBRC039	MIDLAND AVE	HYLAN BLVD	2015	FD	R
R00034	HBRC040	ROCKLAND AVE	BRIELLE AVE	2015	FD	R
R00068	HBRC041	FOREST AVE	RANDALL AVE	2015	FD	R
R00069	HBRC042	GREGG PLACE	RANDALL AVE	2015	FD	R
R00084	HBRC043	ARTHUR KILL RD	MULDOON AVE	2015	FD	R
R00097	HBRC044	RICHMOND HILL RD	RICHMOND RD	2015	FD	R
R00122	HBRC045	ARTHUR KILL RD	RIDGEWOOD AVE	2015	FD	R
2249820	HBRC1149	ARTHUR KILL ROAD	ARTHUR KILL STREAM	2022	FD	R

Revised 11/9/11

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Appendix B

FLAG CONDITIONS

Definitions and Procedures	B-1
2007-2011 Red, Yellow and Safety Flags	B-2
Flag Reporting and Tracking Process	B-3

FLAG DEFINITIONS AND PROCEDURES

(Source: NYSDOT Engineering Instruction 94-002)

New York State Department of Transportation (NYSDOT) bridge inspection procedures require that "Flags" be issued to report the existence of conditions that pose a clear and present danger, or conditions which, if left unattended for an extended period, would likely become a clear and present danger.

A "Flag" is classified as either a Red Flag, Yellow Flag or Safety Flag.

Red Flag is used to report the failure or potentially imminent failure of a critical primary structural component. Potentially imminent means that a failure is likely before the next scheduled inspection. The maximum time between bridge inspections is two years. Red Flags must be addressed within six weeks.



September 2008: Advanced Corrosion of Steel Stringer and Girder.



February 2011: Red Flag Stringer Repair at Riverside Drive Viaduct over West 158th Street.

Yellow Flag is used to report a potentially hazardous condition which, if left unattended beyond the next scheduled inspection, would likely become a clear and present danger. A Yellow Flag is also used to report the actual or imminent failure of a non-critical primary structural component, where its failure may diminish the reserve capacity or redundancy of the bridge but would not result in structural collapse or a clear and present danger.



February 2008: Yellow Structural Flag Due to the Deteriorated Cap Beam. October 2008: Corrosion of Steel Secondary Member. November 2008: Crack in Steel Girder.

FLAG DEFINITIONS AND PROCEDURES

(Source: NYSDOT Engineering Instruction 94-002)

Safety Flag is used to report a condition that presents a clear and present vehicular or pedestrian traffic hazard, but there is no danger of structural failure or collapse.



August, October, and November 2008: Examples of Tripping Hazards.



February 2008: Loose Bolts at the Lighting Base. October 2008: Electrical Hazard, and Loose Joint.

Certain Red or Safety Flags may be further classified as Prompt Interim Action (PIA) flags. PIA flags must be addressed within 24 hours of discovery.



Example of PIA Safety Flag: Broken Grating. Executive Director of Bridge Preventive Maintenance and Repair Tom Whitehouse (White Hardhat) Ensuring the Proper Setup of Containment Procedures at the St. George Ferry Terminal Landing Slips Before the Masons Address A PIA Flag (Falling Concrete). Inspecting the Flagged Condition.



PIA Flag (Truck Wedged Under the FDR Drive at Span 41): Removing the Debris. (Credit: Victor Sandoval) PIA Flag Repair (Through Hole) on Harlem River Drive Ramp. (Credit: Bojidar Yanev)

FLAG CONDITIONS BY CALENDAR YEAR						
	2007	2008	2009	2010	2011	% increase (2007 – 2011)
<i>Citywide</i>						
FLAGS ROUTED	1,261	1,764	1,286	1,591	1,342	6%
RED	41	84	72	53	56	37%
YELLOW	206	247	155	387	252	22%
SAFETY	1,014	1,433	1,059	1,151	1,034	2%
TOTAL FLAGS ELIMINATED	1,083	1,137	973	1,297	966	-11%
RED	36	60	67	47	53	47%
YELLOW	214	195	188	214	126	-41%
SAFETY	833	882	718	1,036	787	-6%
TOTAL FLAGS OUTSTANDING	2,356	2,983	3,296	3,612	3,989	69%
RED	15	39	44	50	53	253%
YELLOW	568	620	587	760	887	56%
SAFETY	1,773	2,324	2,665	2,802	3,049	72%
<i>Division of Bridges Workload</i>						
FLAGS ROUTED*	931	1,127	973	1,390	1,160	25%
RED	38	66	66	52	47	24%
YELLOW	203	240	147	383	250	23%
SAFETY	690	821	760	955	863	25%
FLAGS ELIMINATED	916	969	897	1,198	877	-4%
RED	34	41	67	40	46	35%
YELLOW	193	188	185	207	126	-35%
SAFETY	689	740	645	951	705	2%
FLAGS OUTSTANDING**	1,650	1,823	1,903	2,076	2,355	43%
RED	14	39	38	50	51	264%
YELLOW	537	594	556	731	845	57%
SAFETY	1,099	1,190	1,309	1,295	1,459	33%

*Does not include re-routed flags.

**Includes re-routed flags.

Revised 1/17/12

FLAG REPORTING AND TRACKING PROCESS

There are three primary sources from which flags originate:

- NYSDOT inspectors
- NYCDOT inspectors
- NYCDOT Communications Center

State DOT Inspectors

1. State inspectors identify flag conditions.
2. Written notification of flag conditions are sent to the Bridge's Flags unit. (Immediate verbal notification is given for Red Flags and PIA flags.)
3. Flag condition reports are entered into the Division's "City Flag" and "State Flag" database.
4. Flag conditions are reviewed by City engineers who have four routing options:
 - ◆ assign flags to outside agencies for repair, or
 - ◆ have City inspectors monitor flags until further action is desired, or
 - ◆ assign flags to in-house or contractor forces for repair, or
 - ◆ assign flags to the Construction Section for Capital contractor repair.
5. Each flag condition is assigned a City Flag number, and routed to the appropriate group.
6. When flag conditions are eliminated, the respective databases are updated.

City DOT Division of Bridges Inspectors

1. City inspectors identify flag conditions and prepare a scope of work. (Immediate verbal notification is given for Red Flags and PIA flags.)
2. Flag condition reports are received and reviewed by the Flags unit.
3. Flag condition reports are entered into the "City Flag" database.
4. Flag conditions are reviewed by City engineers who have four routing options:
 - ◆ assign flags to outside agencies for repair, or
 - ◆ have City inspectors monitor flags until further action is desired, or
 - ◆ assign flags to in-house or contractor forces for repair, or
 - ◆ assign flags to the Construction Section for Capital contractor repair.
5. When flag conditions are eliminated, the database is updated.

City DOT Communications Center

1. Flag condition is phoned in.
2. City inspectors visit the site to review the reported condition.
3. If the deficiency warrants, a flag condition report is filed.
4. Flag condition reports are entered into the "City Flag" database.
5. Flag conditions are reviewed by City engineers who have four routing options:
 - ◆ assign flags to outside agencies for repair, or
 - ◆ have City inspectors monitor flags until further action is desired, or
 - ◆ assign flags to in-house or contractor forces for repair, or
 - ◆ assign flags to the Construction Section for Capital contractor repair.
6. When flag conditions are eliminated, the database is updated.

Appendix C

2011 INVENTORY

Inventory Summary	C-1
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New York State Inspection System	C-4
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Inventory Summary

In Calendar Year 2011, the total number of bridge and tunnel structures under the jurisdiction of the New York City Department of Transportation (NYCDOT) remained at 787. NYCDOT owns, operates, and/or maintains 757 non-movable bridges, 25 movable bridges, and five tunnels. In 1999, a Memorandum of Understanding between NYCDOT and the New York City Department of Environmental Protection (NYCDEP) added 67 culverts (since reduced to 61) in Staten Island to the Division's Inventory. While the Division is responsible for the capital rehabilitation of these structures, maintenance and inspection responsibilities remain with NYCDEP.

The condition of New York City's 787 elevated bridge structures (including five tunnels), as measured by the City's general condition rating, are as follows: 3 structures were rated *Poor*, 459 structures were rated *Fair*, 215 structures were rated *Good*, 109 structures were classified *Very Good*, and one structure is not rated (closed).

The bridges in the Division's inventory connect a vast and diverse highway and street network throughout the City. The impressive East River crossings – the Brooklyn, Manhattan, Williamsburg, and Ed Koch Queensboro Bridges – are the most visible and famous structures, but are by no means representative of all the bridges in the City's inventory. Three hundred nineteen (40.5%) of the Division's structures consist of one span (the portion of a bridge between two supports). One hundred four (13%) bridges carry pedestrian traffic. Of the 787 structures in the City's inventory, 102 (13%) cross waterways; of these, 20 connect the boroughs of the Bronx, Brooklyn, Manhattan and Queens. Three hundred twenty-six (41%) structures cross the City's labyrinthine system of railroad and subway tracks. Two hundred forty-eight (31.5%) structures cross or connect arterial highways, such as the Henry Hudson Parkway, the Brooklyn-Queens Expressway, and the Belt Parkway, which facilitate traffic flow through and around the five boroughs of the City of New York.

Rating System

The Division of Bridges bases its general condition ratings directly on the numerical ratings assigned during bridge inspections. Federal law mandates that bridge structures be inspected at least once every two years. The New York State Department of Transportation hires engineering consultants to perform biennial inspections for all bridge structures except pedestrian bridge structures, and bridge structures less than 20 feet in length. Bridge structures not inspected by the State are inspected by the NYC Department of Transportation's Division of Bridges, with the exception of the East 64th Street Pedestrian Bridge over the FDR Drive, which was inspected by Rockefeller University.

The State inspected 673 (86%) bridge structures. The balance of 113 (14%) were inspected by the City, with the exception of the High Bridge over the Harlem River, which was inspected in 2002 by the Department of Parks and Recreation. Each structure in a biennial inspection is given an overall numerical condition rating from 1 (structural failure) to 7 (new condition), reflecting a weighting of key features of the structure (see Appendix C-4). In certain cases, where a bridge structure is closed to traffic, only a city condition rating is given.

City condition ratings coincide with the following ranges of State ratings:

<u>State Numerical Rating</u>	=	<u>City Condition Rating</u>
1.000 – 3.000	=	POOR
3.001 – 4.999	=	FAIR
5.000 – 6.000	=	GOOD
6.001 – 7.000	=	VERY GOOD

This method is used as a guide in assessing what operational action is needed. The overall bridge rating, in and of itself, is not always indicative of whether a bridge needs major rehabilitation. Further inspection and analysis must be done to determine specific rehabilitation or corrective repair needs.

Summary of 2011 Structure Conditions

Rating	Number of Structures	Percent	Number of Spans	Percent	Deck Area Sq Ft	Percent
Poor	3	0.38%	87	1.97%	514,708	3.55%
Fair	459	58.40%	3,341	75.78%	10,310,005	71.05%
Good	215	27.35%	651	14.77%	2,239,045	15.43%
Very Good	109	13.87%	330	7.48%	1,446,802	9.97%
Not Rated	1	—	—	—	—	—
Total	787	100%	4,409	100%	14,510,560	100.62%

* The number of spans decreased since the 2010 Annual Report was issued when the decision was made to not rate a detail known as a “deflection joint” as a pier. Many of the pedestrian bridges on the FDR Drive had this detail and it was decided that it should not bear the same type of designation as a pin and hanger detail, and therefore should not be considered as a pier.

As of December 31, 2011, the condition of the City’s bridges and tunnels indicated that 0.38% were rated as *Poor*, 58.40% were classified as *Fair*, 27.35% were awarded ratings of *Good*, and 13.87% as *Very Good*. Those structures given ratings of *Poor* and *Fair* encompassed 77.75% of bridge spans.

Rating	2008		2009		2010		2011	
Poor	3	0.38%	4	0.51%	4	0.51%	3	0.38%
Fair	455	57.81%	456	58.09%	462	58.78%	459	58.40%
Good	213	27.06%	209	26.62%	207	26.34%	215	27.35%
Very Good	116	14.74%	116	14.78%	113	14.38%	109	13.87%
Not Rated	1		1		1		1	
Total	788	100	786	100	787	100	787	100

During 2011, Manhattan had the highest percentage of bridge structures rated *fair* – 75.86% - as well as the lowest percentage of bridge structures rated *good* – 19.54%. Staten Island had the highest percentage of bridge structures classified as *good* – 37.31%, and the third highest percentage of bridge structures rated *very good* – 16.42%, for a total of 53.73%. In 2011, Brooklyn had the highest percentage of bridge structures rated as *very good* – 20.57%. The Bronx had the second highest percentage of bridge structures classified as *fair* – 62.50%, and the third highest percentage of bridge structures rated as *good* – 28.95%. Queens had no bridges rated as *poor*, the second highest percentage of bridge structures classified as *very good* – 19.70%, and the second highest percentage of bridge structures rated as *good* – 29.80%.

Borough*	Poor	% of Boro	Fair	% of Boro	Good	% of Boro	Very Good	% of Boro	Total
Bronx	0	0.00%	95	62.50%	44	28.95%	13	8.55%	152
Brooklyn	1	0.57%	88	50.29%	50	28.57%	36	20.57%	175
Manhattan	1	0.57%	132	75.86%	34	19.54%	7	4.02%	174
Queens	0	0.00%	100	50.51%	59	29.80%	39	19.70%	198
Staten Island	0	0.00%	31	46.27%	25	37.31%	11	16.42%	67
Total	2	0.26%	446	58.22%	212	27.68%	106	13.84%	766

* Does not include borough-crossing bridges (see next table).

Summary of 2011 Structure Conditions

Seventy percent of the 20 bridge structures that service the five boroughs were rated in either *poor* or *fair* condition in 2011, and 30% were rated *good* or *very good*.

Boro-Crossing	Poor	% of Boro Crossing	Fair	% of Boro Crossing	Good	% of Boro Crossing	Very Good	% of Boro Crossing	Total
Bronx-Manhattan	0	0.00%	6	60.00%	1	10.00%	3	30.00%	10
Brooklyn-Manhattan	1	25.00%	3	75.00%	0	0.00%	0	0.00%	4
Queens-Manhattan	0	0.00%	2	66.67%	1	33.33%	0	0.00%	3
Brooklyn-Queens	0	0.00%	2	66.67%	1	33.33%	0	0.00%	3
Total	1	5.00%	13	65.00%	3	15.00%	3	15.00%	20

These figures evidence that the Division is continuing to make progress in improving the conditions of the City's bridges. The number of bridges rated *Poor* and *Fair* has decreased over the past few years while the number of bridges rated *Good* and *Very Good* has increased. However, it continues to remain essential that the overall bridge program include an expansion of the Preventive Maintenance and Corrective Repair programs which have traditionally slowed the deterioration of *good* and *very good* bridges.

During 2011, the total number of closed or partially closed bridge structures was three, with one closed and two partially-closed structures (see Appendix C-2).

Bridges with Posted Weight Restrictions
NEW YORK CITY DEPARTMENT OF TRANSPORTATION

BIN	BOROUGH	LOCATION FEATURE-1	LOCATION FEATURE-2	LOCATION FEATURE-3	FISCAL YEAR*	POSTED TONS	REMARKS
2231450	BROOKLYN	BELT SHORE PARKWAY	GERRITSEN INLET		2012	5	CONDITION OF PAERDEGAT BASIN BRIDGE
2231479	BROOKLYN	BELT SHORE PARKWAY	MILL BASIN CREEK		2012	5	CONDITION OF PAERDEGAT BASIN BRIDGE
2231489	BROOKLYN	BELT SHORE PARKWAY	PAERDEGAT BASIN		2010	5	
2231499	BROOKLYN	BELT SHORE PARKWAY	ROCKAWAY PKWY.		2010	5	PASSENGER CARS ONLY
2231509	BROOKLYN	BELT SHORE PARKWAY	FRESH CREEK		2010	5	PASSENGER CARS ONLY
	MANHATTAN	FDR DRIVE (NB & SB)	23 RD TO 63 RD STREET			4	PASSENGER CARS ONLY
2240019	BROOKLYN & MANHATTAN	BROOKLYN BRIDGE	EAST RIVER	INCLUDING RAMPS	2009	3	NO COMMERCIAL TRAFFIC NO TRUCKS, NO BUSES; 11'0" CLEARANCE
2240027	MANHATTAN & BROOKLYN	MANHATTAN BRIDGE	EAST RIVER				DESIGN LOAD FOR HS 20 TRUCK LOAD [36 TONS]; FROM 6 TO 10 AM, M-F, THE LEFT LANE OF THE NORTH UPPER ROADWAY IS HOV2+ BUSES ONLY; MANHATTAN-BOUND TRUCKS MUST USE THE LOWER ROADWAY 5 AM TO 3 PM, M-F; BICYCLES ONLY ON NORTH BIKEWAY (BUT DURING CONSTRUCTION, BICYCLES MAY BE DETOURED TO THE SOUTH PATH AND PEDESTRIANS TO THE NORTH PATH). DURING CONSTRUCTION, ONLY TWO LANES OPEN AT LOWER ROADWAY.
2240039	BROOKLYN & MANHATTAN	WILLIAMSBURG BRIDGE	EAST RIVER				INNER ROADWAYS, <u>NO TRUCKS</u> ; OUTER ROADWAYS DESIGN FOR HS20 [36 TONS] AND TRUCKS ARE PERMITTED ON OUTER ROADWAY
2240047	MANHATTAN & QUEENS	ED KOCH QUEENSBORO BRIDGE	EAST RIVER			7.5	LOWER OUTER ROADWAYS POSTED AS H-7.5 [7.5 TONS] (PASSENGER CARS ONLY FOR SOUTHBOUND; PEDESTRIANS AND BICYCLES ONLY FOR NORTHBOUND); LOWER INNER ROADWAYS ARE DESIGNED FOR HS20 TRUCK LOAD [36 TONS]; UPPER ROADWAYS DESIGNED FOR H-15 [15 TONS], <u>NO TRUCKS</u> , <u>ONLY BUSES</u>
2240260	BROOKLYN	CARROLL STREET BRIDGE	GOWANUS CANAL	CARROLL STREET	2013	10	
2240640	MANHATTAN & QUEENS	ROOSEVELT ISLAND	EAST CHANNEL OF THE EAST RIVER		2007	36	
2240660	QUEENS	RIKERS ISLAND BRIDGE	RIKERS ISLAND CHANNEL			36	
2246550	MANHATTAN	PARK AVENUE VIADUCT	42 ND STREET			15	NO COMMERCIAL TRAFFIC
2247590	QUEENS	FOREST PARK DRIVE	LIRR			8	
2247660	QUEENS	FOREST PARK DRIVE	ABANDONED LIRR			8	
2245460	MANHATTAN	PARK AVENUE SB	EAST 45 TH STREET			15	NO COMMERCIAL TRAFFIC

Bridges with Posted Weight Restrictions
NEW YORK CITY DEPARTMENT OF TRANSPORTATION

BIN	BOROUGH	LOCATION FEATURE-1	LOCATION FEATURE-2	LOCATION FEATURE-3	FISCAL YEAR*	POSTED TONS	REMARKS
2245470	MANHATTAN	PARK AVENUE NB	EAST 45 TH STREET			15	NO COMMERCIAL TRAFFIC
2269760	STATEN ISLAND	NORTH RAMP	SIRT SOUTH SHORE		2011	5	
2244120	BROOKLYN	HILL DRIVE	PROSPECT PARK LAKE				NO VEHICLES
226771A**	MANHATTAN	79 TH STREET RAMP to HHP	79 TH STREET BOAT BASIN GARAGE		2017	15	
226771B**	MANHATTAN	79 TH STREET RAMP TO GARAGE	79 TH STREET BOAT BASIN GARAGE		2017	15	
226771C**	MANHATTAN	GARAGE RAMP TO 79 TH STREET	79 TH STREET BOAT BASIN GARAGE		2017	15	
226771D**	MANHATTAN	SB HHP RAMP TO 79 TH STREET	79 TH STREET BOAT BASIN GARAGE		2017	15	
2240507**	QUEENS	ROOSEVELT AVENUE BRIDGE	VAN WYCK EXPRESSWAY		2014	25	
2247120**	QUEENS	WOODSIDE AVENUE BRIDGE	LIRR MAIN LINE			8	

26 COUNT

* - CONSTRUCTION CONTRACT LETTING

** - THESE BRIDGES ARE RECOMMENDED FOR LOAD POSTING – POSTING SIGNS HAVE NOT YET BEEN INSTALLED.

Revised 11/1/11

Partially Closed Bridges
NEW YORK CITY DEPARTMENT OF TRANSPORTATION

BIN	BOROUGH	LOCATION FEATURE-1	LOCATION FEATURE-2	LOCATION FEATURE-3	FISCAL YEAR*	REMARKS
2076640	BRONX	DEPOT PLACE	CONRAIL HUDSON DIVISION			ONE LANE CLOSED TO TRAFFIC (BUT OPEN TO PEDESTRIANS AND BICYCLES), AND ONE LANE OPEN
2244120	BROOKLYN	HILL DRIVE	PROSPECT PARK LAKE		CONSTRUCTION MOVED DUE TO LACK OF FUNDING	CLOSED TO VEHICULAR TRAFFIC, OPEN TO PEDESTRIAN TRAFFIC, ALONG THE CENTER OF THE ROADWAY.

2 COUNT

* - CONSTRUCTION CONTRACT LETTING

Revised 11/12/10



Paerdegat Basin, Fresh Creek, Carroll Street Bridges, and Staten Island North Ramp Posted Weight Restriction Signs. (Credit: NYSDOT)

Closed Bridges*NEW YORK CITY DEPARTMENT OF TRANSPORTATION*

There is one closed bridge.

BIN	BOROUGH	LOCATION FEATURE-1	LOCATION FEATURE-2	LOCATION FEATURE-3	REMARKS
2248130	QUEENS	FLUSHING MEADOW PARK PEDESTRIAN	WILLOW LAKE	76 th ROAD	BRIDGE IS IN FLUSHING CORONA PARK, WHICH IS IN A REMOTE LOCATION AND WAS DAMAGED BY FIRE.

10/20/09

Bridge Identification Numbers

In 1972, the State of New York developed a computerized system to store inventory and inspection data on bridges that are greater than 20 feet in length. In New York City, structures that are 20 feet in length or less, “mini-bridges,” are tracked independently by the City. Each structure is distinguished by a separate Bridge Identification Number (B.I.N.).

A six-digit B.I.N. identifies a single structure or group of connected or associated structures, while the seven-digit B.I.N. identifies each of those connected or associated bridge structures individually. Each level of a bi-level bridge, each separate bridge structure in a parallel configuration, and each ramp attached to a main bridge is considered an individual structure and assigned its own unique B.I.N. for example, the Brooklyn Bridge has one six-digit B.I.N., 2-24002, which incorporates the entire bridge. All ramps and secondary structures, as well as the main structure, are identified by their own seven-digit numbers, such as 2-24001-A, 2-24001-B, etc.

If the prefix (first number) of the B.I.N. is:

1, the bridge is considered part of the **State** bridge system. This number might include City bridges if maintenance is shared between City and State.

2, the bridge is considered part of the **City** bridge system. This number might include State bridges if maintenance is shared between City and State.

M, Q, or R, the bridge is a “mini-bridge,” and is considered part of the **City** bridge system. They are located in Manhattan, Queens, or Staten Island, respectively.

If the suffix (last character) of the B.I.N. is:

1 through 6, the bridge is in parallel configuration. The left-most bridge in the Direction of Orientation has a last character of 1. The next left-most bridge has a last character of 2, and so on.

7 or 8, the bridge is in a bi-level configuration. Seven indicates the lower level and eight indicates the upper level.

0 or 9, the bridge is not in parallel or bi-level configuration.

A letter of the alphabet, the structure is a ramp physically attached to the main bridge. If more than one ramp is attached to the same span of the main bridge, the characters are assigned alphabetically starting with the left-most ramp in the Direction of Orientation. Other ramps attached to the bridge are assigned alphabetical characters in a clockwise direction.

New York State Biennial Bridge Inspection and Condition Rating System

During the regularly scheduled State biennial bridge inspections, each bridge element is investigated and its structural condition is numerically rated according to the system indicated below:

<u>Numerical Rating</u>	<u>Description</u>
1	Potentially Hazardous
2	Used to shade between a rating of 1 and 3
3	Serious deterioration, or not functioning as originally designed
4	Used to shade between a rating of 3 and 5
5	Minor deterioration, and is functioning as originally designed
6	Used to shade between a rating of 5 and 7
7	New condition
8	Not Applicable
9	Unknown (due to inaccessibility, e.g. footings or piles)

Based on these individual ratings for each element, a weighted average rating is computed for the entire structure.

These ratings (both individual and weighted average) are recorded on New York State Department of Transportation Inspection report Forms. Together with photographs and explanatory descriptions, the ratings provide the Division with information on the existing condition of each bridge.

A description of the condition ratings 1 through 7, with programmed responses to certain critical ratings, demonstrates the importance of these inspections:

A rating of 1 describes an extremely serious condition which is deemed potentially hazardous. This rating, which is phoned in by the inspection leader, necessitates that the Division respond immediately by 1) closing the structure either completely or partially until emergency repairs are made, or 2) limiting the vehicle weight permitted on the structure and then performing repairs on a timely basis.

A rating of 3 describes a bridge element that is not functioning as designed. Although not considered hazardous, such members require extensive rehabilitation. A determination is then made to repair such rated members either by the Division's in-house repair personnel, the critical maintenance contractor (When and Where contracts), or a major capital contract. Until such repairs are made, this condition is periodically monitored.

A rating of 5 indicates the member is functioning as designed but exhibits minor deterioration. These members are prioritized and scheduled for repair by the Bridge Maintenance, Inspection and Operations Bureau.

A rating of 7 indicates a new condition requiring no remediation.

The ratings of 2, 4, and 6 are utilized to shade between each of the above ratings.

Standard Abbreviations

General Abbreviations :

APP:	Approach	NB:	Northbound
AVE:	Avenue	PED BR:	Pedestrian Bridge
BLVD:	Boulevard	PKWY:	Parkway
BR:	Bridge	PL:	Place
CPK:	Central Park	RD:	Road
DR:	Drive	SB:	Southbound
EB:	Eastbound	ST:	Street
EXPWY:	Expressway	TPKE:	Turnpike
I:	Interstate	WB:	Westbound
LN:	Lane		
X:	No State accepted mileage markers exist on this route		



Assistant Civil Engineer Andrew Hoang Inspecting the Brooklyn Bridge in October 2007. (Credit: Clara Medina)

Routes :

<u>No.</u>	<u>Borough</u>	<u>Name</u>
25	Queens	Union Turnpike
25A	Queens	Northern Boulevard
27	Brooklyn	Southern Parkway
I-87	Manhattan, Bronx	Major Deegan Expressway
I-95	Manhattan, Bronx	Cross Bronx Expressway
I-278	Brooklyn, Queens	Brooklyn-Queens Expressway
I-278	Bronx	Bruckner Expressway
I-278	Staten Island	Staten Island Expressway
I-295	Queens	Clearview Expressway
I-295	Bronx	Throgs Neck Expressway
I-440	Staten Island	Richmond Parkway
I-478	Brooklyn	Brooklyn Battery Tunnel
I-495	Queens	Long Island Expressway
I-678	Queens	Whitestone Expressway, Van Wyck
I-878	Queens	Nassau Expressway
I-895	Bronx	Sheridan Expressway

Standard Abbreviations

Highways :

BCIP:	Belt System - Cross Island
BE:	Bruckner Expressway
BLP:	Belt System - Laurelton Parkway
BPP:	Bronx Pelham Parkway
BQE:	Brooklyn-Queens Expressway
BRPC:	Bronx River Parkway (in NYC)
BSHP:	Belt System - Shore Parkway
BSOP:	Belt System - Southern Parkway
CBE:	Cross Bronx Expressway
FDRD:	Franklin D. Roosevelt Drive
GCP:	Grand Central Parkway
GW:	George Washington Bridge
HHP:	Henry Hudson Parkway
HRD:	Harlem River Drive
HRPC:	Hutchinson River Parkway (in NYC)
IP:	Jackie Robinson (Interborough) Parkway
LIE:	Long Island Expressway
MAP:	Marine Parkway
MDE:	Major Deegan Expressway
MP:	Mosholu Parkway
OCP:	Ocean Parkway
PR:	Prospect Expressway
RP:	Richmond Parkway
VWE:	Van Wyck Expressway
WLMBRG:	Williamsburg Bridge
WSE:	West Shore Expressway

Information Available On Division Of Bridges Inventory Of Structures

- **Bridge Identification Number (B.I.N.)**
- **Borough :**

B - The Bronx	Q - Queens	R - Staten Island
K - Brooklyn	M - Manhattan	
- **Feature Carried :** Name of passageway carrying vehicle or pedestrian traffic.
- **Feature Crossed :** Description of area crossed.
 - **Railroad Crossed** (if applicable):

A - Amtrak	N - New York & Atlantic
C - CSX	O - B & O Railroad
L - Long Island Railroad	S - Staten Island Rapid Transit Operating Authority
M - Metro-North (MTA)	T - NYC Transit Authority
 - **Other Owner :**

ED	Department of Education
F	Ferries (Department of Transportation)
P	Department of Parks and Recreation
- **Bridge Type :**

A	Arterial	PED	Pedestrian
E	East River	T	Tunnel
M	Movable	W	Waterway
O	Off-System		
- **Rating Source:**

(C)	City Inspection	(P)	Parks Inspection
(S)	State Inspection	(U)	Rockefeller University Inspection
- **Rating :** Numerical and/or verbal rating

1.000 - 3.000:	(P)	POOR
3.001 - 4.999:	(F)	FAIR
5.000 - 6.000:	(G)	GOOD
6.001 - 7.000:	(V)	VERY GOOD
- **Deck Area:** Square feet
- **CD:**

Community Board District

2011 Bridge Inventory Adjustments

There were no bridges removed from or added to the City's inventory since the 2010 *Annual Report* was issued.

REV. DATE 2/3/12

INVENTORY SORTED BY B.I.N.

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
1065210	Q	WHITESTONE EXP NB	BCIP (2065210)		A		1	S	7/22/2010	4.476	F	2,500	\$10,000,000	407		
1066510	B	BRUCKNER EXPWY SVC RD	WESTCHESTER CREEK		WMA		17	S	11/8/2010	3.516	F	39,400	\$157,600,000	209		
1067150	B	NEREID AVE (E. 240TH ST)	BRONX RIVER PKWY	M	O		10	S	10/6/2011	4.474	F	57,750	\$231,000,000	212		
1240090	BM	MACOMBS DAM BRIDGE	HARLEM RIVER	M	WMO		52	S	11/30/2011	3.930	F	220,000	\$880,000,000	110	204	
1247010	Q	91 PLACE (2247010)	LIRR PT WASH BR	L	O		1	S	11/3/2011	6.567	VG	2,760	\$11,040,000	404		
1247200	Q	67 AVE PED BR (2247200)	LIRR MAIN LINE	L	O-PED		3	C	10/9/2009	4.500	F	1,300	\$5,200,000	406		
1247280	Q	51 AVE PED BR (2247280)	LIRR MAIN LINE	L	O-PED		5	C	10/6/2009	3.018	F	700	\$2,800,000	402		
1247560	Q	METROPOLITAN AVE	LIRR -NY&ATL	LN	O		2	S	9/29/2011	3.603	F	20,900	\$83,600,000	405		
2055801	Q	NORTHERN BLVD WB	FLUSHING RIVER		WO		40	S	10/21/2010	4.282	F	71,900	\$287,600,000	407		
2055802	Q	NORTHERN BLVD EB	FLUSHING RIVER		WO		40	S	10/18/2010	4.099	F	78,894	\$315,576,000	407		
205580A	Q	N.BLVD WB TO 678I SB	VACANT LAND		AR		16	S	6/30/2010	5.571	G	8,600	\$34,400,000	407		
2065629	B	BRONX RIVER PKWY	BOSTON RD BX ZOO		A		1	S	8/22/2011	5.276	G	6,300	\$25,200,000	227		
2065930	Q	HAMILTON PLACE	495I (L.I.E.)		A		2	S	3/9/2010	5.847	G	11,111	\$44,444,000	405		
2065940	Q	GRAND AVE	495I (L.I.E.)		A		2	S	11/18/2010	4.861	F	12,850	\$51,400,000	405		
2065950	Q	69TH STREET	495I (L.I.E.)		A		2	S	7/27/2011	5.250	G	10,336	\$41,344,000	405		
2066002	Q	495I (2066000)	WOODHAVEN BLVD		A		2	S	6/14/2011	5.592	G	25,200	\$100,800,000	406	404	
2066100	K	5TH AVE	27 X PROSPECT EXPWY		A		1	S	6/4/2010	5.104	G	8,800	\$35,200,000	307		
2066671	B	BRUCKNER EXPWY SB	BRONX RIVER		WMA		3	S	10/22/2011	5.278	G	12,400	\$49,600,000	202	209	
2066672	B	BRUCKNER EXPWY NB	BRONX RIVER		WMA		8	S	10/22/2011	4.269	F	22,300	\$89,200,000	202	209	
2066720	B	E 174TH ST	SHERIDAN EXPWY/AMTRAK	A	A		13	S	8/30/2010	4.042	F	35,573	\$142,292,000	209	203	
206672A	B	174TH ST-NTH PED BRDG	895I - SHERIDAN EXPWY		A-PED		4	C	5/10/2010	4.736	F	1,800	\$7,200,000	209		
206672B	B	174TH ST-STH PED BRDG	895I - SHERIDAN EXPWY		A-PED		4	C	4/13/2010	4.972	F	1,900	\$7,600,000	209		
2066919	BM	WASHINGTON BRIDGE	HARLEM RIVER	M	WO		9	S	11/12/2010	4.642	F	128,339	\$513,356,000	112	205	204
2075351	B	BRUCKNER EXPWY SB	AMTRAK - CSX	AC	A		1	S	11/3/2011	3.719	F	11,600	\$46,400,000	202		
2075352	B	BRUCKNER EXPWY NB	AMTRAK - CSX	AC	A		1	S	11/3/2011	6.317	VG	10,900	\$43,600,000	202		
2075820	B	E TREMONT AVE	HUTCHINSON RVR PKWY		A		2	S	11/21/2011	4.444	F	10,200	\$40,800,000	210		
2075837	B	WESTCHESTER AVE	HUTCHINSON RVR PKWY		A		2	S	2/5/2010	4.306	F	15,858	\$63,432,000	210	211	
2075849	B	BRONX PELHAM PKWY	HUTCHINSON RVR PKWY		A		2	S	6/9/2010	3.974	F	17,600	\$70,400,000	210	211	
2075859	B	HUTCHINSON RVR PKWY	HUTCHINSON RIVER		WMA		7	S	10/24/2011	4.703	F	60,500	\$242,000,000	210	228	
2076109	B	BE NB SERVICE RD	HUTCHINSON RVR PKWY		A		2	S	9/1/2011	4.632	F	7,800	\$31,200,000	210		
2076129	B	BE SB SERVICE RD	HUTCHINSON RVR PKWY		A		2	S	1/22/2010	5.105	G	7,100	\$28,400,000	210		
2076640	B	DEPOT PLACE	METRO NORTH RR HUD	CM	O		11	S	6/27/2011	5.028	G	26,566	\$106,264,000	204		
2076929	B	BRUCKNER EXPWY	CSX - HUNTS POINT	C	A		1	S	9/15/2011	4.700	F	3,800	\$15,200,000	202		
2229289	M	HHP VIADUCT	AMTRAK - W72 ST - W79 ST	A	A		145	S	12/7/2010	3.537	F	236,100	\$944,400,000	107		
222928C	M	PED BR AT 73RD ST	HHP - AMTRAK	A	A-PED	P	5	C	12/10/2010	4.145	F	3,480	\$13,920,000	107		
2229290	M	W 79 ST	AMTRAK	A	A		1	S	10/18/2010	4.492	F	4,500	\$18,000,000	107		
2229309	M	HHP	RIVERSIDE PARK		A		1	S	1/6/2010	5.267	G	2,172	\$8,688,000	107		
2229311	M	HHP SB	RAMP TO 96 ST		A		1	S	2/11/2010	4.455	F	2,000	\$8,000,000	107		
2229312	M	HHP NB	RAMP TO 96 ST		A		1	S	2/11/2010	4.364	F	2,000	\$8,000,000	107		

INVENTORY SORTED BY B.I.N.

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2229321	M	HHP SB	RAMP FROM 96 ST		A		1	S	2/17/2010	5.133	G	2,000	\$8,000,000	107		
2229322	M	HHP NB	RAMP FROM 96 ST		A		1	S	2/18/2010	5.300	G	2,000	\$8,000,000	107		
2229349	M	HHP	W 158 ST	A	A		44	S	11/18/2010	4.380	F	140,000	\$560,000,000	109	112	
222934A	M	RAMP TO N.B. HHP	AMTRAK WEST SIDE	A	AR		26	S	12/8/2011	3.708	F	10,800	\$43,200,000	112		
2229400	M	W 181ST ST PED BRDG	HHP N.B.		A-PED	P	7	C	1/25/2011	4.657	F	1,500	\$6,000,000	112		
2229440	B	HHP	KAPPOCK ST		A		1	S	7/18/2011	4.931	F	3,900	\$15,600,000	208		
2229450	B	232ND ST	HHP		A		2	S	7/19/2011	5.026	G	4,900	\$19,600,000	208		
2229460	B	236TH ST PED BRDG	HHP		A-PED		3	C	6/8/2011	4.672	F	2,500	\$10,000,000	208		
2229470	B	239TH ST	HHP		A		2	S	4/29/2011	5.053	G	6,100	\$24,400,000	208		
2229480	B	MANHATTAN COLL PKWY	HHP		A		3	S	4/29/2011	5.053	G	6,200	\$24,800,000	208		
2229490	B	246TH ST	HHP		A		2	S	4/29/2011	4.868	F	5,600	\$22,400,000	208		
2229500	B	252ND ST	HHP		A		2	S	2/4/2010	5.791	G	4,500	\$18,000,000	208		
2229510	B	RIVERDALE AVE	HHP		A		2	S	7/20/2011	5.079	G	5,200	\$20,800,000	208		
2229520	B	FIELDSTON ROAD	HHP		A		1	S	7/21/2011	5.033	G	6,600	\$26,400,000	208		
2229530	B	HHP	BROADWAY		A		1	S	7/22/2011	4.574	F	7,500	\$30,000,000	208		
2229540	B	VAN CRTLDT PARK	HHP		A-PED	P	2	C	8/4/2011	4.306	F	3,900	\$15,600,000	226		
2229550	B	VAN CRTLDT EQUES	HHP		A-PED	P	2	C	8/4/2011	4.556	F	2,100	\$8,400,000	226		
2229560	B	BRONX PELHAM PKWY	AMTRAK - CSX	AC	A		3	S	6/13/2010	4.542	F	24,591	\$98,364,000	211		
2229579	B	BOSTON POST ROAD	HUTCHINSON RIVER		WO		14	S	6/23/2011	4.194	F	95,700	\$382,800,000	212		
2230000	K	HIGHLAND BLVD E.B.	JACKIE ROBINSON PKWY		A		1	S	3/24/2010	4.724	F	4,900	\$19,600,000	305		
2230010	K	HIGHLAND BLVD W.B.	JACKIE ROBINSON PKWY		A		1	S	3/24/2010	4.767	F	3,500	\$14,000,000	305		
2230020	K	HIGHLAND BLVD W.B.	JACKIE ROBINSON PKWY		A		2	S	3/25/2010	4.711	F	4,700	\$18,800,000	305		
2230040	Q	CYPRESS HILLS ST	JACKIE ROBINSON PKWY		A		1	S	4/15/2010	4.611	F	5,000	\$20,000,000	405		
2230099	Q	JACKIE ROBINSON PKWY	CYPRESS HILLS CEMETRY		A		1	S	1/14/2010	5.444	G	4,200	\$16,800,000	405		
2230120	Q	MYRTLE AVE	JACKIE ROBINSON PKWY		A		1	S	5/5/2010	5.354	G	6,400	\$25,600,000	405	482	
2230179	Q	JACKIE ROBINSON PKWY	METROPOLITAN AVE		A		2	S	5/21/2010	5.286	G	8,673	\$34,692,000	482		
2230180	Q	UNION TPKE	JACKIE ROBINSON PKWY		A		1	S	2/9/2010	5.797	G	5,359	\$21,436,000	482		
2230190	Q	MARKWOOD ROAD	JACKIE ROBINSON PKWY		A		1	S	2/9/2010	5.167	G	4,400	\$17,600,000	482	406	
2230209	Q	QUEENS BLVD	JACKIE ROBINSON PKWY	T	A		5	S	7/23/2010	4.778	F	37,700	\$150,800,000	409		
2230220	K	HIGHLAND BLVD NB	VERMONT AVE		A		1	S	5/18/2011	5.857	G	3,995	\$15,980,000	305		
2230250	B	MOSHOLU PARKWAY	BRONX RIVER		WA		5	S	1/13/2010	4.316	F	16,300	\$65,200,000	227		
2230260	B	MOSHOLU PARKWAY	METRO NORTH	M	A		1	S	5/13/2010	5.516	G	8,880	\$35,520,000	227	207	
2230270	B	MOSHOLU PARKWAY	WEBSTER AVE		A		1	S	5/13/2011	5.328	G	8,480	\$33,920,000	207		
2230287	B	JEROME AVE	MOSHOLU PARKWAY	T	A		3	S	4/22/2011	4.816	F	11,800	\$47,200,000	207		
2230290	B	MOSHOLU PARKWAY	EQUESTRIAN PATH		A		1	S	1/22/2010	4.448	F	4,300	\$17,200,000	226		
2230300	B	MOSHOLU PARKWAY	CONRAIL (ABANDONED)	C	A		1	S	10/15/2010	4.271	F	4,600	\$18,400,000	226		
2230310	B	MOSHOLU PARKWAY	SB RAMP TO HHP		A		2	S	9/26/2011	4.919	F	7,400	\$29,600,000	226		
2230350	K	SUMMIT ST PED BRDG	2781 (B.Q.E.)		A-PED		2	S	4/1/2010	4.386	F	1,400	\$5,600,000	306		
2230360	K	UNION ST	2781 (B.Q.E.)		A		2	S	4/1/2010	4.236	F	5,000	\$20,000,000	306		

INVENTORY SORTED BY B.I.N.

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2230370	K	SACKETT ST	278I (B.Q.E.)		A		2	S	3/26/2010	4.431	F	5,000	\$20,000,000	306		
2230380	K	KANE ST	278I (B.Q.E.)		A		2	S	4/9/2010	4.208	F	5,000	\$20,000,000	306		
2230390	K	CONGRESS ST	278I (B.Q.E.)		A		2	S	4/9/2010	6.279	VG	5,000	\$20,000,000	306		
2230410	K	278I EB (B.Q.E.)	WASHINGTON ST		A		1	S	6/30/2011	4.500	F	2,500	\$10,000,000	302		
2230420	K	278I WB (B.Q.E.)	WASHINGTON ST		A		1	S	7/2/2010	5.109	G	2,500	\$10,000,000	302		
2230430	K	278I (B.Q.E.)	PROSPECT ST		A		1	S	1/19/2010	5.000	G	1,100	\$4,400,000	302		
2230440	K	278I WB (B.Q.E.)	ADAMS ST		A		1	S	1/15/2010	5.167	G	2,700	\$10,800,000	302		
2230450	K	278I EB (B.Q.E.)	ADAMS ST		A		1	S	1/15/2010	4.933	F	2,500	\$10,000,000	302		
2230460	K	278I (B.Q.E.)	PEARL ST		A		1	S	2/16/2010	5.467	G	4,500	\$18,000,000	302		
2230470	K	278I (B.Q.E.)	JAY ST		A		1	S	2/17/2010	4.833	F	5,100	\$20,400,000	302		
2230480	K	278I (B.Q.E.)	PROSPECT ST		A		1	S	2/18/2010	5.093	G	8,400	\$33,600,000	302		
2230490	K	278I (B.Q.E.)	SANDS ST		A		1	S	3/1/2010	5.019	G	12,600	\$50,400,000	302		
2230500	K	278I (B.Q.E.)	RAMP TO BQE EB		A		1	S	3/5/2010	5.100	G	1,300	\$5,200,000	302		
2230510	K	278I (B.Q.E.)	NASSAU ST		A		6	S	6/11/2010	5.169	G	51,200	\$204,800,000	302		
2230520	Q	65TH PLACE	278I (B.Q.E.)		A		2	S	2/17/2010	6.111	VG	11,668	\$46,672,000	402		
2230530	Q	QUEENS BLVD	278I (B.Q.E.)		A		2	S	11/1/2010	6.417	VG	25,543	\$102,172,000	402		
2230540	Q	WOODSIDE AVE	278I (B.Q.E.)		A		1	S	1/19/2010	5.797	G	7,529	\$30,116,000	402		
2230550	Q	69TH ST	278I (B.Q.E.)		A		2	S	1/19/2010	5.123	G	12,600	\$50,400,000	402		
2230560	Q	70TH ST	278I (B.Q.E.)		A		2	S	10/29/2010	6.833	VG	8,580	\$34,320,000	402		
2230570	Q	41ST AVE	278I (B.Q.E.)		A		2	S	10/29/2010	6.735	VG	8,580	\$34,320,000	402		
2230587	Q	ROOSEVELT AVE	278I (B.Q.E.)		A		2	S	10/28/2011	5.889	G	11,022	\$44,088,000	402		
2230590	Q	BROADWAY	278I (B.Q.E.)		O		2	S	11/12/2010	5.789	G	16,000	\$64,000,000	402		
2230600	Q	STEINWAY ST	278I WB (BQE)		A		1	S	10/4/2010	6.581	VG	5,229	\$20,916,000	401		
2230610	Q	STEINWAY ST	278I EB (BQE)		A		1	S	9/29/2010	6.581	VG	5,146	\$20,584,000	401		
2230620	Q	37TH ST	278I (B.Q.E.)		A		2	S	3/25/2010	4.597	F	5,300	\$21,200,000	401		
2230630	Q	35TH ST	278I (B.Q.E.)		A		4	S	4/9/2010	4.667	F	9,000	\$36,000,000	401		
2230640	Q	32ND ST	278I (B.Q.E.)		A		2	S	6/24/2011	4.875	F	8,100	\$32,400,000	401		
2230657	Q	31ST ST	278I (B.Q.E.)		A		2	S	11/6/2010	4.569	F	9,500	\$38,000,000	401		
2230669	Q	278I (B.Q.E.)	35TH AVE		A		1	S	8/3/2011	6.390	VG	13,135	\$52,540,000	402		
2230679	Q	278I (B.Q.E.)	34TH AVE		A		1	S	6/7/2011	6.203	VG	7,793	\$31,172,000	402		
2230680	Q	278I (B.Q.E.)	NORTHERN BLVD		A		1	S	11/12/2010	6.079	VG	27,011	\$108,044,000	402	401	
2230690	Q	278I NB (BQE WEST LEG)	32ND AVE		A		1	S	7/7/2010	6.492	VG	4,080	\$16,320,000	401		
2230700	Q	278I NB (BQE EAST LEG)	32ND AVE (TO BQE WEST LEG)		A		8	S	11/9/2010	6.662	VG	31,600	\$126,400,000	401	403	
2230710	Q	278I SB (BQE WEST LEG)	32ND AVE		A		1	S	8/2/2011	6.559	VG	5,240	\$20,960,000	401		
2230720	Q	278I SB (BQE EAST LEG)	278I NB (BQE WEST LEG)		A		3	S	7/22/2011	6.182	VG	20,896	\$83,584,000	401		
2230730	Q	31ST AVE	278I NB (BQE WEST LEG)		A		1	S	7/15/2011	6.217	VG	5,875	\$23,500,000	401		
2230740	Q	278I SB (BQE WEST LEG)	31ST AVE		A		1	S	8/1/2011	6.217	VG	5,246	\$20,984,000	401		
2230750	Q	278I SB (BQE EAST LEG)	31ST AVE		A		1	S	8/1/2011	6.508	VG	4,221	\$16,884,000	401	403	
2230760	Q	278I NB (BQE EAST LEG)	31ST AVE		A		1	S	10/4/2010	6.610	VG	4,161	\$16,644,000	401		

INVENTORY SORTED BY B.I.N.

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2230770	Q	278I (BQE WEST LEG)	30TH AVE		A		1	S	6/15/2011	6.322	VG	6,199	\$24,796,000	401		
2230780	Q	278I (BQE EAST LEG)	30TH AVE		A		1	S	6/14/2011	6.206	VG	7,071	\$28,284,000	403	401	
2230790	Q	BULOVA AVE	278I (BQE WEST LEG)		A		2	S	4/23/2010	5.333	G	3,300	\$13,200,000	401		
2230800	Q	49TH ST	278I (BQE WEST LEG)		A		2	S	4/23/2010	5.333	G	4,900	\$19,600,000	401		
2230810	Q	ASTORIA BLVD EB	278I (BQE WEST LEG)		A		4	S	8/23/2011	4.044	F	8,200	\$32,800,000	401		
2230820	Q	47TH ST	GCP		A		2	S	5/21/2010	4.944	F	5,700	\$22,800,000	401		
2230830	Q	278I NB (BQE WEST LEG)	GCP		A		2	S	5/20/2010	4.583	F	7,600	\$30,400,000	401		
2230840	Q	44TH ST	GCP		A		2	S	5/21/2010	4.681	F	5,000	\$20,000,000	401		
2230857	K	278I WB (B.Q.E.)	JORALEMON ST		A		1	S	3/18/2010	5.000	G	2,100	\$8,400,000	302		
2230858	K	278I EB (B.Q.E.)	JORALEMON ST / BQE WB		A		2	S	10/9/2011	4.619	F	5,900	\$23,600,000	302		
2230869	Q	QUEENS BLVD	ACCESS RD BQE S.B.		A		1	S	11/8/2010	5.727	G	7,900	\$31,600,000	402		
2230870	K	COLUMBIA HEIGHTS	278I (B.Q.E.)		A		1	S	7/21/2010	4.550	F	16,500	\$66,000,000	302		
2230887	K	278I W.B. (B.Q.E.)	CADMAN PLAZA		A		2	S	7/20/2010	4.397	F	4,500	\$18,000,000	302		
2230888	K	278I E.B. (B.Q.E.)	CADMAN PLAZA / 278I WB		A		2	S	7/23/2010	5.263	G	4,500	\$18,000,000	302		
2230890	Q	49TH ST	GCP		A		2	S	5/20/2010	4.444	F	6,350	\$25,400,000	401		
2231249	K	BSHP	BAY RIDGE AVE		A		1	S	5/12/2011	3.313	F	4,900	\$19,600,000	310		
2231250	K	81ST ST PED BRDG	BSHP		A-PED	P	5	C	2/11/2011	4.403	F	3,100	\$12,400,000	310		
2231260	K	92ND ST PED BRDG	BSHP		A-PED	P	6	C	7/30/2010	3.952	F	3,000	\$12,000,000	310		
2231270	K	4TH AVE	BSHP		A		2	S	3/31/2010	4.684	F	6,100	\$24,400,000	310		
2231290	K	BAY 8TH ST	BSHP		A		1	S	5/14/2011	5.952	G	4,950	\$19,800,000	311		
2231300	K	17TH AVE PED BRDG	BSHP		A-PED	P	1	C	9/1/2011	3.559	F	2,100	\$8,400,000	311		
2231319	K	BSHP	BAY PKWY		A		1	S	6/21/2011	4.442	F	7,200	\$28,800,000	311		
2231329	K	BSHP	26TH AVE		A		1	S	4/30/2010	4.600	F	6,700	\$26,800,000	313		
2231330	K	27TH AVE PED BRDG	BSHP		A-PED	P	1	C	2/23/2011	4.106	F	2,100	\$8,400,000	313		
2231340	K	CROPSY AVE	BSHP		A		2	S	6/15/2010	4.583	F	13,100	\$52,400,000	313		
2231360	K	BSHP	OCEAN PKWY		A		3	S	7/16/2010	6.535	VG	29,637	\$118,548,000	313		
2231370	K	GUIDER AV RAMP TO BSHP	BSHP		A		4	S	10/24/2011	3.292	F	12,800	\$51,200,000	313		
2231380	K	CONEY ISLAND AVE	BSHP		A		4	S	9/20/2011	5.986	G	19,866	\$79,464,000	313		
2231390	K	E 12TH ST	BSHP		A		4	S	6/18/2010	4.694	F	17,200	\$68,800,000	315		
2231409	K	BSHP	SHEEPSHEAD BAY ROAD		A		1	S	4/27/2010	4.836	F	6,500	\$26,000,000	315		
2231419	K	BSHP	OCEAN AVE		A		3	S	4/27/2010	4.083	F	14,000	\$56,000,000	315		
2231429	K	BSHP	BEDFORD AVE		A		3	S	4/29/2010	4.097	F	12,000	\$48,000,000	315		
2231439	K	BSHP	NOSTRAND AVE		A		3	S	4/29/2010	3.986	F	13,000	\$52,000,000	315		
2231449	K	KNAPP ST	BSHP		A		1	S	4/28/2010	4.391	F	9,500	\$38,000,000	315		
2231450	K	BSHP	GERRITSEN INLET		WA		11	S	8/4/2011	3.463	F	52,000	\$208,000,000	356		
2231460	K	FLATBUSH AVE	BSHP		A		2	S	9/22/2011	6.250	VG	14,058	\$56,232,000	356		
2231479	K	BSHP	MILL BASIN		WMA		14	S	10/30/2011	3.313	F	73,500	\$294,000,000	318		
2231489	K	BSHP	PAERDEGAT BASIN		WA		15	S	11/9/2011	3.222	F	58,300	\$233,200,000	318		
2231499	K	BSHP	ROCKAWAY PKWY		A		4	S	10/16/2011	3.792	F	11,500	\$46,000,000	356		

INVENTORY SORTED BY B.I.N.

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2231509	K	BSHP	FRESH CREEK		WA		5	S	11/4/2011	3.139	F	23,000	\$92,000,000	356		
2231519	K	PENNSYLVANIA AVE	BSHP		A		2	S	5/20/2011	5.694	G	6,640	\$26,560,000	356		
2231559	Q	CROSS BAY BLVD	BSHP		A		4	S	6/15/2010	5.139	G	23,205	\$92,820,000	410		
2231560	Q	S CONDUIT BLVD	BSOP		A		2	S	7/27/2010	5.465	G	15,776	\$63,104,000	410		
2231570	Q	COHANCY ST	BSOP		A		2	S	5/10/2010	4.368	F	6,400	\$25,600,000	410		
2231590	Q	130TH ST	BSOP		A		2	S	2/2/2010	4.659	F	6,800	\$27,200,000	410		
2231610	Q	GUY R. BREWER BLVD	BSOP		A		4	S	6/2/2011	6.222	VG	12,342	\$49,368,000	413		
2231620	Q	FARMERS BLVD	BSOP		A		2	S	5/17/2010	4.568	F	6,400	\$25,600,000	413		
2231630	Q	SPRINGFIELD BLVD	BSOP		A		2	S	5/19/2010	4.614	F	8,500	\$34,000,000	413		
2231640	Q	225TH ST	BSOP		A		2	S	5/20/2010	5.000	G	7,000	\$28,000,000	413		
2231650	Q	SUNRISE HWY W.B.	BLP E.B.		A		1	S	4/26/2010	4.393	F	4,100	\$16,400,000	413		
2231660	Q	SUNRISE HWY W.B.	BLP W.B.		A		2	S	3/11/2010	4.565	F	5,350	\$21,400,000	413		
2231670	Q	N CONDUIT AVE WB	BLP E.B.		A		1	S	1/26/2010	4.917	F	4,000	\$16,000,000	413		
2231680	Q	N CONDUIT AVE WB	BLP W.B.		A		2	S	1/27/2010	4.932	F	6,500	\$26,000,000	413		
2231690	Q	FRANCIS LEWIS BLVD	BLP E.B.		A		1	S	4/13/2010	5.167	G	6,000	\$24,000,000	413		
2231700	Q	FRANCIS LEWIS BLVD	BLP W.B.		A		1	S	4/13/2010	4.833	F	6,000	\$24,000,000	413		
2231710	Q	MERRICK BLVD	BLP N.B.		A		1	S	2/22/2010	4.533	F	6,000	\$24,000,000	413		
2231720	Q	MERRICK BLVD	BLP S.B.		A		1	S	2/22/2010	4.200	F	6,000	\$24,000,000	413		
2231730	Q	130TH AVE	BLP N.B.		A		1	S	1/21/2010	5.267	G	4,400	\$17,600,000	413		
2231740	Q	130TH AVE	BLP S.B.		A		1	S	1/20/2010	4.833	F	4,400	\$17,600,000	413		
2231750	Q	LINDEN BLVD	BCIP		A		2	S	3/8/2010	4.432	F	6,700	\$26,800,000	413		
2231760	Q	BCIP	DUTCH BROADWAY-115 AVE		A		1	S	3/8/2010	4.395	F	7,300	\$29,200,000	413		
2231770	Q	BELMONT PARK RAMP	BCIP		A	P	1	S	2/8/2010	4.688	F	3,200	\$12,800,000	413		
2231780	Q	HEMPSTEAD AVE	BCIP		A		2	S	2/8/2010	3.968	F	14,200	\$56,800,000	413		
2231790	Q	BELMONT PARK RAMP	BCIP		A	P	1	S	1/14/2010	4.563	F	3,400	\$13,600,000	413		
2231800	Q	SUPERIOR ROAD	BCIP		A		2	S	4/13/2010	4.136	F	7,000	\$28,000,000	413		
2231819	Q	JAMAICA AVE	BCIP		A		2	S	3/25/2010	4.773	F	11,500	\$46,000,000	413		
2231829	Q	BRADDOCK AVE	BCIP		A		2	S	8/5/2011	4.591	F	10,600	\$42,400,000	413		
2231840	Q	HILLSIDE AVE	BCIP		A		2	S	4/8/2010	4.079	F	9,672	\$38,688,000	413		
2231850	Q	UNION TPKE	BCIP		A		2	S	4/1/2010	4.409	F	13,600	\$54,400,000	413		
2231860	Q	W ALLEY ROAD	BCIP		A		2	S	7/20/2011	5.474	G	7,200	\$28,800,000	411		
2231870	Q	NORTHERN BLVD	BCIP		A		2	S	9/21/2010	6.125	VG	9,400	\$37,600,000	411		
2231880	Q	CROCHERON PK PED	BCIP		A-PED	P	9	C	6/23/2011	4.188	F	2,300	\$9,200,000	411		
2231890	Q	28TH AVE PED BRDG	BCIP		A-PED	P	24	C	6/6/2011	4.517	F	7,600	\$30,400,000	411		
2231900	Q	BCIP	TOTTEN AVE		A		1	S	6/23/2010	4.641	F	4,900	\$19,600,000	407		
2231910	Q	UTOPIA PKWY	BCIP		A		2	S	3/19/2010	5.114	G	7,200	\$28,800,000	407		
2231920	Q	160TH ST	BCIP		A		2	S	6/27/2011	5.750	G	5,550	\$22,200,000	407		
2231930	Q	FRANCIS LEWIS BLVD	BCIP		A		3	S	2/5/2010	4.682	F	9,100	\$36,400,000	407		
2231940	Q	CLINTONVILLE ST	BCIP		A		2	S	2/5/2010	4.659	F	7,400	\$29,600,000	407		

INVENTORY SORTED BY B.I.N.

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2231950	Q	150TH ST	BCIP		A		2	S	2/18/2010	4.614	F	5,900	\$23,600,000	407		
2231960	Q	149TH ST	BCIP		A		2	S	2/18/2010	4.795	F	6,210	\$24,840,000	407		
2231970	Q	14TH AVE	BCIP		A		2	S	2/18/2010	4.614	F	8,100	\$32,400,000	407		
2231980	Q	147TH ST	BCIP		A		2	S	3/10/2010	4.705	F	6,300	\$25,200,000	407		
2232000	M	BATTERY PLACE	FDR DRIVE		AT		2	S	12/21/2011	5.318	G	142,000	\$568,000,000	101		
223201A	M	FDR DR N.B. OFF RMP	FDR DR & SOUTH ST		AR		17	S	4/29/2010	3.597	F	23,373	\$93,492,000	101		
223201B	M	STH ST RMP TO FDR S.B.	SOUTH ST		AR		10	S	7/13/2011	3.731	F	44,625	\$178,500,000	101		
223201C	M	FDR DR S.B. OFF RMP	SOUTH ST		AR		8	S	2/5/2010	4.821	F	39,150	\$156,600,000	103		
223201D	M	RAMP TO N.B. FDR DRIVE	FDR & SOUTH ST.		AR		22	S	2/18/2010	5.033	G	15,825	\$63,300,000	101	103	
2232029	M	CORLEARS PARK ROAD	FDR DRIVE		A	P	4	S	3/19/2010	3.938	F	4,100	\$16,400,000	103		
2232030	M	DELANCEY ST PED BRDG	FDR DRIVE		A-PED	P	12	C	2/6/2011	4.217	F	2,900	\$11,600,000	103		
2232040	M	HOUSTON ST	FDR DRIVE		A		2	S	5/13/2011	3.955	F	11,010	\$44,040,000	103		
223204A	M	FDR NB RAMP TO HOUSTON ST	RELIEF		AR		4	S	1/20/2010	4.471	F	6,150	\$24,600,000	103		
223204B	M	HOUSTON ST RAMP TO FDR NB	RELIEF		AR		4	S	1/22/2010	4.625	F	7,125	\$28,500,000	103		
2232050	M	E 6TH ST PED BRDG	FDR DRIVE		A-PED	P	19	C	3/11/2011	4.150	F	2,200	\$8,800,000	103		
2232070	M	E 25TH ST PED BRDG	FDR DRIVE		A-PED		3	C	2/20/2011	4.627	F	1,700	\$6,800,000	106		
2232100	M	E 51ST ST PED BRDG	FDR DRIVE		A-PED	P	6	C	2/20/2011	4.400	F	2,800	\$11,200,000	106		
2232110	M	E 64TH ST PED BRDG	FDR DRIVE		A-PED	P	11	U	11/23/2011	4.912	F	2,100	\$8,400,000	108		
2232120	M	E 71ST ST PED BRDG	FDR DRIVE		A-PED	P	19	C	8/15/2010	5.000	G	340	\$1,360,000	108		
2232140	M	E 78TH ST PED BRDG	FDR DRIVE		A-PED	P	9	C	4/18/2010	2.711	P	3,120	\$12,480,000	108		
2232167	M	PROMENADE OVER FDR	FDR - E81ST ST - E90TH ST		A-PED	P	53	S	7/9/2009	3.857	F	93,000	\$372,000,000	108		
2232180	M	E 103RD ST PED BRDG	FDR DRIVE		A-PED		18	C	9/18/2011	4.447	F	4,800	\$19,200,000	111		
2232190	M	E 111TH ST PED BRDG	FDR DRIVE		A-PED	P	9	C	8/19/2010	4.353	F	4,200	\$16,800,000	111		
2232200	M	E 120TH ST PED BRDG	FDR DRIVE		A-PED	P	18	C	8/8/2010	4.259	F	3,978	\$15,912,000	111		
2233020	M	E 10TH ST PED BRDG	FDR DRIVE		A-PED	P	21	C	3/11/2011	4.038	F	2,754	\$11,016,000	103		
2233038	M	FDR DRIVE SB	FDR NB / E 62ND ST		AT		34	S	12/21/2010	6.563	VG	58,700	\$234,800,000	106	108	
2233040	M	E 60TH ST	FDR DRIVE		A		17	S	7/13/2011	4.806	F	24,480	\$97,920,000	108		
2233059	M	HARLEM RIVER DRIVE	RAMP TO & FROM HRD N.B.		A		11	S	6/22/2011	3.239	F	51,000	\$204,000,000	111		
2233080	K	E 14 ST PED BRDG	BSHP		A-PED		14	C	7/13/2010	4.213	F	4,700	\$18,800,000	315		
2240019	KM	BROOKLYN BRIDGE	EAST RIVER		WEO		75	S	11/2/2010	2.944	P	503,788	\$2,015,152,000	103	302	101
224001A	M	PARK ROW TO BKLN	WILLIAM ST N.B.		OE		4	S	6/21/2011	3.972	F	10,167	\$40,668,000	101		
224001B	M	TO BKLN FRM FDR	FRANKFRT & CITY		OE		31	S	12/9/2010	3.778	F	51,400	\$205,600,000	101	103	
224001C	M	PEARL ST TO BKLN	LAND ADJ TO BRDG		OE		9	S	6/29/2011	3.746	F	6,365	\$25,460,000	101		
224001D	M	TO FDR DR N.B.	PEARL STREET		OE		30	S	7/15/2011	4.868	F	49,600	\$198,400,000	101	103	
224001E	M	TO PEARL ST	LAND ADJ TO BRDG		OE		3	S	6/28/2011	5.141	G	5,300	\$21,200,000	101		
224001F	M	PEARL ST TO FDR DR	LAND ADJ TO BRDG		OE		3	S	6/21/2011	5.225	G	5,200	\$20,800,000	103		
224001G	M	TO PARK ROW	ROSE ST		OE		11	S	5/28/2010	4.521	F	16,551	\$66,204,000	101		
2240027	KM	MANHATTAN BRIDGE(LL)	EAST RIVER	T	WEO		23	S	12/17/2010	4.806	F	616,390	\$2,465,560,000	103	302	
2240028	KM	MANHATTAN BRIDGE(UL)	NYCTA TRACKS-BMT	T	WEO		43	S	12/17/2010	4.071	F	587,424	\$2,349,696,000	103	302	

INVENTORY SORTED BY B.I.N.

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2240039	KM	WILLIAMSBURG BRIDGE	EAST RIVER	T	WEO		53	S	11/12/2010	4.653	F	824,000	\$3,296,000,000	103	301	
2240047	MQ	QUEENSBORO BRIDGE (LL)	EAST RIVER	AL	WEO		53	S	11/4/2010	4.208	F	626,900	\$2,507,600,000	108	402	401
2240048	MQ	QUEENSBORO BRIDGE (UL)	EAST RIVER - LL		WEO		37	S	11/4/2010	4.189	F	322,300	\$1,289,200,000	108	402	401
224004A	M	TO E 60TH ST FROM QNS	FIRST AVE		OE		13	S	4/12/2010	5.394	G	14,800	\$59,200,000	108		
224004B	M	TO QNS FRM E 59TH ST	FIRST AVE		OE		13	S	4/13/2010	5.708	G	14,800	\$59,200,000	108		
224004C	M	TO E 62ND ST FROM QNS	E 60TH - E 61ST ST		OE		10	S	9/24/2010	4.985	F	16,720	\$66,880,000	108		
224004D	M	TO QNS FROM E 58TH ST	E 59TH ST		OE		12	S	6/18/2010	4.321	F	11,781	\$47,124,000	106	108	
224004E	Q	TO NY FR THOMSON AVE	JACKSON AVE	L	OE		94	S	12/16/2010	4.717	F	104,600	\$418,400,000	402		
224004F	Q	TO NY FROM 21ST ST	21ST ST		OE		63	S	11/24/2010	4.712	F	63,310	\$253,240,000	402	401	
224004G	Q	TO NY FROM 11TH ST	TERRAIN (CHAMBER)		OE		36	S	9/10/2010	5.268	G	8,360	\$33,440,000	401	402	
224004H	Q	TO 21ST ST FROM NY	22ND ST		OE		43	S	11/23/2010	4.268	F	48,100	\$192,400,000	402		
224004I	Q	TO THOMSON AVE FROM NY	JACKSON AVE	L	OE		39	S	12/16/2010	4.951	F	59,100	\$236,400,000	402		
224004J	M	25X	NYC GARAGE		OE		14	S	4/23/2010	4.780	F	22,058	\$88,232,000	108		
2240059	BM	WILLIS AVENUE	HARLEM RIVER		WMO		26	S	12/22/2010	6.403	VG	171,105	\$684,420,000	111	201	
224005A	M	FROM FDR DRIVE	HARLEM RIVER DR		OR		19	S	12/22/2010	6.625	VG	28,233	\$112,932,000	111		
224005B	B	FROM BRUCKNER BLVD	RELIEF		OR		5	S	10/24/2011	6.746	VG	12,100	\$48,400,000	201		
2240069	BM	THIRD AVE BRIDGE	HARLEM RIVER		WMO		14	S	8/24/2010	6.521	VG	100,232	\$400,928,000	111	201	
224006A	B	FROM BRUCKNER BLVD	RELIEF		OR		5	S	9/28/2011	6.761	VG	14,037	\$56,148,000	201		
2240079	BM	MADISON AVE BRIDGE	HARLEM RIVER		WMO		21	S	9/30/2010	4.944	F	80,000	\$320,000,000	111	201	
224007A	M	TO MADISON AVENUE	E 138TH ST		OR		7	S	3/20/2010	5.225	G	19,880	\$79,520,000	111		
2240089	BM	145TH ST BRIDGE	HARLEM RIVER		WMO		8	S	9/23/2011	6.250	VG	56,700	\$226,800,000	110	204	201
2240120	BM	W 207TH/W FORDHAM RD	HARLEM RIVER		WMO		5	S	8/20/2010	5.222	G	31,784	\$127,136,000	112	207	
2240137	BM	BROADWAY BRIDGE	HARLEM RIVER	TM	WMO		3	S	12/28/2010	3.972	F	46,848	\$187,392,000	112	207	208
2240138	BM	NYCTA IRT	HARLEM RVR/BROADWAY	TM	WMO		3	S	11/21/2011	4.720	F	19,520	\$78,080,000	112	207	208
2240180	B	WESTCHESTER AVE	BRONX RIVER		WO		1	S	9/16/2011	4.608	F	5,476	\$21,904,000	202	209	
2240200	B	SHORE ROAD	HUTCHINSON RIVER		WMO		7	S	6/21/2011	4.537	F	43,576	\$174,304,000	228		
2240210	B	CITY ISLAND ROAD	EASTCHESTER BAY		WO		7	S	10/21/2011	3.389	F	19,915	\$79,660,000	228		
2240231	K	HAMILTON AVE BRIDGE	GOWANUS CANAL		WMO		3	S	10/8/2010	5.472	G	7,300	\$29,200,000	307	306	
2240232	K	HAMILTON AVE BRIDGE	GOWANUS CANAL		WMO		3	S	9/7/2011	5.306	G	7,300	\$29,200,000	306		
2240240	K	NINTH ST BRIDGE	GOWANUS CANAL		WMO		3	S	5/27/2011	6.581	VG	5,772	\$23,088,000	306		
2240250	K	THIRD ST	GOWANUS CANAL		WMO		5	S	5/19/2011	4.903	F	4,900	\$19,600,000	306		
2240260	K	CARROLL ST	GOWANUS CANAL		WMO		2	S	6/16/2011	4.634	F	3,000	\$12,000,000	306		
2240270	K	UNION ST	GOWANUS CANAL		WMO		5	S	9/3/2010	4.000	F	4,900	\$19,600,000	306		
2240290	K	METROPOLITAN AVE	ENGLISH KILLS		WMO		5	S	6/28/2011	6.000	G	10,550	\$42,200,000	301		
2240301	K	CROPSSEY AVE	CONEY ISLAND CREEK		WO		3	S	6/10/2011	5.225	G	9,400	\$37,600,000	313		
2240302	K	CROPSSEY AVE	CONEY ISLAND CREEK		WO		3	S	11/15/2011	4.831	F	9,400	\$37,600,000	313		
2240310	K	THIRD AVE	GOWANUS CANAL		WO		1	S	5/18/2011	6.900	VG	3,200	\$12,800,000	306		
2240320	K	OCEAN AVE PED BRDG	SHEEPSHEAD BAY		WO-PED		30	C	7/19/2010	3.939	F	4,450	\$17,800,000	315		
2240350	R	RICHMOND AVE	RICHMOND CREEK		WO		3	S	6/8/2011	5.472	G	32,589	\$130,356,000	502		

INVENTORY SORTED BY B.I.N.

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2240370	KQ	GREENPOINT AVE BRIDGE	NEWTOWN CREEK	L	WMO		12	S	7/8/2011	5.222	G	76,106	\$304,424,000	301	402	
2240390	KQ	GRAND ST BRIDGE	NEWTOWN CREEK		WMO		2	S	11/23/2011	4.208	F	5,100	\$20,400,000	301	405	
2240410	Q	BORDEN AVE	DUTCH KILLS		WMO		2	S	7/26/2011	4.792	F	8,400	\$33,600,000	402		
2240440	Q	NORTHERN BLVD	ALLEY CREEK		WO		2	S	8/12/2010	4.681	F	8,300	\$33,200,000	411		
2240450	Q	HUNTERS PT AVE	DUTCH KILLS		WMO		4	S	7/30/2010	5.083	G	12,168	\$48,672,000	402		
2240507	Q	ROOSEVELT AVE	6781 - FLUSHING RIVER		WA		27	S	12/8/2010	3.465	F	84,424	\$337,696,000	407	481	
2240540	K	STILLWELL AVE	CONEY ISLAND CRK		WO		2	S	5/27/2011	6.292	VG	17,000	\$68,000,000	313		
2240620	M	WARDS ISLAND PED BRDG	HARLEM RIVER		WMO-PED		10	C	11/1/2008	4.367	F	12,600	\$50,400,000	111		
2240639	KQ	PULASKI BRIDGE	NEWTOWN CREEK		WMO		44	S	4/29/2010	4.606	F	205,770	\$823,080,000	301	402	
2240640	MQ	ROOSEVELT ISLAND BRDG	E. RIVER E. CHANNEL		WMO		8	S	11/17/2011	5.611	G	36,500	\$146,000,000	108	401	
2240650	Q	163RD AVE PED BRDG	HAWTREE BASIN		WO-PED		13	C	9/19/2011	4.174	F	5,000	\$20,000,000	410		
2240660	Q	RIKERS ISLAND BRIDGE	RIKERS ISL CHANNEL		WO		56	S	11/16/2011	4.324	F	183,100	\$732,400,000	401	480	
2241000	B	WESTCHESTER AVE	CSX TRANS - PT MORRIS	C	O		1	S	6/16/2010	4.660	F	1,740	\$6,960,000	201		
2241010	B	E 156TH STREET	CSX TRANS - PT MORRIS	C	O		1	S	7/16/2010	4.556	F	2,400	\$9,600,000	201		
2241020	B	E 161ST STREET	CSX TRANS - PT MORRIS	C	O		1	S	5/20/2010	6.700	VG	12,800	\$51,200,000	203		
2241030	B	E 163RD STREET	CSX TRANS - PT MORRIS	C	O		1	S	3/10/2010	4.833	F	3,200	\$12,800,000	203		
2241040	B	THIRD AVE	CSX TRANS - PT MORRIS	C	O		1	S	9/28/2010	4.563	F	2,700	\$10,800,000	201	203	
2241050	B	E 149TH ST/JACKSON AVE	CSX TRANS - PT MORRIS	C	O		1	S	6/15/2010	4.850	F	65,000	\$260,000,000	201		
2241060	B	ST. MARYS & CONCORD	CSX TRANS - PT MORRIS	C	O		1	S	9/16/2010	5.370	G	4,500	\$18,000,000	201		
2241070	B	WALES AVE	CSX TRANS - PT MORRIS	C	O		1	S	9/27/2010	6.567	VG	2,535	\$10,140,000	201		
2241080	B	SOUTHERN BLVD	CSX TRANS - PT MORRIS	C	O		1	S	9/17/2010	4.167	F	3,900	\$15,600,000	201		
2241099	B	BRUCKNER BLVD	CSX TRANS - PT MORRIS	C	O		1	S	9/17/2010	6.583	VG	6,700	\$26,800,000	201		
2241110	B	MELROSE AVE	CSX TRANS - PT MORRIS	C	O		8	S	8/3/2011	5.611	G	37,854	\$151,416,000	203		
2241129	B	E 149TH ST	AMTRAK - CSX	AC	O		2	S	11/29/2010	4.620	F	18,258	\$73,032,000	201	202	
2241139	B	LEGGETT AVE	AMTRAK - CSX	AC	O		3	S	12/6/2010	4.690	F	41,551	\$166,204,000	202		
2241159	B	LONGWOOD AVE	AMTRAK - CSX	AC	O		2	S	11/22/2010	5.306	G	10,625	\$42,500,000	202		
2241169	B	LAFAYETTE AVE	AMTRAK - CSX	AC	O		1	S	12/6/2010	5.730	G	12,000	\$48,000,000	202		
2241170	B	TIFFANY ST	AMTRAK - CSX	AC	O		1	S	11/1/2011	5.627	G	7,267	\$29,068,000	202		
2241180	B	BARRETTO ST	AMTRAK - CSX	AC	O		1	S	12/2/2010	6.000	G	5,313	\$21,252,000	202		
2241190	B	HUNTS POINT AVE	AMTRAK - CSX	AC	O		1	S	12/2/2010	4.984	F	10,049	\$40,196,000	202		
2241200	B	FAILE ST	AMTRAK - CSX	AC	O		1	S	12/20/2010	5.578	G	6,208	\$24,832,000	202		
2241210	B	BRYANT AVE	AMTRAK - CSX	AC	O		1	S	11/7/2011	3.119	F	5,300	\$21,200,000	202		
2241230	B	WESTCHESTER AVE	AMTRAK - CSX	AC	O		3	S	11/29/2010	5.944	G	15,600	\$62,400,000	202	209	
2241259	B	204TH ST PED BRDG	METRO NORTH RR HAR	M	O-PED	P	1	C	3/4/2009	4.034	F	4,700	\$18,800,000	227	207	
2241269	B	E 177TH ST	AMTRAK - CSX	AC	O		3	S	10/4/2010	5.403	G	16,606	\$66,424,000	206		
2241270	B	E TREMONT AVE	AMTRAK - CSX	AC	O		2	S	10/1/2010	5.153	G	22,300	\$89,200,000	209	211	
2241329	B	WHITE PLAINS ROAD	AMTRAK - CSX	AC	O		1	S	9/14/2010	4.719	F	6,900	\$27,600,000	211		
2241330	B	UNIONPORT ROAD	AMTRAK - CSX	AC	O		1	S	9/14/2010	4.781	F	7,631	\$30,524,000	211		
2241369	B	WILLIAMSBRIDGE RD	AMTRAK - CSX	AC	O		2	S	10/1/2010	4.836	F	6,510	\$26,040,000	211		

INVENTORY SORTED BY B.I.N.

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2241380	B	PELHAM BAY PK EQUES	AMTRAK - CSX	AC	O-PED	P	1	C	3/7/2009	3.508	F	4,223	\$16,892,000	228		
2241390	B	SHORE RD CIRCLE	AMTRAK - CSX	AC	O		2	S	11/12/2011	3.569	F	4,800	\$19,200,000	228		
2241409	B	GRAND CONCOURSE	METRO NORTH RR HUD	MT	O		1	S	6/1/2010	3.797	F	14,300	\$57,200,000	204		
2241410	B	WALTON AVE	METRO NORTH RR HUD	M	O		1	S	6/1/2010	5.297	G	3,600	\$14,400,000	204		
2241420	B	GERARD AVE	METRO NORTH RR HUD	M	O		1	S	5/18/2010	5.797	G	5,063	\$20,252,000	204		
2241430	B	RIVER AVE	METRO NORTH RR HUD	M	O		1	S	7/13/2011	6.156	VG	5,040	\$20,160,000	204		
2241460	B	W TREMONT AVE	METRO NORTH RR HUD	M	O		8	S	6/14/2010	4.164	F	12,900	\$51,600,000	205		
2241470	B	W FORDHAM RD	METRO NORTH RR HUD	M	O		4	S	7/14/2011	5.694	G	16,052	\$64,208,000	207		
2241489	B	W 225TH ST	CSX TRASP - PUTNAM	C	O		2	S	6/11/2010	5.149	G	10,900	\$43,600,000	207	208	
2241490	B	W 230TH ST	CONRAIL (ABANDONED) PUTNAM		O		1	S	4/8/2011	5.563	G	5,600	\$22,400,000	208		
2241509	B	W 231ST ST	CONRAIL (ABANDONED) PUTNAM		O		1	S	9/29/2010	4.745	F	4,723	\$18,892,000	208		
2241510	B	W 233RD ST	CONRAIL (ABANDONED) PUTNAM		O		1	S	4/7/2011	5.275	G	3,760	\$15,040,000	208		
2241520	B	W 234TH ST	CONRAIL (ABANDONED) PUTNAM		O		1	S	4/7/2011	5.176	G	3,770	\$15,080,000	208		
2241550	B	E 144TH ST	METRO NORTH RR HAR	M	O		2	S	7/11/2011	6.264	VG	8,290	\$33,160,000	201		
2241560	B	E 149TH ST	METRO NORTH RR HAR	M	O		8	S	5/27/2010	4.819	F	27,900	\$111,600,000	201	204	
2241590	B	CONCOURSE VILL AVE	METRO NORTH RR HAR	M	O		1	S	5/13/2010	4.031	F	12,077	\$48,308,000	204		
2241600	B	E 158TH ST	METRO NORTH RR HAR	M	O		1	S	7/12/2011	5.200	G	3,400	\$13,600,000	204		
2241610	B	E 161ST ST	METRO NORTH RR HAR	M	O		1	S	10/12/2011	5.017	G	6,600	\$26,400,000	204	203	
2241620	B	E 162ND ST	METRO NORTH RR HAR	M	O		1	S	5/1/2010	4.859	F	4,700	\$18,800,000	203		
2241630	B	E 165TH ST	METRO NORTH RR HAR	M	O		1	S	4/29/2010	4.217	F	16,400	\$65,600,000	203		
2241650	B	E 167TH ST	METRO NORTH RR HAR	M	O		1	S	4/27/2010	5.510	G	3,363	\$13,452,000	203		
2241660	B	E 168TH ST	METRO NORTH RR HAR	M	O		1	S	4/26/2010	4.797	F	4,800	\$19,200,000	203		
2241670	B	E 169TH ST	METRO NORTH RR HAR	M	O		1	S	4/23/2010	4.250	F	3,300	\$13,200,000	203		
2241680	B	E 170TH ST	METRO NORTH RR HAR	M	O		1	S	4/22/2010	6.333	VG	3,150	\$12,600,000	203		
2241700	B	ST PAULS PL PED BRDG	METRO NORTH RR HAR	M	O-PED		2	C	2/10/2009	5.000	G	600	\$2,400,000	203		
2241710	B	CLAREMONT PKWY	METRO NORTH RR HAR	M	O		1	S	4/21/2010	4.422	F	6,300	\$25,200,000	203		
2241720	B	E 173RD ST	METRO NORTH RR HAR	M	O		1	S	4/20/2010	4.875	F	3,000	\$12,000,000	203		
2241740	B	E 175TH ST	METRO NORTH RR HAR	M	O		1	S	4/19/2010	3.922	F	3,600	\$14,400,000	206		
2241760	B	E TREMONT AVE	METRO NORTH RR HAR	M	O		1	S	7/6/2011	6.450	VG	8,424	\$33,696,000	206		
2241770	B	E 178TH ST PED BRDG	METRO NORTH RR HAR	M	O-PED		1	C	2/11/2009	5.159	G	700	\$2,800,000	206		
2241780	B	E 179TH ST PED BRDG	METRO NORTH RR HAR	M	O-PED		6	C	2/11/2009	5.797	G	700	\$2,800,000	206		
2241790	B	E 180TH ST	METRO NORTH RR HAR	M	O		1	S	4/19/2010	3.906	F	5,000	\$20,000,000	206		
2241800	B	E 183TH ST	METRO NORTH RR HAR	M	O		1	S	4/14/2010	4.109	F	4,080	\$16,320,000	206		
2241810	B	E 188TH ST	METRO NORTH RR HAR	M	O		1	S	4/12/2010	4.063	F	5,300	\$21,200,000	206		
2241820	B	E 187TH ST	METRO NORTH RR HAR	M	O		1	S	4/13/2010	4.344	F	3,800	\$15,200,000	206		
2241839	B	E 189TH ST	METRO NORTH RR HAR	M	O		1	S	7/6/2011	6.333	VG	43,157	\$172,628,000	206	207	
2241840	B	BEDFORD PARK BLVD	METRO NORTH RR HAR	M	O		1	S	5/13/2010	4.844	F	6,400	\$25,600,000	227	207	
2241860	B	GUN HILL RD	METRO NORTH RR HAR	M	O		1	S	5/17/2010	6.531	VG	9,128	\$36,512,000	212		
2241870	B	E 233RD ST	METRO NORTH RR HAR	M	O		1	S	5/17/2010	4.941	F	7,664	\$30,656,000	212	207	

INVENTORY SORTED BY B.I.N.

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2241890	B	E 241ST ST	BRP, METRO NORTH HAR	M	WO		28	S	10/5/2011	4.306	F	49,500	\$198,000,000	212		
2241900	B	EASTCHESTER ROAD	NYCTA-DYRE AVE LN	T	O		3	S	11/16/2010	4.556	F	13,500	\$54,000,000	212		
2241910	B	GUN HILL ROAD	NYCTA-DYRE AVE LN	T	O		1	S	11/12/2010	5.750	G	7,500	\$30,000,000	211	212	
2241930	B	BEDFORD PARK BLVD	NYCTA IND YARDS	T	O		4	S	11/11/2010	5.514	G	46,300	\$185,200,000	207		
2241940	B	W 205TH ST	NYCTA IND YARDS	T	O		4	S	11/11/2010	5.625	G	32,508	\$130,032,000	207		
2241959	B	HUTCHINSON RVR PKWY	AMTRAK - CSX	AC	O		1	S	6/13/2010	5.780	G	15,444	\$61,776,000	210	211	
2242010	B	EAST FORDHAM RD	BRONX RIVER		WA		1	S	4/20/2010	5.207	G	9,200	\$36,800,000	227		
2242029	B	SOUTHERN BLVD	EAST FORDHAM ROAD		O		2	S	2/8/2010	4.553	F	12,900	\$51,600,000	227		
2242030	B	CROTONA AVE	BRONX PELHAM PKWY		O		2	S	2/8/2010	5.447	G	7,600	\$30,400,000	206		
2242071	B	BRONX BLVD S.B.	BRONX RIVER		WO		1	S	5/6/2010	4.633	F	1,800	\$7,200,000	212		
2242072	B	BRONX BLVD N.B.	BRONX RIVER		WO		1	S	5/6/2010	4.967	F	1,800	\$7,200,000	212		
2242081	B	BRONX BLVD S.B.	BRONX RIVER		WO		1	S	5/6/2010	4.467	F	2,800	\$11,200,000	212		
2242082	B	BRONX BLVD N.B.	BRONX RIVER		WO		1	S	5/6/2010	4.467	F	2,800	\$11,200,000	212		
2242099	B	PARK ROAD (204TH ST)	BRONX RIVER		WO		1	S	6/7/2010	4.793	F	4,700	\$18,800,000	212		
2242100	B	BOTANICAL GARDEN ROAD	TWIN LAKES		WO	P	1	S	3/29/2010	4.833	F	2,200	\$8,800,000	227		
2242110	B	BOSTON ROAD	BRONX RIVER		WO		1	S	4/7/2010	4.227	F	6,200	\$24,800,000	227		
2242120	B	FTBG N OF RTE 1	BRONX RIVER		WO-PED	P	1	C	11/29/2010	3.583	F	1,900	\$7,600,000	227		
2242149	B	E TREMONT AVE	BRONX RIVER		WO		2	S	6/3/2010	4.500	F	12,900	\$51,600,000	206		
2242210	B	S OF ALLERTON AVE	BRONX RIVER		WO		3	S	6/7/2010	4.763	F	6,200	\$24,800,000	227		
2242220	B	SNUFF MILL ROAD	BRONX RIVER		WO		2	S	1/15/2010	4.395	F	4,800	\$19,200,000	227		
2242259	B	GRAND CONCOURSE	E 161ST ST		O		1	S	9/15/2010	6.400	VG	27.017	\$108,068,000	204		
2242260	B	EAGLE AVE	E 161ST ST		O		1	S	3/5/2010	5.017	G	2,800	\$11,200,000	201	203	
2242280	B	GRAND CONCOURSE	E 167TH ST		O		2	S	8/20/2010	4.754	F	42,900	\$171,600,000	204		
2242299	B	GRAND CONCOURSE	E 138TH ST		O		1	S	5/25/2011	4.467	F	9,500	\$38,000,000	201		
2242300	B	GRAND CONCOURSE	E 170TH ST		O		2	S	3/26/2010	4.789	F	39,300	\$157,200,000	204		
2242319	B	GRAND CONCOURSE	E 174TH ST	T	O		1	S	3/26/2010	4.067	F	14,900	\$59,600,000	204		
2242329	B	GRAND CONCOURSE	E 175TH ST	T	O		1	S	8/19/2010	4.867	F	11,900	\$47,600,000	205		
2242330	B	GRAND CONCOURSE	E TREMONT AVE		O		1	S	9/28/2011	5.983	G	11,700	\$46,800,000	205		
2242340	B	GRAND CONCOURSE	EAST KINGSBRIDGE		O		2	S	9/9/2010	4.714	F	18,285	\$73,140,000	207		
2242350	B	EAST FORDHAM RD	GRAND CONCOURSE		O		1	S	3/19/2010	4.567	F	10,300	\$41,200,000	205	207	
2242360	B	GRAND CONCOURSE	BURNSIDE AVE		O		2	S	9/15/2010	4.441	F	8,400	\$33,600,000	205		
2242370	B	GRAND CONCOURSE	BEDFORD PARK BLVD		O		1	S	3/18/2010	4.294	F	8,418	\$33,672,000	207		
2242380	B	GRAND CONCOURSE	E 204TH ST		O		1	S	9/26/2011	5.484	G	9,272	\$37,088,000	207		
2242400	B	E 180TH ST	BRONX RIVER		WO		1	S	10/7/2010	4.810	F	4,500	\$18,000,000	206	227	
2242430	B	GUN HILL ROAD	BRONX BLVD		O		4	S	3/17/2010	4.737	F	9,400	\$37,600,000	212		
2242440	B	GUN HILL ROAD	BRONX RIVER		WO		1	S	2/24/2010	4.767	F	8,700	\$34,800,000	212		
2242459	B	E 233RD ST	BRONX RIVER		WO		1	S	3/25/2010	4.367	F	7,000	\$28,000,000	212		
2242460	B	E 233RD ST	ENTR D BNX RVR PKWY		O		1	S	1/18/2010	4.900	F	5,300	\$21,200,000	212		
2243010	K	LINCOLN ROAD	BMT SUBWAY, BRIGHTON	T	O		1	S	12/23/2010	6.722	VG	6,016	\$24,064,000	355		

INVENTORY SORTED BY B.I.N.

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2243020	K	PARKSIDE AVE	BMT SUBWAY, BRIGHTON	T	O		6	S	12/23/2010	4.000	F	48,700	\$194,800,000	314		
2243040	K	CROOKE AVE	BMT SUBWAY, BRIGHTON	T	O		4	S	9/1/2011	4.000	F	6,000	\$24,000,000	314		
2243050	K	CATON AVE	BMT SUBWAY, BRIGHTON	T	O		4	S	8/10/2011	4.500	F	20,800	\$83,200,000	314		
2243080	K	CHURCH AVE	BMT SUBWAY, BRIGHTON	T	O		4	S	8/10/2011	4.545	F	18,200	\$72,800,000	314		
2243100	K	BEVERLY ROAD	BMT SUBWAY, BRIGHTON	T	O		3	S	8/22/2011	3.561	F	4,200	\$16,800,000	314		
2243110	K	CORTELYOU ROAD	BMT SUBWAY, BRIGHTON	T	O		3	S	8/25/2011	6.139	VG	4,810	\$19,240,000	314		
2243120	K	DORCHESTER ROAD	BMT SUBWAY, BRIGHTON	T	O		1	S	12/21/2010	5.882	G	4,825	\$19,300,000	314		
2243130	K	DITMAS AVE	BMT SUBWAY, BRIGHTON	T	O		1	S	10/4/2011	5.723	G	5,150	\$20,600,000	314		
2243140	K	NEWKIRK AVE	BMT SUBWAY, BRIGHTON	T	O		3	S	10/5/2011	4.250	F	4,100	\$16,400,000	314		
2243150	K	FOSTER AVE	BMT SUBWAY, BRIGHTON	T	O		1	S	10/5/2011	4.450	F	3,000	\$12,000,000	314		
2243170	K	STERLING PLACE	FRANKLIN SHUTTLE	T	O		1	S	8/24/2011	6.500	VG	2,300	\$9,200,000	308		
2243180	K	ST JOHNS PLACE	FRANKLIN SHUTTLE	T	O		1	S	8/24/2011	6.781	VG	2,300	\$9,200,000	308		
2243190	K	LINCOLN PLACE	FRANKLIN SHUTTLE	T	O		1	S	1/17/2011	6.797	VG	2,460	\$9,840,000	308		
2243200	K	UNION ST	FRANKLIN SHUTTLE	T	O		2	S	1/3/2011	5.000	G	4,100	\$16,400,000	309		
2243210	K	PRESIDENT ST	FRANKLIN SHUTTLE	T	O		2	S	1/3/2011	5.157	G	2,500	\$10,000,000	309		
2243220	K	CARROLL ST PED BRDG	FRANKLIN SHUTTLE	T	O-PED		3	C	10/26/2011	5.155	G	600	\$2,400,000	309		
2243230	K	CROWN ST	FRANKLIN SHUTTLE	T	O		3	S	10/11/2011	5.097	G	4,060	\$16,240,000	309		
2243240	K	MONTGOMERY ST	FRANKLIN SHUTTLE	T	O		1	S	8/11/2011	5.961	G	2,240	\$8,960,000	309		
2243250	K	WASHINGTON AVE	FRANKLIN SHUTTLE	T	O		1	S	1/4/2011	6.281	VG	3,657	\$14,628,000	309	355	
2243260	K	FLATBUSH AVE	FRANKLIN SHUTTLE	T	O		2	S	1/6/2011	4.961	F	11,300	\$45,200,000	309		
2243279	K	EASTERN PKWY	FRANKLIN SHUTTLE	T	O		1	S	1/5/2011	4.861	F	7,700	\$30,800,000	309	308	
2243280	K	6TH AVE	LIRR ATLANTIC AVE	L	O		9	S	12/30/2010	5.431	G	12,276	\$49,104,000	302		
2243290	K	CARLTON AVE	LIRR ATLANTIC AVE	L	O		7	S	12/29/2010	5.069	G	10,823	\$43,292,000	302		
2243310	K	2ND AVE	LIRR BAY RIDGE	N	O		2	S	12/14/2010	6.472	VG	17,751	\$71,004,000	310		
2243320	K	3RD AVE	LIRR BAY RIDGE	N	O		4	S	9/14/2011	5.083	G	17,230	\$68,920,000	310		
2243330	K	4TH AVE	LIRR BAY RIDGE	NT	O		4	S	8/30/2011	5.653	G	13,668	\$54,672,000	310		
2243340	K	15TH AVE	LIRR BAY RIDGE	N	O		1	S	12/6/2010	4.723	F	3,614	\$14,456,000	311		
2243350	K	60TH ST	LIRR BAY RIDGE	N	O		1	S	8/31/2011	6.133	VG	3,900	\$15,600,000	311		
2243360	K	16TH AVE	LIRR BAY RIDGE	N	O		1	S	12/6/2010	5.350	G	4,345	\$17,380,000	311		
2243370	K	17TH AVE	LIRR BAY RIDGE	N	O		1	S	12/7/2010	4.824	F	3,406	\$13,624,000	312		
2243380	K	18TH AVE	LIRR BAY RIDGE	N	O		1	S	12/7/2010	4.688	F	6,006	\$24,024,000	312		
2243390	K	52ND ST	LIRR BAY RIDGE	N	O		1	S	12/9/2010	6.250	VG	3,293	\$13,172,000	312		
2243400	K	50TH ST	LIRR BAY RIDGE	N	O		2	S	9/1/2011	4.731	F	7,100	\$28,400,000	312		
2243410	K	MCDONALD AVE	LIRR BAY RIDGE	N	O		1	S	12/9/2010	5.047	G	2,760	\$11,040,000	312		
2243420	K	E 3RD ST	LIRR BAY RIDGE	N	O		1	S	9/1/2011	6.517	VG	1,840	\$7,360,000	312		
2243439	K	OCEAN PKWY	LIRR BAY RIDGE	N	O		1	S	12/10/2010	4.927	F	7,000	\$28,000,000	312		
2243440	K	CONY ISLAND AVE	LIRR BAY RIDGE	N	O		1	S	12/2/2010	5.234	G	3,231	\$12,924,000	312		
2243450	K	E 14TH ST	LIRR BAY RIDGE	N	O		1	S	12/2/2010	4.809	F	1,775	\$7,100,000	314		
2243460	K	E 15TH ST PED BRDG	LIRR BAY RIDGE	N	O-PED		3	C	9/16/2008	5.193	G	900	\$3,600,000	314		

INVENTORY SORTED BY B.I.N.

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2243480	K	OCEAN AVE	LIRR BAY RIDGE	N	O		2	S	12/1/2010	4.825	F	5,000	\$20,000,000	314		
2243490	K	BEDFORD AVE	LIRR BAY RIDGE	N	O		6	S	11/24/2010	4.319	F	12,000	\$48,000,000	314		
2243500	K	NOSTRAND AVE	LIRR BAY RIDGE	N	O		2	S	11/30/2010	4.966	F	4,320	\$17,280,000	314		
2243510	K	FLATBUSH AVE	LIRR BAY RIDGE	N	O		2	S	9/16/2011	4.730	F	5,900	\$23,600,000	318		
2243520	K	BROOKLYN AVE	LIRR BAY RIDGE	N	O		3	S	9/9/2011	6.236	VG	4,500	\$18,000,000	318		
2243530	K	AVENUE H	LIRR BAY RIDGE	N	O		2	S	9/9/2011	5.956	G	35,100	\$140,400,000	318		
2243569	K	ATLANTIC AVE	LIRR ATLANTIC AVE	L	O		75	S	5/28/2010	3.676	F	135,100	\$540,400,000	316	305	
2243570	K	86TH ST	BMT SEA BEACH	T	O		1	S	1/24/2011	6.078	VG	12,167	\$48,668,000	313		
2243580	K	5TH AVE	LIRR & SEA BEACH	NT	O		4	S	1/11/2011	4.059	F	12,395	\$49,580,000	310		
2243590	K	6TH AVE	LIRR & SEA BEACH	NT	O		2	S	9/30/2011	6.306	VG	14,382	\$57,528,000	310		
2243600	K	7TH AVE	LIRR & SEA BEACH	NT	O		7	S	1/19/2011	4.778	F	18,628	\$74,512,000	310		
2243610	K	8TH AVE	LIRR & SEA BEACH	NT	O		2	S	9/30/2011	6.181	VG	10,834	\$43,336,000	310		
2243620	K	FORT HAMILTON PKWY	LIRR & SEA BEACH	NT	O		3	S	1/10/2011	4.729	F	14,800	\$59,200,000	310		
2243630	K	11TH AVE	LIRR & SEA BEACH	NT	O		5	S	1/10/2011	5.926	G	9,700	\$38,800,000	310		
2243640	K	13TH AVE	LIRR & SEA BEACH	NT	O		5	S	9/23/2011	4.694	F	16,000	\$64,000,000	310		
2243650	K	14TH AVE	LIRR BAY RIDGE	N	O		1	S	12/23/2010	6.600	VG	4,720	\$18,880,000	311		
2243660	K	NEW UTRECHT AVE	LIRR BAY RIDGE	N	O		1	S	12/23/2010	6.217	VG	2,350	\$9,400,000	311		
2243670	K	15TH AVE	BMT SEA BEACH	T	O		4	S	6/26/2011	6.386	VG	16,020	\$64,080,000	311		
2243680	K	16TH AVE	BMT SEA BEACH	T	O		3	S	2/12/2011	5.370	G	6,816	\$27,264,000	311		
2243690	K	17TH AVE	BMT SEA BEACH	T	O		4	S	2/12/2011	6.327	VG	8,946	\$35,784,000	311		
2243700	K	18TH AVE	BMT SEA BEACH	T	O		1	S	8/25/2011	6.632	VG	5,200	\$20,800,000	311		
2243710	K	19TH AVE	BMT SEA BEACH	T	O		4	S	1/20/2011	4.395	F	4,800	\$19,200,000	311		
2243720	K	20TH AVE	BMT SEA BEACH	T	O		1	S	1/20/2011	6.673	VG	7,000	\$28,000,000	311		
2243730	K	65TH ST	BMT SEA BEACH	T	O		4	S	12/16/2010	5.132	G	12,000	\$48,000,000	311		
2243740	K	BAY PKWY	BMT SEA BEACH	T	O		4	S	12/14/2010	4.816	F	16,800	\$67,200,000	311		
2243750	K	AVENUE O	BMT SEA BEACH	T	O		1	S	9/1/2011	5.706	G	4,658	\$18,632,000	311		
2243760	K	AVENUE P	BMT SEA BEACH	T	O		1	S	8/31/2011	5.674	G	5,544	\$22,176,000	311		
2243770	K	KINGS HIGHWAY	BMT SEA BEACH	T	O		1	S	9/13/2011	6.767	VG	5,032	\$20,128,000	311		
2243780	K	HIGHLAWN AVE	BMT SEA BEACH	T	O		1	S	9/13/2011	6.400	VG	6,960	\$27,840,000	311		
2243790	K	AVENUE S	BMT SEA BEACH	T	O		1	S	9/15/2011	5.967	G	5,360	\$21,440,000	315		
2243800	K	AVENUE T	BMT SEA BEACH	T	O		1	S	9/15/2011	6.033	VG	5,360	\$21,440,000	311		
2243810	K	AVENUE U	BMT SEA BEACH	T	O		1	S	12/17/2010	5.686	G	5,880	\$23,520,000	315		
2243820	K	21ST AVE	BMT SEA BEACH	T	O		4	S	10/10/2011	3.974	F	21,400	\$85,600,000	311		
2243839	K	4TH AVE	NYCTA BMT TRACKS	T	O		1	S	8/24/2011	6.300	VG	4,440	\$17,760,000	307		
2243840	K	9TH AVE	NYCTA BMT YARD	T	O		5	S	8/19/2011	5.736	G	12,440	\$49,760,000	312		
2243850	K	LIBERTY AVE	LIRR BAY RIDGE	N	O		3	S	12/14/2010	6.294	VG	6,659	\$26,636,000	316		
2243860	K	GLENMORE AVE	LIRR BAY RIDGE	N	O		2	S	12/14/2010	6.559	VG	5,616	\$22,464,000	316		
2243870	K	PITKIN AVE	LIRR BAY RIDGE	N	O		2	S	12/14/2010	6.515	VG	5,328	\$21,312,000	316		
2243890	K	SUTTER AVE	LIRR BAY RIDGE	N	O		3	S	12/15/2010	6.542	VG	5,497	\$21,988,000	316		

INVENTORY SORTED BY B.I.N.

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2243900	K	BLAKE AVE	LIRR BAY RIDGE LINE	N	O		3	S	12/15/2010	5.000	G	4,912	\$19,648,000	316		
2243910	K	LIVONIA AVE PED BRDG	LIRR BAY RIDGE LINE	N	O-PED		6	C	3/2/2010	5.000	G	2,500	\$10,000,000	316		
2243920	K	7TH AVE	NYCTA BMT YARD	T	O		2	S	1/14/2011	5.930	G	4,700	\$18,800,000	307		
2243940	K	9TH AVE	NYCTA IND SBWY	T	O		5	S	8/19/2011	4.737	F	6,300	\$25,200,000	312		
2244010	K	EAST DR (ENDALE ARCH)	PED PATH NR GRND ARMY PLZ		O	P	1	C	5/2/2011	4.367	F	1,533	\$6,132,000	355		
2244020	K	WEST DR (MEADOWPORT ARCH)	PED PATH NR GRND ARMY PLZ		O	P	1	S	4/26/2011	5.321	G	2,500	\$10,000,000	355		
2244030	K	EAST DRIVE	BRIDLE PATH NR ZOO		O	P	1	S	4/27/2011	4.878	F	2,000	\$8,000,000	355		
2244040	K	EAST DR (EAST WOOD ARCH)	PED PATH NR CENTER DR		O	P	1	C	6/10/2011	4.067	F	1,066	\$4,262,400	355		
2244050	K	CENTER DR (NETHERMEAD ARCHES)	PED PATH & STREAM		WO	P	3	S	5/9/2011	5.000	G	7,400	\$29,600,000	355		
2244060	K	HILL DR (LEFT RIDGE SPAN)	PED PATH SO OF BOATHOUSE		O	P	1	C	5/4/2011	4.433	F	750	\$3,000,000	355		
2244100	K	WEST FOOTBRIDGE	PROSPECT PK STREAM		WO-PED	P	1	C	12/2/2010	4.875	F	3,200	\$12,800,000	355		
2244120	K	HILL DR (TERRACE BRDG)	PROSPECT PK LAKE		WO	P	3	S	5/11/2011	2.927	P	7,800	\$31,200,000	355		
2244130	K	PED NR BOATHSE (LULLWATER BRDG)	PROSPECT PK LAKE		WO-PED	P	1	C	9/16/2011	4.898	F	1,000	\$4,000,000	355		
2244150	K	RIDGE BLVD	SHORE RD DRIVE		O		1	S	5/24/2011	6.667	VG	4,350	\$17,400,000	310		
2244160	K	3RD AVE	SHORE RD DRIVE		O		1	S	5/24/2011	6.727	VG	4,360	\$17,440,000	310		
2244170	K	ATLNTC AV SVC RD E.B.	EAST NEW YORK AVE		O		2	S	7/20/2011	5.474	G	3,192	\$12,768,000	305		
2244180	K	ATLNTC AV SVC RD W.B.	EAST NEW YORK AVE		O		2	S	7/20/2011	4.965	F	5,600	\$22,400,000	305		
2244440	K	SOUTH OF TILLARY ST	NAVY ST		O-PED		1	C	8/15/2011	3.958	F	6,200	\$24,800,000	302		
2244460	K	CONDUIT BLVD NB	ATLANTIC AVE EB		O		1	S	10/15/2010	4.833	F	3,800	\$15,200,000	305		
2244470	K	SEELEY ST	PROSPECT AVE		O		1	S	6/1/2011	4.033	F	8,482	\$33,928,000	307		
2244480	K	5TH AVE	GREENWOOD CEMETERY		O		1	S	9/8/2011	4.667	F	3,600	\$14,400,000	307		
2245010	M	11TH AVE VIADUCT	LIRR WEST SIDE YARD	AL	O		39	S	12/29/2010	3.750	F	157,500	\$630,000,000	104		
224501B	M	W 33RD ST	AMTRAK 30 ST BRANCH	A	O		8	S	3/17/2010	4.611	F	16,500	\$66,000,000	104		
224501C	M	W 33RD ST	LAND ADJ TO AMTRAK	A	O		2	S	6/14/2011	4.472	F	2,360	\$9,440,000	104		
224501D	M	W 34TH ST	AMTRAK 30 ST BRANCH	A	O		4	S	6/6/2011	4.597	F	11,800	\$47,200,000	104		
224501E	M	W 35TH ST	AMTRAK 30 ST BRANCH	A	O		3	S	12/3/2010	4.028	F	6,500	\$26,000,000	104		
224501F	M	W 36TH ST	AMTRAK 30 ST BRANCH	A	O		7	S	10/6/2011	3.985	F	16,400	\$65,600,000	104		
2245040	M	MARGARET CORBIN DR	PED PATH NEAR CAFÉ		O	P	1	C	5/27/2011	4.933	F	598	\$2,392,000	112		
2245050	M	MARGARET CORBIN DR	PED PATH NR NO ENTR		O	P	1	C	5/3/2011	4.233	F	889	\$3,556,000	112		
2245060	M	W 37TH ST	AMTRAK 30 ST BRANCH	A	O		3	S	12/8/2011	6.190	VG	7,505	\$30,020,000	104		
2245070	M	W 38TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	10/1/2010	4.154	F	6,200	\$24,800,000	104		
2245080	M	W 39TH ST	AMTRAK 30 ST BRANCH	A	O		3	S	10/1/2010	4.196	F	6,300	\$25,200,000	104		
2245090	M	W 43RD ST	AMTRAK 30 ST BRANCH	A	O		2	S	5/1/2010	4.662	F	4,100	\$16,400,000	104		
2245100	M	W 44TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	4/24/2010	4.662	F	4,300	\$17,200,000	104		
2245110	M	W 45TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	5/15/2010	5.485	G	4,100	\$16,400,000	104		
2245120	M	W 46TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	5/15/2010	4.500	F	4,100	\$16,400,000	104		
2245130	M	W 47TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	5/29/2010	4.721	F	4,100	\$16,400,000	104		
2245140	M	W 48TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	6/24/2010	4.618	F	4,100	\$16,400,000	104		
2245150	M	W 49TH ST	AMTRAK 30 ST BRANCH	A	O		3	S	5/26/2010	4.426	F	4,100	\$16,400,000	104		

INVENTORY SORTED BY B.I.N.

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2245160	M	W 51ST ST	AMTRAK 30 ST BRANCH	A	O		2	S	6/5/2010	4.882	F	4,300	\$17,200,000	104		
2245170	M	W 52ND ST	AMTRAK 30 ST BRANCH	A	O		2	S	6/5/2010	4.956	F	4,300	\$17,200,000	104		
2245180	M	W 53RD ST	AMTRAK 30 ST BRANCH	A	O		2	S	6/27/2010	5.103	G	5,100	\$20,400,000	104		
2245190	M	W 58TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	6/28/2010	4.706	F	4,100	\$16,400,000	104		
2245209	M	11TH AVE	AMTRAK 30 ST BRANCH	A	O		2	S	8/9/2010	4.471	F	15,400	\$61,600,000	104		
2245210	M	W 42ND ST	AMTRAK 30 ST BRANCH	A	O		4	S	8/4/2010	4.619	F	9,155	\$36,620,000	104		
2245220	M	W 57TH ST	AMTRAK 30 ST BRANCH	A	O		3	S	6/28/2010	4.765	F	9,100	\$36,400,000	104		
2245230	M	W 148TH ST PED BRDG	AMTRAK 30 ST BRANCH	A	O-PED	P	3	C	11/5/2010	4.033	F	1,100	\$4,400,000	109		
2245250	M	W 158TH ST	AMTRAK 30 ST BRANCH	A	O		7	S	12/7/2011	6.125	VG	29,170	\$116,680,000	112		
2245260	M	W 173RD ST PED BRDG	AMTRAK 30 ST BRANCH	A	O-PED	P	2	C	10/29/2010	4.446	F	1,500	\$6,000,000	112		
2245290	M	W 155TH ST PED BRDG	AMTRAK 30 ST BRANCH	A	O-PED		3	C	10/31/2010	3.292	F	800	\$3,200,000	109	112	
2245300	M	INWOOD HILL PK FTBR	AMTRAK 30 ST BRANCH	A	O-PED	P	6	C	11/5/2010	4.100	F	700	\$2,800,000	112		
2245319	M	E 97TH ST	METRO NORTH MAIN LN	M	O		1	S	12/29/2010	4.647	F	3,200	\$12,800,000	111		
2245330	M	W 41ST ST	AMTRAK 30 ST BRANCH	A	O		3	S	9/28/2010	4.388	F	6,200	\$24,800,000	104		
2245340	M	W 50TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	5/26/2010	4.544	F	4,100	\$16,400,000	104		
2245350	M	W 54TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	6/27/2010	5.476	G	4,700	\$18,800,000	104		
2245360	M	W 55TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	7/10/2010	5.353	G	4,300	\$17,200,000	104		
2245370	M	W 56TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	7/10/2010	5.618	G	4,400	\$17,600,000	104		
2245380	M	TRANSVERSE RD #1 WB	PED PATH OPP E 66TH ST		O	P	1	S	1/7/2010	5.000	G	1,500	\$6,000,000	164		
2245420	M	W 65TH ST ENTR EB	BRIDLE PATH W END		O	P	1	S	1/25/2010	5.167	G	1,600	\$6,400,000	164		
2245440	M	W 40TH ST	AMTRAK 30 ST BRANCH	A	O		4	S	10/16/2010	4.236	F	9,400	\$37,600,000	104		
2245460	M	PARK AVE S.B.	E 45TH ST		O		1	S	6/16/2011	4.514	F	2,400	\$9,600,000	105		
2245470	M	PARK AVE N.B	E 45TH ST		O		1	S	6/16/2011	4.865	F	2,400	\$9,600,000	105		
2245480	M	TO GWB OPP W 171ST ST	RIVERSIDE DRIVE		O		1	S	3/17/2010	4.952	F	10,800	\$43,200,000	112		
2246000	M	WEST DR (GREYSHOT ARCH)	PED BET 61ST & 62ST		O	P	1	S	1/14/2010	5.400	G	2,500	\$10,000,000	164		
2246010	M	W 62 ST PED BRDG (PINEBANK ARCH)	BRIDLE PATH		O-PED	P	1	C	7/5/2011	4.404	F	1,000	\$4,000,000	164		
2246030	M	E 62 ST PED BRDG (GAPSTOW BRDG)	THE POND		O-PED	P	1	C	6/1/2011	3.897	F	1,400	\$5,600,000	164		
2246040	M	EAST DR (INSCOPE ARCH)	PED PATH OPP E 62 ST		O	P	1	C	4/21/2011	4.400	F	1,515	\$6,060,000	164		
2246050	M	CENTER DR (DRIPROCK ARCH)	PED OPP 63RD ST		O	P	1	S	1/18/2010	5.067	G	2,000	\$8,000,000	164		
2246069	M	EAST DR (GREEN GAP ARCH)	PED BET E 63ST & E 64ST		O	P	1	S	1/26/2010	4.500	F	2,700	\$10,800,000	164		
2246070	M	CENTER DR (PLAYMATES ARCH)	PED PATH OPP 65TH ST		O	P	1	C	6/16/2011	4.367	F	1,129	\$4,516,000	164		
2246080	M	WEST DR (DALEHEAD ARCH)	BRIDLE OPP W 64TH ST		O	P	1	S	1/5/2010	4.667	F	2,000	\$8,000,000	164		
2246090	M	PED BRDG OPP 65 ST	TRANSVERSE RD #1		O-PED	P	1	C	7/24/2010	4.655	F	2,300	\$9,200,000	164		
2246100	M	CENTER DRIVE	TRANSVERSE RD #1		O	P	1	S	4/2/2010	4.467	F	6,000	\$24,000,000	164		
2246110	M	EAST DRIVE	TRANSVERSE RD #1		O	P	1	S	3/25/2010	4.667	F	6,000	\$24,000,000	164		
2246120	M	WEST DRIVE	TRANSVERSE RD #1		O	P	1	S	4/2/2010	4.967	F	7,900	\$31,600,000	164		
2246130	M	EAST DR (WILLOWDELL ARCH)	PED PATH OPP E 67TH ST		O	P	1	C	4/13/2011	3.500	F	666	\$2,665,600	164		
2246140	M	W 72 ST ENTR (RIFTSTONE ARCH)	BRIDLE PATH		O	P	1	S	1/12/2010	4.533	F	3,600	\$14,400,000	164		
2246150	M	72 ST CROSS DR (TERRACE BRDG)	PED PATH TO FOUNTAIN		O	P	3	S	3/12/2010	5.786	G	7,300	\$29,200,000	164		

INVENTORY SORTED BY B.I.N.

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2246160	M	73 ST PED BRDG (BOW BRIDGE)	THE LAKE		WO-PED	P	1	C	5/13/2010	3.718	F	1,700	\$6,800,000	164		
2246170	M	EAST DR (TREFOIL ARCH)	PED PATH OPP E 73RD ST		O	P	1	S	2/3/2010	5.056	G	1,900	\$7,600,000	164		
2246230	M	EAST DRIVE	TRANSVERSE RD #2		O	P	1	S	3/23/2010	4.600	F	6,500	\$26,000,000	164		
2246240	M	WEST DRIVE	TRANSVERSE RD #2		O	P	1	S	3/23/2010	4.167	F	7,200	\$28,800,000	164		
2246250	M	EAST DRIVE	TRANSVERSE RD #3		O	P	1	S	2/9/2010	4.300	F	5,100	\$20,400,000	164		
2246260	M	WEST DRIVE	TRANSVERSE RD #3		O	P	1	S	3/26/2010	4.933	F	5,100	\$20,400,000	164		
2246270	M	EAST DRIVE	TRANSVERSE RD #4		O	P	1	S	3/24/2010	4.100	F	7,000	\$28,000,000	164		
2246280	M	WEST DRIVE	TRANSVERSE RD #4		O	P	1	S	3/24/2010	4.300	F	4,700	\$18,000,000	164		
2246320	M	W77 ST PED (OAK BRDG)	THE LAKE		WO-PED	P	3	C	12/20/2011	6.684	VG	919	\$3,676,000	164		
2246330	M	WEST DR (BALCONY BRDG)	STREAM TO THE LAKE		WO	P	1	S	2/1/2010	5.000	G	2,019	\$8,076,000	164		
2246340	M	W77 ST PED (LADIES POND BRDG)	STREAM TO THE LAKE		WO-PED	P	3	C	11/15/2011	4.145	F	500	\$2,000,000	164		
2246350	M	EAST DR (GREYWACKE ARCH)	PED PATH OPP E 80TH ST		O	P	1	C	5/25/2011	3.733	F	1,266	\$5,064,000	164		
2246360	M	WEST DR (WINTERDALE ARCH)	PED PATH OPP W 82 ST		O	P	1	S	1/27/2010	5.273	G	3,100	\$12,400,000	164		
2246380	M	W86 ST PED (SW RESERVOIR BRDG)	BRIDLE PATH		O-PED	P	1	C	10/7/2010	4.143	F	700	\$2,800,000	164		
2246390	M	E86 ST PED (SE RESERVOIR BRDG)	BRIDLE PATH		O-PED	P	3	C	10/31/2011	4.509	F	1,100	\$4,400,000	164		
2246400	M	PED PATH OPP E79 ST	TRANSVERSE RD #2		O-PED	P	1	C	7/31/2010	4.233	F	3,700	\$14,800,000	164		
2246410	M	TRNSVRS RD 1 EB (DENESMOUTH ARCH)	PED PATH OPP E 65TH ST		O	P	1	S	2/2/2010	4.727	F	1,739	\$6,956,000	164		
2246430	M	W110 ST ENTR (MOUNTCLIFF ARCH)	PED PATH OPP W109 ST		O	P	1	S	3/29/2010	4.383	F	1,200	\$4,800,000	164		
2246440	M	79 TH ST PED BRDG	TRANSVERSE RD #2		O-PED	P	1	C	9/3/2011	3.926	F	5,900	\$23,600,000	164		
2246450	M	E77 ST PED (GLADE ARCH)	PED PATH OPP E77 ST		O-PED	P	1	C	12/7/2010	4.138	F	5,000	\$20,000,000	164		
2246460	M	W77 ST ENTR (EAGLEVALE ARCH)	PED PATH OPP W77 ST		O	P	2	S	1/15/2010	4.263	F	5,800	\$23,200,000	164		
2246470	M	EAST DR (HUDDLESTONE ARCH)	THE LOCH		WO	P	1	S	2/2/2010	4.500	F	1,100	\$4,400,000	164		
2246489	M	W 181 ST	RAMP TO WASH BR		O		1	S	3/16/2010	4.500	F	8,200	\$32,800,000	112		
2246490	M	A.C. POWELL BLVD N.B.	A.C. POWELL BLVD		O		1	S	2/11/2010	4.020	F	5,600	\$22,400,000	110		
2246500	M	FORT TRYON PLACE	ENTR FROM RIVERSIDE DR		O	P	1	S	3/18/2010	4.333	F	6,600	\$26,400,000	112		
2246510	M	CORBIN PL OVERPASS	CORBIN PLACE		O	P	1	S	1/13/2010	5.000	G	2,223	\$8,892,000	112		
2246540	M	E 34TH ST	PARK AVE TUNNEL		OT		1	S	11/1/2010	4.117	F	36,200	\$144,800,000	105	106	
2246550	M	PARK AVE VIADUCT	E 42ND ST		O		10	S	12/7/2011	4.478	F	22,150	\$88,600,000	105		
2246560	M	TUDOR CITY PLACE	E 42ND ST		O		1	S	2/1/2010	5.133	G	6,600	\$26,400,000	106		
2246570	M	E42ND ST - E47TH ST	FIRST AVE TUNNEL		OT		2	S	6/17/2010	4.882	F	95,000	\$380,000,000	106		
2246580	BM	HIGH BRIDGE PDOVP	I87 - HARLEM RIVER	M	WA-PED	P	11	P	8/12/2002	3.759	F	34,100	\$136,400,000	112	204	
2246600	M	W 176TH ST PED BRDG	APPROACH TO G.W.B.		O-PED		1	C	12/7/2010	3.897	F	1,200	\$4,800,000	112		
2246620	M	W 128TH ST PED BRDG	3RD AVE BRDG APPR		O-PED		18	C	7/1/2010	4.048	F	2,300	\$9,200,000	111		
2246660	M	RIVERSIDE DRIVE	W125TH ST - W134TH ST		O		27	S	7/15/2011	4.306	F	148,300	\$593,200,000	109		
2246670	M	W 134 ST	TERRAIN		O		4	S	7/13/2011	4.833	F	7,500	\$30,000,000	109		
2246690	M	ISHAM PK VEHICULR	HARLEM RIVER INLET		O	P	1	S	6/11/2010	6.261	VG	911	\$3,644,000	112		
2246700	M	ISHAM PK PED BRDG	HARLEM RV INLET		WO-PED	P	1	C	12/13/2010	3.552	F	300	\$1,200,000	112		
2246710	M	W 153 ST	A.C. POWELL BLVD		O		1	S	2/11/2010	4.370	F	3,082	\$12,328,000	110		
2246720	M	RIVERSIDE DRIVE	W 158TH ST - AMTRAK	A	O		77	S	9/30/2010	3.472	F	185,658	\$742,632,000	109	112	

INVENTORY SORTED BY B.I.N.

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2246970	M	RIVERSIDE DRIVE	W 96TH ST		O		3	S	5/18/2011	5.471	G	10,600	\$42,400,000	107		
2246980	M	RIVERSIDE DRIVE	W 138TH ST		O		1	S	1/29/2010	4.767	F	6,700	\$26,800,000	109		
2246990	M	E 129TH ST PED BRDG	3RD AVE BRDG RAMP		O-PED		5	C	11/4/2011	4.000	F	1,046	\$4,184,000	111		
2247020	Q	94TH ST PED BRDG	LIRR PORT WASH BR	L	O-PED		5	C	10/8/2009	4.030	F	500	\$2,000,000	404		
2247040	Q	UNION ST	LIRR PORT WASH BR	L	O		1	S	9/12/2011	6.234	VG	3,313	\$13,252,000	407		
2247050	Q	BOWNE AVE	LIRR PORT WASH BR	L	O		1	S	12/15/2010	5.490	G	4,974	\$19,896,000	407		
2247060	Q	PARSONS BLVD	LIRR PORT WASH BR	L	O		1	S	11/30/2010	4.745	F	4,200	\$16,800,000	407		
2247070	Q	147TH ST	LIRR PORT WASH BR	L	O		1	S	9/13/2011	5.471	G	2,800	\$11,200,000	407		
2247080	Q	149TH ST	LIRR PORT WASH BR	L	O		1	S	9/12/2011	4.776	F	4,100	\$16,400,000	407		
2247090	Q	149TH PLACE	LIRR PORT WASH BR	L	O		2	S	9/13/2011	5.000	G	4,300	\$17,200,000	407		
2247100	Q	150TH ST	LIRR PORT WASH BR	L	O		2	S	9/13/2011	6.029	VG	7,830	\$31,320,000	407		
2247110	Q	MURRAY ST	LIRR PORT WASH BR	L	O		1	S	9/15/2011	5.370	G	4,000	\$16,000,000	407		
2247120	Q	WOODSIDE AVE	LIRR MAIN LINE	L	O		3	S	10/28/2009	4.444	F	14,900	\$59,600,000	402		
2247130	Q	CORPORAL KENNEDY ST	LIRR PORT WASH BR	L	O		1	S	11/3/2011	6.235	VG	3,379	\$13,516,000	411		
2247140	Q	BELL BLVD	LIRR PORT WASH BR	L	O		1	S	9/14/2011	5.780	G	4,320	\$17,280,000	411		
2247150	Q	65TH ST	LIRR MAIN LINE	L	O		3	S	10/17/2011	6.375	VG	6,344	\$25,376,000	402		
2247160	Q	65TH PLACE	LIRR MAIN LINE	L	O		3	S	10/20/2011	6.441	VG	8,381	\$33,524,000	402		
2247170	Q	DOUGLASTON PKWY	LIRR PORT WASH BR	L	O		3	S	12/15/2010	4.712	F	6,300	\$25,200,000	411		
2247180	Q	GRAND AVE	LIRR MAIN LINE	L	O		3	S	12/16/2010	4.585	F	7,415	\$29,660,000	404		
2247190	Q	55TH AVE PED BRDG	LIRR MAIN LINE	L	O-PED		3	C	10/7/2009	4.309	F	13,000	\$52,000,000	404		
2247220	Q	80TH ROAD	LIRR MAIN LINE	L	O		3	S	9/29/2011	4.857	F	4,100	\$16,400,000	409		
2247230	Q	82ND AVE	LIRR MAIN LINE	L	O		3	S	9/21/2011	5.377	G	4,100	\$16,400,000	409		
2247240	Q	LEFFERTS BLVD	LIRR MAIN LINE	L	O		3	S	9/29/2011	5.806	G	5,460	\$21,840,000	409		
2247260	Q	JACKSON AVE	LIRR MONTAUK DIV	L	O		1	S	12/16/2010	6.117	VG	4,517	\$18,068,000	402		
2247270	Q	21ST ST	LIRR N SIDE DIV	L	O		6	S	11/14/2011	5.153	G	17,590	\$70,360,000	402		
2247290	Q	49TH AVE	LIRR,AMT,CON NE	L	O		5	S	11/16/2011	4.014	F	20,400	\$81,600,000	402		
2247300	Q	THOMPSON AVE	AMTRAK & LIRR YARD	AL	O		14	S	12/16/2010	5.042	G	61,280	\$245,120,000	402		
2247310	Q	QUEENS BLVD	AMTRAK & LIRR YARD	AL	O		19	S	12/16/2010	6.324	VG	92,400	\$369,600,000	402	401	
2247320	Q	HONEYWELL ST	AMTRAK & LIRR YARD	AL	O		22	S	11/4/2011	5.903	G	99,036	\$396,144,000	402	401	
2247330	Q	39TH ST (NORTH)	SUNNYSIDE YARD	A	O		14	S	10/31/2011	6.556	VG	48,200	\$192,800,000	402	401	
2247370	Q	37TH AVE	CSX - HELLGATE	C	O		1	S	8/29/2011	6.234	VG	6,868	\$27,472,000	402		
2247380	Q	ROOSEVELT AVE	CSX - HELLGATE	C	O		2	S	8/30/2011	6.333	VG	7,380	\$29,520,000	402	403	404
2247390	Q	41ST AVE	CSX - HELLGATE	C	O		2	S	9/8/2011	4.942	F	4,400	\$17,600,000	402	404	
2247400	Q	WOODSIDE AVE	CSX TRANSPORT	C	O		1	S	9/8/2011	5.033	G	8,200	\$32,800,000	402	404	
2247410	Q	43RD AVE	CSX TRANSPORT	C	O		1	S	9/8/2011	5.000	G	4,800	\$19,200,000	402	404	
2247420	Q	44TH AVE	CSX TRANSPORT	C	O		1	S	9/6/2011	5.000	G	5,100	\$20,400,000	402	404	
2247430	Q	45TH AVE	CSX TRANSPORT	C	O		1	S	9/9/2011	5.306	G	2,400	\$9,600,000	402	404	
2247440	Q	GRAND AVE	CSX TRANSPORT	C	O		1	S	9/9/2011	6.183	VG	3,280	\$13,120,000	405		
2247450	Q	57TH AVE	CSX TRANSPORT	C	O		1	S	9/9/2011	6.073	VG	2,248	\$8,992,000	405		

INVENTORY SORTED BY B.I.N.

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2247460	Q	CALDWELL AVE	CSX TRANSPORT	C	O		1	S	12/13/2010	5.889	G	2,243	\$8,972,000	405		
2247470	Q	ELIOT AVE	CSX TRANSPORT	C	O		1	S	10/4/2011	5.083	G	2,960	\$11,840,000	405		
2247480	Q	JUNIPER BLVD SO	CSX TRANSPORT	C	O		1	S	10/5/2011	5.000	G	9,000	\$36,000,000	405		
2247490	Q	69TH ST JUNPR BLVD	CSX TRANSPORT	C	O		1	S	12/13/2010	5.021	G	6,175	\$24,700,000	405		
2247500	Q	METROPOLITAN AVE	CSX TRANSPORT	C	O		1	S	10/5/2011	4.233	F	18,650	\$74,600,000	405		
2247530	Q	ANDREWS AVE	LIRR MONTAUK DIV	L	O		1	S	9/22/2011	7.000	VG	1,765	\$7,060,000	405		
2247540	Q	60TH ST	LIRR MONTAUK DIV	L	O		2	S	10/5/2011	5.208	G	5,340	\$21,360,000	405		
2247550	Q	ELIOT AVE	LIRR MONTAUK DIV	L	O		2	S	9/19/2011	5.712	G	9,550	\$38,200,000	405		
2247570	Q	80TH ST	77TH AVE - LIRR MT	L	O		5	S	12/13/2010	5.169	G	11,725	\$46,900,000	405		
2247590	Q	FOREST PARK DRIVE	LIRR MONTAUK DIV	L	O	P	5	S	9/20/2011	5.158	G	6,000	\$24,000,000	409		
2247600	Q	PARK LANE SOUTH	LIRR MONTAUK DIV	L	O		1	S	12/14/2010	6.983	VG	3,024	\$12,096,000	409	482	
2247620	Q	MYRTLE AVE	ABANDONED LIRR		O		3	S	1/12/2010	5.028	G	6,725	\$26,900,000	482	406	
2247630	Q	PED BRG NEAR UNION TPK	ABANDONED LIRR		O-PED		8	C	6/24/2011	5.046	G	1,449	\$5,796,000	406		
2247640	Q	39TH ST (SOUTH)	AMTRAK & LIRR YARD	AL	O		9	S	10/28/2011	6.014	VG	34,100	\$136,400,000	402		
2247650	Q	60TH RD PED BRDG	LIRR MAIN LINE	L	O-PED		3	C	10/16/2009	5.000	G	2,293	\$9,172,000	405	406	
2247660	Q	FOREST PARK DRIVE	ABANDONED LIRR		O	P	6	S	8/2/2011	4.746	F	10,000	\$40,000,000	409		
2247680	Q	221ST ST	LIRR PORT WASH BR	L	O		3	S	9/14/2011	5.926	G	6,050	\$24,200,000	411		
2248019	Q	WOODHAVEN BLVD	ATLANTIC AVE		O		3	S	4/8/2010	4.236	F	19,400	\$77,600,000	409		
2248020	Q	WHITELAW PED BRDG	CONDUIT AVE		O-PED		7	C	10/8/2010	4.775	F	5,500	\$22,000,000	410		
2248039	Q	CROSS BAY BLVD	NASSAU EXPWY - RTE 27		O		2	S	6/23/2011	6.347	VG	16,544	\$66,176,000	410		
2248040	Q	RAMP TO LINDEN BLVD	SO. CONDUIT AVE		O		1	S	6/10/2010	5.200	G	3,352	\$13,408,000	410		
2248059	Q	MOTOR PKWY (PED)	FRANCIS LEWIS BLVD		O-PED	P	2	C	6/16/2011	4.194	F	2,800	\$11,200,000	408		
2248060	Q	MOTOR PKWY (PED)	BELL BLVD		O-PED	P	2	C	6/20/2011	4.181	F	2,650	\$10,600,000	411		
2248070	Q	MOTOR PKWY (PED)	SPRINGFIELD BLVD		O-PED	P	3	C	6/14/2010	3.582	F	2,900	\$11,600,000	411		
2248080	Q	MOTOR PKWY (PED)	HOLLIS COURT BLVD		O-PED	P	3	C	11/1/2010	4.612	F	2,700	\$10,800,000	408		
2248090	Q	FLSHG MDW PK PED	COLLEGE POINT BLVD		O-PED	P	3	C	1/6/2011	4.690	F	8,400	\$33,600,000	407		
2248100	Q	MOTOR PKWY (PED)	73RD AVE		O-PED	P	3	C	3/25/2011	4.825	F	2,600	\$10,400,000	408		
2248110	Q	MOTOR PKWY (PED)	ALLEY PK PED WALK		O-PED	P	1	C	7/14/2011	3.983	F	1,000	\$4,000,000	413		
2248129	Q	UNION TPKE	CREEDMOORE HOSP RD		O		1	S	6/24/2011	4.867	F	3,500	\$14,000,000	413		
2248130	Q	FLUSHING MEADOW PK PED	WILLOW LK&76TH RD		WO-PED	P	4	C	4/20/2002	1.000	C	1,891	\$7,564,000	481		
2248140	Q	FLUSHING MEADW PK RD	STREAM N OF LIE		WO	P	5	S	8/19/2011	4.481	F	4,100	\$16,400,000	481		
2248159	Q	WOODHAVEN BLVD	QUEENS BLVD		O		2	S	8/20/2010	4.275	F	11,500	\$46,000,000	404		
2248160	Q	ELLIOT AVE	QUEENS BLVD		O		2	S	8/20/2010	4.804	F	13,785	\$55,140,000	406		
2248200	Q	RUST ST	FLUSHING AVE		O		1	S	7/13/2011	5.000	G	2,940	\$11,760,000	405		
2248220	Q	SERVICE RD TURNAROUND	FLUSHING AVE		O		1	S	7/13/2011	5.078	G	2,940	\$11,760,000	405		
2248230	Q	BEACH CHANNEL DR WB	BEACH CHANNEL DR EB		O		1	S	7/13/2011	4.400	F	3,600	\$14,400,000	484		
2248240	Q	FLUSHING AV SERVICE RD	FLUSHING AVE		O		1	S	7/12/2011	5.250	G	2,940	\$11,760,000	405		
2248250	Q	102ND ST	HAWTREE BASIN		WO		3	S	8/15/2011	5.941	G	4,900	\$19,600,000	410		
2248260	Q	FLUSHING MDW PARK RD	MEADOW LAKE		WO	P	5	S	8/18/2011	4.458	F	4,200	\$16,800,000	481		

INVENTORY SORTED BY B.I.N.

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2248280	Q	HIGHLAND PK PED.	PEDESTRIAN PATH		O-PED	P	1	C	10/20/2010	3.667	F	1,900	\$7,600,000	405		
2248299	Q	J.R. PKWY-UNION TPKE	AUSTIN ST		O		1	S	6/2/2010	4.194	F	5,900	\$23,600,000	409	406	
2248300	Q	71ST AVE	COOPER AVE		O		1	S	7/12/2011	4.373	F	2,800	\$11,200,000	405		
2248340	Q	FOREST PARK DR	MYRTLE AVE		O	P	3	S	6/13/2011	4.984	F	5,100	\$20,400,000	409		
2248369	Q	ROCKAWAY BLVD	THURSTON BASIN		WO		2	S	8/17/2011	5.474	G	6,000	\$24,000,000	483	413	
2248379	Q	FLUSHING MDW PARK RD	AQUACADE LAKE		WO	P	5	S	8/19/2011	4.296	F	6,300	\$25,200,000	481		
2249040	R	TOMPKINS AVE	B&O RR (ABANDONED)		O		1	S	5/24/2010	6.047	VG	5,096	\$20,384,000	501		
2249070	R	JOHN ST	B&O RR (ABANDONED)	O	O-PED		2	C	9/2/2011	5.451	G	1,050	\$4,200,000	501		
2249090	R	MORNINGSTAR ROAD	B&O RR (ABANDONED)	O	O		4	S	5/4/2011	4.864	F	7,900	\$31,600,000	501		
2249100	R	GRANITE AVE	B&O RR (ABANDONED)	O	O		4	S	3/26/2010	6.034	VG	7,300	\$29,200,000	501		
2249110	R	LAKE AVE	B&O RR (ABANDONED)	O	O		3	S	5/2/2011	5.333	G	5,900	\$23,600,000	501		
2249120	R	SIMONSON AVE	B&O RR (ABANDONED)	O	O		3	S	4/26/2011	5.963	G	5,819	\$23,276,000	501		
2249130	R	VAN NAME AVE	B&O RR (ABANDONED)	O	O		3	S	4/29/2011	5.186	G	5,474	\$21,896,000	501		
2249140	R	VAN PELT AVE	B&O RR (ABANDONED)	O	O		3	S	4/28/2011	5.576	G	5,000	\$20,000,000	501		
2249160	R	DE HART AVE	B&O RR (ABANDONED)	O	O		4	S	4/27/2011	6.389	VG	6,700	\$26,800,000	501		
2249170	R	UNION AVE	B&O RR (ABANDONED)	O	O		4	S	4/29/2011	5.167	G	6,500	\$26,000,000	501		
2249180	R	HARBOR ROAD	B&O RR (ABANDONED)	O	O		4	S	8/20/2011	6.220	VG	5,778	\$23,112,000	501		
2249200	R	SOUTH AVE	B&O RR (ABANDONED)	O	O		3	S	8/20/2011	6.709	VG	8,322	\$33,288,000	501		
2249210	R	MAIN ST PED BRDG	SIRT SOUTH SHORE	S	O-PED		9	C	7/23/2010	4.309	F	400	\$1,600,000	503		
2249230	R	TRACY AVE PED BRDG	SIRT SOUTH SHORE	S	O-PED		9	C	7/13/2011	3.383	F	635	\$2,540,000	503		
2249240	R	ARTHUR KILL ROAD	SIRT SOUTH SHORE	S	O		1	S	11/1/2010	4.685	F	3,650	\$14,600,000	503		
2249250	R	BETHEL AV PED BRDG	SIRT SOUTH SHORE	S	O-PED		12	C	7/19/2011	3.525	F	111	\$444,000	503		
2249269	R	PAGE AVE	SIRT SOUTH SHORE	S	O		4	S	8/25/2011	5.889	G	30,710	\$122,840,000	503		
2249270	R	RICHMOND VALLY ROAD	SIRT SOUTH SHORE	S	O		4	S	8/23/2011	5.284	G	9,440	\$37,760,000	503		
2249280	R	CHAMP COURT PED BRDG	SIRT SOUTH SHORE	S	O-PED		7	C	7/15/2011	3.893	F	595	\$2,380,000	503		
2249290	R	SEGUINE AVE	SIRT SOUTH SHORE	S	O		1	S	9/26/2011	6.016	VG	3,250	\$13,000,000	503		
2249300	R	HUGUENOT AVE	SIRT SOUTH SHORE	S	O		2	S	10/3/2011	4.788	F	4,900	\$19,600,000	503		
2249320	R	ALBEE AVE	SIRT SOUTH SHORE	S	O		3	S	10/4/2011	4.492	F	6,500	\$26,000,000	503		
2249330	R	ANNADALE ROAD	SIRT SOUTH SHORE	S	O		2	S	8/17/2011	6.433	VG	4,500	\$18,000,000	503		
2249350	R	NELSON AVE PED BRDG	SIRT SOUTH SHORE	S	O-PED		3	C	7/18/2011	4.115	F	300	\$1,200,000	503		
2249360	R	GIFFORDS LANE	SIRT SOUTH SHORE	S	O		1	S	11/2/2010	5.531	G	3,042	\$12,168,000	503		
2249370	R	GREAVES AVE	SIRT SOUTH SHORE	S	O		1	S	8/16/2011	6.550	VG	2,650	\$10,600,000	503		
2249380	R	GUYON AVE	SIRT SOUTH SHORE	S	O		3	S	9/9/2011	4.377	F	6,900	\$27,600,000	503		
2249390	R	CEDARVIEW AVE PED BRDG	SIRT SOUTH SHORE	S	O-PED		5	C	7/19/2011	3.615	F	625	\$2,500,000	503		
2249400	R	BEACH AVE	SIRT SOUTH SHORE	S	O		2	S	8/4/2011	5.364	G	3,700	\$14,800,000	502		
2249410	R	ROSS AVE	SIRT SOUTH SHORE	S	O		2	S	8/5/2011	5.379	G	3,800	\$15,200,000	502		
2249420	R	ROSE AVE	SIRT SOUTH SHORE	S	O		2	S	8/8/2011	5.409	G	3,800	\$15,200,000	502		
2249430	R	NEW DORP LANE	SIRT SOUTH SHORE	S	O		2	S	10/14/2011	4.847	F	7,600	\$30,400,000	502		
2249440	R	BANCROFT AVE	SIRT SOUTH SHORE	S	O		3	S	10/13/2011	5.328	G	5,900	\$23,600,000	502		

INVENTORY SORTED BY B.I.N.

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2249450	R	FREMONT AVE PED BRDG	SIRT SOUTH SHORE	S	O-PED		3	C	7/20/2011	3.618	F	800	\$3,200,000	502		
2249460	R	LINCOLN AVE	SIRT SOUTH SHORE	S	O		1	S	11/18/2011	5.172	G	4,500	\$18,000,000	502		
2249470	R	MIDLAND AVE	SIRT SOUTH SHORE	S	O		1	S	11/22/2011	5.466	G	3,000	\$12,000,000	502		
2249480	R	FINGERBOARD ROAD	SIRT SOUTH SHORE	S	O		2	S	10/5/2011	6.486	VG	5,100	\$20,400,000	502		
2249490	R	CLOVE ROAD	SIRT SOUTH SHORE	S	O		3	S	11/5/2010	5.986	G	5,104	\$20,416,000	502		
2249510	R	TOMPKINS AVE	WILLOW AVE, SIRT	S	O		2	S	11/4/2010	5.328	G	5,378	\$21,512,000	501		
2249520	R	HANNAH ST	SIRT SOUTH SHORE	S	O		10	S	9/22/2011	4.898	F	10,020	\$40,080,000	501		
2249530	R	MINTHORNE ST PED BRDG	SIRT SOUTH SHORE	S	O-PED		26	C	7/21/2011	4.453	F	6,000	\$24,000,000	501		
2249580	R	BELFIELD AVE PED BRDG	SIRT SOUTH SHORE	S	O-PED		5	C	7/27/2010	4.098	F	400	\$1,600,000	503		
2249710	R	WEST FOOTBRIDGE	CLOVE LAKE		WO-PED	P	2	C	8/1/2011	4.086	F	900	\$3,600,000	501		
2249720	R	EAST FOOTBRIDGE	CLOVE LAKE		WO-PED	P	2	C	8/2/2011	4.229	F	900	\$3,600,000	501		
2249730	R	BRIDGE OVER DAM	N.END CLOVE LAKE		WO-PED	P	1	C	8/1/2011	3.351	F	1,000	\$4,000,000	501		
2249760	R	MARTLINGS AVE	RICHMOND LAKE DAM		WO		2	S	6/9/2011	4.600	F	7,000	\$28,000,000	501		
2249770	R	S OF BROOKS LAKE	STREAM IN PARK		WO-PED	P	3	C	12/19/2011	4.676	F	700	\$2,800,000	501		
2249780	R	FOOTBRIDGE	BROOKS LAKE DAM		WO-PED	P	1	C	2/24/2011	3.433	F	800	\$3,200,000	501		
2249790	R	FB S OF FOREST AV	STREAM IN PARK		WO-PED	P	3	C	10/8/2010	4.814	F	700	\$2,800,000	501		
2249800	R	FOREST AVE	CLOVE LAKES PK STREAM		WO	P	1	S	10/7/2011	4.567	F	1,600	\$6,400,000	501		
2249810	R	HYLAN BLVD	LEMON CREEK		WO		1	S	3/10/2010	6.406	VG	11,400	\$45,600,000	503		
2249820	R	ARTHUR KILL ROAD	ARTHUR KILL STREAM		WO		1	S	5/5/2011	4.184	F	1,300	\$5,200,000	503		
2249840	R	TOMPKINS AVE	GREENFIELD AVE		O		1	S	3/17/2010	5.021	G	2,690	\$10,760,000	501		
2249860	R	SLATER BLVD	NEW CREEK		WO		1	S	5/4/2011	5.510	G	2,037	\$8,148,000	502		
2249870	R	TRAVIS AVE	MAIN CREEK		WO		1	S	9/26/2011	5.483	G	1,700	\$6,800,000	502		
2249880	R	CHELSEA ROAD	SAWMILL CREEK		WO		1	S	5/6/2011	6.816	VG	2,205	\$8,820,000	502		
2257569	M	MILLER HIGHWAY	TERRAIN		A		64	S	8/31/2011	4.746	F	272,475	\$1,089,900,000	104	107	
2266129	Q	DOUGLASTON PKWY	BCIP SB		A		1	S	3/19/2010	4.592	F	4,400	\$17,600,000	411		
2266139	Q	DOUGLASTON PKWY	BCIP NB		A		1	S	3/18/2010	4.510	F	6,400	\$25,600,000	411		
2266149	Q	HEMPSTEAD AVE	BCIP RAMP NB		A		2	S	3/17/2010	4.063	F	9,500	\$38,000,000	413		
2266160	Q	678I SB TO BCIP EB	ACCESS RD FROM 678I		A		1	S	7/19/2011	3.734	F	2,300	\$9,200,000	407		
2266229	M	HHP	PED UNDERPASS @ 148 ST		A		1	S	2/16/2010	5.476	G	1,840	\$7,360,000	109		
2266230	M	HHP NB	PED UNDERPASS INWD PK		A		1	S	1/8/2010	5.286	G	800	\$3,200,000	112		
2266240	M	HHP SB	PED UNDERPASS INWD PK		A		1	S	1/11/2010	5.571	G	1,100	\$4,400,000	112		
2266540	B	278I	BRUCKNER BLVD		A		2	S	7/8/2011	4.371	F	32,900	\$131,600,000	201		
226672A	M	W 31ST ST	AMTRAK LAYUP TRACKS	A	O		9	S	12/28/2010	3.714	F	8,800	\$35,200,000	104		
2266770	Q	BCIP	LAURELTON PKWY		A		1	S	3/10/2010	4.972	F	9,508	\$38,032,000	413		
2267130	M	RIVERSIDE DRIVE	W 145TH ST		O		1	S	5/12/2011	4.867	F	5,800	\$23,200,000	109		
2267160	Q	ROOSEVELT AVE	FLUSHING MDW PK ROAD		O		4	S	8/10/2011	4.746	F	7,280	\$29,120,000	408		
2267199	Q	FRANCIS LEWIS BLVD	CUNNINGHAM PK RD		O		1	S	5/27/2011	5.033	G	7,085	\$28,340,000	408		
2267240	M	HRD RAMP TO GWB	HARLEM RIVER DR SB		A		55	S	9/15/2010	3.264	F	122,900	\$491,600,000	112		
2267250	M	HHP	AMTRAK - W96TH ST	A	A		55	S	11/5/2010	3.694	F	40,000	\$160,000,000	107		

INVENTORY SORTED BY B.I.N.

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2267380	M	WEST STREET	RECTOR ST		AT		1	S	11/15/2011	5.033	G	25,760	\$103,040,000	101		
2267717	M	79 ST PED PLAZA	79 ST BT BASIN GAR		A	P	10	S	5/3/2011	4.593	F	27,400	\$109,600,000	107		
2267718	M	79 ST TRAFFIC CIRC	79 ST PED PLAZA		A	P	34	S	5/11/2011	4.000	F	24,130	\$96,520,000	107		
226771A	M	79 ST RAMP TO HHP	79 ST BT BASIN GAR		AR	P	4	S	5/12/2011	4.221	F	3,131	\$12,524,000	107		
226771B	M	79 ST RAMP TO GAR	79 ST BT BASIN GAR		AR	P	21	S	5/11/2011	4.532	F	8,989	\$35,956,000	107		
226771C	M	GAR RAMP TO 79 ST	79 ST BT BASIN GAR		AR	P	21	S	5/12/2011	4.565	F	9,095	\$36,380,000	107		
226771D	M	SB HHP RAMP TO 79 ST	79 ST BT BASIN GAR		AR	P	4	S	5/12/2011	4.516	F	2,601	\$10,404,000	107		
2267860	K	BROOKLYN BR APPROACH	STORAGE (SANDS ST)		O		1	S	7/27/2010	4.607	F	6,490	\$25,960,000	302		
2268350	K	BROOKLYN PROMENADE	278I EB (BQE)		A-PED	P	35	C	4/20/2011	3.690	F	46,184	\$184,736,000	302		
2268480	M	CHAMBERS ST PED BRDG	RTE 9A - WEST ST		O-PED		10	C	6/15/2011	5.167	G	7,481	\$29,924,000	101		
2268497	K	278I W.B. (B.Q.E.)	FURMAN ST		A		45	S	8/6/2011	4.357	F	86,406	\$345,624,000	302		
2268498	K	278I E.B. (B.Q.E.)	278I WB (BQE)		A		69	S	11/13/2011	3.965	F	133,708	\$534,832,000	302		
2268507	K	278I W.B. (B.Q.E.)	YORK ST		A		6	S	6/8/2011	4.071	F	10,388	\$41,552,000	302		
2268508	K	278I E.B. (B.Q.E.)	278I W.B. (B.Q.E.)		A		11	S	6/5/2011	4.103	F	20,529	\$82,116,000	302		
2268517	K	278I W.B. (B.Q.E.)	FURMAN ST		A		7	S	6/28/2011	3.882	F	10,988	\$43,952,000	302		
2268518	K	278I E.B. (B.Q.E.)	278I W.B. (B.Q.E.)		A		5	S	6/9/2011	4.119	F	9,275	\$37,100,000	302		
2268650	M	FDR NB E42ND TO E49TH ST	EAST RIVER		A		119	S	10/28/2011	3.660	F	30,767	\$123,068,000	106		
2268760	M	PS-5 PED BRDG	TENTH AVE		O-PED		5	C	12/2/2010	4.735	F	1,285	\$5,140,000	112		
2268770	Q	SPRINGFIELD BLVD	EQUES. PATH (ABAND.)		O		1	S	4/20/2009	4.667	F	1,470	\$5,880,000	413		
2268920	R	AMBOY ROAD	LEMON CREEK		WO		1	S	3/15/2010	6.000	G	1,310	\$5,240,000	503		
2268930	M	MORRIS ST PED BRDG	BKLN-BATTERY TUNN PLZ		A-PED		3	C	6/21/2011	3.672	F	1,200	\$4,800,000	101		
2269030	B	MATTHEWSON ROAD	MAC CRACKEN AVE		O		15	S	12/7/2010	4.526	F	14,880	\$59,520,000	205		
2269190	M	W 70TH ST	AMTRAK	A	O		3	S	12/9/2011	5.597	G	17,258	\$69,032,000	107		
2269210	M	W 68TH ST	AMTRAK	A	O		3	S	12/12/2011	6.576	VG	5,382	\$21,528,000	107		
2269240	M	RIVERSIDE DRIVE	W. 155TH ST		O		1	S	5/10/2011	4.640	F	2,780	\$11,120,000	109	112	
2269260	K	W. 8TH ST PED BRDG	SURF AVE.		O-PED	P	39	C	2/8/2011	3.629	F	14,742	\$58,968,000	313		
2269600	K	ERSKINE ST	BSHP		A		1	S	9/10/2010	5.938	G	8,258	\$33,032,000	305		
2269730	R	PARKING EXIT RAMP	SIRT	S	O	F	10	S	10/31/2011	4.028	F	20,727	\$82,908,000	501		
2269740	R	BUS STATION NORTH	SIRT	S	O	F	12	S	11/21/2011	4.660	F	64,605	\$258,420,000	501		
2269750	R	BUS STATION SOUTH	SIRT	S	O	F	12	S	11/22/2011	5.820	G	154,688	\$618,752,000	501		
2269760	R	NORTH RAMP	SIRT	S	O	F	9	S	11/30/2011	4.042	F	17,589	\$70,356,000	501		
2269770	R	BUS STA ENTR RAMP	SIRT	S	O	F	19	S	1/19/2011	4.181	F	39,333	\$157,332,000	501		
2269780	R	PARKING ENTR RAMP	SIRT	S	O	F	3	S	1/14/2011	5.014	G	8,589	\$34,356,000	501		
2269790	R	BUS STATION EXIT RAMP	SIRT	S	O	F	7	S	10/29/2010	5.025	G	28,721	\$114,884,000	501		
2269820	M	E 81 ST PED BRDG	FDR DRIVE N.B.		A-PED	P	3	C	1/12/2010	3.149	F	900	\$3,600,000	108		
2270030	B	E 156TH ST	ACCESS TO HOUSING		O	ED	16	S	11/24/2010	3.821	F	49,696	\$198,784,000	204		
2270170	R	SI FERRY PED BRDG	PARKING LOT EXIT RDWY		O-PED	F	5	C	6/17/2010	3.163	F	2,917	\$11,668,000	501		
2270180	R	BOROUGH PLACE - RAMP A	STATEN ISLAND RAILWAY	S	O	F	1	S	12/29/2005	4.938	F	1,250	\$5,000,000	501		
2270250	B	BROOKE AVE	CSX TRANS - PT MORRIS		O		1	S	6/24/2011	3.836	F	21,035	\$84,140,000	201		

INVENTORY SORTED BY B.I.N.

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2300130	Q	ROCKAWAY BLVD	HOOK CREEK		WO		3	S	8/17/2011	6.271	VG	18,302	\$73,208,000	413		
7703720	Q	216TH ST PED BRDG	LIRR PORT WASH BR	L	O-PED		6	C	10/25/2009	3.556	F	400	\$1,600,000	411		
7705510	Q	167TH ST PED BRDG	LIRR PORT WASH BR	L	O-PED		3	C	10/9/2009	3.902	F	600	\$2,400,000	407		
M00001	M	W191ST ST PED TNL	BROADWAY - IRT #1 SUBWAY		O-PED		1	C	12/13/2010	5.000	G	2,000	\$8,000,000	112		
M00003	M	HHP ON/OFF RMP-79TH ST SO. SIDE	PED PATH SO. OF 79TH ST		A		1	C	4/29/2011	3.700	F	900	\$3,600,000	107		
M00004	M	HHP ON/OFF RMP-79TH ST NO. SIDE	PED PATH NO. OF 79TH ST		A		1	C	6/20/2011	4.733	F	900	\$3,600,000	107		
Q00002	Q	BCIP	PATH OPP. 88TH RD		A		1	C	5/17/2011	3.867	F	1,272	\$5,088,000	413		
786 OPEN BRIDGES					OPEN SPANS 4,409					OPEN SF		14,510,560	58,049,804,000	ALL		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2241129	B	E 149TH ST	AMTRAK - CSX	AC	O		2	S	11/29/2010	4.620	F	18,258	\$73,032,000	201	202	
2241040	B	THIRD AVE	CSX TRANS - PT MORRIS	C	O		1	S	9/28/2010	4.563	F	2,700	\$10,800,000	201	203	
2242260	B	EAGLE AVE	E 161ST ST		O		1	S	3/5/2010	5.017	G	2,800	\$11,200,000	201	203	
2241560	B	E 149TH ST	METRO NORTH RR HAR	M	O		8	S	5/27/2010	4.819	F	27,900	\$111,600,000	201	204	
224005B	B	TO BRUCKNER BLVD	RELIEF		OR		5	S	10/24/2011	6.746	VG	12,100	\$48,400,000	201		
224006A	B	FROM BRUCKNER BLVD	RELIEF		OR		5	S	9/28/2011	6.761	VG	14,037	\$56,148,000	201		
2241000	B	WESTCHESTER AVE	CSX TRANS - PT MORRIS	C	O		1	S	6/16/2010	4.660	F	1,740	\$6,960,000	201		
2241010	B	E 156TH STREET	CSX TRANS - PT MORRIS	C	O		1	S	7/16/2010	4.556	F	2,400	\$9,600,000	201		
2241050	B	E 149TH ST/JACKSON AVE	CSX TRANS - PT MORRIS	C	O		1	S	6/15/2010	4.850	F	65,000	\$260,000,000	201		
2241060	B	ST. MARYS & CONCORD	CSX TRANS - PT MORRIS	C	O		1	S	9/16/2010	5.370	G	4,500	\$18,000,000	201		
2241070	B	WALES AVE	CSX TRANS - PT MORRIS	C	O		1	S	9/27/2010	6.567	VG	2,535	\$10,140,000	201		
2241080	B	SOUTHERN BLVD	CSX TRANS - PT MORRIS	C	O		1	S	9/17/2010	4.167	F	3,900	\$15,600,000	201		
2241099	B	BRUCKNER BLVD	CSX TRANS - PT MORRIS	C	O		1	S	9/17/2010	6.583	VG	6,700	\$26,800,000	201		
2241550	B	E 144TH ST	METRO NORTH RR HAR	M	O		2	S	7/11/2011	6.264	VG	8,290	\$33,160,000	201		
2242299	B	GRAND CONCOURSE	E 138TH ST		O		1	S	5/25/2011	4.467	F	9,500	\$38,000,000	201		
2266540	B	278I	BRUCKNER BLVD		A		2	S	7/8/2011	4.371	F	32,900	\$131,600,000	201		
2270250	B	BROOKE AVE	CSX TRANS - PT MORRIS		O		1	S	6/24/2011	3.836	F	21,035	\$84,140,000	201		
2066671	B	BRUCKNER EXPWY SB	BRONX RIVER		WMA		3	S	10/22/2011	5.278	G	12,400	\$49,600,000	202	209	
2066672	B	BRUCKNER EXPWY NB	BRONX RIVER		WMA		8	S	10/22/2011	4.269	F	22,300	\$89,200,000	202	209	
2240180	B	WESTCHESTER AVE	BRONX RIVER		WO		1	S	9/16/2011	4.608	F	5,476	\$21,904,000	202	209	
2241230	B	WESTCHESTER AVE	AMTRAK - CSX	AC	O		3	S	11/29/2010	5.944	G	15,600	\$62,400,000	202	209	
2075351	B	BRUCKNER EXPWY SB	AMTRAK - CSX	AC	A		1	S	11/3/2011	3.719	F	11,600	\$46,400,000	202		
2075352	B	BRUCKNER EXPWY NB	AMTRAK - CSX	AC	A		1	S	11/3/2011	6.317	VG	10,900	\$43,600,000	202		
2076929	B	BRUCKNER EXPWY	CSX - HUNTS POINT	C	A		1	S	9/15/2011	4.700	F	3,800	\$15,200,000	202		
2241139	B	LEGGETT AVE	AMTRAK - CSX	AC	O		3	S	12/6/2010	4.690	F	41,551	\$166,204,000	202		
2241159	B	LONGWOOD AVE	AMTRAK - CSX	AC	O		2	S	11/22/2010	5.306	G	10,625	\$42,500,000	202		
2241169	B	LAFAYETTE AVE	AMTRAK - CSX	AC	O		1	S	12/6/2010	5.730	G	12,000	\$48,000,000	202		
2241170	B	TIFFANY ST	AMTRAK - CSX	AC	O		1	S	11/1/2011	5.627	G	7,267	\$29,068,000	202		
2241180	B	BARRETTO ST	AMTRAK - CSX	AC	O		1	S	12/2/2010	6.000	G	5,313	\$21,252,000	202		
2241190	B	HUNTS POINT AVE	AMTRAK - CSX	AC	O		1	S	12/2/2010	4.984	F	10,049	\$40,196,000	202		
2241200	B	FAILE ST	AMTRAK - CSX	AC	O		1	S	12/20/2010	5.578	G	6,208	\$24,832,000	202		
2241210	B	BRYANT AVE	AMTRAK - CSX	AC	O		1	S	11/7/2011	3.119	F	5,300	\$21,200,000	202		
2241020	B	E 161ST STREET	CSX TRANS - PT MORRIS	C	O		1	S	5/20/2010	6.700	VG	12,800	\$51,200,000	203		
2241030	B	E 163RD STREET	CSX TRANS - PT MORRIS	C	O		1	S	3/10/2010	4.833	F	3,200	\$12,800,000	203		
2241110	B	MELROSE AVE	CSX TRANS - PT MORRIS	C	O		8	S	8/3/2011	5.611	G	37,854	\$151,416,000	203		
2241620	B	E 162ND ST	METRO NORTH RR HAR	M	O		1	S	5/1/2010	4.859	F	4,700	\$18,800,000	203		
2241630	B	E 165TH ST	METRO NORTH RR HAR	M	O		1	S	4/29/2010	4.217	F	16,400	\$65,600,000	203		
2241650	B	E 167TH ST	METRO NORTH RR HAR	M	O		1	S	4/27/2010	5.510	G	3,363	\$13,452,000	203		
2241660	B	E 168TH ST	METRO NORTH RR HAR	M	O		1	S	4/26/2010	4.797	F	4,800	\$19,200,000	203		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2241670	B	E 169TH ST	METRO NORTH RR HAR	M	O		1	S	4/23/2010	4.250	F	3,300	\$13,200,000	203		
2241680	B	E 170TH ST	METRO NORTH RR HAR	M	O		1	S	4/22/2010	6.333	VG	3,150	\$12,600,000	203		
2241700	B	ST PAULS PL PED BRDG	METRO NORTH RR HAR	M	O-PED		2	C	2/10/2009	5.000	G	600	\$2,400,000	203		
2241710	B	CLAREMONT PKWY	METRO NORTH RR HAR	M	O		1	S	4/21/2010	4.422	F	6,300	\$25,200,000	203		
2241720	B	E 173RD ST	METRO NORTH RR HAR	M	O		1	S	4/20/2010	4.875	F	3,000	\$12,000,000	203		
2241610	B	E 161ST ST	METRO NORTH RR HAR	M	O		1	S	10/12/2011	5.017	G	6,600	\$26,400,000	204	203	
2076640	B	DEPOT PLACE	METRO NORTH RR HUD	CM	O		11	S	6/27/2011	5.028	G	26,566	\$106,264,000	204		
2241409	B	GRAND CONCOURSE	METRO NORTH RR HUD	MT	O		1	S	6/1/2010	3.797	F	14,300	\$57,200,000	204		
2241410	B	WALTON AVE	METRO NORTH RR HUD	M	O		1	S	6/1/2010	5.297	G	3,600	\$14,400,000	204		
2241420	B	GERARD AVE	METRO NORTH RR HUD	M	O		1	S	5/18/2010	5.797	G	5,063	\$20,252,000	204		
2241430	B	RIVER AVE	METRO NORTH RR HUD	M	O		1	S	7/13/2011	6.156	VG	5,040	\$20,160,000	204		
2241590	B	CONCOURSE VILL AVE	METRO NORTH RR HAR	M	O		1	S	5/13/2010	4.031	F	12,077	\$48,308,000	204		
2241600	B	E 158TH ST	METRO NORTH RR HAR	M	O		1	S	7/12/2011	5.200	G	3,400	\$13,600,000	204		
2242259	B	GRAND CONCOURSE	E 161ST ST		O		1	S	9/15/2010	6.400	VG	27.017	\$108,068,000	204		
2242280	B	GRAND CONCOURSE	E 167TH ST		O		2	S	8/20/2010	4.754	F	42,900	\$171,600,000	204		
2242300	B	GRAND CONCOURSE	E 170TH ST		O		2	S	3/26/2010	4.789	F	39,300	\$157,200,000	204		
2242319	B	GRAND CONCOURSE	E 174TH ST	T	O		1	S	3/26/2010	4.067	F	14,900	\$59,600,000	204		
2270030	B	E 156TH ST	ACCESS TO HOUSING		O	ED	16	S	11/24/2010	3.821	F	49,696	\$198,784,000	204		
2242350	B	EAST FORDHAM RD	GRAND CONCOURSE		O		1	S	3/19/2010	4.567	F	10,300	\$41,200,000	205	207	
2241460	B	W TREMONT AVE	METRO NORTH RR HUD	M	O		8	S	6/14/2010	4.164	F	12,900	\$51,600,000	205		
2242329	B	GRAND CONCOURSE	E 175TH ST	T	O		1	S	8/19/2010	4.867	F	11,900	\$47,600,000	205		
2242330	B	GRAND CONCOURSE	E TREMONT AVE		O		1	S	9/28/2011	5.983	G	11,700	\$46,800,000	205		
2242360	B	GRAND CONCOURSE	BURNSIDE AVE		O		2	S	9/15/2010	4.441	F	8,400	\$33,600,000	205		
2269030	B	MATTHEWSON ROAD	MAC CRACKEN AVE		O		15	S	12/7/2010	4.526	F	14,880	\$59,520,000	205		
2241839	B	E 189TH ST	METRO NORTH RR HAR	M	O		1	S	7/6/2011	6.333	VG	43,157	\$172,628,000	206	207	
2242400	B	E 180TH ST	BRONX RIVER		WO		1	S	10/7/2010	4.810	F	4,500	\$18,000,000	206	227	
2241269	B	E 177TH ST	AMTRAK - CSX	AC	O		3	S	10/4/2010	5.403	G	16,606	\$66,424,000	206		
2241740	B	E 175TH ST	METRO NORTH RR HAR	M	O		1	S	4/19/2010	3.922	F	3,600	\$14,400,000	206		
2241760	B	E TREMONT AVE	METRO NORTH RR HAR	M	O		1	S	7/6/2011	6.450	VG	8,424	\$33,696,000	206		
2241770	B	E 178TH ST PED BRDG	METRO NORTH RR HAR	M	O-PED		1	C	2/11/2009	5.159	G	700	\$2,800,000	206		
2241780	B	E 179TH ST PED BRDG	METRO NORTH RR HAR	M	O-PED		6	C	2/11/2009	5.797	G	700	\$2,800,000	206		
2241790	B	E 180TH ST	METRO NORTH RR HAR	M	O		1	S	4/19/2010	3.906	F	5,000	\$20,000,000	206		
2241800	B	E 183TH ST	METRO NORTH RR HAR	M	O		1	S	4/14/2010	4.109	F	4,080	\$16,320,000	206		
2241810	B	E 188TH ST	METRO NORTH RR HAR	M	O		1	S	4/12/2010	4.063	F	5,300	\$21,200,000	206		
2241820	B	E 187TH ST	METRO NORTH RR HAR	M	O		1	S	4/13/2010	4.344	F	3,800	\$15,200,000	206		
2242030	B	CROTONA AVE	BRONX PELHAM PKWY		O		2	S	2/8/2010	5.447	G	7,600	\$30,400,000	206		
2242149	B	E TREMONT AVE	BRONX RIVER		WO		2	S	6/3/2010	4.500	F	12,900	\$51,600,000	206		
2241489	B	W 225TH ST	CSX TRASP - PUTNAM	C	O		2	S	6/11/2010	5.149	G	10,900	\$43,600,000	207	208	
2230270	B	MOSHOLU PARKWAY	WEBSTER AVE		A		1	S	5/13/2011	5.328	G	8,480	\$33,920,000	207		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2230287	B	JEROME AVE	MOSHOLU PARKWAY	T	A		3	S	4/22/2011	4.816	F	11,800	\$47,200,000	207		
2241470	B	W FORDHAM RD	METRO NORTH RR HUD	M	O		4	S	7/14/2011	5.694	G	16,052	\$64,208,000	207		
2241930	B	BEDFORD PARK BLVD	NYCTA IND YARDS	T	O		4	S	11/11/2010	5.514	G	46,300	\$185,200,000	207		
2241940	B	W 205TH ST	NYCTA IND YARDS	T	O		4	S	11/11/2010	5.625	G	32,508	\$130,032,000	207		
2242340	B	GRAND CONCOURSE	EAST KINGSBRIDGE		O		2	S	9/9/2010	4.714	F	18,285	\$73,140,000	207		
2242370	B	GRAND CONCOURSE	BEDFORD PARK BLVD		O		1	S	3/18/2010	4.294	F	8,418	\$33,672,000	207		
2242380	B	GRAND CONCOURSE	E 204TH ST		O		1	S	9/26/2011	5.484	G	9,272	\$37,088,000	207		
2229440	B	HHP	KAPPOCK ST		A		1	S	7/18/2011	4.931	F	3,900	\$15,600,000	208		
2229450	B	232ND ST	HHP		A		2	S	7/19/2011	5.026	G	4,900	\$19,600,000	208		
2229460	B	236TH ST PED BRDG	HHP		A-PED		3	C	6/8/2011	4.672	F	2,500	\$10,000,000	208		
2229470	B	239TH ST	HHP		A		2	S	4/29/2011	5.053	G	6,100	\$24,400,000	208		
2229480	B	MANHATTAN COLL PKWY	HHP		A		3	S	4/29/2011	5.053	G	6,200	\$24,800,000	208		
2229490	B	246TH ST	HHP		A		2	S	4/29/2011	4.868	F	5,600	\$22,400,000	208		
2229500	B	252ND ST	HHP		A		2	S	2/4/2010	5.791	G	4,500	\$18,000,000	208		
2229510	B	RIVERDALE AVE	HHP		A		2	S	7/20/2011	5.079	G	5,200	\$20,800,000	208		
2229520	B	FIELDSTON ROAD	HHP		A		1	S	7/21/2011	5.033	G	6,600	\$26,400,000	208		
2229530	B	HHP	BROADWAY		A		1	S	7/22/2011	4.574	F	7,500	\$30,000,000	208		
2241490	B	W 230TH ST	CONRAIL (ABANDONED) PUTNAM		O		1	S	4/8/2011	5.563	G	5,600	\$22,400,000	208		
2241509	B	W 231ST ST	CONRAIL (ABANDONED) PUTNAM		O		1	S	9/29/2010	4.745	F	4,723	\$18,892,000	208		
2241510	B	W 233RD ST	CONRAIL (ABANDONED) PUTNAM		O		1	S	4/7/2011	5.275	G	3,760	\$15,040,000	208		
2241520	B	W 234TH ST	CONRAIL (ABANDONED) PUTNAM		O		1	S	4/7/2011	5.176	G	3,770	\$15,080,000	208		
2066720	B	E 174TH ST	SHERIDAN EXPWY/AMTRAK	A	A		13	S	8/30/2010	4.042	F	35,573	\$142,292,000	209	203	
2241270	B	E TREMONT AVE	AMTRAK - CSX	AC	O		2	S	10/1/2010	5.153	G	22,300	\$89,200,000	209	211	
1066510	B	BRUCKNER EXPWY SVC RD	WESTCHESTER CREEK		WMA		17	S	11/8/2010	3.516	F	39,400	\$157,600,000	209		
206672A	B	174TH ST-NTH PED BRDG	8951 - SHERIDAN EXPWY		A-PED		4	C	5/10/2010	4.736	F	1,800	\$7,200,000	209		
206672B	B	174TH ST-STH PED BRDG	8951 - SHERIDAN EXPWY		A-PED		4	C	4/13/2010	4.972	F	1,900	\$7,600,000	209		
2075837	B	WESTCHESTER AVE	HUTCHINSON RVR PKWY		A		2	S	2/5/2010	4.306	F	15,858	\$63,432,000	210	211	
2075849	B	BRONX PELHAM PKWY	HUTCHINSON RVR PKWY		A		2	S	6/9/2010	3.974	F	17,600	\$70,400,000	210	211	
2241959	B	HUTCHINSON RVR PKWY	AMTRAK - CSX	AC	O		1	S	6/13/2010	5.780	G	15,444	\$61,776,000	210	211	
2075859	B	HUTCHINSON RVR PKWY	HUTCHINSON RIVER		WMA		7	S	10/24/2011	4.703	F	60,500	\$242,000,000	210	228	
2075820	B	E TREMONT AVE	HUTCHINSON RVR PKWY		A		2	S	11/21/2011	4.444	F	10,200	\$40,800,000	210		
2076109	B	BE NB SERVICE RD	HUTCHINSON RVR PKWY		A		2	S	9/1/2011	4.632	F	7,800	\$31,200,000	210		
2076129	B	BE SB SERVICE RD	HUTCHINSON RVR PKWY		A		2	S	1/22/2010	5.105	G	7,100	\$28,400,000	210		
2241910	B	GUN HILL ROAD	NYCTA-DYRE AVE LN	T	O		1	S	11/12/2010	5.750	G	7,500	\$30,000,000	211	212	
2229560	B	BRONX PELHAM PKWY	AMTRAK - CSX	AC	A		3	S	6/13/2010	4.542	F	24,591	\$98,364,000	211		
2241329	B	WHITE PLAINS ROAD	AMTRAK - CSX	AC	O		1	S	9/14/2010	4.719	F	6,900	\$27,600,000	211		
2241330	B	UNIONPORT ROAD	AMTRAK - CSX	AC	O		1	S	9/14/2010	4.781	F	7,631	\$30,524,000	211		
2241369	B	WILLIAMSBRIDGE RD	AMTRAK - CSX	AC	O		2	S	10/1/2010	4.836	F	6,510	\$26,040,000	211		
2241870	B	E 233RD ST	METRO NORTH RR HAR	M	O		1	S	5/17/2010	4.941	F	7,664	\$30,656,000	212	207	

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
1067150	B	NEREID AVE (E. 240TH ST)	BRONX RIVER PKWY	M	O		10	S	10/6/2011	4.474	F	57,750	\$231,000,000	212		
2229579	B	BOSTON POST ROAD	HUTCHINSON RIVER		WO		14	S	6/23/2011	4.194	F	95,700	\$382,800,000	212		
2241860	B	GUN HILL RD	METRO NORTH RR HAR	M	O		1	S	5/17/2010	6.531	VG	9,128	\$36,512,000	212		
2241890	B	E 241ST ST	BRP, METRO NORTH HAR	M	WO		28	S	10/5/2011	4.306	F	49,500	\$198,000,000	212		
2241900	B	EASTCHESTER ROAD	NYCTA-DYRE AVE LN	T	O		3	S	11/16/2010	4.556	F	13,500	\$54,000,000	212		
2242071	B	BRONX BLVD S.B.	BRONX RIVER		WO		1	S	5/6/2010	4.633	F	1,800	\$7,200,000	212		
2242072	B	BRONX BLVD N.B.	BRONX RIVER		WO		1	S	5/6/2010	4.967	F	1,800	\$7,200,000	212		
2242081	B	BRONX BLVD S.B.	BRONX RIVER		WO		1	S	5/6/2010	4.467	F	2,800	\$11,200,000	212		
2242082	B	BRONX BLVD N.B.	BRONX RIVER		WO		1	S	5/6/2010	4.467	F	2,800	\$11,200,000	212		
2242099	B	PARK ROAD (204TH ST)	BRONX RIVER		WO		1	S	6/7/2010	4.793	F	4,700	\$18,800,000	212		
2242430	B	GUN HILL ROAD	BRONX BLVD		O		4	S	3/17/2010	4.737	F	9,400	\$37,600,000	212		
2242440	B	GUN HILL ROAD	BRONX RIVER		WO		1	S	2/24/2010	4.767	F	8,700	\$34,800,000	212		
2242459	B	E 233RD ST	BRONX RIVER		WO		1	S	3/25/2010	4.367	F	7,000	\$28,000,000	212		
2242460	B	E 233RD ST	ENTR RD BNX RVR PKWY		O		1	S	1/18/2010	4.900	F	5,300	\$21,200,000	212		
2229540	B	VAN CRTLDT PARK	HHP		A-PED	P	2	C	8/4/2011	4.306	F	3,900	\$15,600,000	226		
2229550	B	VAN CRTLDT EQUES	HHP		A-PED	P	2	C	8/4/2011	4.556	F	2,100	\$8,400,000	226		
2230290	B	MOSHOLU PARKWAY	EQUESTRIAN PATH		A		1	S	1/22/2010	4.448	F	4,300	\$17,200,000	226		
2230300	B	MOSHOLU PARKWAY	CONRAIL (ABANDONED)	C	A		1	S	10/15/2010	4.271	F	4,600	\$18,400,000	226		
2230310	B	MOSHOLU PARKWAY	SB RAMP TO HHP		A		2	S	9/26/2011	4.919	F	7,400	\$29,600,000	226		
2230260	B	MOSHOLU PARKWAY	METRO NORTH	M	A		1	S	5/13/2010	5.516	G	8,880	\$35,520,000	227	207	
2241259	B	204TH ST PED BRDG	METRO NORTH RR HAR	M	O-PED	P	1	C	3/4/2009	4.034	F	4,700	\$18,800,000	227	207	
2241840	B	BEDFORD PARK BLVD	METRO NORTH RR HAR	M	O		1	S	5/13/2010	4.844	F	6,400	\$25,600,000	227	207	
2065629	B	BRONX RIVER PKWY	BOSTON RD BX ZOO		A		1	S	8/22/2011	5.276	G	6,300	\$25,200,000	227		
2230250	B	MOSHOLU PARKWAY	BRONX RIVER		WA		5	S	1/13/2010	4.316	F	16,300	\$65,200,000	227		
2242010	B	EAST FORDHAM RD	BRONX RIVER		WA		1	S	4/20/2010	5.207	G	9,200	\$36,800,000	227		
2242029	B	SOUTHERN BLVD	EAST FORDHAM ROAD		O		2	S	2/8/2010	4.553	F	12,900	\$51,600,000	227		
2242100	B	BOTANICAL GARDEN ROAD	TWIN LAKES		WO	P	1	S	3/29/2010	4.833	F	2,200	\$8,800,000	227		
2242110	B	BOSTON ROAD	BRONX RIVER		WO		1	S	4/7/2010	4.227	F	6,200	\$24,800,000	227		
2242120	B	FTBG N OF RTE 1	BRONX RIVER		WO-PED	P	1	C	11/29/2010	3.583	F	1,900	\$7,600,000	227		
2242210	B	S OF ALLERTON AVE	BRONX RIVER		WO		3	S	6/7/2010	4.763	F	6,200	\$24,800,000	227		
2242220	B	SNUFF MILL ROAD	BRONX RIVER		WO		2	S	1/15/2010	4.395	F	4,800	\$19,200,000	227		
2240200	B	SHORE ROAD	HUTCHINSON RIVER		WMO		7	S	6/21/2011	4.537	F	43,576	\$174,304,000	228		
2240210	B	CITY ISLAND ROAD	EASTCHESTER BAY		WO		7	S	10/21/2011	3.389	F	19,915	\$79,660,000	228		
2241380	B	PELHAM BAY PK EQUES	AMTRAK - CSX	AC	O-PED	P	1	C	3/7/2009	3.508	F	4,223	\$16,892,000	228		
2241390	B	SHORE RD CIRCLE	AMTRAK - CSX	AC	O		2	S	11/12/2011	3.569	F	4,800	\$19,200,000	228		
1240090	BM	MACOMBS DAM BRIDGE	HARLEM RIVER	M	WMO		52	S	11/30/2011	3.930	F	220,000	\$880,000,000	110	204	
2240089	BM	145TH ST BRIDGE	HARLEM RIVER		WMO		8	S	9/23/2011	6.250	VG	56,700	\$226,800,000	110	204	201
2240059	BM	WILLIS AVENUE	HARLEM RIVER		WMO		26	S	12/22/2010	6.403	VG	171,105	\$684,420,000	111	201	
2240069	BM	THIRD AVE BRIDGE	HARLEM RIVER		WMO		14	S	8/24/2010	6.521	VG	100,232	\$400,928,000	111	201	

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2240079	BM	MADISON AVE BRIDGE	HARLEM RIVER		WMO		21	S	9/30/2010	4.944	F	80,000	\$320,000,000	111	201	
2246580	BM	HIGH BRIDGE PDOVP	I87 - HARLEM RIVER	M	WA-PED	P	11	P	8/12/2002	3.759	F	34,100	\$136,400,000	112	204	
2066919	BM	WASHINGTON BRIDGE	HARLEM RIVER	M	WO		9	S	11/12/2010	4.642	F	128,339	\$513,356,000	112	205	204
2240120	BM	W 207TH/W FORDHAM RD	HARLEM RIVER		WMO		5	S	8/20/2010	5.222	G	31,784	\$127,136,000	112	207	
2240137	BM	BROADWAY BRIDGE	HARLEM RIVER	TM	WMO		3	S	12/28/2010	3.972	F	46,848	\$187,392,000	112	207	208
2240138	BM	NYCTA IRT	HARLEM RVR/BROADWAY	TM	WMO		3	S	11/21/2011	4.720	F	19,520	\$78,080,000	112	207	208
2240290	K	METROPOLITAN AVE	ENGLISH KILLS		WMO		5	S	6/28/2011	6.000	G	10,550	\$42,200,000	301		
2230410	K	278I EB (B.Q.E.)	WASHINGTON ST		A		1	S	6/30/2011	4.500	F	2,500	\$10,000,000	302		
2230420	K	278I WB (B.Q.E.)	WASHINGTON ST		A		1	S	7/2/2010	5.109	G	2,500	\$10,000,000	302		
2230430	K	278I (B.Q.E.)	PROSPECT ST		A		1	S	1/19/2010	5.000	G	1,100	\$4,400,000	302		
2230440	K	278I WB (B.Q.E.)	ADAMS ST		A		1	S	1/15/2010	5.167	G	2,700	\$10,800,000	302		
2230450	K	278I EB (B.Q.E.)	ADAMS ST		A		1	S	1/15/2010	4.933	F	2,500	\$10,000,000	302		
2230460	K	278I (B.Q.E.)	PEARL ST		A		1	S	2/16/2010	5.467	G	4,500	\$18,000,000	302		
2230470	K	278I (B.Q.E.)	JAY ST		A		1	S	2/17/2010	4.833	F	5,100	\$20,400,000	302		
2230480	K	278I (B.Q.E.)	PROSPECT ST		A		1	S	2/18/2010	5.093	G	8,400	\$33,600,000	302		
2230490	K	278I (B.Q.E.)	SANDS ST		A		1	S	3/1/2010	5.019	G	12,600	\$50,400,000	302		
2230500	K	278I (B.Q.E.)	RAMP TO BQE EB		A		1	S	3/5/2010	5.100	G	1,300	\$5,200,000	302		
2230510	K	278I (B.Q.E.)	NASSAU ST		A		6	S	6/1/2010	5.169	G	51,200	\$204,800,000	302		
2230857	K	278I WB (B.Q.E.)	JORALEMON ST		A		1	S	3/18/2010	5.000	G	2,100	\$8,400,000	302		
2230858	K	278I EB (B.Q.E.)	JORALEMON ST / BQE WB		A		2	S	10/9/2011	4.619	F	5,900	\$23,600,000	302		
2230870	K	COLUMBIA HEIGHTS	278I (B.Q.E.)		A		1	S	7/21/2010	4.550	F	16,500	\$66,000,000	302		
2230887	K	278I W.B. (B.Q.E.)	CADMAN PLAZA		A		2	S	7/20/2010	4.397	F	4,500	\$18,000,000	302		
2230888	K	278I E.B. (B.Q.E.)	CADMAN PLAZA / 278I WB		A		2	S	7/23/2010	5.263	G	4,500	\$18,000,000	302		
2243280	K	6TH AVE	LIRR ATLANTIC AVE	L	O		9	S	12/30/2010	5.431	G	12,276	\$49,104,000	302		
2243290	K	CARLTON AVE	LIRR ATLANTIC AVE	L	O		7	S	12/29/2010	5.069	G	10,823	\$43,292,000	302		
2244440	K	SOUTH OF TILLARY ST	NAVY ST		O-PED		1	C	8/15/2011	3.958	F	6,200	\$24,800,000	302		
2267860	K	BROOKLYN BR APPROACH	STORAGE (SANDS ST)		O		1	S	7/27/2010	4.607	F	6,490	\$25,960,000	302		
2268350	K	BROOKLYN PROMENADE	278I EB (BQE)		A-PED	P	35	C	4/20/2011	3.690	F	46,184	\$184,736,000	302		
2268497	K	278I W.B. (B.Q.E.)	FURMAN ST		A		45	S	8/6/2011	4.357	F	86,406	\$345,624,000	302		
2268498	K	278I E.B. (B.Q.E.)	278I WB (BQE)		A		69	S	11/13/2011	3.965	F	133,708	\$534,832,000	302		
2268507	K	278I W.B. (B.Q.E.)	YORK ST		A		6	S	6/8/2011	4.071	F	10,388	\$41,552,000	302		
2268508	K	278I E.B. (B.Q.E.)	278I W.B. (B.Q.E.)		A		11	S	6/5/2011	4.103	F	20,529	\$82,116,000	302		
2268517	K	278I W.B. (B.Q.E.)	FURMAN ST		A		7	S	6/28/2011	3.882	F	10,988	\$43,952,000	302		
2268518	K	278I E.B. (B.Q.E.)	278I W.B. (B.Q.E.)		A		5	S	6/9/2011	4.119	F	9,275	\$37,100,000	302		
2230000	K	HIGHLAND BLVD E.B.	JACKIE ROBINSON PKWY		A		1	S	3/24/2010	4.724	F	4,900	\$19,600,000	305		
2230010	K	HIGHLAND BLVD W.B.	JACKIE ROBINSON PKWY		A		1	S	3/24/2010	4.767	F	3,500	\$14,000,000	305		
2230020	K	HIGHLAND BLVD W.B.	JACKIE ROBINSON PKWY		A		2	S	3/25/2010	4.711	F	4,700	\$18,800,000	305		
2230220	K	HIGHLAND BLVD NB	VERMONT AVE		A		1	S	5/18/2011	5.857	G	3,995	\$15,980,000	305		
2244170	K	ATLNTC AV SVC RD E.B.	EAST NEW YORK AVE		O		2	S	7/20/2011	5.474	G	3,192	\$12,768,000	305		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2244180	K	ATLNTC AV SVC RD W.B.	EAST NEW YORK AVE		O		2	S	7/20/2011	4.965	F	5,600	\$22,400,000	305		
2244460	K	CONDUIT BLVD NB	ATLANTIC AVE EB		O		1	S	10/15/2010	4.833	F	3,800	\$15,200,000	305		
2269600	K	ERSKINE ST	BSHP		A		1	S	9/10/2010	5.938	G	8,258	\$33,032,000	305		
2230350	K	SUMMIT ST PED BRDG	278I (B.Q.E.)		A-PED		2	S	4/1/2010	4.386	F	1,400	\$5,600,000	306		
2230360	K	UNION ST	278I (B.Q.E.)		A		2	S	4/1/2010	4.236	F	5,000	\$20,000,000	306		
2230370	K	SACKETT ST	278I (B.Q.E.)		A		2	S	3/26/2010	4.431	F	5,000	\$20,000,000	306		
2230380	K	KANE ST	278I (B.Q.E.)		A		2	S	4/9/2010	4.208	F	5,000	\$20,000,000	306		
2230390	K	CONGRESS ST	278I (B.Q.E.)		A		2	S	4/9/2010	6.279	VG	5,000	\$20,000,000	306		
2240232	K	HAMILTON AVE BRIDGE	GOWANUS CANAL		WMO		3	S	9/7/2011	5.306	G	7,300	\$29,200,000	306		
2240240	K	NINTH ST BRIDGE	GOWANUS CANAL		WMO		3	S	5/27/2011	6.581	VG	5,772	\$23,088,000	306		
2240250	K	THIRD ST	GOWANUS CANAL		WMO		5	S	5/19/2011	4.903	F	4,900	\$19,600,000	306		
2240260	K	CARROLL ST	GOWANUS CANAL		WMO		2	S	6/16/2011	4.634	F	3,000	\$12,000,000	306		
2240270	K	UNION ST	GOWANUS CANAL		WMO		5	S	9/3/2010	4.000	F	4,900	\$19,600,000	306		
2240310	K	THIRD AVE	GOWANUS CANAL		WO		1	S	5/18/2011	6.900	VG	3,200	\$12,800,000	306		
2240231	K	HAMILTON AVE BRIDGE	GOWANUS CANAL		WMO		3	S	10/8/2010	5.472	G	7,300	\$29,200,000	307	306	
2066100	K	5TH AVE	27 X PROSPECT EXPWY		A		1	S	6/4/2010	5.104	G	8,800	\$35,200,000	307		
2243839	K	4TH AVE	NYCTA BMT TRACKS	T	O		1	S	8/24/2011	6.300	VG	4,440	\$17,760,000	307		
2243920	K	7TH AVE	NYCTA BMT YARD	T	O		2	S	1/14/2011	5.930	G	4,700	\$18,800,000	307		
2244470	K	SEELEY ST	PROSPECT AVE		O		1	S	6/1/2011	4.033	F	8,482	\$33,928,000	307		
2244480	K	5TH AVE	GREENWOOD CEMETERY		O		1	S	9/8/2011	4.667	F	3,600	\$14,400,000	307		
2243170	K	STERLING PLACE	FRANKLIN SHUTTLE	T	O		1	S	8/24/2011	6.500	VG	2,300	\$9,200,000	308		
2243180	K	ST JOHNS PLACE	FRANKLIN SHUTTLE	T	O		1	S	8/24/2011	6.781	VG	2,300	\$9,200,000	308		
2243190	K	LINCOLN PLACE	FRANKLIN SHUTTLE	T	O		1	S	1/17/2011	6.797	VG	2,460	\$9,840,000	308		
2243279	K	EASTERN PKWY	FRANKLIN SHUTTLE	T	O		1	S	1/5/2011	4.861	F	7,700	\$30,800,000	309	308	
2243250	K	WASHINGTON AVE	FRANKLIN SHUTTLE	T	O		1	S	1/4/2011	6.281	VG	3,657	\$14,628,000	309	355	
2243200	K	UNION ST	FRANKLIN SHUTTLE	T	O		2	S	1/3/2011	5.000	G	4,100	\$16,400,000	309		
2243210	K	PRESIDENT ST	FRANKLIN SHUTTLE	T	O		2	S	1/3/2011	5.157	G	2,500	\$10,000,000	309		
2243220	K	CARROLL ST PED BRDG	FRANKLIN SHUTTLE	T	O-PED		3	C	10/26/2011	5.155	G	600	\$2,400,000	309		
2243230	K	CROWN ST	FRANKLIN SHUTTLE	T	O		3	S	10/11/2011	5.097	G	4,060	\$16,240,000	309		
2243240	K	MONTGOMERY ST	FRANKLIN SHUTTLE	T	O		1	S	8/11/2011	5.961	G	2,240	\$8,960,000	309		
2243260	K	FLATBUSH AVE	FRANKLIN SHUTTLE	T	O		2	S	1/6/2011	4.961	F	11,300	\$45,200,000	309		
2231249	K	BSHP	BAY RIDGE AVE		A		1	S	5/12/2011	3.313	F	4,900	\$19,600,000	310		
2231250	K	81ST ST PED BRDG	BSHP		A-PED	P	5	C	2/11/2011	4.403	F	3,100	\$12,400,000	310		
2231260	K	92ND ST PED BRDG	BSHP		A-PED	P	6	C	7/30/2010	3.952	F	3,000	\$12,000,000	310		
2231270	K	4TH AVE	BSHP		A		2	S	3/31/2010	4.684	F	6,100	\$24,400,000	310		
2243310	K	2ND AVE	LIRR BAY RIDGE	N	O		2	S	12/14/2010	6.472	VG	17,751	\$71,004,000	310		
2243320	K	3RD AVE	LIRR BAY RIDGE	N	O		4	S	9/14/2011	5.083	G	17,230	\$68,920,000	310		
2243330	K	4TH AVE	LIRR BAY RIDGE	NT	O		4	S	8/30/2011	5.653	G	13,668	\$54,672,000	310		
2243580	K	5TH AVE	LIRR & SEA BEACH	NT	O		4	S	1/11/2011	4.059	F	12,395	\$49,580,000	310		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2243590	K	6TH AVE	LIRR & SEA BEACH	NT	O		2	S	9/30/2011	6.306	VG	14,382	\$57,528,000	310		
2243600	K	7TH AVE	LIRR & SEA BEACH	NT	O		7	S	1/19/2011	4.778	F	18,628	\$74,512,000	310		
2243610	K	8TH AVE	LIRR & SEA BEACH	NT	O		2	S	9/30/2011	6.181	VG	10,834	\$43,336,000	310		
2243620	K	FORT HAMILTON PKWY	LIRR & SEA BEACH	NT	O		3	S	1/10/2011	4.729	F	14,800	\$59,200,000	310		
2243630	K	11TH AVE	LIRR & SEA BEACH	NT	O		5	S	1/10/2011	5.926	G	9,700	\$38,800,000	310		
2243640	K	13TH AVE	LIRR & SEA BEACH	NT	O		5	S	9/23/2011	4.694	F	16,000	\$64,000,000	310		
2244150	K	RIDGE BLVD	SHORE RD DRIVE		O		1	S	5/24/2011	6.667	VG	4,350	\$17,400,000	310		
2244160	K	3RD AVE	SHORE RD DRIVE		O		1	S	5/24/2011	6.727	VG	4,360	\$17,440,000	310		
2231290	K	BAY 8TH ST	BSHP		A		1	S	5/14/2011	5.952	G	4,950	\$19,800,000	311		
2231300	K	17TH AVE PED BRDG	BSHP		A-PED	P	1	C	9/1/2011	3.559	F	2,100	\$8,400,000	311		
2231319	K	BSHP	BAY PKWY		A		1	S	6/21/2011	4.442	F	7,200	\$28,800,000	311		
2243340	K	15TH AVE	LIRR BAY RIDGE	N	O		1	S	12/6/2010	4.723	F	3,614	\$14,456,000	311		
2243350	K	60TH ST	LIRR BAY RIDGE	N	O		1	S	8/31/2011	6.133	VG	3,900	\$15,600,000	311		
2243360	K	16TH AVE	LIRR BAY RIDGE	N	O		1	S	12/6/2010	5.350	G	4,345	\$17,380,000	311		
2243650	K	14TH AVE	LIRR BAY RIDGE	N	O		1	S	12/23/2010	6.600	VG	4,720	\$18,880,000	311		
2243660	K	NEW UTRECHT AVE	LIRR BAY RIDGE	N	O		1	S	12/23/2010	6.217	VG	2,350	\$9,400,000	311		
2243670	K	15TH AVE	BMT SEA BEACH	T	O		4	S	6/26/2011	6.386	VG	16,020	\$64,080,000	311		
2243680	K	16TH AVE	BMT SEA BEACH	T	O		3	S	2/12/2011	5.370	G	6,816	\$27,264,000	311		
2243690	K	17TH AVE	BMT SEA BEACH	T	O		4	S	2/12/2011	6.327	VG	8,946	\$35,784,000	311		
2243700	K	18TH AVE	BMT SEA BEACH	T	O		1	S	8/25/2011	6.632	VG	5,200	\$20,800,000	311		
2243710	K	19TH AVE	BMT SEA BEACH	T	O		4	S	1/20/2011	4.395	F	4,800	\$19,200,000	311		
2243720	K	20TH AVE	BMT SEA BEACH	T	O		1	S	1/20/2011	6.673	VG	7,000	\$28,000,000	311		
2243730	K	65TH ST	BMT SEA BEACH	T	O		4	S	12/16/2010	5.132	G	12,000	\$48,000,000	311		
2243740	K	BAY PKWY	BMT SEA BEACH	T	O		4	S	12/14/2010	4.816	F	16,800	\$67,200,000	311		
2243750	K	AVENUE O	BMT SEA BEACH	T	O		1	S	9/1/2011	5.706	G	4,658	\$18,632,000	311		
2243760	K	AVENUE P	BMT SEA BEACH	T	O		1	S	8/31/2011	5.674	G	5,544	\$22,176,000	311		
2243770	K	KINGS HIGHWAY	BMT SEA BEACH	T	O		1	S	9/13/2011	6.767	VG	5,032	\$20,128,000	311		
2243780	K	HIGHLAWN AVE	BMT SEA BEACH	T	O		1	S	9/13/2011	6.400	VG	6,960	\$27,840,000	311		
2243800	K	AVENUE T	BMT SEA BEACH	T	O		1	S	9/15/2011	6.033	VG	5,360	\$21,440,000	311		
2243820	K	21ST AVE	BMT SEA BEACH	T	O		4	S	10/10/2011	3.974	F	21,400	\$85,600,000	311		
2243370	K	17TH AVE	LIRR BAY RIDGE	N	O		1	S	12/7/2010	4.824	F	3,406	\$13,624,000	312		
2243380	K	18TH AVE	LIRR BAY RIDGE	N	O		1	S	12/7/2010	4.688	F	6,006	\$24,024,000	312		
2243390	K	52ND ST	LIRR BAY RIDGE	N	O		1	S	12/9/2010	6.250	VG	3,293	\$13,172,000	312		
2243400	K	50TH ST	LIRR BAY RIDGE	N	O		2	S	9/1/2011	4.731	F	7,100	\$28,400,000	312		
2243410	K	MCDONALD AVE	LIRR BAY RIDGE	N	O		1	S	12/9/2010	5.047	G	2,760	\$11,040,000	312		
2243420	K	E 3RD ST	LIRR BAY RIDGE	N	O		1	S	9/1/2011	6.517	VG	1,840	\$7,360,000	312		
2243439	K	OCEAN PKWY	LIRR BAY RIDGE	N	O		1	S	12/10/2010	4.927	F	7,000	\$28,000,000	312		
2243440	K	CONY ISLAND AVE	LIRR BAY RIDGE	N	O		1	S	12/2/2010	5.234	G	3,231	\$12,924,000	312		
2243840	K	9TH AVE	NYCTA BMT YARD	T	O		5	S	8/19/2011	5.736	G	12,440	\$49,760,000	312		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2243940	K	9TH AVE	NYCTA IND SBWY	T	O		5	S	8/19/2011	4.737	F	6,300	\$25,200,000	312		
2231329	K	BSHP	26TH AVE		A		1	S	4/30/2010	4.600	F	6,700	\$26,800,000	313		
2231330	K	27TH AVE PED BRDG	BSHP		A-PED	P	1	C	2/23/2011	4.106	F	2,100	\$8,400,000	313		
2231340	K	CROPSEY AVE	BSHP		A		2	S	6/15/2010	4.583	F	13,100	\$52,400,000	313		
2231360	K	BSHP	OCEAN PKWY		A		3	S	7/16/2010	6.535	VG	29,637	\$118,548,000	313		
2231370	K	GUIDER AV RAMP TO BSHP	BSHP		A		4	S	10/24/2011	3.292	F	12,800	\$51,200,000	313		
2231380	K	CONEY ISLAND AVE	BSHP		A		4	S	9/20/2011	5.986	G	19,866	\$79,464,000	313		
2240301	K	CROPSEY AVE	CONEY ISLAND CREEK		WO		3	S	6/10/2011	5.225	G	9,400	\$37,600,000	313		
2240302	K	CROPSEY AVE	CONEY ISLAND CREEK		WO		3	S	11/15/2011	4.831	F	9,400	\$37,600,000	313		
2240540	K	STILLWELL AVE	CONEY ISLAND CRK		WO		2	S	5/27/2011	6.292	VG	17,000	\$68,000,000	313		
2243570	K	86TH ST	BMT SEA BEACH	T	O		1	S	1/24/2011	6.078	VG	12,167	\$48,668,000	313		
2269260	K	W. 8TH ST PED BRDG	SURF AVE.		O-PED	P	39	C	2/8/2011	3.629	F	14,742	\$58,968,000	313		
2243020	K	PARKSIDE AVE	BMT SUBWAY, BRIGHTON	T	O		6	S	12/23/2010	4.000	F	48,700	\$194,800,000	314		
2243040	K	CROOKE AVE	BMT SUBWAY, BRIGHTON	T	O		4	S	9/1/2011	4.000	F	6,000	\$24,000,000	314		
2243050	K	CATON AVE	BMT SUBWAY, BRIGHTON	T	O		4	S	8/10/2011	4.500	F	20,800	\$83,200,000	314		
2243080	K	CHURCH AVE	BMT SUBWAY, BRIGHTON	T	O		4	S	8/10/2011	4.545	F	18,200	\$72,800,000	314		
2243100	K	BEVERLY ROAD	BMT SUBWAY, BRIGHTON	T	O		3	S	8/22/2011	3.561	F	4,200	\$16,800,000	314		
2243110	K	CORTEYOU ROAD	BMT SUBWAY, BRIGHTON	T	O		3	S	8/25/2011	6.139	VG	4,810	\$19,240,000	314		
2243120	K	DORCHESTER ROAD	BMT SUBWAY, BRIGHTON	T	O		1	S	12/21/2010	5.882	G	4,825	\$19,300,000	314		
2243130	K	DITMAS AVE	BMT SUBWAY, BRIGHTON	T	O		1	S	10/4/2011	5.723	G	5,150	\$20,600,000	314		
2243140	K	NEWKIRK AVE	BMT SUBWAY, BRIGHTON	T	O		3	S	10/5/2011	4.250	F	4,100	\$16,400,000	314		
2243150	K	FOSTER AVE	BMT SUBWAY, BRIGHTON	T	O		1	S	10/5/2011	4.450	F	3,000	\$12,000,000	314		
2243450	K	E 14TH ST	LIRR BAY RIDGE	N	O		1	S	12/2/2010	4.809	F	1,775	\$7,100,000	314		
2243460	K	E 15TH ST PED BRDG	LIRR BAY RIDGE	N	O-PED		3	C	9/16/2008	5.193	G	900	\$3,600,000	314		
2243480	K	OCEAN AVE	LIRR BAY RIDGE	N	O		2	S	12/1/2010	4.825	F	5,000	\$20,000,000	314		
2243490	K	BEDFORD AVE	LIRR BAY RIDGE	N	O		6	S	11/24/2010	4.319	F	12,000	\$48,000,000	314		
2243500	K	NOSTRAND AVE	LIRR BAY RIDGE	N	O		2	S	11/30/2010	4.966	F	4,320	\$17,280,000	314		
2231390	K	E 12TH ST	BSHP		A		4	S	6/18/2010	4.694	F	17,200	\$68,800,000	315		
2231409	K	BSHP	SHEEPSHEAD BAY ROAD		A		1	S	4/27/2010	4.836	F	6,500	\$26,000,000	315		
2231419	K	BSHP	OCEAN AVE		A		3	S	4/27/2010	4.083	F	14,000	\$56,000,000	315		
2231429	K	BSHP	BEDFORD AVE		A		3	S	4/29/2010	4.097	F	12,000	\$48,000,000	315		
2231439	K	BSHP	NOSTRAND AVE		A		3	S	4/29/2010	3.986	F	13,000	\$52,000,000	315		
2231449	K	KNAPP ST	BSHP		A		1	S	4/28/2010	4.391	F	9,500	\$38,000,000	315		
2233080	K	E 14 ST PED BRDG	BSHP		A-PED		14	C	7/13/2010	4.213	F	4,700	\$18,800,000	315		
2240320	K	OCEAN AVE PED BRDG	SHEEPSHEAD BAY		WO-PED		30	C	7/19/2010	3.939	F	4,450	\$17,800,000	315		
2243790	K	AVENUE S	BMT SEA BEACH	T	O		1	S	9/15/2011	5.967	G	5,360	\$21,440,000	315		
2243810	K	AVENUE U	BMT SEA BEACH	T	O		1	S	12/17/2010	5.686	G	5,880	\$23,520,000	315		
2243569	K	ATLANTIC AVE	LIRR ATLANTIC AVE	L	O		75	S	5/28/2010	3.676	F	135,100	\$540,400,000	316	305	
2243850	K	LIBERTY AVE	LIRR BAY RIDGE	N	O		3	S	12/14/2010	6.294	VG	6,659	\$26,636,000	316		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2243860	K	GLENMORE AVE	LIRR BAY RIDGE	N	O		2	S	12/14/2010	6.559	VG	5,616	\$22,464,000	316		
2243870	K	PITKIN AVE	LIRR BAY RIDGE	N	O		2	S	12/14/2010	6.515	VG	5,328	\$21,312,000	316		
2243890	K	SUTTER AVE	LIRR BAY RIDGE	N	O		3	S	12/15/2010	6.542	VG	5,497	\$21,988,000	316		
2243900	K	BLAKE AVE	LIRR BAY RIDGE LINE	N	O		3	S	12/15/2010	5.000	G	4,912	\$19,648,000	316		
2243910	K	LIVONIA AVE PED BRDG	LIRR BAY RIDGE LINE	N	O-PED		6	C	3/2/2010	5.000	G	2,500	\$10,000,000	316		
2231479	K	BSHP	MILL BASIN		WMA		14	S	10/30/2011	3.313	F	73,500	\$294,000,000	318		
2231489	K	BSHP	PAERDEGAT BASIN		WA		15	S	11/9/2011	3.222	F	58,300	\$233,200,000	318		
2243510	K	FLATBUSH AVE	LIRR BAY RIDGE	N	O		2	S	9/16/2011	4.730	F	5,900	\$23,600,000	318		
2243520	K	BROOKLYN AVE	LIRR BAY RIDGE	N	O		3	S	9/9/2011	6.236	VG	4,500	\$18,000,000	318		
2243530	K	AVENUE H	LIRR BAY RIDGE	N	O		2	S	9/9/2011	5.956	G	35,100	\$140,400,000	318		
2243010	K	LINCOLN ROAD	BMT SUBWAY, BRIGHTON	T	O		1	S	12/23/2010	6.722	VG	6,016	\$24,064,000	355		
2244010	K	EAST DR (ENDALE ARCH)	PED PATH NR GRND ARMY PLZ		O	P	1	C	5/2/2011	4.367	F	1,533	\$6,132,000	355		
2244020	K	WEST DR (MEADOWPORT ARCH)	PED PATH NR GRND ARMY PLZ		O	P	1	S	4/26/2011	5.321	G	2,500	\$10,000,000	355		
2244030	K	EAST DRIVE	BRIDLE PATH NR ZOO		O	P	1	S	4/27/2011	4.878	F	2,000	\$8,000,000	355		
2244040	K	EAST DR (EAST WOOD ARCH)	PED PATH NR CENTER DR		O	P	1	C	6/10/2011	4.067	F	1,066	\$4,262,400	355		
2244050	K	CENTER DR (NETHERMEAD ARCHES)	PED PATH & STREAM		WO	P	3	S	5/9/2011	5.000	G	7,400	\$29,600,000	355		
2244060	K	HILL DR (LEFT RIDGE SPAN)	PED PATH SO OF BOATHOUSE		O	P	1	C	5/4/2011	4.433	F	750	\$3,000,000	355		
2244100	K	WEST FOOTBRIDGE	PROSPECT PK STREAM		WO-PED	P	1	C	12/2/2010	4.875	F	3,200	\$12,800,000	355		
2244120	K	HILL DR (TERRACE BRDG)	PROSPECT PK LAKE		WO	P	3	S	5/11/2011	2.927	P	7,800	\$31,200,000	355		
2244130	K	PED NR BOATHSE (LULLWATER BRDG)	PROSPECT PK LAKE		WO-PED	P	1	C	9/16/2011	4.898	F	1,000	\$4,000,000	355		
2231450	K	BSHP	GERRITSEN INLET		WA		11	S	8/4/2011	3.463	F	52,000	\$208,000,000	356		
2231460	K	FLATBUSH AVE	BSHP		A		2	S	9/22/2011	6.250	VG	14,058	\$56,232,000	356		
2231499	K	BSHP	ROCKAWAY PKWY		A		4	S	10/16/2011	3.792	F	11,500	\$46,000,000	356		
2231509	K	BSHP	FRESH CREEK		WA		5	S	11/4/2011	3.139	F	23,000	\$92,000,000	356		
2231519	K	PENNSYLVANIA AVE	BSHP		A		2	S	5/20/2011	5.694	G	6,640	\$26,560,000	356		
2240039	KM	WILLIAMSBURG BRIDGE	EAST RIVER	T	WEO		53	S	11/12/2010	4.653	F	824,000	\$3,296,000,000	103	301	
2240019	KM	BROOKLYN BRIDGE	EAST RIVER		WEO		75	S	11/2/2010	2.944	P	503,788	\$2,015,152,000	103	302	101
2240027	KM	MANHATTAN BRIDGE(LL)	EAST RIVER	T	WEO		23	S	12/17/2010	4.806	F	616,390	\$2,465,560,000	103	302	
2240028	KM	MANHATTAN BRIDGE(UL)	NYCTA TRACKS-BMT	T	WEO		43	S	12/17/2010	4.071	F	587,424	\$2,349,696,000	103	302	
2240370	KQ	GREENPOINT AVE BRIDGE	NEWTOWN CREEK	L	WMO		12	S	7/8/2011	5.222	G	76,106	\$304,424,000	301	402	
2240639	KQ	PULASKI BRIDGE	NEWTOWN CREEK		WMO		44	S	4/29/2010	4.606	F	205,770	\$823,080,000	301	402	
2240390	KQ	GRAND ST BRIDGE	NEWTOWN CREEK		WMO		2	S	11/23/2011	4.208	F	5,100	\$20,400,000	301	405	
223201D	M	RAMP TO N.B. FDR DRIVE	FDR & SOUTH ST.		AR		22	S	2/18/2010	5.033	G	15,825	\$63,300,000	101	103	
224001B	M	TO BKLN FRM FDR	FRANKFRT & CITY		OE		31	S	12/9/2010	3.778	F	51,400	\$205,600,000	101	103	
224001D	M	TO FDR DR N.B.	PEARL STREET		OE		30	S	7/15/2011	4.868	F	49,600	\$198,400,000	101	103	
2232000	M	BATTERY PLACE	FDR DRIVE		AT		2	S	12/21/2011	5.318	G	142,000	\$568,000,000	101		
223201A	M	FDR DR N.B. OFF RMP	FDR DR & SOUTH ST		AR		17	S	4/29/2010	3.597	F	23,373	\$93,492,000	101		
223201B	M	STH ST RMP TO FDR S.B.	SOUTH ST		AR		10	S	7/13/2011	3.731	F	44,625	\$178,500,000	101		
224001A	M	PARK ROW TO BKLN	WILLIAM ST N.B.		OE		4	S	6/21/2011	3.972	F	10,167	\$40,668,000	101		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
224001C	M	PEARL ST TO BKLN	LAND ADJ TO BRDG		OE		9	S	6/29/2011	3.746	F	6,365	\$25,460,000	101		
224001E	M	TO PEARL ST	LAND ADJ TO BRDG		OE		3	S	6/28/2011	5.141	G	5,300	\$21,200,000	101		
224001G	M	TO PARK ROW	ROSE ST		OE		11	S	5/28/2010	4.521	F	16,551	\$66,204,000	101		
2267380	M	WEST STREET	RECTOR ST		AT		1	S	11/15/2011	5.033	G	25,760	\$103,040,000	101		
2268480	M	CHAMBERS ST PED BRDG	RTE 9A - WEST ST		O-PED		10	C	6/15/2011	5.167	G	7,481	\$29,924,000	101		
2268930	M	MORRIS ST PED BRDG	BKLN-BATTERY TUNN PLZ		A-PED		3	C	6/21/2011	3.672	F	1,200	\$4,800,000	101		
223201C	M	FDR DR S.B. OFF RMP	SOUTH ST		AR		8	S	2/5/2010	4.821	F	39,150	\$156,600,000	103		
2232029	M	CORLEARS PARK ROAD	FDR DRIVE		A	P	4	S	3/19/2010	3.938	F	4,100	\$16,400,000	103		
2232030	M	DELANCEY ST PED BRDG	FDR DRIVE		A-PED	P	12	C	2/6/2011	4.217	F	2,900	\$11,600,000	103		
2232040	M	HOUSTON ST	FDR DRIVE		A		2	S	5/13/2011	3.955	F	11,010	\$44,040,000	103		
223204A	M	FDR NB RAMP TO HOUSTON ST	RELIEF		AR		4	S	1/20/2010	4.471	F	6,150	\$24,600,000	103		
223204B	M	HOUSTON ST RAMP TO FDR NB	RELIEF		AR		4	S	1/22/2010	4.625	F	7,125	\$28,500,000	103		
2232050	M	E 6TH ST PED BRDG	FDR DRIVE		A-PED	P	19	C	3/11/2011	4.150	F	2,200	\$8,800,000	103		
2233020	M	E 10TH ST PED BRDG	FDR DRIVE		A-PED	P	21	C	3/11/2011	4.038	F	2,754	\$11,016,000	103		
224001F	M	PEARL ST TO FDR DR	LAND ADJ TO BRDG		OE		3	S	6/21/2011	5.225	G	5,200	\$20,800,000	103		
2257569	M	MILLER HIGHWAY	TERRAIN		A		64	S	8/31/2011	4.746	F	272,475	\$1,089,900,000	104	107	
2245010	M	11TH AVE VIADUCT	LIRR WEST SIDE YARD	AL	O		39	S	12/29/2010	3.750	F	157,500	\$630,000,000	104		
224501B	M	W 33RD ST	AMTRAK 30 ST BRANCH	A	O		8	S	3/17/2010	4.611	F	16,500	\$66,000,000	104		
224501C	M	W 33RD ST	LAND ADJ TO AMTRAK	A	O		2	S	6/14/2011	4.472	F	2,360	\$9,440,000	104		
224501D	M	W 34TH ST	AMTRAK 30 ST BRANCH	A	O		4	S	6/6/2011	4.597	F	11,800	\$47,200,000	104		
224501E	M	W 35TH ST	AMTRAK 30 ST BRANCH	A	O		3	S	12/3/2010	4.028	F	6,500	\$26,000,000	104		
224501F	M	W 36TH ST	AMTRAK 30 ST BRANCH	A	O		7	S	10/6/2011	3.985	F	16,400	\$65,600,000	104		
2245060	M	W 37TH ST	AMTRAK 30 ST BRANCH	A	O		3	S	12/8/2011	6.190	VG	7,505	\$30,020,000	104		
2245070	M	W 38TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	10/1/2010	4.154	F	6,200	\$24,800,000	104		
2245080	M	W 39TH ST	AMTRAK 30 ST BRANCH	A	O		3	S	10/1/2010	4.196	F	6,300	\$25,200,000	104		
2245090	M	W 43RD ST	AMTRAK 30 ST BRANCH	A	O		2	S	5/1/2010	4.662	F	4,100	\$16,400,000	104		
2245100	M	W 44TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	4/24/2010	4.662	F	4,300	\$17,200,000	104		
2245110	M	W 45TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	5/15/2010	5.485	G	4,100	\$16,400,000	104		
2245120	M	W 46TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	5/15/2010	4.500	F	4,100	\$16,400,000	104		
2245130	M	W 47TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	5/29/2010	4.721	F	4,100	\$16,400,000	104		
2245140	M	W 48TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	6/24/2010	4.618	F	4,100	\$16,400,000	104		
2245150	M	W 49TH ST	AMTRAK 30 ST BRANCH	A	O		3	S	5/26/2010	4.426	F	4,100	\$16,400,000	104		
2245160	M	W 51ST ST	AMTRAK 30 ST BRANCH	A	O		2	S	6/5/2010	4.882	F	4,300	\$17,200,000	104		
2245170	M	W 52ND ST	AMTRAK 30 ST BRANCH	A	O		2	S	6/5/2010	4.956	F	4,300	\$17,200,000	104		
2245180	M	W 53RD ST	AMTRAK 30 ST BRANCH	A	O		2	S	6/27/2010	5.103	G	5,100	\$20,400,000	104		
2245190	M	W 58TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	6/28/2010	4.706	F	4,100	\$16,400,000	104		
2245209	M	11TH AVE	AMTRAK 30 ST BRANCH	A	O		2	S	8/9/2010	4.471	F	15,400	\$61,600,000	104		
2245210	M	W 42ND ST	AMTRAK 30 ST BRANCH	A	O		4	S	8/4/2010	4.619	F	9,155	\$36,620,000	104		
2245220	M	W 57TH ST	AMTRAK 30 ST BRANCH	A	O		3	S	6/28/2010	4.765	F	9,100	\$36,400,000	104		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2245330	M	W 41ST ST	AMTRAK 30 ST BRANCH	A	O		3	S	9/28/2010	4.388	F	6,200	\$24,800,000	104		
2245340	M	W 50TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	5/26/2010	4.544	F	4,100	\$16,400,000	104		
2245350	M	W 54TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	6/27/2010	5.476	G	4,700	\$18,800,000	104		
2245360	M	W 55TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	7/10/2010	5.353	G	4,300	\$17,200,000	104		
2245370	M	W 56TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	7/10/2010	5.618	G	4,400	\$17,600,000	104		
2245440	M	W 40TH ST	AMTRAK 30 ST BRANCH	A	O		4	S	10/16/2010	4.236	F	9,400	\$37,600,000	104		
226672A	M	W 31ST ST	AMTRAK LAYUP TRACKS	A	O		9	S	12/28/2010	3.714	F	8,800	\$35,200,000	104		
2246540	M	E 34TH ST	PARK AVE TUNNEL		OT		1	S	11/1/2010	4.117	F	36,200	\$144,800,000	105	106	
2245460	M	PARK AVE S.B.	E 45TH ST		O		1	S	6/16/2011	4.514	F	2,400	\$9,600,000	105		
2245470	M	PARK AVE N.B	E 45TH ST		O		1	S	6/16/2011	4.865	F	2,400	\$9,600,000	105		
2246550	M	PARK AVE VIADUCT	E 42ND ST		O		10	S	12/7/2011	4.478	F	22,150	\$88,600,000	105		
2233038	M	FDR DRIVE SB	FDR NB / E 62ND ST		AT		34	S	12/21/2010	6.563	VG	58,700	\$234,800,000	106	108	
224004D	M	TO QNS FROM E 58TH ST	E 59TH ST		OE		12	S	6/18/2010	4.321	F	11,781	\$47,124,000	106	108	
2232070	M	E 25TH ST PED BRDG	FDR DRIVE		A-PED		3	C	2/20/2011	4.627	F	1,700	\$6,800,000	106		
2232100	M	E 51ST ST PED BRDG	FDR DRIVE		A-PED	P	6	C	2/20/2011	4.400	F	2,800	\$11,200,000	106		
2246560	M	TUDOR CITY PLACE	E 42ND ST		O		1	S	2/1/2010	5.133	G	6,600	\$26,400,000	106		
2246570	M	E42ND ST - E47TH ST	FIRST AVE TUNNEL		OT		2	S	6/17/2010	4.882	F	95,000	\$380,000,000	106		
2268650	M	FDR NB E42ND TO E49TH ST	EAST RIVER		A		119	S	10/28/2011	3.660	F	30,767	\$123,068,000	106		
2229289	M	HHP VIADUCT	AMTRAK - W72 ST - W79 ST	A	A		145	S	12/7/2010	3.537	F	236,100	\$944,400,000	107		
222928C	M	PED BR AT 73RD ST	HHP - AMTRAK	A	A-PED	P	5	C	12/10/2010	4.145	F	3,480	\$13,920,000	107		
2229290	M	W 79 ST	AMTRAK	A	A		1	S	10/18/2010	4.492	F	4,500	\$18,000,000	107		
2229309	M	HHP	RIVERSIDE PARK		A		1	S	1/6/2010	5.267	G	2,172	\$8,688,000	107		
2229311	M	HHP SB	RAMP TO 96 ST		A		1	S	2/11/2010	4.455	F	2,000	\$8,000,000	107		
2229312	M	HHP NB	RAMP TO 96 ST		A		1	S	2/11/2010	4.364	F	2,000	\$8,000,000	107		
2229321	M	HHP SB	RAMP FROM 96 ST		A		1	S	2/17/2010	5.133	G	2,000	\$8,000,000	107		
2229322	M	HHP NB	RAMP FROM 96 ST		A		1	S	2/18/2010	5.300	G	2,000	\$8,000,000	107		
2246970	M	RIVERSIDE DRIVE	W 96TH ST		O		3	S	5/18/2011	5.471	G	10,600	\$42,400,000	107		
2267250	M	HHP	AMTRAK - W96TH ST	A	A		55	S	11/5/2010	3.694	F	40,000	\$160,000,000	107		
2267717	M	79 ST PED PLAZA	79 ST BT BASIN GAR		A	P	10	S	5/3/2011	4.593	F	27,400	\$109,600,000	107		
2267718	M	79 ST TRAFFIC CIRC	79 ST PED PLAZA		A	P	34	S	5/11/2011	4.000	F	24,130	\$96,520,000	107		
226771A	M	79 ST RAMP TO HHP	79 ST BT BASIN GAR		AR	P	4	S	5/12/2011	4.221	F	3,131	\$12,524,000	107		
226771B	M	79 ST RAMP TO GAR	79 ST BT BASIN GAR		AR	P	21	S	5/11/2011	4.532	F	8,989	\$35,956,000	107		
226771C	M	GAR RAMP TO 79 ST	79 ST BT BASIN GAR		AR	P	21	S	5/12/2011	4.565	F	9,095	\$36,380,000	107		
226771D	M	SB HHP RAMP TO 79 ST	79 ST BT BASIN GAR		AR	P	4	S	5/12/2011	4.516	F	2,601	\$10,404,000	107		
2269190	M	W 70TH ST	AMTRAK	A	O		3	S	12/9/2011	5.597	G	17,258	\$69,032,000	107		
2269210	M	W 68TH ST	AMTRAK	A	O		3	S	12/12/2011	6.576	VG	5,382	\$21,528,000	107		
M00003	M	HHP ON/OFF RMP-79TH ST SO. SIDE	PED PATH SO. OF 79TH ST		A		1	C	4/29/2011	3.700	F	900	\$3,600,000	107		
M00004	M	HHP ON/OFF RMP-79TH ST NO. SIDE	PED PATH NO. OF 79TH ST		A		1	C	6/20/2011	4.733	F	900	\$3,600,000	107		
2232110	M	E 64TH ST PED BRDG	FDR DRIVE		A-PED	P	11	U	11/23/2011	4.912	F	2,100	\$8,400,000	108		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2232120	M	E 71ST ST PED BRDG	FDR DRIVE		A-PED	P	19	C	8/15/2010	5.000	G	340	\$1,360,000	108		
2232140	M	E 78TH ST PED BRDG	FDR DRIVE		A-PED	P	9	C	4/18/2010	2.711	P	3,120	\$12,480,000	108		
2232167	M	PROMENADE OVER FDR	FDR - E81ST ST - E90TH ST		A-PED	P	53	S	7/9/2009	3.857	F	93,000	\$372,000,000	108		
2233040	M	E 60TH ST	FDR DRIVE		A		17	S	7/13/2011	4.806	F	24,480	\$97,920,000	108		
224004A	M	TO E 60TH ST FROM QNS	FIRST AVE		OE		13	S	4/12/2010	5.394	G	14,800	\$59,200,000	108		
224004B	M	TO QNS FRM E 59TH ST	FIRST AVE		OE		13	S	4/13/2010	5.708	G	14,800	\$59,200,000	108		
224004C	M	TO E 62ND ST FROM QNS	E 60TH - E 61ST ST		OE		10	S	9/24/2010	4.985	F	16,720	\$66,880,000	108		
224004J	M	25X	NYC GARAGE		OE		14	S	4/23/2010	4.780	F	22,058	\$88,232,000	108		
2269820	M	E 81 ST PED BRDG	FDR DRIVE N.B.		A-PED	P	3	C	1/12/2010	3.149	F	900	\$3,600,000	108		
2229349	M	HHP	W 158 ST	A	A		44	S	11/18/2010	4.380	F	140,000	\$560,000,000	109	112	
2245290	M	W 155TH ST PED BRDG	AMTRAK 30 ST BRANCH	A	O-PED		3	C	10/31/2010	3.292	F	800	\$3,200,000	109	112	
2246720	M	RIVERSIDE DRIVE	W 158TH ST - AMTRAK	A	O		77	S	9/30/2010	3.472	F	185,658	\$742,632,000	109	112	
2269240	M	RIVERSIDE DRIVE	W. 155TH ST		O		1	S	5/10/2011	4.640	F	2,780	\$11,120,000	109	112	
2245230	M	W 148TH ST PED BRDG	AMTRAK 30 ST BRANCH	A	O-PED	P	3	C	11/5/2010	4.033	F	1,100	\$4,400,000	109		
2246660	M	RIVERSIDE DRIVE	W125TH ST - W134TH ST		O		27	S	7/15/2011	4.306	F	148,300	\$593,200,000	109		
2246670	M	W 134 ST	TERRAIN		O		4	S	7/13/2011	4.833	F	7,500	\$30,000,000	109		
2246980	M	RIVERSIDE DRIVE	W 138TH ST		O		1	S	1/29/2010	4.767	F	6,700	\$26,800,000	109		
2266229	M	HHP	PED UNDERPASS @ 148 ST		A		1	S	2/16/2010	5.476	G	1,840	\$7,360,000	109		
2267130	M	RIVERSIDE DRIVE	W 145TH ST		O		1	S	5/12/2011	4.867	F	5,800	\$23,200,000	109		
2246490	M	A.C. POWELL BLVD N.B.	A.C. POWELL BLVD		O		1	S	2/11/2010	4.020	F	5,600	\$22,400,000	110		
2246710	M	W 153 ST	A.C. POWELL BLVD		O		1	S	2/11/2010	4.370	F	3,082	\$12,328,000	110		
2232180	M	E 103RD ST PED BRDG	FDR DRIVE		A-PED		18	C	9/18/2011	4.447	F	4,800	\$19,200,000	111		
2232190	M	E 111TH ST PED BRDG	FDR DRIVE		A-PED	P	9	C	8/19/2010	4.353	F	4,200	\$16,800,000	111		
2232200	M	E 120TH ST PED BRDG	FDR DRIVE		A-PED	P	18	C	8/8/2010	4.259	F	3,978	\$15,912,000	111		
2233059	M	HARLEM RIVER DRIVE	RAMP TO & FROM HRD N.B.		A		11	S	6/22/2011	3.239	F	51,000	\$204,000,000	111		
224005A	M	FROM FDR DRIVE	HARLEM RIVER DR		OR		19	S	12/22/2010	6.625	VG	28,233	\$112,932,000	111		
224007A	M	TO MADISON AVENUE	E 138TH ST		OR		7	S	3/20/2010	5.225	G	19,880	\$79,520,000	111		
2240620	M	WARDS ISLAND PED BRDG	HARLEM RIVER		WMO-PED		10	C	11/1/2008	4.367	F	12,600	\$50,400,000	111		
2245319	M	E 97TH ST	METRO NORTH MAIN LN	M	O		1	S	12/29/2010	4.647	F	3,200	\$12,800,000	111		
2246620	M	W 128TH ST PED BRDG	3RD AVE BRDG APPR		O-PED		18	C	7/1/2010	4.048	F	2,300	\$9,200,000	111		
2246990	M	E 129TH ST PED BRDG	3RD AVE BRDG RAMP		O-PED		5	C	11/4/2011	4.000	F	1,046	\$4,184,000	111		
222934A	M	RAMP TO N.B. HHP	AMTRAK WEST SIDE	A	AR		26	S	12/8/2011	3.708	F	10,800	\$43,200,000	112		
2229400	M	W 181ST ST PED BRDG	HHP N.B.		A-PED	P	7	C	1/25/2011	4.657	F	1,500	\$6,000,000	112		
2245040	M	MARGARET CORBIN DR	PED PATH NEAR CAFÉ		O	P	1	C	5/27/2011	4.933	F	598	\$2,392,000	112		
2245050	M	MARGARET CORBIN DR	PED PATH NR NO ENTR		O	P	1	C	5/3/2011	4.233	F	889	\$3,556,000	112		
2245250	M	W 158TH ST	AMTRAK 30 ST BRANCH	A	O		7	S	12/7/2011	6.125	VG	29,170	\$116,680,000	112		
2245260	M	W 173RD ST PED BRDG	AMTRAK 30 ST BRANCH	A	O-PED	P	2	C	10/29/2010	4.446	F	1,500	\$6,000,000	112		
2245300	M	INWOOD HILL PK FTBR	AMTRAK 30 ST BRANCH	A	O-PED	P	6	C	11/5/2010	4.100	F	700	\$2,800,000	112		
2245480	M	TO GWB OPP W 171ST ST	RIVERSIDE DRIVE		O		1	S	3/17/2010	4.952	F	10,800	\$43,200,000	112		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2246489	M	W 181 ST	RAMP TO WASH BR		O		1	S	3/16/2010	4.500	F	8,200	\$32,800,000	112		
2246500	M	FORT TRYON PLACE	ENTR FROM RIVERSIDE DR		O	P	1	S	3/18/2010	4.333	F	6,600	\$26,400,000	112		
2246510	M	CORBIN PL OVERPASS	CORBIN PLACE		O	P	1	S	1/13/2010	5.000	G	2,223	\$8,892,000	112		
2246600	M	W 176TH ST PED BRDG	APPROACH TO G.W.B.		O-PED		1	C	12/7/2010	3.897	F	1,200	\$4,800,000	112		
2246690	M	ISHAM PK VEHICULR	HARLEM RIVER INLET		O	P	1	S	6/11/2010	6.261	VG	911	\$3,644,000	112		
2246700	M	ISHAM PK PED BRDG	HARLEM RV INLET		WO-PED	P	1	C	12/13/2010	3.552	F	300	\$1,200,000	112		
2266230	M	HHP NB	PED UNDERPASS INWD PK		A		1	S	1/8/2010	5.286	G	800	\$3,200,000	112		
2266240	M	HHP SB	PED UNDERPASS INWD PK		A		1	S	1/11/2010	5.571	G	1,100	\$4,400,000	112		
2267240	M	HRD RAMP TO GWB	HARLEM RIVER DR SB		A		55	S	9/15/2010	3.264	F	122,900	\$491,600,000	112		
2268760	M	PS-5 PED BRDG	TENTH AVE		O-PED		5	C	12/2/2010	4.735	F	1,285	\$5,140,000	112		
M00001	M	W191ST ST PED TNL	BROADWAY - IRT #1 SUBWAY		O-PED		1	C	12/13/2010	5.000	G	2,000	\$8,000,000	112		
2245380	M	TRANSVERSE RD #1 WB	PED PATH OPP E 66TH ST		O	P	1	S	1/7/2010	5.000	G	1,500	\$6,000,000	164		
2245420	M	W 65TH ST ENTR EB	BRIDLE PATH W END		O	P	1	S	1/25/2010	5.167	G	1,600	\$6,400,000	164		
2246000	M	WEST DR (GREYSHOT ARCH)	PED BET 61ST & 62ST		O	P	1	S	1/14/2010	5.400	G	2,500	\$10,000,000	164		
2246010	M	W 62 ST PED BRDG (PINEBANK ARCH)	BRIDLE PATH		O-PED	P	1	C	7/5/2011	4.404	F	1,000	\$4,000,000	164		
2246030	M	E 62 ST PED BRDG (GAPSTOW BRDG)	THE POND		O-PED	P	1	C	6/1/2011	3.897	F	1,400	\$5,600,000	164		
2246040	M	EAST DR (INSCOPE ARCH)	PED PATH OPP E 62 ST		O	P	1	C	4/21/2011	4.400	F	1,515	\$6,060,000	164		
2246050	M	CENTER DR (DRIPROCK ARCH)	PED OPP 63RD ST		O	P	1	S	1/18/2010	5.067	G	2,000	\$8,000,000	164		
2246069	M	EAST DR (GREEN GAP ARCH)	PED BET E 63ST & E 64ST		O	P	1	S	1/26/2010	4.500	F	2,700	\$10,800,000	164		
2246070	M	CENTER DR (PLAYMATES ARCH)	PED PATH OPP 65TH ST		O	P	1	C	6/16/2011	4.367	F	1,129	\$4,516,000	164		
2246080	M	WEST DR (DALEHEAD ARCH)	BRIDLE OPP W 64TH ST		O	P	1	S	1/5/2010	4.667	F	2,000	\$8,000,000	164		
2246090	M	PED BRDG OPP 65 ST	TRANSVERSE RD #1		O-PED	P	1	C	7/24/2010	4.655	F	2,300	\$9,200,000	164		
2246100	M	CENTER DRIVE	TRANSVERSE RD #1		O	P	1	S	4/2/2010	4.467	F	6,000	\$24,000,000	164		
2246110	M	EAST DRIVE	TRANSVERSE RD #1		O	P	1	S	3/25/2010	4.667	F	6,000	\$24,000,000	164		
2246120	M	WEST DRIVE	TRANSVERSE RD #1		O	P	1	S	4/2/2010	4.967	F	7,900	\$31,600,000	164		
2246130	M	EAST DR (WILLOWDELL ARCH)	PED PATH OPP E 67TH ST		O	P	1	C	4/13/2011	3.500	F	666	\$2,665,600	164		
2246140	M	W 72 ST ENTR (RIFTSTONE ARCH)	BRIDLE PATH		O	P	1	S	1/12/2010	4.533	F	3,600	\$14,400,000	164		
2246150	M	72 ST CROSS DR (TERRACE BRDG)	PED PATH TO FOUNTAIN		O	P	3	S	3/12/2010	5.786	G	7,300	\$29,200,000	164		
2246160	M	73 ST PED BRDG (BOW BRIDGE)	THE LAKE		WO-PED	P	1	C	5/13/2010	3.718	F	1,700	\$6,800,000	164		
2246170	M	EAST DR (TREFOIL ARCH)	PED PATH OPP E 73RD ST		O	P	1	S	2/3/2010	5.056	G	1,900	\$7,600,000	164		
2246230	M	EAST DRIVE	TRANSVERSE RD #2		O	P	1	S	3/23/2010	4.600	F	6,500	\$26,000,000	164		
2246240	M	WEST DRIVE	TRANSVERSE RD #2		O	P	1	S	3/23/2010	4.167	F	7,200	\$28,800,000	164		
2246250	M	EAST DRIVE	TRANSVERSE RD #3		O	P	1	S	2/9/2010	4.300	F	5,100	\$20,400,000	164		
2246260	M	WEST DRIVE	TRANSVERSE RD #3		O	P	1	S	3/26/2010	4.933	F	5,100	\$20,400,000	164		
2246270	M	EAST DRIVE	TRANSVERSE RD #4		O	P	1	S	3/24/2010	4.100	F	7,000	\$28,000,000	164		
2246280	M	WEST DRIVE	TRANSVERSE RD #4		O	P	1	S	3/24/2010	4.300	F	4,700	\$18,800,000	164		
2246320	M	W77 ST PED (OAK BRDG)	THE LAKE		WO-PED	P	3	C	12/20/2011	6.684	VG	919	\$3,676,000	164		
2246330	M	WEST DR (BALCONY BRDG)	STREAM TO THE LAKE		WO	P	1	S	2/1/2010	5.000	G	2,019	\$8,076,000	164		
2246340	M	W77 ST PED (LADIES POND BRDG)	STREAM TO THE LAKE		WO-PED	P	3	C	11/15/2011	4.145	F	500	\$2,000,000	164		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2246350	M	EAST DR (GREYWACKE ARCH)	PED PATH OPP E 80TH ST		O	P	1	C	5/25/2011	3.733	F	1,266	\$5,064,000	164		
2246360	M	WEST DR (WINTERDALE ARCH)	PED PATH OPP W 82 ST		O	P	1	S	1/27/2010	5.273	G	3,100	\$12,400,000	164		
2246380	M	W86 ST PED (SW RESERVOIR BRDG)	BRIDLE PATH		O-PED	P	1	C	10/7/2010	4.143	F	700	\$2,800,000	164		
2246390	M	E86 ST PED (SE RESERVOIR BRDG)	BRIDLE PATH		O-PED	P	3	C	10/31/2011	4.509	F	1,100	\$4,400,000	164		
2246400	M	PED PATH OPP E79 ST	TRANSVERSE RD #2		O-PED	P	1	C	7/31/2010	4.233	F	3,700	\$14,800,000	164		
2246410	M	TRNSVRS RD 1 EB (DENESMOUTH ARCH)	PED PATH OPP E 65TH ST		O	P	1	S	2/2/2010	4.727	F	1,739	\$6,956,000	164		
2246430	M	W110 ST ENTR (MOUNTCLIFF ARCH)	PED PATH OPP W109 ST		O	P	1	S	3/29/2010	4.383	F	1,200	\$4,800,000	164		
2246440	M	79 TH ST PED BRDG	TRANSVERSE RD #2		O-PED	P	1	C	9/3/2011	3.926	F	5,900	\$23,600,000	164		
2246450	M	E77 ST PED (GLADE ARCH)	PED PATH OPP E77 ST		O-PED	P	1	C	12/7/2010	4.138	F	5,000	\$20,000,000	164		
2246460	M	W77 ST ENTR (EAGLEVALE ARCH)	PED PATH OPP W77 ST		O	P	2	S	1/15/2010	4.263	F	5,800	\$23,200,000	164		
2246470	M	EAST DR (HUDDLESTONE ARCH)	THE LOCH		WO	P	1	S	2/2/2010	4.500	F	1,100	\$4,400,000	164		
2240640	MQ	ROOSEVELT ISLAND BRDG	E. RIVER E. CHANNEL		WMO		8	S	11/17/2011	5.611	G	36,500	\$146,000,000	108	401	
2240047	MQ	QUEENSBORO BRIDGE (LL)	EAST RIVER	AL	WEO		53	S	11/4/2010	4.208	F	626,900	\$2,507,600,000	108	402	401
2240048	MQ	QUEENSBORO BRIDGE (UL)	EAST RIVER - LL		WEO		37	S	11/4/2010	4.189	F	322,300	\$1,289,200,000	108	402	401
224004G	Q	TO NY FROM 11TH ST	TERRAIN (CHAMBER)		OE		36	S	9/10/2010	5.268	G	8,360	\$33,440,000	401	402	
2230700	Q	278I NB (BQE EAST LEG)	32ND AVE (TO BQE WEST LEG)		A		8	S	11/9/2010	6.662	VG	31,600	\$126,400,000	401	403	
2230750	Q	278I SB (BQE EAST LEG)	31ST AVE		A		1	S	8/1/2011	6.508	VG	4,221	\$16,884,000	401	403	
2240660	Q	RIKERS ISLAND BRIDGE	RIKERS ISL CHANNEL		WO		56	S	11/16/2011	4.324	F	183,100	\$732,400,000	401	480	
2230600	Q	STEINWAY ST	278I WB (BQE)		A		1	S	10/4/2010	6.581	VG	5,229	\$20,916,000	401		
2230610	Q	STEINWAY ST	278I EB (BQE)		A		1	S	9/29/2010	6.581	VG	5,146	\$20,584,000	401		
2230620	Q	37TH ST	278I (B.Q.E.)		A		2	S	3/25/2010	4.597	F	5,300	\$21,200,000	401		
2230630	Q	35TH ST	278I (B.Q.E.)		A		4	S	4/9/2010	4.667	F	9,000	\$36,000,000	401		
2230640	Q	32ND ST	278I (B.Q.E.)		A		2	S	6/24/2011	4.875	F	8,100	\$32,400,000	401		
2230657	Q	31ST ST	278I (B.Q.E.)		A		2	S	11/6/2010	4.569	F	9,500	\$38,000,000	401		
2230690	Q	278I NB (BQE WEST LEG)	32ND AVE		A		1	S	7/7/2010	6.492	VG	4,080	\$16,320,000	401		
2230710	Q	278I SB (BQE WEST LEG)	32ND AVE		A		1	S	8/2/2011	6.559	VG	5,240	\$20,960,000	401		
2230720	Q	278I SB (BQE EAST LEG)	278I NB (BQE WEST LEG)		A		3	S	7/22/2011	6.182	VG	20,896	\$83,584,000	401		
2230730	Q	31ST AVE	278I NB (BQE WEST LEG)		A		1	S	7/15/2011	6.217	VG	5,875	\$23,500,000	401		
2230740	Q	278I SB (BQE WEST LEG)	31ST AVE		A		1	S	8/1/2011	6.217	VG	5,246	\$20,984,000	401		
2230760	Q	278I NB (BQE EAST LEG)	31ST AVE		A		1	S	10/4/2010	6.610	VG	4,161	\$16,644,000	401		
2230770	Q	278I (BQE WEST LEG)	30TH AVE		A		1	S	6/15/2011	6.322	VG	6,199	\$24,796,000	401		
2230790	Q	BULOVA AVE	278I (BQE WEST LEG)		A		2	S	4/23/2010	5.333	G	3,300	\$13,200,000	401		
2230800	Q	49TH ST	278I (BQE WEST LEG)		A		2	S	4/23/2010	5.333	G	4,900	\$19,600,000	401		
2230810	Q	ASTORIA BLVD EB	278I (BQE WEST LEG)		A		4	S	8/23/2011	4.044	F	8,200	\$32,800,000	401		
2230820	Q	47TH ST	GCP		A		2	S	5/21/2010	4.944	F	5,700	\$22,800,000	401		
2230830	Q	278I NB (BQE WEST LEG)	GCP		A		2	S	5/20/2010	4.583	F	7,600	\$30,400,000	401		
2230840	Q	44TH ST	GCP		A		2	S	5/21/2010	4.681	F	5,000	\$20,000,000	401		
2230890	Q	49TH ST	GCP		A		2	S	5/20/2010	4.444	F	6,350	\$25,400,000	401		
2230680	Q	278I (B.Q.E.)	NORTHERN BLVD		A		1	S	11/12/2010	6.079	VG	27.011	\$108,044,000	402	401	

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
224004F	Q	TO NY FROM 21ST ST	21ST ST		OE		63	S	11/24/2010	4.712	F	63,310	\$253,240,000	402	401	
2247310	Q	QUEENS BLVD	AMTRAK & LIRR YARD	AL	O		19	S	12/16/2010	6.324	VG	92,400	\$369,600,000	402	401	
2247320	Q	HONEYWELL ST	AMTRAK & LIRR YARD	AL	O		22	S	11/4/2011	5.903	G	99,036	\$396,144,000	402	401	
2247330	Q	39TH ST (NORTH)	SUNNYSIDE YARD	A	O		14	S	10/31/2011	6.556	VG	48,200	\$192,800,000	402	401	
2247380	Q	ROOSEVELT AVE	CSX - HELLGATE	C	O		2	S	8/30/2011	6.333	VG	7,380	\$29,520,000	402	403	404
2247390	Q	41ST AVE	CSX - HELLGATE	C	O		2	S	9/8/2011	4.942	F	4,400	\$17,600,000	402	404	
2247400	Q	WOODSIDE AVE	CSX TRANSPORT	C	O		1	S	9/8/2011	5.033	G	8,200	\$32,800,000	402	404	
2247410	Q	43RD AVE	CSX TRANSPORT	C	O		1	S	9/8/2011	5.000	G	4,800	\$19,200,000	402	404	
2247420	Q	44TH AVE	CSX TRANSPORT	C	O		1	S	9/6/2011	5.000	G	5,100	\$20,400,000	402	404	
2247430	Q	45TH AVE	CSX TRANSPORT	C	O		1	S	9/9/2011	5.306	G	2,400	\$9,600,000	402	404	
1247280	Q	51 AVE PED BR (2247280)	LIRR MAIN LINE	L	O-PED		5	C	10/6/2009	3.018	F	700	\$2,800,000	402		
2230520	Q	65TH PLACE	278I (B.Q.E.)		A		2	S	2/17/2010	6.111	VG	11,668	\$46,672,000	402		
2230530	Q	QUEENS BLVD	278I (B.Q.E.)		A		2	S	11/1/2010	6.417	VG	25,543	\$102,172,000	402		
2230540	Q	WOODSIDE AVE	278I (B.Q.E.)		A		1	S	1/19/2010	5.797	G	7,529	\$30,116,000	402		
2230550	Q	69TH ST	278I (B.Q.E.)		A		2	S	1/19/2010	5.123	G	12,600	\$50,400,000	402		
2230560	Q	70TH ST	278I (B.Q.E.)		A		2	S	10/29/2010	6.833	VG	8,580	\$34,320,000	402		
2230570	Q	41ST AVE	278I (B.Q.E.)		A		2	S	10/29/2010	6.735	VG	8,580	\$34,320,000	402		
2230587	Q	ROOSEVELT AVE	278I (B.Q.E.)		A		2	S	10/28/2011	5.889	G	11,022	\$44,088,000	402		
2230590	Q	BROADWAY	278I (B.Q.E.)		O		2	S	11/12/2010	5.789	G	16,000	\$64,000,000	402		
2230669	Q	278I (B.Q.E.)	35TH AVE		A		1	S	8/3/2011	6.390	VG	13,135	\$52,540,000	402		
2230679	Q	278I (B.Q.E.)	34TH AVE		A		1	S	6/7/2011	6.203	VG	7,793	\$31,172,000	402		
2230869	Q	QUEENS BLVD	ACCESS RD BQE S.B.		A		1	S	11/8/2010	5.727	G	7,900	\$31,600,000	402		
224004E	Q	TO NY FR THOMSON AVE	JACKSON AVE	L	OE		94	S	12/16/2010	4.717	F	104,600	\$418,400,000	402		
224004H	Q	TO 21ST ST FROM NY	22ND ST		OE		43	S	11/23/2010	4.268	F	48,100	\$192,400,000	402		
224004I	Q	TO THOMSON AVE FROM NY	JACKSON AVE	L	OE		39	S	12/16/2010	4.951	F	59,100	\$236,400,000	402		
2240410	Q	BORDEN AVE	DUTCH KILLS		WMO		2	S	7/26/2011	4.792	F	8,400	\$33,600,000	402		
2240450	Q	HUNTERS PT AVE	DUTCH KILLS		WMO		4	S	7/30/2010	5.083	G	12,168	\$48,672,000	402		
2247120	Q	WOODSIDE AVE	LIRR MAIN LINE	L	O		3	S	10/28/2009	4.444	F	14,900	\$59,600,000	402		
2247150	Q	65TH ST	LIRR MAIN LINE	L	O		3	S	10/17/2011	6.375	VG	6,344	\$25,376,000	402		
2247160	Q	65TH PLACE	LIRR MAIN LINE	L	O		3	S	10/20/2011	6.441	VG	8,381	\$33,524,000	402		
2247260	Q	JACKSON AVE	LIRR MONTAUK DIV	L	O		1	S	12/16/2010	6.117	VG	4,517	\$18,068,000	402		
2247270	Q	21ST ST	LIRR N SIDE DIV	L	O		6	S	11/14/2011	5.153	G	17,590	\$70,360,000	402		
2247290	Q	49TH AVE	LIRR,AMT,CON NE	L	O		5	S	11/16/2011	4.014	F	20,400	\$81,600,000	402		
2247300	Q	THOMPSON AVE	AMTRAK & LIRR YARD	AL	O		14	S	12/16/2010	5.042	G	61,280	\$245,120,000	402		
2247370	Q	37TH AVE	CSX - HELLGATE	C	O		1	S	8/29/2011	6.234	VG	6,868	\$27,472,000	402		
2247640	Q	39TH ST (SOUTH)	AMTRAK & LIRR YARD	AL	O		9	S	10/28/2011	6.014	VG	34,100	\$136,400,000	402		
2230780	Q	278I (BQE EAST LEG)	30TH AVE		A		1	S	6/14/2011	6.206	VG	7,071	\$28,284,000	403	401	
1247010	Q	91 PLACE (2247010)	LIRR PT WASH BR	L	O		1	S	11/3/2011	6.567	VG	2,760	\$11,040,000	404		
2247020	Q	94TH ST PED BRDG	LIRR PORT WASH BR	L	O-PED		5	C	10/8/2009	4.030	F	500	\$2,000,000	404		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2247180	Q	GRAND AVE	LIRR MAIN LINE	L	O		3	S	12/16/2010	4.585	F	7,415	\$29,660,000	404		
2247190	Q	55TH AVE PED BRDG	LIRR MAIN LINE	L	O-PED		3	C	10/7/2009	4.309	F	13,000	\$52,000,000	404		
2248159	Q	WOODHAVEN BLVD	QUEENS BLVD		O		2	S	8/20/2010	4.275	F	11,500	\$46,000,000	404		
2247650	Q	60TH RD PED BRDG	LIRR MAIN LINE	L	O-PED		3	C	10/16/2009	5.000	G	2,293	\$9,172,000	405	406	
2230120	Q	MYRTLE AVE	JACKIE ROBINSON PKWY		A		1	S	5/5/2010	5.354	G	6,400	\$25,600,000	405	482	
1247560	Q	METROPOLITAN AVE	LIRR -NY&ATL	LN	O		2	S	9/29/2011	3.603	F	20,900	\$83,600,000	405		
2065930	Q	HAMILTON PLACE	495I (L.I.E.)		A		2	S	3/9/2010	5.847	G	11,111	\$44,444,000	405		
2065940	Q	GRAND AVE	495I (L.I.E.)		A		2	S	11/18/2010	4.861	F	12,850	\$51,400,000	405		
2065950	Q	69TH STREET	495I (L.I.E.)		A		2	S	7/27/2011	5.250	G	10,336	\$41,344,000	405		
2230040	Q	CYPRESS HILLS ST	JACKIE ROBINSON PKWY		A		1	S	4/15/2010	4.611	F	5,000	\$20,000,000	405		
2230099	Q	JACKIE ROBINSON PKWY	CYPRESS HILLS CEMETRY		A		1	S	1/14/2010	5.444	G	4,200	\$16,800,000	405		
2247440	Q	GRAND AVE	CSX TRANSPORT	C	O		1	S	9/9/2011	6.183	VG	3,280	\$13,120,000	405		
2247450	Q	57TH AVE	CSX TRANSPORT	C	O		1	S	9/9/2011	6.073	VG	2,248	\$8,992,000	405		
2247460	Q	CALDWELL AVE	CSX TRANSPORT	C	O		1	S	12/13/2010	5.889	G	2,243	\$8,972,000	405		
2247470	Q	ELIOT AVE	CSX TRANSPORT	C	O		1	S	10/4/2011	5.083	G	2,960	\$11,840,000	405		
2247480	Q	JUNIPER BLVD SO	CSX TRANSPORT	C	O		1	S	10/5/2011	5.000	G	9,000	\$36,000,000	405		
2247490	Q	69TH ST JUNPR BLVD	CSX TRANSPORT	C	O		1	S	12/13/2010	5.021	G	6,175	\$24,700,000	405		
2247500	Q	METROPOLITAN AVE	CSX TRANSPORT	C	O		1	S	10/5/2011	4.233	F	18,650	\$74,600,000	405		
2247530	Q	ANDREWS AVE	LIRR MONTAUK DIV	L	O		1	S	9/22/2011	7.000	VG	1,765	\$7,060,000	405		
2247540	Q	60TH ST	LIRR MONTAUK DIV	L	O		2	S	10/5/2011	5.208	G	5,340	\$21,360,000	405		
2247550	Q	ELIOT AVE	LIRR MONTAUK DIV	L	O		2	S	9/19/2011	5.712	G	9,550	\$38,200,000	405		
2247570	Q	80TH ST	77TH AVE - LIRR MT	L	O		5	S	12/13/2010	5.169	G	11,725	\$46,900,000	405		
2248200	Q	RUST ST	FLUSHING AVE		O		1	S	7/13/2011	5.000	G	2,940	\$11,760,000	405		
2248220	Q	SERVICE RD TURNAROUND	FLUSHING AVE		O		1	S	7/13/2011	5.078	G	2,940	\$11,760,000	405		
2248240	Q	FLUSHING AV SERVICE RD	FLUSHING AVE		O		1	S	7/12/2011	5.250	G	2,940	\$11,760,000	405		
2248280	Q	HIGHLAND PK PED.	PEDESTRIAN PATH		O-PED	P	1	C	10/20/2010	3.667	F	1,900	\$7,600,000	405		
2248300	Q	71ST AVE	COOPER AVE		O		1	S	7/12/2011	4.373	F	2,800	\$11,200,000	405		
2066002	Q	495I (2066000)	WOODHAVEN BLVD		A		2	S	6/14/2011	5.592	G	25,200	\$100,800,000	406	404	
1247200	Q	67 AVE PED BR (2247200)	LIRR MAIN LINE	L	O-PED		3	C	10/9/2009	4.500	F	1,300	\$5,200,000	406		
2247630	Q	PED BRG NEAR UNION TPK	ABANDONED LIRR		O-PED		8	C	6/24/2011	5.046	G	1,449	\$5,796,000	406		
2248160	Q	ELLIOT AVE	QUEENS BLVD		O		2	S	8/20/2010	4.804	F	13,785	\$55,140,000	406		
2240507	Q	ROOSEVELT AVE	678I - FLUSHING RIVER		WA		27	S	12/8/2010	3.465	F	84,424	\$337,696,000	407	481	
1065210	Q	WHITESTONE EXP NB	BCIP (2065210)		A		1	S	7/22/2010	4.476	F	2,500	\$10,000,000	407		
2055801	Q	NORTHERN BLVD WB	FLUSHING RIVER		WO		40	S	10/21/2010	4.282	F	71,900	\$287,600,000	407		
2055802	Q	NORTHERN BLVD EB	FLUSHING RIVER		WO		40	S	10/18/2010	4.099	F	78,894	\$315,576,000	407		
205580A	Q	N.BLVD WB TO 678I SB	VACANT LAND		AR		16	S	6/30/2010	5.571	G	8,600	\$34,400,000	407		
2231900	Q	BCIP	TOTTEN AVE		A		1	S	6/23/2010	4.641	F	4,900	\$19,600,000	407		
2231910	Q	UTOPIA PKWY	BCIP		A		2	S	3/19/2010	5.114	G	7,200	\$28,800,000	407		
2231920	Q	160TH ST	BCIP		A		2	S	6/27/2011	5.750	G	5,550	\$22,200,000	407		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2231930	Q	FRANCIS LEWIS BLVD	BCIP		A		3	S	2/5/2010	4.682	F	9,100	\$36,400,000	407		
2231940	Q	CLINTONVILLE ST	BCIP		A		2	S	2/5/2010	4.659	F	7,400	\$29,600,000	407		
2231950	Q	150TH ST	BCIP		A		2	S	2/18/2010	4.614	F	5,900	\$23,600,000	407		
2231960	Q	149TH ST	BCIP		A		2	S	2/18/2010	4.795	F	6,210	\$24,840,000	407		
2231970	Q	14TH AVE	BCIP		A		2	S	2/18/2010	4.614	F	8,100	\$32,400,000	407		
2231980	Q	147TH ST	BCIP		A		2	S	3/10/2010	4.705	F	6,300	\$25,200,000	407		
2247040	Q	UNION ST	LIRR PORT WASH BR	L	O		1	S	9/12/2011	6.234	VG	3,313	\$13,252,000	407		
2247050	Q	BOWNE AVE	LIRR PORT WASH BR	L	O		1	S	12/15/2010	5.490	G	4,974	\$19,896,000	407		
2247060	Q	PARSONS BLVD	LIRR PORT WASH BR	L	O		1	S	11/30/2010	4.745	F	4,200	\$16,800,000	407		
2247070	Q	147TH ST	LIRR PORT WASH BR	L	O		1	S	9/13/2011	5.471	G	2,800	\$11,200,000	407		
2247080	Q	149TH ST	LIRR PORT WASH BR	L	O		1	S	9/12/2011	4.776	F	4,100	\$16,400,000	407		
2247090	Q	149TH PLACE	LIRR PORT WASH BR	L	O		2	S	9/13/2011	5.000	G	4,300	\$17,200,000	407		
2247100	Q	150TH ST	LIRR PORT WASH BR	L	O		2	S	9/13/2011	6.029	VG	7,830	\$31,320,000	407		
2247110	Q	MURRAY ST	LIRR PORT WASH BR	L	O		1	S	9/15/2011	5.370	G	4,000	\$16,000,000	407		
2248090	Q	FLSHG MDW PK PED	COLLEGE POINT BLVD		O-PED	P	3	C	1/6/2011	4.690	F	8,400	\$33,600,000	407		
2266160	Q	678I SB TO BCIP EB	ACCESS RD FROM 678I		A		1	S	7/19/2011	3.734	F	2,300	\$9,200,000	407		
7705510	Q	167TH ST PED BRDG	LIRR PORT WASH BR	L	O-PED		3	C	10/9/2009	3.902	F	600	\$2,400,000	407		
2248059	Q	MOTOR PKWY (PED)	FRANCIS LEWIS BLVD		O-PED	P	2	C	6/16/2011	4.194	F	2,800	\$11,200,000	408		
2248080	Q	MOTOR PKWY (PED)	HOLLIS COURT BLVD		O-PED	P	3	C	11/1/2010	4.612	F	2,700	\$10,800,000	408		
2248100	Q	MOTOR PKWY (PED)	73RD AVE		O-PED	P	3	C	3/25/2011	4.825	F	2,600	\$10,400,000	408		
2267160	Q	ROOSEVELT AVE	FLUSHING MDW PK ROAD		O		4	S	8/10/2011	4.746	F	7,280	\$29,120,000	408		
2267199	Q	FRANCIS LEWIS BLVD	CUNNINGHAM PK RD		O		1	S	5/27/2011	5.033	G	7,085	\$28,340,000	408		
2248299	Q	J.R. PKWY-UNION TPKE	AUSTIN ST		O		1	S	6/2/2010	4.194	F	5,900	\$23,600,000	409	406	
2247600	Q	PARK LANE SOUTH	LIRR MONTAUK DIV	L	O		1	S	12/14/2010	6.983	VG	3,024	\$12,096,000	409	482	
2230209	Q	QUEENS BLVD	JACKIE ROBINSON PKWY	T	A		5	S	7/23/2010	4.778	F	37,700	\$150,800,000	409		
2247220	Q	80TH ROAD	LIRR MAIN LINE	L	O		3	S	9/29/2011	4.857	F	4,100	\$16,400,000	409		
2247230	Q	82ND AVE	LIRR MAIN LINE	L	O		3	S	9/21/2011	5.377	G	4,100	\$16,400,000	409		
2247240	Q	LEFFERTS BLVD	LIRR MAIN LINE	L	O		3	S	9/29/2011	5.806	G	5,460	\$21,840,000	409		
2247590	Q	FOREST PARK DRIVE	LIRR MONTAUK DIV	L	O	P	5	S	9/20/2011	5.158	G	6,000	\$24,000,000	409		
2247660	Q	FOREST PARK DRIVE	ABANDONED LIRR		O	P	6	S	8/2/2011	4.746	F	10,000	\$40,000,000	409		
2248019	Q	WOODHAVEN BLVD	ATLANTIC AVE		O		3	S	4/8/2010	4.236	F	19,400	\$77,600,000	409		
2248340	Q	FOREST PARK DR	MYRTLE AVE		O	P	3	S	6/13/2011	4.984	F	5,100	\$20,400,000	409		
2231559	Q	CROSS BAY BLVD	BSHP		A		4	S	6/15/2010	5.139	G	23,205	\$92,820,000	410		
2231560	Q	S CONDUIT BLVD	BSOP		A		2	S	7/27/2010	5.465	G	15,776	\$63,104,000	410		
2231570	Q	COHANCY ST	BSOP		A		2	S	5/10/2010	4.368	F	6,400	\$25,600,000	410		
2231590	Q	130TH ST	BSOP		A		2	S	2/2/2010	4.659	F	6,800	\$27,200,000	410		
2240650	Q	163RD AVE PED BRDG	HAWTREE BASIN		WO-PED		13	C	9/19/2011	4.174	F	5,000	\$20,000,000	410		
2248020	Q	WHITELAW PED BRDG	CONDUIT AVE		O-PED		7	C	10/8/2010	4.775	F	5,500	\$22,000,000	410		
2248039	Q	CROSS BAY BLVD	NASSAU EXPWY - RTE 27		O		2	S	6/23/2011	6.347	VG	16,544	\$66,176,000	410		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2248040	Q	RAMP TO LINDEN BLVD	SO. CONDUIT AVE		O		1	S	6/10/2010	5.200	G	3,352	\$13,408,000	410		
2248250	Q	102ND ST	HAWTREE BASIN		WO		3	S	8/15/2011	5.941	G	4,900	\$19,600,000	410		
2231860	Q	W ALLEY ROAD	BCIP		A		2	S	7/20/2011	5.474	G	7,200	\$28,800,000	411		
2231870	Q	NORTHERN BLVD	BCIP		A		2	S	9/21/2010	6.125	VG	9,400	\$37,600,000	411		
2231880	Q	CROCHERON PK PED	BCIP		A-PED	P	9	C	6/23/2011	4.188	F	2,300	\$9,200,000	411		
2231890	Q	28TH AVE PED BRDG	BCIP		A-PED	P	24	C	6/6/2011	4.517	F	7,600	\$30,400,000	411		
2240440	Q	NORTHERN BLVD	ALLEY CREEK		WO		2	S	8/12/2010	4.681	F	8,300	\$33,200,000	411		
2247130	Q	CORPORAL KENNEDY ST	LIRR PORT WASH BR	L	O		1	S	11/3/2011	6.235	VG	3,379	\$13,516,000	411		
2247140	Q	BELL BLVD	LIRR PORT WASH BR	L	O		1	S	9/14/2011	5.780	G	4,320	\$17,280,000	411		
2247170	Q	DOUGLASTON PKWY	LIRR PORT WASH BR	L	O		3	S	12/15/2010	4.712	F	6,300	\$25,200,000	411		
2247680	Q	221ST ST	LIRR PORT WASH BR	L	O		3	S	9/14/2011	5.926	G	6,050	\$24,200,000	411		
2248060	Q	MOTOR PKWY (PED)	BELL BLVD		O-PED	P	2	C	6/20/2011	4.181	F	2,650	\$10,600,000	411		
2248070	Q	MOTOR PKWY (PED)	SPRINGFIELD BLVD		O-PED	P	3	C	6/14/2010	3.582	F	2,900	\$11,600,000	411		
2266129	Q	DOUGLASTON PKWY	BCIP SB		A		1	S	3/19/2010	4.592	F	4,400	\$17,600,000	411		
2266139	Q	DOUGLASTON PKWY	BCIP NB		A		1	S	3/18/2010	4.510	F	6,400	\$25,600,000	411		
7703720	Q	216TH ST PED BRDG	LIRR PORT WASH BR	L	O-PED		6	C	10/25/2009	3.556	F	400	\$1,600,000	411		
2231610	Q	GUY R. BREWER BLVD	BSOP		A		4	S	6/2/2011	6.222	VG	12,342	\$49,368,000	413		
2231620	Q	FARMERS BLVD	BSOP		A		2	S	5/17/2010	4.568	F	6,400	\$25,600,000	413		
2231630	Q	SPRINGFIELD BLVD	BSOP		A		2	S	5/19/2010	4.614	F	8,500	\$34,000,000	413		
2231640	Q	225TH ST	BSOP		A		2	S	5/20/2010	5.000	G	7,000	\$28,000,000	413		
2231650	Q	SUNRISE HWY W.B.	BLP E.B.		A		1	S	4/26/2010	4.393	F	4,100	\$16,400,000	413		
2231660	Q	SUNRISE HWY W.B.	BLP W.B.		A		2	S	3/11/2010	4.565	F	5,350	\$21,400,000	413		
2231670	Q	N CONDUIT AVE WB	BLP E.B.		A		1	S	1/26/2010	4.917	F	4,000	\$16,000,000	413		
2231680	Q	N CONDUIT AVE WB	BLP W.B.		A		2	S	1/27/2010	4.932	F	6,500	\$26,000,000	413		
2231690	Q	FRANCIS LEWIS BLVD	BLP E.B.		A		1	S	4/13/2010	5.167	G	6,000	\$24,000,000	413		
2231700	Q	FRANCIS LEWIS BLVD	BLP W.B.		A		1	S	4/13/2010	4.833	F	6,000	\$24,000,000	413		
2231710	Q	MERRICK BLVD	BLP N.B.		A		1	S	2/22/2010	4.533	F	6,000	\$24,000,000	413		
2231720	Q	MERRICK BLVD	BLP S.B.		A		1	S	2/22/2010	4.200	F	6,000	\$24,000,000	413		
2231730	Q	130TH AVE	BLP N.B.		A		1	S	1/21/2010	5.267	G	4,400	\$17,600,000	413		
2231740	Q	130TH AVE	BLP S.B.		A		1	S	1/20/2010	4.833	F	4,400	\$17,600,000	413		
2231750	Q	LINDEN BLVD	BCIP		A		2	S	3/8/2010	4.432	F	6,700	\$26,800,000	413		
2231760	Q	BCIP	DUTCH BROADWAY-115 AVE		A		1	S	3/8/2010	4.395	F	7,300	\$29,200,000	413		
2231770	Q	BELMONT PARK RAMP	BCIP		A	P	1	S	2/8/2010	4.688	F	3,200	\$12,800,000	413		
2231780	Q	HEMPSTEAD AVE	BCIP		A		2	S	2/8/2010	3.968	F	14,200	\$56,800,000	413		
2231790	Q	BELMONT PARK RAMP	BCIP		A	P	1	S	1/14/2010	4.563	F	3,400	\$13,600,000	413		
2231800	Q	SUPERIOR ROAD	BCIP		A		2	S	4/13/2010	4.136	F	7,000	\$28,000,000	413		
2231819	Q	JAMAICA AVE	BCIP		A		2	S	3/25/2010	4.773	F	11,500	\$46,000,000	413		
2231829	Q	BRADDOCK AVE	BCIP		A		2	S	8/5/2011	4.591	F	10,600	\$42,400,000	413		
2231840	Q	HILLSIDE AVE	BCIP		A		2	S	4/8/2010	4.079	F	9,672	\$38,688,000	413		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2231850	Q	UNION TPKE	BCIP		A		2	S	4/1/2010	4.409	F	13,600	\$54,400,000	413		
2248110	Q	MOTOR PKWY (PED)	ALLEY PK PED WALK		O-PED	P	1	C	7/14/2011	3.983	F	1,000	\$4,000,000	413		
2248129	Q	UNION TPKE	CREEDMOORE HOSP RD		O		1	S	6/24/2011	4.867	F	3,500	\$14,000,000	413		
2266149	Q	HEMPSTEAD AVE	BCIP RAMP NB		A		2	S	3/17/2010	4.063	F	9,500	\$38,000,000	413		
2266770	Q	BCIP	LAURELTON PKWY		A		1	S	3/10/2010	4.972	F	9,508	\$38,032,000	413		
2268770	Q	SPRINGFIELD BLVD	EQUES. PATH (ABAND.)		O		1	S	4/20/2009	4.667	F	1,470	\$5,880,000	413		
2300130	Q	ROCKAWAY BLVD	HOOK CREEK		WO		3	S	8/17/2011	6.271	VG	18,302	\$73,208,000	413		
Q00002	Q	BCIP	PATH OPP. 88TH RD		A		1	C	5/17/2011	3.867	F	1,272	\$5,088,000	413		
2248130	Q	FLUSHING MEADOW PK PED	WILLOW LK&76TH RD		WO-PED	P	4	C	4/20/2002	1.000	C	1,891	\$7,564,000	481		
2248140	Q	FLUSHING MEADW PK RD	STREAM N OF LIE		WO	P	5	S	8/19/2011	4.481	F	4,100	\$16,400,000	481		
2248260	Q	FLUSHING MDW PARK RD	MEADOW LAKE		WO	P	5	S	8/18/2011	4.458	F	4,200	\$16,800,000	481		
2248379	Q	FLUSHING MDW PARK RD	AQUACADE LAKE		WO	P	5	S	8/19/2011	4.296	F	6,300	\$25,200,000	481		
2230190	Q	MARKWOOD ROAD	JACKIE ROBINSON PKWY		A		1	S	2/9/2010	5.167	G	4,400	\$17,600,000	482	406	
2247620	Q	MYRTLE AVE	ABANDONED LIRR		O		3	S	1/12/2010	5.028	G	6,725	\$26,900,000	482	406	
2230179	Q	JACKIE ROBINSON PKWY	METROPOLITAN AVE		A		2	S	5/21/2010	5.286	G	8,673	\$34,692,000	482		
2230180	Q	UNION TPKE	JACKIE ROBINSON PKWY		A		1	S	2/9/2010	5.797	G	5,359	\$21,436,000	482		
2248369	Q	ROCKAWAY BLVD	THURSTON BASIN		WO		2	S	8/17/2011	5.474	G	6,000	\$24,000,000	483	413	
2248230	Q	BEACH CHANNEL DR WB	BEACH CHANNEL DR EB		O		1	S	7/13/2011	4.400	F	3,600	\$14,400,000	484		
2249040	R	TOMPKINS AVE	B&O RR (ABANDONED)		O		1	S	5/24/2010	6.047	VG	5,096	\$20,384,000	501		
2249070	R	JOHN ST	B&O RR (ABANDONED)	O	O-PED		2	C	9/2/2011	5.451	G	1,050	\$4,200,000	501		
2249090	R	MORNINGSTAR ROAD	B&O RR (ABANDONED)	O	O		4	S	5/4/2011	4.864	F	7,900	\$31,600,000	501		
2249100	R	GRANITE AVE	B&O RR (ABANDONED)	O	O		4	S	3/26/2010	6.034	VG	7,300	\$29,200,000	501		
2249110	R	LAKE AVE	B&O RR (ABANDONED)	O	O		3	S	5/2/2011	5.333	G	5,900	\$23,600,000	501		
2249120	R	SIMONSON AVE	B&O RR (ABANDONED)	O	O		3	S	4/26/2011	5.963	G	5,819	\$23,276,000	501		
2249130	R	VAN NAME AVE	B&O RR (ABANDONED)	O	O		3	S	4/29/2011	5.186	G	5,474	\$21,896,000	501		
2249140	R	VAN PELT AVE	B&O RR (ABANDONED)	O	O		3	S	4/28/2011	5.576	G	5,000	\$20,000,000	501		
2249160	R	DE HART AVE	B&O RR (ABANDONED)	O	O		4	S	4/27/2011	6.389	VG	6,700	\$26,800,000	501		
2249170	R	UNION AVE	B&O RR (ABANDONED)	O	O		4	S	4/29/2011	5.167	G	6,500	\$26,000,000	501		
2249180	R	HARBOR ROAD	B&O RR (ABANDONED)	O	O		4	S	8/20/2011	6.220	VG	5,778	\$23,112,000	501		
2249200	R	SOUTH AVE	B&O RR (ABANDONED)	O	O		3	S	8/20/2011	6.709	VG	8,322	\$33,288,000	501		
2249510	R	TOMPKINS AVE	WILLOW AVE, SIRT	S	O		2	S	11/4/2010	5.328	G	5,378	\$21,512,000	501		
2249520	R	HANNAH ST	SIRT SOUTH SHORE	S	O		10	S	9/22/2011	4.898	F	10,020	\$40,080,000	501		
2249530	R	MINTHORNE ST PED BRDG	SIRT SOUTH SHORE	S	O-PED		26	C	7/21/2011	4.453	F	6,000	\$24,000,000	501		
2249710	R	WEST FOOTBRIDGE	CLOVE LAKE		WO-PED	P	2	C	8/1/2011	4.086	F	900	\$3,600,000	501		
2249720	R	EAST FOOTBRIDGE	CLOVE LAKE		WO-PED	P	2	C	8/2/2011	4.229	F	900	\$3,600,000	501		
2249730	R	BRIDGE OVER DAM	N.END CLOVE LAKE		WO-PED	P	1	C	8/1/2011	3.351	F	1,000	\$4,000,000	501		
2249760	R	MARTLINGS AVE	RICHMOND LAKE DAM		WO		2	S	6/9/2011	4.600	F	7,000	\$28,000,000	501		
2249770	R	S OF BROOKS LAKE	STREAM IN PARK		WO-PED	P	3	C	12/19/2011	4.676	F	700	\$2,800,000	501		
2249780	R	FOOTBRIDGE	BROOKS LAKE DAM		WO-PED	P	1	C	2/24/2011	3.433	F	800	\$3,200,000	501		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2249790	R	FB S OF FOREST AV	STREAM IN PARK		WO-PED	P	3	C	10/8/2010	4.814	F	700	\$2,800,000	501		
2249800	R	FOREST AVE	CLOVE LAKES PK STREAM		WO	P	1	S	10/7/2011	4.567	F	1,600	\$6,400,000	501		
2249840	R	TOMPKINS AVE	GREENFIELD AVE		O		1	S	3/17/2010	5.021	G	2,690	\$10,760,000	501		
2269730	R	PARKING EXIT RAMP	SIRT	S	O	F	10	S	10/31/2011	4.028	F	20,727	\$82,908,000	501		
2269740	R	BUS STATION NORTH	SIRT	S	O	F	12	S	11/21/2011	4.660	F	64,605	\$258,420,000	501		
2269750	R	BUS STATION SOUTH	SIRT	S	O	F	12	S	11/22/2011	5.820	G	154,688	\$618,752,000	501		
2269760	R	NORTH RAMP	SIRT	S	O	F	9	S	11/30/2011	4.042	F	17,589	\$70,356,000	501		
2269770	R	BUS STA ENTR RAMP	SIRT	S	O	F	19	S	11/19/2011	4.181	F	39,333	\$157,332,000	501		
2269780	R	PARKING ENTR RAMP	SIRT	S	O	F	3	S	1/14/2011	5.014	G	8,589	\$34,356,000	501		
2269790	R	BUS STATION EXIT RAMP	SIRT	S	O	F	7	S	10/29/2010	5.025	G	28,721	\$114,884,000	501		
2270170	R	SI FERRY PED BRDG	PARKING LOT EXIT RDWY		O-PED	F	5	C	6/17/2010	3.163	F	2,917	\$11,668,000	501		
2270180	R	BOROUGH PLACE - RAMP A	STATEN ISLAND RAILWAY	S	O	F	1	S	12/29/2005	4.938	F	1,250	\$5,000,000	501		
2240350	R	RICHMOND AVE	RICHMOND CREEK		WO		3	S	6/8/2011	5.472	G	32,589	\$130,356,000	502		
2249400	R	BEACH AVE	SIRT SOUTH SHORE	S	O		2	S	8/4/2011	5.364	G	3,700	\$14,800,000	502		
2249410	R	ROSS AVE	SIRT SOUTH SHORE	S	O		2	S	8/5/2011	5.379	G	3,800	\$15,200,000	502		
2249420	R	ROSE AVE	SIRT SOUTH SHORE	S	O		2	S	8/8/2011	5.409	G	3,800	\$15,200,000	502		
2249430	R	NEW DORP LANE	SIRT SOUTH SHORE	S	O		2	S	10/14/2011	4.847	F	7,600	\$30,400,000	502		
2249440	R	BANCROFT AVE	SIRT SOUTH SHORE	S	O		3	S	10/13/2011	5.328	G	5,900	\$23,600,000	502		
2249450	R	FREMONT AVE PED BRDG	SIRT SOUTH SHORE	S	O-PED		3	C	7/20/2011	3.618	F	800	\$3,200,000	502		
2249460	R	LINCOLN AVE	SIRT SOUTH SHORE	S	O		1	S	11/18/2011	5.172	G	4,500	\$18,000,000	502		
2249470	R	MIDLAND AVE	SIRT SOUTH SHORE	S	O		1	S	11/22/2011	5.466	G	3,000	\$12,000,000	502		
2249480	R	FINGERBOARD ROAD	SIRT SOUTH SHORE	S	O		2	S	10/5/2011	6.486	VG	5,100	\$20,400,000	502		
2249490	R	CLOVE ROAD	SIRT SOUTH SHORE	S	O		3	S	11/5/2010	5.986	G	5,104	\$20,416,000	502		
2249860	R	SLATER BLVD	NEW CREEK		WO		1	S	5/4/2011	5.510	G	2,037	\$8,148,000	502		
2249870	R	TRAVIS AVE	MAIN CREEK		WO		1	S	9/26/2011	5.483	G	1,700	\$6,800,000	502		
2249880	R	CHELSEA ROAD	SAWMILL CREEK		WO		1	S	5/6/2011	6.816	VG	2,205	\$8,820,000	502		
2249210	R	MAIN ST PED BRDG	SIRT SOUTH SHORE	S	O-PED		9	C	7/23/2010	4.309	F	400	\$1,600,000	503		
2249230	R	TRACY AVE PED BRDG	SIRT SOUTH SHORE	S	O-PED		9	C	7/13/2011	3.383	F	635	\$2,540,000	503		
2249240	R	ARTHUR KILL ROAD	SIRT SOUTH SHORE	S	O		1	S	11/1/2010	4.685	F	3,650	\$14,600,000	503		
2249250	R	BETHEL AV PED BRDG	SIRT SOUTH SHORE	S	O-PED		12	C	7/19/2011	3.525	F	111	\$444,000	503		
2249269	R	PAGE AVE	SIRT SOUTH SHORE	S	O		4	S	8/25/2011	5.889	G	30,710	\$122,840,000	503		
2249270	R	RICHMOND VALLY ROAD	SIRT SOUTH SHORE	S	O		4	S	8/23/2011	5.284	G	9,440	\$37,760,000	503		
2249280	R	CHAMP COURT PED BRDG	SIRT SOUTH SHORE	S	O-PED		7	C	7/15/2011	3.893	F	595	\$2,380,000	503		
2249290	R	SEGUINE AVE	SIRT SOUTH SHORE	S	O		1	S	9/26/2011	6.016	VG	3,250	\$13,000,000	503		
2249300	R	HUGUENOT AVE	SIRT SOUTH SHORE	S	O		2	S	10/3/2011	4.788	F	4,900	\$19,600,000	503		
2249320	R	ALBEE AVE	SIRT SOUTH SHORE	S	O		3	S	10/4/2011	4.492	F	6,500	\$26,000,000	503		
2249330	R	ANNADALE ROAD	SIRT SOUTH SHORE	S	O		2	S	8/17/2011	6.433	VG	4,500	\$18,000,000	503		
2249350	R	NELSON AVE PED BRDG	SIRT SOUTH SHORE	S	O-PED		3	C	7/18/2011	4.115	F	300	\$1,200,000	503		
2249360	R	GIFFORDS LANE	SIRT SOUTH SHORE	S	O		1	S	11/2/2010	5.531	G	3,042	\$12,168,000	503		

INVENTORY SORTED BY BOROUGH AND COMMUNITY BOARD DISTRICT

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2249370	R	GREAVES AVE	SIRT SOUTH SHORE	S	O		1	S	8/16/2011	6.550	VG	2,650	\$10,600,000	503		
2249380	R	GUYON AVE	SIRT SOUTH SHORE	S	O		3	S	9/9/2011	4.377	F	6,900	\$27,600,000	503		
2249390	R	CEDARVIEW AVE PED BRDG	SIRT SOUTH SHORE	S	O-PED		5	C	7/19/2011	3.615	F	625	\$2,500,000	503		
2249580	R	BELFIELD AVE PED BRDG	SIRT SOUTH SHORE	S	O-PED		5	C	7/27/2010	4.098	F	400	\$1,600,000	503		
2249810	R	HYLAN BLVD	LEMON CREEK		WO		1	S	3/10/2010	6.406	VG	11,400	\$45,600,000	503		
2249820	R	ARTHUR KILL ROAD	ARTHUR KILL STREAM		WO		1	S	5/5/2011	4.184	F	1,300	\$5,200,000	503		
2268920	R	AMBOY ROAD	LEMON CREEK		WO		1	S	3/15/2010	6.000	G	1,310	\$5,240,000	503		
786	OPEN BRIDGES				OPEN SPANS	4,409				OPEN SF		14,510,560	58,049,804,000	ALL		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2243310	K	2ND AVE	LIRR BAY RIDGE	N	O		2	S	12/14/2010	6.472	VG	17,751	\$71,004,000	310		
2243320	K	3RD AVE	LIRR BAY RIDGE	N	O		4	S	9/14/2011	5.083	G	17,230	\$68,920,000	310		
2244160	K	3RD AVE	SHORE RD DRIVE		O		1	S	5/24/2011	6.727	VG	4,360	\$17,440,000	310		
2231270	K	4TH AVE	BSHP		A		2	S	3/31/2010	4.684	F	6,100	\$24,400,000	310		
2243330	K	4TH AVE	LIRR BAY RIDGE	NT	O		4	S	8/30/2011	5.653	G	13,668	\$54,672,000	310		
2243839	K	4TH AVE	NYCTA BMT TRACKS	T	O		1	S	8/24/2011	6.300	VG	4,440	\$17,760,000	307		
2066100	K	5TH AVE	27 X PROSPECT EXPWY		A		1	S	6/4/2010	5.104	G	8,800	\$35,200,000	307		
2244480	K	5TH AVE	GREENWOOD CEMETERY		O		1	S	9/8/2011	4.667	F	3,600	\$14,400,000	307		
2243580	K	5TH AVE	LIRR & SEA BEACH	NT	O		4	S	1/11/2011	4.059	F	12,395	\$49,580,000	310		
2243590	K	6TH AVE	LIRR & SEA BEACH	NT	O		2	S	9/30/2011	6.306	VG	14,382	\$57,528,000	310		
2243280	K	6TH AVE	LIRR ATLANTIC AVE	L	O		9	S	12/30/2010	5.431	G	12,276	\$49,104,000	302		
2243600	K	7TH AVE	LIRR & SEA BEACH	NT	O		7	S	1/19/2011	4.778	F	18,628	\$74,512,000	310		
2243920	K	7TH AVE	NYCTA BMT YARD	T	O		2	S	1/14/2011	5.930	G	4,700	\$18,800,000	307		
2243610	K	8TH AVE	LIRR & SEA BEACH	NT	O		2	S	9/30/2011	6.181	VG	10,834	\$43,336,000	310		
2243840	K	9TH AVE	NYCTA BMT YARD	T	O		5	S	8/19/2011	5.736	G	12,440	\$49,760,000	312		
2243940	K	9TH AVE	NYCTA IND SBWY	T	O		5	S	8/19/2011	4.737	F	6,300	\$25,200,000	312		
2245209	M	11TH AVE	AMTRAK 30 ST BRANCH	A	O		2	S	8/9/2010	4.471	F	15,400	\$61,600,000	104		
2243630	K	11TH AVE	LIRR & SEA BEACH	NT	O		5	S	1/10/2011	5.926	G	9,700	\$38,800,000	310		
2245010	M	11TH AVE VIADUCT	LIRR WEST SIDE YARD	AL	O		39	S	12/29/2010	3.750	F	157,500	\$630,000,000	104		
2243640	K	13TH AVE	LIRR & SEA BEACH	NT	O		5	S	9/23/2011	4.694	F	16,000	\$64,000,000	310		
2231970	Q	14TH AVE	BCIP		A		2	S	2/18/2010	4.614	F	8,100	\$32,400,000	407		
2243650	K	14TH AVE	LIRR BAY RIDGE	N	O		1	S	12/23/2010	6.600	VG	4,720	\$18,880,000	311		
2243670	K	15TH AVE	BMT SEA BEACH	T	O		4	S	6/26/2011	6.386	VG	16,020	\$64,080,000	311		
2243340	K	15TH AVE	LIRR BAY RIDGE	N	O		1	S	12/6/2010	4.723	F	3,614	\$14,456,000	311		
2243680	K	16TH AVE	BMT SEA BEACH	T	O		3	S	2/12/2011	5.370	G	6,816	\$27,264,000	311		
2243360	K	16TH AVE	LIRR BAY RIDGE	N	O		1	S	12/6/2010	5.350	G	4,345	\$17,380,000	311		
2243690	K	17TH AVE	BMT SEA BEACH	T	O		4	S	2/12/2011	6.327	VG	8,946	\$35,784,000	311		
2243370	K	17TH AVE	LIRR BAY RIDGE	N	O		1	S	12/7/2010	4.824	F	3,406	\$13,624,000	312		
2231300	K	17TH AVE PED BRDG	BSHP		A-PED	P	1	C	9/1/2011	3.559	F	2,100	\$8,400,000	311		
2243700	K	18TH AVE	BMT SEA BEACH	T	O		1	S	8/25/2011	6.632	VG	5,200	\$20,800,000	311		
2243380	K	18TH AVE	LIRR BAY RIDGE	N	O		1	S	12/7/2010	4.688	F	6,006	\$24,024,000	312		
2243710	K	19TH AVE	BMT SEA BEACH	T	O		4	S	1/20/2011	4.395	F	4,800	\$19,200,000	311		
2243720	K	20TH AVE	BMT SEA BEACH	T	O		1	S	1/20/2011	6.673	VG	7,000	\$28,000,000	311		
2243820	K	21ST AVE	BMT SEA BEACH	T	O		4	S	10/10/2011	3.974	F	21,400	\$85,600,000	311		
2247270	Q	21ST ST	LIRR N SIDE DIV	L	O		6	S	11/14/2011	5.153	G	17,590	\$70,360,000	402		
2231330	K	27TH AVE PED BRDG	BSHP		A-PED	P	1	C	2/23/2011	4.106	F	2,100	\$8,400,000	313		
2231890	Q	28TH AVE PED BRDG	BCIP		A-PED	P	24	C	6/6/2011	4.517	F	7,600	\$30,400,000	411		
2230730	Q	31ST AVE	278I NB (BQE WEST LEG)		A		1	S	7/15/2011	6.217	VG	5,875	\$23,500,000	401		
2230657	Q	31ST ST	278I (B.Q.E.)		A		2	S	11/6/2010	4.569	F	9,500	\$38,000,000	401		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2230640	Q	32ND ST	278I (B.Q.E.)		A		2	S	6/24/2011	4.875	F	8,100	\$32,400,000	401		
2230630	Q	35TH ST	278I (B.Q.E.)		A		4	S	4/9/2010	4.667	F	9,000	\$36,000,000	401		
2247370	Q	37TH AVE	CSX - HELLGATE	C	O		1	S	8/29/2011	6.234	VG	6,868	\$27,472,000	402		
2230620	Q	37TH ST	278I (B.Q.E.)		A		2	S	3/25/2010	4.597	F	5,300	\$21,200,000	401		
2247330	Q	39TH ST (NORTH)	SUNNYSIDE YARD	A	O		14	S	10/31/2011	6.556	VG	48,200	\$192,800,000	402	401	
2247640	Q	39TH ST (SOUTH)	AMTRAK & LIRR YARD	AL	O		9	S	10/28/2011	6.014	VG	34,100	\$136,400,000	402		
2230570	Q	41ST AVE	278I (B.Q.E.)		A		2	S	10/29/2010	6.735	VG	8,580	\$34,320,000	402		
2247390	Q	41ST AVE	CSX - HELLGATE	C	O		2	S	9/8/2011	4.942	F	4,400	\$17,600,000	402	404	
2247410	Q	43RD AVE	CSX TRANSPORT	C	O		1	S	9/8/2011	5.000	G	4,800	\$19,200,000	402	404	
2247420	Q	44TH AVE	CSX TRANSPORT	C	O		1	S	9/6/2011	5.000	G	5,100	\$20,400,000	402	404	
2230840	Q	44TH ST	GCP		A		2	S	5/21/2010	4.681	F	5,000	\$20,000,000	401		
2247430	Q	45TH AVE	CSX TRANSPORT	C	O		1	S	9/9/2011	5.306	G	2,400	\$9,600,000	402	404	
2230820	Q	47TH ST	GCP		A		2	S	5/21/2010	4.944	F	5,700	\$22,800,000	401		
2247290	Q	49TH AVE	LIRR_AMT.CON NE	L	O		5	S	11/16/2011	4.014	F	20,400	\$81,600,000	402		
2230800	Q	49TH ST	278I (BQE WEST LEG)		A		2	S	4/23/2010	5.333	G	4,900	\$19,600,000	401		
2230890	Q	49TH ST	GCP		A		2	S	5/20/2010	4.444	F	6,350	\$25,400,000	401		
2243400	K	50TH ST	LIRR BAY RIDGE	N	O		2	S	9/1/2011	4.731	F	7,100	\$28,400,000	312		
1247280	Q	51 AVE PED BR (2247280)	LIRR MAIN LINE	L	O-PED		5	C	10/6/2009	3.018	F	700	\$2,800,000	402		
2243390	K	52ND ST	LIRR BAY RIDGE	N	O		1	S	12/9/2010	6.250	VG	3,293	\$13,172,000	312		
2247190	Q	55TH AVE PED BRDG	LIRR MAIN LINE	L	O-PED		3	C	10/7/2009	4.309	F	13,000	\$52,000,000	404		
2247450	Q	57TH AVE	CSX TRANSPORT	C	O		1	S	9/9/2011	6.073	VG	2,248	\$8,992,000	405		
2247650	Q	60TH RD PED BRDG	LIRR MAIN LINE	L	O-PED		3	C	10/16/2009	5.000	G	2,293	\$9,172,000	405	406	
2243350	K	60TH ST	LIRR BAY RIDGE	N	O		1	S	8/31/2011	6.133	VG	3,900	\$15,600,000	311		
2247540	Q	60TH ST	LIRR MONTAUK DIV	L	O		2	S	10/5/2011	5.208	G	5,340	\$21,360,000	405		
2230520	Q	65TH PLACE	278I (B.Q.E.)		A		2	S	2/17/2010	6.111	VG	11,668	\$46,672,000	402		
2247160	Q	65TH PLACE	LIRR MAIN LINE	L	O		3	S	10/20/2011	6.441	VG	8,381	\$33,524,000	402		
2243730	K	65TH ST	BMT SEA BEACH	T	O		4	S	12/16/2010	5.132	G	12,000	\$48,000,000	311		
2247150	Q	65TH ST	LIRR MAIN LINE	L	O		3	S	10/17/2011	6.375	VG	6,344	\$25,376,000	402		
1247200	Q	67 AVE PED BR (2247200)	LIRR MAIN LINE	L	O-PED		3	C	10/9/2009	4.500	F	1,300	\$5,200,000	406		
2230550	Q	69TH ST	278I (B.Q.E.)		A		2	S	1/19/2010	5.123	G	12,600	\$50,400,000	402		
2247490	Q	69TH ST JUNPR BLVD	CSX TRANSPORT	C	O		1	S	12/13/2010	5.021	G	6,175	\$24,700,000	405		
2065950	Q	69TH STREET	495I (L.I.E.)		A		2	S	7/27/2011	5.250	G	10,336	\$41,344,000	405		
2230560	Q	70TH ST	278I (B.Q.E.)		A		2	S	10/29/2010	6.833	VG	8,580	\$34,320,000	402		
2248300	Q	71ST AVE	COOPER AVE		O		1	S	7/12/2011	4.373	F	2,800	\$11,200,000	405		
2246150	M	72 ST CROSS DR (TERRACE BRDG)	PED PATH TO FOUNTAIN		O	P	3	S	3/12/2010	5.786	G	7,300	\$29,200,000	164		
2246160	M	73 ST PED BRDG (BOW BRIDGE)	THE LAKE		WO-PED	P	1	C	5/13/2010	3.718	F	1,700	\$6,800,000	164		
2267717	M	79 ST PED PLAZA	79 ST BT BASIN GAR		A	P	10	S	5/3/2011	4.593	F	27,400	\$109,600,000	107		
226771B	M	79 ST RAMP TO GAR	79 ST BT BASIN GAR		AR	P	21	S	5/11/2011	4.532	F	8,989	\$35,956,000	107		
226771A	M	79 ST RAMP TO HHP	79 ST BT BASIN GAR		AR	P	4	S	5/12/2011	4.221	F	3,131	\$12,524,000	107		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2267718	M	79 ST TRAFFIC CIRC	79 ST PED PLAZA		A	P	34	S	5/11/2011	4.000	F	24,130	\$96,520,000	107		
2246440	M	79 TH ST PED BRDG	TRANSVERSE RD #2		O-PED	P	1	C	9/3/2011	3.926	F	5,900	\$23,600,000	164		
2247220	Q	80TH ROAD	LIRR MAIN LINE	L	O		3	S	9/29/2011	4.857	F	4,100	\$16,400,000	409		
2247570	Q	80TH ST	77TH AVE - LIRR MT	L	O		5	S	12/13/2010	5.169	G	11,725	\$46,900,000	405		
2231250	K	81ST ST PED BRDG	BSHP		A-PED	P	5	C	2/11/2011	4.403	F	3,100	\$12,400,000	310		
2247230	Q	82ND AVE	LIRR MAIN LINE	L	O		3	S	9/21/2011	5.377	G	4,100	\$16,400,000	409		
2243570	K	86TH ST	BMT SEA BEACH	T	O		1	S	1/24/2011	6.078	VG	12,167	\$48,668,000	313		
1247010	Q	91 PLACE (2247010)	LIRR PT WASH BR	L	O		1	S	11/3/2011	6.567	VG	2,760	\$11,040,000	404		
2231260	K	92ND ST PED BRDG	BSHP		A-PED	P	6	C	7/30/2010	3.952	F	3,000	\$12,000,000	310		
2247020	Q	94TH ST PED BRDG	LIRR PORT WASH BR	L	O-PED		5	C	10/8/2009	4.030	F	500	\$2,000,000	404		
2248250	Q	102ND ST	HAWTREE BASIN		WO		3	S	8/15/2011	5.941	G	4,900	\$19,600,000	410		
2231730	Q	130TH AVE	BLP N.B.		A		1	S	1/21/2010	5.267	G	4,400	\$17,600,000	413		
2231740	Q	130TH AVE	BLP S.B.		A		1	S	1/20/2010	4.833	F	4,400	\$17,600,000	413		
2231590	Q	130TH ST	BSOP		A		2	S	2/2/2010	4.659	F	6,800	\$27,200,000	410		
2240089	BM	145TH ST BRIDGE	HARLEM RIVER		WMO		8	S	9/23/2011	6.250	VG	56,700	\$226,800,000	110	204	201
2231980	Q	147TH ST	BCIP		A		2	S	3/10/2010	4.705	F	6,300	\$25,200,000	407		
2247070	Q	147TH ST	LIRR PORT WASH BR	L	O		1	S	9/13/2011	5.471	G	2,800	\$11,200,000	407		
2247090	Q	149TH PLACE	LIRR PORT WASH BR	L	O		2	S	9/13/2011	5.000	G	4,300	\$17,200,000	407		
2231960	Q	149TH ST	BCIP		A		2	S	2/18/2010	4.795	F	6,210	\$24,840,000	407		
2247080	Q	149TH ST	LIRR PORT WASH BR	L	O		1	S	9/12/2011	4.776	F	4,100	\$16,400,000	407		
2231950	Q	150TH ST	BCIP		A		2	S	2/18/2010	4.614	F	5,900	\$23,600,000	407		
2247100	Q	150TH ST	LIRR PORT WASH BR	L	O		2	S	9/13/2011	6.029	VG	7,830	\$31,320,000	407		
2231920	Q	160TH ST	BCIP		A		2	S	6/27/2011	5.750	G	5,550	\$22,200,000	407		
2240650	Q	163RD AVE PED BRDG	HAWTREE BASIN		WO-PED		13	C	9/19/2011	4.174	F	5,000	\$20,000,000	410		
7705510	Q	167TH ST PED BRDG	LIRR PORT WASH BR	L	O-PED		3	C	10/9/2009	3.902	F	600	\$2,400,000	407		
206672A	B	174TH ST-NTH PED BRDG	895I - SHERIDAN EXPWY		A-PED		4	C	5/10/2010	4.736	F	1,800	\$7,200,000	209		
206672B	B	174TH ST-STH PED BRDG	895I - SHERIDAN EXPWY		A-PED		4	C	4/13/2010	4.972	F	1,900	\$7,600,000	209		
2241259	B	204TH ST PED BRDG	METRO NORTH RR HAR	M	O-PED	P	1	C	3/4/2009	4.034	F	4,700	\$18,800,000	227	207	
7703720	Q	216TH ST PED BRDG	LIRR PORT WASH BR	L	O-PED		6	C	10/25/2009	3.556	F	400	\$1,600,000	411		
2247680	Q	221ST ST	LIRR PORT WASH BR	L	O		3	S	9/14/2011	5.926	G	6,050	\$24,200,000	411		
2231640	Q	225TH ST	BSOP		A		2	S	5/20/2010	5.000	G	7,000	\$28,000,000	413		
2229450	B	232ND ST	HHP		A		2	S	7/19/2011	5.026	G	4,900	\$19,600,000	208		
2229460	B	236TH ST PED BRDG	HHP		A-PED		3	C	6/8/2011	4.672	F	2,500	\$10,000,000	208		
2229470	B	239TH ST	HHP		A		2	S	4/29/2011	5.053	G	6,100	\$24,400,000	208		
2229490	B	246TH ST	HHP		A		2	S	4/29/2011	4.868	F	5,600	\$22,400,000	208		
2229500	B	252ND ST	HHP		A		2	S	2/4/2010	5.791	G	4,500	\$18,000,000	208		
224004J	M	25X	NYC GARAGE		OE		14	S	4/23/2010	4.780	F	22,058	\$88,232,000	108		
2266540	B	278I	BRUCKNER BLVD		A		2	S	7/8/2011	4.371	F	32,900	\$131,600,000	201		
2230679	Q	278I (B.Q.E.)	34TH AVE		A		1	S	6/7/2011	6.203	VG	7,793	\$31,172,000	402		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2230669	Q	278I (B.Q.E.)	35TH AVE		A		1	S	8/3/2011	6.390	VG	13,135	\$52,540,000	402		
2230470	K	278I (B.Q.E.)	JAY ST		A		1	S	2/17/2010	4.833	F	5,100	\$20,400,000	302		
2230510	K	278I (B.Q.E.)	NASSAU ST		A		6	S	6/11/2010	5.169	G	51,200	\$204,800,000	302		
2230680	Q	278I (B.Q.E.)	NORTHERN BLVD		A		1	S	11/12/2010	6.079	VG	27,011	\$108,044,000	402	401	
2230460	K	278I (B.Q.E.)	PEARL ST		A		1	S	2/16/2010	5.467	G	4,500	\$18,000,000	302		
2230430	K	278I (B.Q.E.)	PROSPECT ST		A		1	S	1/19/2010	5.000	G	1,100	\$4,400,000	302		
2230480	K	278I (B.Q.E.)	PROSPECT ST		A		1	S	2/18/2010	5.093	G	8,400	\$33,600,000	302		
2230500	K	278I (B.Q.E.)	RAMP TO BQE EB		A		1	S	3/5/2010	5.100	G	1,300	\$5,200,000	302		
2230490	K	278I (B.Q.E.)	SANDS ST		A		1	S	3/1/2010	5.019	G	12,600	\$50,400,000	302		
2230780	Q	278I (BQE EAST LEG)	30TH AVE		A		1	S	6/14/2011	6.206	VG	7,071	\$28,284,000	403	401	
2230770	Q	278I (BQE WEST LEG)	30TH AVE		A		1	S	6/15/2011	6.322	VG	6,199	\$24,796,000	401		
2268508	K	278I E.B. (B.Q.E.)	278I W.B. (B.Q.E.)		A		11	S	6/5/2011	4.103	F	20,529	\$82,116,000	302		
2268518	K	278I E.B. (B.Q.E.)	278I W.B. (B.Q.E.)		A		5	S	6/9/2011	4.119	F	9,275	\$37,100,000	302		
2268498	K	278I E.B. (B.Q.E.)	278I WB (BQE)		A		69	S	11/13/2011	3.965	F	133,708	\$534,832,000	302		
2230888	K	278I E.B. (B.Q.E.)	CADMAN PLAZA / 278I WB		A		2	S	7/23/2010	5.263	G	4,500	\$18,000,000	302		
2230450	K	278I EB (B.Q.E.)	ADAMS ST		A		1	S	1/15/2010	4.933	F	2,500	\$10,000,000	302		
2230858	K	278I EB (B.Q.E.)	JORALEMON ST / BQE WB		A		2	S	10/9/2011	4.619	F	5,900	\$23,600,000	302		
2230410	K	278I EB (B.Q.E.)	WASHINGTON ST		A		1	S	6/30/2011	4.500	F	2,500	\$10,000,000	302		
2230760	Q	278I NB (BQE EAST LEG)	31ST AVE		A		1	S	10/4/2010	6.610	VG	4,161	\$16,644,000	401		
2230700	Q	278I NB (BQE EAST LEG)	32ND AVE (TO BQE WEST LEG)		A		8	S	11/9/2010	6.662	VG	31,600	\$126,400,000	401	403	
2230690	Q	278I NB (BQE WEST LEG)	32ND AVE		A		1	S	7/7/2010	6.492	VG	4,080	\$16,320,000	401		
2230830	Q	278I NB (BQE WEST LEG)	GCP		A		2	S	5/20/2010	4.583	F	7,600	\$30,400,000	401		
2230720	Q	278I SB (BQE EAST LEG)	278I NB (BQE WEST LEG)		A		3	S	7/22/2011	6.182	VG	20,896	\$83,584,000	401		
2230710	Q	278I SB (BQE WEST LEG)	32ND AVE		A		1	S	8/2/2011	6.559	VG	5,240	\$20,960,000	401		
2230750	Q	278I SB (BQE EAST LEG)	31ST AVE		A		1	S	8/1/2011	6.508	VG	4,221	\$16,884,000	401	403	
2230740	Q	278I SB (BQE WEST LEG)	31ST AVE		A		1	S	8/1/2011	6.217	VG	5,246	\$20,984,000	401		
2230887	K	278I W.B. (B.Q.E.)	CADMAN PLAZA		A		2	S	7/20/2010	4.397	F	4,500	\$18,000,000	302		
2268497	K	278I W.B. (B.Q.E.)	FURMAN ST		A		45	S	8/6/2011	4.357	F	86,406	\$345,624,000	302		
2268517	K	278I W.B. (B.Q.E.)	FURMAN ST		A		7	S	6/28/2011	3.882	F	10,988	\$43,952,000	302		
2268507	K	278I W.B. (B.Q.E.)	YORK ST		A		6	S	6/8/2011	4.071	F	10,388	\$41,552,000	302		
2230440	K	278I WB (B.Q.E.)	ADAMS ST		A		1	S	1/15/2010	5.167	G	2,700	\$10,800,000	302		
2230857	K	278I WB (B.Q.E.)	JORALEMON ST		A		1	S	3/18/2010	5.000	G	2,100	\$8,400,000	302		
2230420	K	278I WB (B.Q.E.)	WASHINGTON ST		A		1	S	7/2/2010	5.109	G	2,500	\$10,000,000	302		
2066002	Q	495I (2066000)	WOODHAVEN BLVD		A		2	S	6/14/2011	5.592	G	25,200	\$100,800,000	406	404	
2266160	Q	678I SB TO BCIP EB	ACCESS RD FROM 678I		A		1	S	7/19/2011	3.734	F	2,300	\$9,200,000	407		
2246490	M	A.C. POWELL BLVD N.B.	A.C. POWELL BLVD		O		1	S	2/11/2010	4.020	F	5,600	\$22,400,000	110		
2249320	R	ALBEE AVE	SIRT SOUTH SHORE	S	O		3	S	10/4/2011	4.492	F	6,500	\$26,000,000	503		
2268920	R	AMBOY ROAD	LEMON CREEK		WO		1	S	3/15/2010	6.000	G	1,310	\$5,240,000	503		
2247530	Q	ANDREWS AVE	LIRR MONTAUK DIV	L	O		1	S	9/22/2011	7.000	VG	1,765	\$7,060,000	405		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2249330	R	ANNADALE ROAD	SIRT SOUTH SHORE	S	O		2	S	8/17/2011	6.433	VG	4,500	\$18,000,000	503		
2249820	R	ARTHUR KILL ROAD	ARTHUR KILL STREAM		WO		1	S	5/5/2011	4.184	F	1,300	\$5,200,000	503		
2249240	R	ARTHUR KILL ROAD	SIRT SOUTH SHORE	S	O		1	S	11/1/2010	4.685	F	3,650	\$14,600,000	503		
2230810	Q	ASTORIA BLVD EB	278I (BQE WEST LEG)		A		4	S	8/23/2011	4.044	F	8,200	\$32,800,000	401		
2243569	K	ATLANTIC AVE	LIRR ATLANTIC AVE	L	O		75	S	5/28/2010	3.676	F	135,100	\$540,400,000	316	305	
2244170	K	ATLNTC AV SVC RD E.B.	EAST NEW YORK AVE		O		2	S	7/20/2011	5.474	G	3,192	\$12,768,000	305		
2244180	K	ATLNTC AV SVC RD W.B.	EAST NEW YORK AVE		O		2	S	7/20/2011	4.965	F	5,600	\$22,400,000	305		
2243530	K	AVENUE H	LIRR BAY RIDGE	N	O		2	S	9/9/2011	5.956	G	35,100	\$140,400,000	318		
2243750	K	AVENUE O	BMT SEA BEACH	T	O		1	S	9/1/2011	5.706	G	4,658	\$18,632,000	311		
2243760	K	AVENUE P	BMT SEA BEACH	T	O		1	S	8/31/2011	5.674	G	5,544	\$22,176,000	311		
2243790	K	AVENUE S	BMT SEA BEACH	T	O		1	S	9/15/2011	5.967	G	5,360	\$21,440,000	315		
2243800	K	AVENUE T	BMT SEA BEACH	T	O		1	S	9/15/2011	6.033	VG	5,360	\$21,440,000	311		
2243810	K	AVENUE U	BMT SEA BEACH	T	O		1	S	12/17/2010	5.686	G	5,880	\$23,520,000	315		
2249440	R	BANCROFT AVE	SIRT SOUTH SHORE	S	O		3	S	10/13/2011	5.328	G	5,900	\$23,600,000	502		
2241180	B	BARRETTO ST	AMTRAK - CSX	AC	O		1	S	12/2/2010	6.000	G	5,313	\$21,252,000	202		
2232000	M	BATTERY PLACE	FDR DRIVE		AT		2	S	12/21/2011	5.318	G	142,000	\$68,000,000	101		
2231290	K	BAY 8TH ST	BSHP		A		1	S	5/14/2011	5.952	G	4,950	\$19,800,000	311		
2243740	K	BAY PKWY	BMT SEA BEACH	T	O		4	S	12/14/2010	4.816	F	16,800	\$67,200,000	311		
2231760	Q	BCIP	DUTCH BROADWAY-115 AVE		A		1	S	3/8/2010	4.395	F	7,300	\$29,200,000	413		
2266770	Q	BCIP	LAURELTON PKWY		A		1	S	3/10/2010	4.972	F	9,508	\$38,032,000	413		
Q00002	Q	BCIP	PATH OPP. 88TH RD		A		1	C	5/17/2011	3.867	F	1,272	\$5,088,000	413		
2231900	Q	BCIP	TOTTEN AVE		A		1	S	6/23/2010	4.641	F	4,900	\$19,600,000	407		
2076109	B	BE NB SERVICE RD	HUTCHINSON RVR PKWY		A		2	S	9/1/2011	4.632	F	7,800	\$31,200,000	210		
2076129	B	BE SB SERVICE RD	HUTCHINSON RVR PKWY		A		2	S	1/22/2010	5.105	G	7,100	\$28,400,000	210		
2249400	R	BEACH AVE	SIRT SOUTH SHORE	S	O		2	S	8/4/2011	5.364	G	3,700	\$14,800,000	502		
2248230	Q	BEACH CHANNEL DR WB	BEACH CHANNEL DR EB		O		1	S	7/13/2011	4.400	F	3,600	\$14,400,000	484		
2243490	K	BEDFORD AVE	LIRR BAY RIDGE	N	O		6	S	11/24/2010	4.319	F	12,000	\$48,000,000	314		
2241840	B	BEDFORD PARK BLVD	METRO NORTH RR HAR	M	O		1	S	5/13/2010	4.844	F	6,400	\$25,600,000	227	207	
2241930	B	BEDFORD PARK BLVD	NYCTA IND YARDS	T	O		4	S	11/11/2010	5.514	G	46,300	\$185,200,000	207		
2249580	R	BELFIELD AVE PED BRDG	SIRT SOUTH SHORE	S	O-PED		5	C	7/27/2010	4.098	F	400	\$1,600,000	503		
2247140	Q	BELL BLVD	LIRR PORT WASH BR	L	O		1	S	9/14/2011	5.780	G	4,320	\$17,280,000	411		
2231770	Q	BELMONT PARK RAMP	BCIP		A	P	1	S	2/8/2010	4.688	F	3,200	\$12,800,000	413		
2231790	Q	BELMONT PARK RAMP	BCIP		A	P	1	S	1/14/2010	4.563	F	3,400	\$13,600,000	413		
2249250	R	BETHEL AV PED BRDG	SIRT SOUTH SHORE	S	O-PED		12	C	7/19/2011	3.525	F	111	\$444,000	503		
2243100	K	BEVERLY ROAD	BMT SUBWAY, BRIGHTON	T	O		3	S	8/22/2011	3.561	F	4,200	\$16,800,000	314		
2243900	K	BLAKE AVE	LIRR BAY RIDGE LINE	N	O		3	S	12/15/2010	5.000	G	4,912	\$19,648,000	316		
2240410	Q	BORDEN AVE	DUTCH KILLS		WMO		2	S	7/26/2011	4.792	F	8,400	\$33,600,000	402		
2270180	R	BOROUGH PLACE - RAMP A	STATEN ISLAND RAILWAY	S	O	F	1	S	12/29/2005	4.938	F	1,250	\$5,000,000	501		
2229579	B	BOSTON POST ROAD	HUTCHINSON RIVER		WO		14	S	6/23/2011	4.194	F	95,700	\$382,800,000	212		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2242110	B	BOSTON ROAD	BRONX RIVER		WO		1	S	4/7/2010	4.227	F	6,200	\$24,800,000	227		
2242100	B	BOTANICAL GARDEN ROAD	TWIN LAKES		WO	P	1	S	3/29/2010	4.833	F	2,200	\$8,800,000	227		
2247050	Q	BOWNE AVE	LIRR PORT WASH BR	L	O		1	S	12/15/2010	5.490	G	4,974	\$19,896,000	407		
2231829	Q	BRADDOCK AVE	BCIP		A		2	S	8/5/2011	4.591	F	10,600	\$42,400,000	413		
2249730	R	BRIDGE OVER DAM	N.END CLOVE LAKE		WO-PED	P	1	C	8/1/2011	3.351	F	1,000	\$4,000,000	501		
2230590	Q	BROADWAY	2781 (B.Q.E.)		O		2	S	11/12/2010	5.789	G	16,000	\$64,000,000	402		
2240137	BM	BROADWAY BRIDGE	HARLEM RIVER	TM	WMO		3	S	12/28/2010	3.972	F	46,848	\$187,392,000	112	207	208
2242072	B	BRONX BLVD N.B.	BRONX RIVER		WO		1	S	5/6/2010	4.967	F	1,800	\$7,200,000	212		
2242082	B	BRONX BLVD N.B.	BRONX RIVER		WO		1	S	5/6/2010	4.467	F	2,800	\$11,200,000	212		
2242071	B	BRONX BLVD S.B.	BRONX RIVER		WO		1	S	5/6/2010	4.633	F	1,800	\$7,200,000	212		
2242081	B	BRONX BLVD S.B.	BRONX RIVER		WO		1	S	5/6/2010	4.467	F	2,800	\$11,200,000	212		
2229560	B	BRONX PELHAM PKWY	AMTRAK - CSX	AC	A		3	S	6/13/2010	4.542	F	24,591	\$98,364,000	211		
2075849	B	BRONX PELHAM PKWY	HUTCHINSON RVR PKWY		A		2	S	6/9/2010	3.974	F	17,600	\$70,400,000	210	211	
2065629	B	BRONX RIVER PKWY	BOSTON RD BX ZOO		A		1	S	8/22/2011	5.276	G	6,300	\$25,200,000	227		
2270250	B	BROOKE AVE	CSX TRANS - PT MORRIS		O		1	S	6/24/2011	3.836	F	21,035	\$84,140,000	201		
2243520	K	BROOKLYN AVE	LIRR BAY RIDGE	N	O		3	S	9/9/2011	6.236	VG	4,500	\$18,000,000	318		
2267860	K	BROOKLYN BR APPROACH	STORAGE (SANDS ST)		O		1	S	7/27/2010	4.607	F	6,490	\$25,960,000	302		
2240019	KM	BROOKLYN BRIDGE	EAST RIVER		WEO		75	S	11/2/2010	2.944	P	503,788	\$2,015,152,000	103	302	101
2268350	K	BROOKLYN PROMENADE	2781 EB (BQE)		A-PED	P	35	C	4/20/2011	3.690	F	46,184	\$184,736,000	302		
2241099	B	BRUCKNER BLVD	CSX TRANS - PT MORRIS	C	O		1	S	9/17/2010	6.583	VG	6,700	\$26,800,000	201		
2076929	B	BRUCKNER EXPWY	CSX - HUNTS POINT	C	A		1	S	9/15/2011	4.700	F	3,800	\$15,200,000	202		
2075352	B	BRUCKNER EXPWY NB	AMTRAK - CSX	AC	A		1	S	11/3/2011	6.317	VG	10,900	\$43,600,000	202		
2066672	B	BRUCKNER EXPWY NB	BRONX RIVER		WMA		8	S	10/22/2011	4.269	F	22,300	\$89,200,000	202	209	
2075351	B	BRUCKNER EXPWY SB	AMTRAK - CSX	AC	A		1	S	11/3/2011	3.719	F	11,600	\$46,400,000	202		
2066671	B	BRUCKNER EXPWY SB	BRONX RIVER		WMA		3	S	10/22/2011	5.278	G	12,400	\$49,600,000	202	209	
1066510	B	BRUCKNER EXPWY SVC RD	WESTCHESTER CREEK		WMA		17	S	11/8/2010	3.516	F	39,400	\$157,600,000	209		
2241210	B	BRYANT AVE	AMTRAK - CSX	AC	O		1	S	11/7/2011	3.119	F	5,300	\$21,200,000	202		
2231329	K	BSHP	26TH AVE		A		1	S	4/30/2010	4.600	F	6,700	\$26,800,000	313		
2231319	K	BSHP	BAY PKWY		A		1	S	6/21/2011	4.442	F	7,200	\$28,800,000	311		
2231249	K	BSHP	BAY RIDGE AVE		A		1	S	5/12/2011	3.313	F	4,900	\$19,600,000	310		
2231429	K	BSHP	BEDFORD AVE		A		3	S	4/29/2010	4.097	F	12,000	\$48,000,000	315		
2231509	K	BSHP	FRESH CREEK		WA		5	S	11/4/2011	3.139	F	23,000	\$92,000,000	356		
2231450	K	BSHP	GERRITSEN INLET		WA		11	S	8/4/2011	3.463	F	52,000	\$208,000,000	356		
2231479	K	BSHP	MILL BASIN		WMA		14	S	10/30/2011	3.313	F	73,500	\$294,000,000	318		
2231439	K	BSHP	NOSTRAND AVE		A		3	S	4/29/2010	3.986	F	13,000	\$52,000,000	315		
2231419	K	BSHP	OCEAN AVE		A		3	S	4/27/2010	4.083	F	14,000	\$56,000,000	315		
2231360	K	BSHP	OCEAN PKWY		A		3	S	7/16/2010	6.535	VG	29,637	\$118,548,000	313		
2231489	K	BSHP	PAERDEGAT BASIN		WA		15	S	11/9/2011	3.222	F	58,300	\$233,200,000	318		
2231499	K	BSHP	ROCKAWAY PKWY		A		4	S	10/16/2011	3.792	F	11,500	\$46,000,000	356		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2231409	K	BSHP	SHEEPSHEAD BAY ROAD		A		1	S	4/27/2010	4.836	F	6,500	\$26,000,000	315		
2230790	Q	BULOVA AVE	278I (BQE WEST LEG)		A		2	S	4/23/2010	5.333	G	3,300	\$13,200,000	401		
2269770	R	BUS STA ENTR RAMP	SIRT	S	O	F	19	S	1/19/2011	4.181	F	39,333	\$157,332,000	501		
2269790	R	BUS STATION EXIT RAMP	SIRT	S	O	F	7	S	10/29/2010	5.025	G	28,721	\$114,884,000	501		
2269740	R	BUS STATION NORTH	SIRT	S	O	F	12	S	11/21/2011	4.660	F	64,605	\$258,420,000	501		
2269750	R	BUS STATION SOUTH	SIRT	S	O	F	12	S	11/22/2011	5.820	G	154,688	\$618,752,000	501		
2247460	Q	CALDWELL AVE	CSX TRANSPORT	C	O		1	S	12/13/2010	5.889	G	2,243	\$8,972,000	405		
2243290	K	CARLTON AVE	LIRR ATLANTIC AVE	L	O		7	S	12/29/2010	5.069	G	10,823	\$43,292,000	302		
2240260	K	CARROLL ST	GOWANUS CANAL		WMO		2	S	6/16/2011	4.634	F	3,000	\$12,000,000	306		
2243220	K	CARROLL ST PED BRDG	FRANKLIN SHUTTLE	T	O-PED		3	C	10/26/2011	5.155	G	600	\$2,400,000	309		
2243050	K	CATON AVE	BMT SUBWAY, BRIGHTON	T	O		4	S	8/10/2011	4.500	F	20,800	\$83,200,000	314		
2249390	R	CEDARVIEW AVE PED BRDG	SIRT SOUTH SHORE	S	O-PED		5	C	7/19/2011	3.615	F	625	\$2,500,000	503		
2246050	M	CENTER DR (DRIPROCK ARCH)	PED OPP 63RD ST		O	P	1	S	1/18/2010	5.067	G	2,000	\$8,000,000	164		
2244050	K	CENTER DR (NETHERMEAD ARCHES)	PED PATH & STREAM		WO	P	3	S	5/9/2011	5.000	G	7,400	\$29,600,000	355		
2246070	M	CENTER DR (PLAYMATES ARCH)	PED PATH OPP 65TH ST		O	P	1	C	6/16/2011	4.367	F	1,129	\$4,516,000	164		
2246100	M	CENTER DRIVE	TRANSVERSE RD #1		O	P	1	S	4/2/2010	4.467	F	6,000	\$24,000,000	164		
2268480	M	CHAMBERS ST PED BRDG	RTE 9A - WEST ST		O-PED		10	C	6/15/2011	5.167	G	7,481	\$29,924,000	101		
2249280	R	CHAMP COURT PED BRDG	SIRT SOUTH SHORE	S	O-PED		7	C	7/15/2011	3.893	F	595	\$2,380,000	503		
2249880	R	CHELSEA ROAD	SAWMILL CREEK		WO		1	S	5/6/2011	6.816	VG	2,205	\$8,820,000	502		
2243080	K	CHURCH AVE	BMT SUBWAY, BRIGHTON	T	O		4	S	8/10/2011	4.545	F	18,200	\$72,800,000	314		
2240210	B	CITY ISLAND ROAD	EASTCHESTER BAY		WO		7	S	10/21/2011	3.389	F	19,915	\$79,660,000	228		
2241710	B	CLAREMONT PKWY	METRO NORTH RR HAR	M	O		1	S	4/21/2010	4.422	F	6,300	\$25,200,000	203		
2231940	Q	CLINTONVILLE ST	BCIP		A		2	S	2/5/2010	4.659	F	7,400	\$29,600,000	407		
2249490	R	CLOVE ROAD	SIRT SOUTH SHORE	S	O		3	S	11/5/2010	5.986	G	5,104	\$20,416,000	502		
2231570	Q	COHANCY ST	BSOP		A		2	S	5/10/2010	4.368	F	6,400	\$25,600,000	410		
2230870	K	COLUMBIA HEIGHTS	278I (B.Q.E.)		A		1	S	7/21/2010	4.550	F	16,500	\$66,000,000	302		
2241590	B	CONCOURSE VILL AVE	METRO NORTH RR HAR	M	O		1	S	5/13/2010	4.031	F	12,077	\$48,308,000	204		
2244460	K	CONDUIT BLVD NB	ATLANTIC AVE EB		O		1	S	10/15/2010	4.833	F	3,800	\$15,200,000	305		
2231380	K	CONEY ISLAND AVE	BSHP		A		4	S	9/20/2011	5.986	G	19,866	\$79,464,000	313		
2243440	K	CONEY ISLAND AVE	LIRR BAY RIDGE	N	O		1	S	12/2/2010	5.234	G	3,231	\$12,924,000	312		
2230390	K	CONGRESS ST	278I (B.Q.E.)		A		2	S	4/9/2010	6.279	VG	5,000	\$20,000,000	306		
2246510	M	CORBIN PL OVERPASS	CORBIN PLACE		O	P	1	S	1/13/2010	5.000	G	2,223	\$8,892,000	112		
2232029	M	CORLEARS PARK ROAD	FDR DRIVE		A	P	4	S	3/19/2010	3.938	F	4,100	\$16,400,000	103		
2247130	Q	CORPORAL KENNEDY ST	LIRR PORT WASH BR	L	O		1	S	11/3/2011	6.235	VG	3,379	\$13,516,000	411		
2243110	K	CORTEYOU ROAD	BMT SUBWAY, BRIGHTON	T	O		3	S	8/25/2011	6.139	VG	4,810	\$19,240,000	314		
2231880	Q	CROCHERON PK PED	BCIP		A-PED	P	9	C	6/23/2011	4.188	F	2,300	\$9,200,000	411		
2243040	K	CROOKE AVE	BMT SUBWAY, BRIGHTON	T	O		4	S	9/1/2011	4.000	F	6,000	\$24,000,000	314		
2231340	K	CROPSY AVE	BSHP		A		2	S	6/15/2010	4.583	F	13,100	\$52,400,000	313		
2240301	K	CROPSY AVE	CONEY ISLAND CREEK		WO		3	S	6/10/2011	5.225	G	9,400	\$37,600,000	313		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2240302	K	CROSEY AVE	CONEY ISLAND CREEK		WO		3	S	11/15/2011	4.831	F	9,400	\$37,600,000	313		
2231559	Q	CROSS BAY BLVD	BSHP		A		4	S	6/15/2010	5.139	G	23,205	\$92,820,000	410		
2248039	Q	CROSS BAY BLVD	NASSAU EXPWY - RTE 27		O		2	S	6/23/2011	6.347	VG	16,544	\$66,176,000	410		
2242030	B	CROTONA AVE	BRONX PELHAM PKWY		O		2	S	2/8/2010	5.447	G	7,600	\$30,400,000	206		
2243230	K	CROWN ST	FRANKLIN SHUTTLE	T	O		3	S	10/11/2011	5.097	G	4,060	\$16,240,000	309		
2230040	Q	CYPRESS HILLS ST	JACKIE ROBINSON PKWY		A		1	S	4/15/2010	4.611	F	5,000	\$20,000,000	405		
2249160	R	DE HART AVE	B&O RR (ABANDONED)	O	O		4	S	4/27/2011	6.389	VG	6,700	\$26,800,000	501		
2232030	M	DELANCEY ST PED BRDG	FDR DRIVE		A-PED	P	12	C	2/6/2011	4.217	F	2,900	\$11,600,000	103		
2076640	B	DEPOT PLACE	METRO NORTH RR HUD	CM	O		11	S	6/27/2011	5.028	G	26,566	\$106,264,000	204		
2243130	K	DITMAS AVE	BMT SUBWAY, BRIGHTON	T	O		1	S	10/4/2011	5.723	G	5,150	\$20,600,000	314		
2243120	K	DORCHESTER ROAD	BMT SUBWAY, BRIGHTON	T	O		1	S	12/21/2010	5.882	G	4,825	\$19,300,000	314		
2266139	Q	DOUGLASTON PKWY	BCIP NB		A		1	S	3/18/2010	4.510	F	6,400	\$25,600,000	411		
2266129	Q	DOUGLASTON PKWY	BCIP SB		A		1	S	3/19/2010	4.592	F	4,400	\$17,600,000	411		
2247170	Q	DOUGLASTON PKWY	LIRR PORT WASH BR	L	O		3	S	12/15/2010	4.712	F	6,300	\$25,200,000	411		
2243420	K	E 3RD ST	LIRR BAY RIDGE	N	O		1	S	9/1/2011	6.517	VG	1,840	\$7,360,000	312		
2232050	M	E 6TH ST PED BRDG	FDR DRIVE		A-PED	P	19	C	3/1/2011	4.150	F	2,200	\$8,800,000	103		
2233020	M	E 10TH ST PED BRDG	FDR DRIVE		A-PED	P	21	C	3/1/2011	4.038	F	2,754	\$11,016,000	103		
2231390	K	E 12TH ST	BSHP		A		4	S	6/18/2010	4.694	F	17,200	\$68,800,000	315		
2243450	K	E 14TH ST	LIRR BAY RIDGE	N	O		1	S	12/2/2010	4.809	F	1,775	\$7,100,000	314		
2233080	K	E 14 ST PED BRDG	BSHP		A-PED		14	C	7/13/2010	4.213	F	4,700	\$18,800,000	315		
2243460	K	E 15TH ST PED BRDG	LIRR BAY RIDGE	N	O-PED		3	C	9/16/2008	5.193	G	900	\$3,600,000	314		
2232070	M	E 25TH ST PED BRDG	FDR DRIVE		A-PED		3	C	2/20/2011	4.627	F	1,700	\$6,800,000	106		
2246540	M	E 34TH ST	PARK AVE TUNNEL		OT		1	S	11/1/2010	4.117	F	36,200	\$144,800,000	105	106	
2246570	M	E42ND ST - E47TH ST	FIRST AVE TUNNEL		OT		2	S	6/17/2010	4.882	F	95,000	\$380,000,000	106		
2232100	M	E 51ST ST PED BRDG	FDR DRIVE		A-PED	P	6	C	2/20/2011	4.400	F	2,800	\$11,200,000	106		
2233040	M	E 60TH ST	FDR DRIVE		A		17	S	7/13/2011	4.806	F	24,480	\$97,920,000	108		
2246030	M	E 62 ST PED BRDG (GAPSTOW BRDG)	THE POND		O-PED	P	1	C	6/1/2011	3.897	F	1,400	\$5,600,000	164		
2232110	M	E 64TH ST PED BRDG	FDR DRIVE		A-PED	P	11	U	11/23/2011	4.912	F	2,100	\$8,400,000	108		
2232120	M	E 71ST ST PED BRDG	FDR DRIVE		A-PED	P	19	C	8/15/2010	5.000	G	340	\$1,360,000	108		
2246450	M	E77 ST PED (GLADE ARCH)	PED PATH OPP E77 ST		O-PED	P	1	C	12/7/2010	4.138	F	5,000	\$20,000,000	164		
2232140	M	E 78TH ST PED BRDG	FDR DRIVE		A-PED	P	9	C	4/18/2010	2.711	P	3,120	\$12,480,000	108		
2269820	M	E 81 ST PED BRDG	FDR DRIVE N.B.		A-PED	P	3	C	1/12/2010	3.149	F	900	\$3,600,000	108		
2246390	M	E86 ST PED (SE RESERVOIR BRDG)	BRIDLE PATH		O-PED	P	3	C	10/31/2011	4.509	F	1,100	\$4,400,000	164		
2245319	M	E 97TH ST	METRO NORTH MAIN LN	M	O		1	S	12/29/2010	4.647	F	3,200	\$12,800,000	111		
2232180	M	E 103RD ST PED BRDG	FDR DRIVE		A-PED		18	C	9/18/2011	4.447	F	4,800	\$19,200,000	111		
2232190	M	E 111TH ST PED BRDG	FDR DRIVE		A-PED	P	9	C	8/19/2010	4.353	F	4,200	\$16,800,000	111		
2232200	M	E 120TH ST PED BRDG	FDR DRIVE		A-PED	P	18	C	8/8/2010	4.259	F	3,978	\$15,912,000	111		
2246990	M	E 129TH ST PED BRDG	3RD AVE BRDG RAMP		O-PED		5	C	11/4/2011	4.000	F	1,046	\$4,184,000	111		
2241550	B	E 144TH ST	METRO NORTH RR HAR	M	O		2	S	7/11/2011	6.264	VG	8,290	\$33,160,000	201		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2241129	B	E 149TH ST	AMTRAK - CSX	AC	O		2	S	11/29/2010	4.620	F	18,258	\$73,032,000	201	202	
2241560	B	E 149TH ST	METRO NORTH RR HAR	M	O		8	S	5/27/2010	4.819	F	27,900	\$111,600,000	201	204	
2241050	B	E 149TH ST/JACKSON AVE	CSX TRANS - PT MORRIS	C	O		1	S	6/15/2010	4.850	F	65,000	\$260,000,000	201		
2270030	B	E 156TH ST	ACCESS TO HOUSING		O	ED	16	S	11/24/2010	3.821	F	49,696	\$198,784,000	204		
2241010	B	E 156TH STREET	CSX TRANS - PT MORRIS	C	O		1	S	7/16/2010	4.556	F	2,400	\$9,600,000	201		
2241600	B	E 156TH ST	METRO NORTH RR HAR	M	O		1	S	7/12/2011	5.200	G	3,400	\$13,600,000	204		
2241610	B	E 161ST ST	METRO NORTH RR HAR	M	O		1	S	10/12/2011	5.017	G	6,600	\$26,400,000	204	203	
2241020	B	E 161ST STREET	CSX TRANS - PT MORRIS	C	O		1	S	5/20/2010	6.700	VG	12,800	\$51,200,000	203		
2241620	B	E 162ND ST	METRO NORTH RR HAR	M	O		1	S	5/1/2010	4.859	F	4,700	\$18,800,000	203		
2241030	B	E 163RD STREET	CSX TRANS - PT MORRIS	C	O		1	S	3/10/2010	4.833	F	3,200	\$12,800,000	203		
2241630	B	E 165TH ST	METRO NORTH RR HAR	M	O		1	S	4/29/2010	4.217	F	16,400	\$65,600,000	203		
2241650	B	E 167TH ST	METRO NORTH RR HAR	M	O		1	S	4/27/2010	5.510	G	3,363	\$13,452,000	203		
2241660	B	E 168TH ST	METRO NORTH RR HAR	M	O		1	S	4/26/2010	4.797	F	4,800	\$19,200,000	203		
2241670	B	E 169TH ST	METRO NORTH RR HAR	M	O		1	S	4/23/2010	4.250	F	3,300	\$13,200,000	203		
2241680	B	E 170TH ST	METRO NORTH RR HAR	M	O		1	S	4/22/2010	6.333	VG	3,150	\$12,600,000	203		
2241720	B	E 173RD ST	METRO NORTH RR HAR	M	O		1	S	4/20/2010	4.875	F	3,000	\$12,000,000	203		
2066720	B	E 174TH ST	SHERIDAN EXPWY/AMTRAK	A	A		13	S	8/30/2010	4.042	F	35,573	\$142,292,000	209	203	
2241740	B	E 175TH ST	METRO NORTH RR HAR	M	O		1	S	4/19/2010	3.922	F	3,600	\$14,400,000	206		
2241269	B	E 177TH ST	AMTRAK - CSX	AC	O		3	S	10/4/2010	5.403	G	16,606	\$66,424,000	206		
2241770	B	E 178TH ST PED BRDG	METRO NORTH RR HAR	M	O-PED		1	C	2/11/2009	5.159	G	700	\$2,800,000	206		
2241780	B	E 179TH ST PED BRDG	METRO NORTH RR HAR	M	O-PED		6	C	2/11/2009	5.797	G	700	\$2,800,000	206		
2242400	B	E 180TH ST	BRONX RIVER		WO		1	S	10/7/2010	4.810	F	4,500	\$18,000,000	206	227	
2241790	B	E 180TH ST	METRO NORTH RR HAR	M	O		1	S	4/19/2010	3.906	F	5,000	\$20,000,000	206		
2241800	B	E 183TH ST	METRO NORTH RR HAR	M	O		1	S	4/14/2010	4.109	F	4,080	\$16,320,000	206		
2241820	B	E 187TH ST	METRO NORTH RR HAR	M	O		1	S	4/13/2010	4.344	F	3,800	\$15,200,000	206		
2241810	B	E 188TH ST	METRO NORTH RR HAR	M	O		1	S	4/12/2010	4.063	F	5,300	\$21,200,000	206		
2241839	B	E 189TH ST	METRO NORTH RR HAR	M	O		1	S	7/6/2011	6.333	VG	43,157	\$172,628,000	206	207	
2242459	B	E 233RD ST	BRONX RIVER		WO		1	S	3/25/2010	4.367	F	7,000	\$28,000,000	212		
2242460	B	E 233RD ST	ENTR RD BNX RVR PKWY		O		1	S	1/18/2010	4.900	F	5,300	\$21,200,000	212		
2241870	B	E 233RD ST	METRO NORTH RR HAR	M	O		1	S	5/17/2010	4.941	F	7,664	\$30,656,000	212	207	
2241890	B	E 241ST ST	BRP, METRO NORTH HAR	M	WO		28	S	10/5/2011	4.306	F	49,500	\$198,000,000	212		
2241270	B	E TREMONT AVE	AMTRAK - CSX	AC	O		2	S	10/1/2010	5.153	G	22,300	\$89,200,000	209	211	
2242149	B	E TREMONT AVE	BRONX RIVER		WO		2	S	6/3/2010	4.500	F	12,900	\$51,600,000	206		
2075820	B	E TREMONT AVE	HUTCHINSON RVR PKWY		A		2	S	11/21/2011	4.444	F	10,200	\$40,800,000	210		
2241760	B	E TREMONT AVE	METRO NORTH RR HAR	M	O		1	S	7/6/2011	6.450	VG	8,424	\$33,696,000	206		
2242260	B	EAGLE AVE	E 161ST ST		O		1	S	3/5/2010	5.017	G	2,800	\$11,200,000	201	203	
2244040	K	EAST DR (EAST WOOD ARCH)	PED PATH NR CENTER DR		O	P	1	C	6/10/2011	4.067	F	1,066	\$4,262,400	355		
2244010	K	EAST DR (ENDALE ARCH)	PED PATH NR GRND ARMY PLZ		O	P	1	C	5/2/2011	4.367	F	1,533	\$6,132,000	355		
2246069	M	EAST DR (GREEN GAP ARCH)	PED BET E 63ST & E 64ST		O	P	1	S	1/26/2010	4.500	F	2,700	\$10,800,000	164		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2246350	M	EAST DR (GREYWACKE ARCH)	PED PATH OPP E 80TH ST		O	P	1	C	5/25/2011	3.733	F	1,266	\$5,064,000	164		
2246470	M	EAST DR (HUDDLESTONE ARCH)	THE LOCH		WO	P	1	S	2/2/2010	4.500	F	1,100	\$4,400,000	164		
2246040	M	EAST DR (INSCOPE ARCH)	PED PATH OPP E 62 ST		O	P	1	C	4/21/2011	4.400	F	1,515	\$6,060,000	164		
2246170	M	EAST DR (TREFOIL ARCH)	PED PATH OPP E 73RD ST		O	P	1	S	2/3/2010	5.056	G	1,900	\$7,600,000	164		
2246130	M	EAST DR (WILLOWDELL ARCH)	PED PATH OPP E 67TH ST		O	P	1	C	4/13/2011	3.500	F	666	\$2,665,600	164		
2244030	K	EAST DRIVE	BRIDLE PATH NR ZOO		O	P	1	S	4/27/2011	4.878	F	2,000	\$8,000,000	355		
2246110	M	EAST DRIVE	TRANSVERSE RD #1		O	P	1	S	3/25/2010	4.667	F	6,000	\$24,000,000	164		
2246230	M	EAST DRIVE	TRANSVERSE RD #2		O	P	1	S	3/23/2010	4.600	F	6,500	\$26,000,000	164		
2246250	M	EAST DRIVE	TRANSVERSE RD #3		O	P	1	S	2/9/2010	4.300	F	5,100	\$20,400,000	164		
2246270	M	EAST DRIVE	TRANSVERSE RD #4		O	P	1	S	3/24/2010	4.100	F	7,000	\$28,000,000	164		
2249720	R	EAST FOOTBRIDGE	CLOVE LAKE		WO-PED	P	2	C	8/2/2011	4.229	F	900	\$3,600,000	501		
2242010	B	EAST FORDHAM RD	BRONX RIVER		WA		1	S	4/20/2010	5.207	G	9,200	\$36,800,000	227		
2242350	B	EAST FORDHAM RD	GRAND CONCOURSE		O		1	S	3/19/2010	4.567	F	10,300	\$41,200,000	205	207	
2241900	B	EASTCHESTER ROAD	NYCTA-DYRE AVE LN	T	O		3	S	11/16/2010	4.556	F	13,500	\$54,000,000	212		
2243279	K	EASTERN PKWY	FRANKLIN SHUTTLE	T	O		1	S	1/5/2011	4.861	F	7,700	\$30,800,000	309	308	
2247470	Q	ELIOT AVE	CSX TRANSPORT	C	O		1	S	10/4/2011	5.083	G	2,960	\$11,840,000	405		
2247550	Q	ELIOT AVE	LIRR MONTAUK DIV	L	O		2	S	9/19/2011	5.712	G	9,550	\$38,200,000	405		
2248160	Q	ELLIOT AVE	QUEENS BLVD		O		2	S	8/20/2010	4.804	F	13,785	\$55,140,000	406		
2269600	K	ERSKINE ST	BSHP		A		1	S	9/10/2010	5.938	G	8,258	\$33,032,000	305		
2241200	B	FAILE ST	AMTRAK - CSX	AC	O		1	S	12/20/2010	5.578	G	6,208	\$24,832,000	202		
2231620	Q	FARMERS BLVD	BSOP		A		2	S	5/17/2010	4.568	F	6,400	\$25,600,000	413		
2249790	R	FB S OF FOREST AV	STREAM IN PARK		WO-PED	P	3	C	10/8/2010	4.814	F	700	\$2,800,000	501		
223201A	M	FDR DR N.B. OFF RMP	FDR DR & SOUTH ST		AR		17	S	4/29/2010	3.597	F	23,373	\$93,492,000	101		
223201C	M	FDR DR S.B. OFF RMP	SOUTH ST		AR		8	S	2/5/2010	4.821	F	39,150	\$156,600,000	103		
2233038	M	FDR DRIVE SB	FDR NB / E 62ND ST		AT		34	S	12/21/2010	6.563	VG	58,700	\$234,800,000	106	108	
2268650	M	FDR NB E42ND TO E49TH ST	EAST RIVER		A		119	S	10/28/2011	3.660	F	30,767	\$123,068,000	106		
223204A	M	FDR NB RAMP TO HOUSTON ST	RELIEF		AR		4	S	1/20/2010	4.471	F	6,150	\$24,600,000	103		
2229520	B	FIELDSTON ROAD	HHP		A		1	S	7/21/2011	5.033	G	6,600	\$26,400,000	208		
2249480	R	FINGERBOARD ROAD	SIRT SOUTH SHORE	S	O		2	S	10/5/2011	6.486	VG	5,100	\$20,400,000	502		
2231460	K	FLATBUSH AVE	BSHP		A		2	S	9/22/2011	6.250	VG	14,058	\$56,232,000	356		
2243260	K	FLATBUSH AVE	FRANKLIN SHUTTLE	T	O		2	S	1/6/2011	4.961	F	11,300	\$45,200,000	309		
2243510	K	FLATBUSH AVE	LIRR BAY RIDGE	N	O		2	S	9/16/2011	4.730	F	5,900	\$23,600,000	318		
2248090	Q	FLSHG MDW PK PED	COLLEGE POINT BLVD		O-PED	P	3	C	1/6/2011	4.690	F	8,400	\$33,600,000	407		
2248240	Q	FLUSHING AV SERVICE RD	FLUSHING AVE		O		1	S	7/12/2011	5.250	G	2,940	\$11,760,000	405		
2248379	Q	FLUSHING MDW PARK RD	AQUACADE LAKE		WO	P	5	S	8/19/2011	4.296	F	6,300	\$25,200,000	481		
2248260	Q	FLUSHING MDW PARK RD	MEADOW LAKE		WO	P	5	S	8/18/2011	4.458	F	4,200	\$16,800,000	481		
2248130	Q	FLUSHING MEADOW PK PED	WILLOW LK&76TH RD		WO-PED	P	4	C	4/20/2002	1.000	C	1,891	\$7,564,000	481		
2248140	Q	FLUSHING MEADW PK RD	STREAM N OF LIE		WO	P	5	S	8/19/2011	4.481	F	4,100	\$16,400,000	481		
2249780	R	FOOTBRIDGE	BROOKS LAKE DAM		WO-PED	P	1	C	2/24/2011	3.433	F	800	\$3,200,000	501		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2249800	R	FOREST AVE	CLOVE LAKES PK STREAM		WO	P	1	S	10/7/2011	4.567	F	1,600	\$6,400,000	501		
2248340	Q	FOREST PARK DR	MYRTLE AVE		O	P	3	S	6/13/2011	4.984	F	5,100	\$20,400,000	409		
2247660	Q	FOREST PARK DRIVE	ABANDONED LIRR		O	P	6	S	8/2/2011	4.746	F	10,000	\$40,000,000	409		
2247590	Q	FOREST PARK DRIVE	LIRR MONTAUK DIV	L	O	P	5	S	9/20/2011	5.158	G	6,000	\$24,000,000	409		
2243620	K	FORT HAMILTON PKWY	LIRR & SEA BEACH	NT	O		3	S	11/10/2011	4.729	F	14,800	\$59,200,000	310		
2246500	M	FORT TRYON PLACE	ENTR FROM RIVERSIDE DR		O	P	1	S	3/18/2010	4.333	F	6,600	\$26,400,000	112		
2243150	K	FOSTER AVE	BMT SUBWAY, BRIGHTON	T	O		1	S	10/5/2011	4.450	F	3,000	\$12,000,000	314		
2231930	Q	FRANCIS LEWIS BLVD	BCIP		A		3	S	2/5/2010	4.682	F	9,100	\$36,400,000	407		
2231690	Q	FRANCIS LEWIS BLVD	BLP E.B.		A		1	S	4/13/2010	5.167	G	6,000	\$24,000,000	413		
2231700	Q	FRANCIS LEWIS BLVD	BLP W.B.		A		1	S	4/13/2010	4.833	F	6,000	\$24,000,000	413		
2267199	Q	FRANCIS LEWIS BLVD	CUNNINGHAM PK RD		O		1	S	5/27/2011	5.033	G	7,085	\$28,340,000	408		
2249450	R	FREMONT AVE PED BRDG	SIRT SOUTH SHORE	S	O-PED		3	C	7/20/2011	3.618	F	800	\$3,200,000	502		
224006A	B	FROM BRUCKNER BLVD	RELIEF		OR		5	S	9/28/2011	6.761	VG	14.037	\$56,148,000	201		
224005A	M	FROM FDR DRIVE	HARLEM RIVER DR		OR		19	S	12/22/2010	6.625	VG	28.233	\$112,932,000	111		
2242120	B	FTBG N OF RTE 1	BRONX RIVER		WO-PED	P	1	C	11/29/2010	3.583	F	1,900	\$7,600,000	227		
226771C	M	GAR RAMP TO 79 ST	79 ST BT BASIN GAR		AR	P	21	S	5/12/2011	4.565	F	9,095	\$36,380,000	107		
2241420	B	GERARD AVE	METRO NORTH RR HUD	M	O		1	S	5/18/2010	5.797	G	5,063	\$20,252,000	204		
2249360	R	GIFFORDS LANE	SIRT SOUTH SHORE	S	O		1	S	11/2/2010	5.531	G	3,042	\$12,168,000	503		
2243860	K	GLENMORE AVE	LIRR BAY RIDGE	N	O		2	S	12/14/2010	6.559	VG	5,616	\$22,464,000	316		
2065940	Q	GRAND AVE	495I (L.I.E.)		A		2	S	11/18/2010	4.861	F	12,850	\$51,400,000	405		
2247440	Q	GRAND AVE	CSX TRANSPORT	C	O		1	S	9/9/2011	6.183	VG	3,280	\$13,120,000	405		
2247180	Q	GRAND AVE	LIRR MAIN LINE	L	O		3	S	12/16/2010	4.585	F	7,415	\$29,660,000	404		
2242370	B	GRAND CONCOURSE	BEDFORD PARK BLVD		O		1	S	3/18/2010	4.294	F	8,418	\$33,672,000	207		
2242360	B	GRAND CONCOURSE	BURNSIDE AVE		O		2	S	9/15/2010	4.441	F	8,400	\$33,600,000	205		
2242299	B	GRAND CONCOURSE	E 138TH ST		O		1	S	5/25/2011	4.467	F	9,500	\$38,000,000	201		
2242259	B	GRAND CONCOURSE	E 161ST ST		O		1	S	9/15/2010	6.400	VG	27,017	\$108,068,000	204		
2242280	B	GRAND CONCOURSE	E 167TH ST		O		2	S	8/20/2010	4.754	F	42,900	\$171,600,000	204		
2242300	B	GRAND CONCOURSE	E 170TH ST		O		2	S	3/26/2010	4.789	F	39,300	\$157,200,000	204		
2242319	B	GRAND CONCOURSE	E 174TH ST	T	O		1	S	3/26/2010	4.067	F	14,900	\$59,600,000	204		
2242329	B	GRAND CONCOURSE	E 175TH ST	T	O		1	S	8/19/2010	4.867	F	11,900	\$47,600,000	205		
2242380	B	GRAND CONCOURSE	E 204TH ST		O		1	S	9/26/2011	5.484	G	9,272	\$37,088,000	207		
2242330	B	GRAND CONCOURSE	E TREMONT AVE		O		1	S	9/28/2011	5.983	G	11,700	\$46,800,000	205		
2242340	B	GRAND CONCOURSE	EAST KINGSBRIDGE		O		2	S	9/9/2010	4.714	F	18,285	\$73,140,000	207		
2241409	B	GRAND CONCOURSE	METRO NORTH RR HUD	MT	O		1	S	6/1/2010	3.797	F	14,300	\$57,200,000	204		
2240390	KQ	GRAND ST BRIDGE	NEWTOWN CREEK		WMO		2	S	11/23/2011	4.208	F	5,100	\$20,400,000	301	405	
2249100	R	GRANITE AVE	B&O RR (ABANDONED)	O	O		4	S	3/26/2010	6.034	VG	7,300	\$29,200,000	501		
2249370	R	GREAVES AVE	SIRT SOUTH SHORE	S	O		1	S	8/16/2011	6.550	VG	2,650	\$10,600,000	503		
2240370	KQ	GREENPOINT AVE BRIDGE	NEWTOWN CREEK	L	WMO		12	S	7/8/2011	5.222	G	76.106	\$304,424,000	301	402	
2231370	K	GUIDER AV RAMP TO BSHP	BSHP		A		4	S	10/24/2011	3.292	F	12,800	\$51,200,000	313		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2241860	B	GUN HILL RD	METRO NORTH RR HAR	M	O		1	S	5/17/2010	6.531	VG	9,128	\$36,512,000	212		
2242430	B	GUN HILL ROAD	BRONX BLVD		O		4	S	3/17/2010	4.737	F	9,400	\$37,600,000	212		
2242440	B	GUN HILL ROAD	BRONX RIVER		WO		1	S	2/24/2010	4.767	F	8,700	\$34,800,000	212		
2241910	B	GUN HILL ROAD	NYCTA-DYRE AVE LN	T	O		1	S	11/12/2010	5.750	G	7,500	\$30,000,000	211	212	
2231610	Q	GUY R. BREWER BLVD	BSOP		A		4	S	6/2/2011	6.222	VG	12,342	\$49,368,000	413		
2249380	R	GUYON AVE	SIRT SOUTH SHORE	S	O		3	S	9/9/2011	4.377	F	6,900	\$27,600,000	503		
2240231	K	HAMILTON AVE BRIDGE	GOWANUS CANAL		WMO		3	S	10/8/2010	5.472	G	7,300	\$29,200,000	307	306	
2240232	K	HAMILTON AVE BRIDGE	GOWANUS CANAL		WMO		3	S	9/7/2011	5.306	G	7,300	\$29,200,000	306		
2065930	Q	HAMILTON PLACE	495I (L.I.E.)		A		2	S	3/9/2010	5.847	G	11,111	\$44,444,000	405		
2249520	R	HANNAH ST	SIRT SOUTH SHORE	S	O		10	S	9/22/2011	4.898	F	10,020	\$40,080,000	501		
2249180	R	HARBOR ROAD	B&O RR (ABANDONED)	O	O		4	S	8/20/2011	6.220	VG	5,778	\$23,112,000	501		
2233059	M	HARLEM RIVER DRIVE	RAMP TO & FROM HRD N.B.		A		11	S	6/22/2011	3.239	F	51,000	\$204,000,000	111		
2231780	Q	HEMPSTEAD AVE	BCIP		A		2	S	2/8/2010	3.968	F	14,200	\$56,800,000	413		
2266149	Q	HEMPSTEAD AVE	BCIP RAMP NB		A		2	S	3/17/2010	4.063	F	9,500	\$38,000,000	413		
2267250	M	HHP	AMTRAK - W96TH ST	A	A		55	S	11/5/2010	3.694	F	40,000	\$160,000,000	107		
2229530	B	HHP	BROADWAY		A		1	S	7/22/2011	4.574	F	7,500	\$30,000,000	208		
2229440	B	HHP	KAPPOCK ST		A		1	S	7/18/2011	4.931	F	3,900	\$15,600,000	208		
2266229	M	HHP	PED UNDERPASS @ 148 ST		A		1	S	2/16/2010	5.476	G	1,840	\$7,360,000	109		
2229309	M	HHP	RIVERSIDE PARK		A		1	S	1/6/2010	5.267	G	2,172	\$8,688,000	107		
2229349	M	HHP	W 158 ST	A	A		44	S	11/18/2010	4.380	F	140,000	\$560,000,000	109	112	
2266230	M	HHP NB	PED UNDERPASS INWD PK		A		1	S	1/8/2010	5.286	G	800	\$3,200,000	112		
2229322	M	HHP NB	RAMP FROM 96 ST		A		1	S	2/18/2010	5.300	G	2,000	\$8,000,000	107		
2229312	M	HHP NB	RAMP TO 96 ST		A		1	S	2/11/2010	4.364	F	2,000	\$8,000,000	107		
M00004	M	HHP ON/OFF RMP-79TH ST NO. SIDE	PED PATH NO. OF 79TH ST		A		1	C	6/20/2011	4.733	F	900	\$3,600,000	107		
M00003	M	HHP ON/OFF RMP-79TH ST SO. SIDE	PED PATH SO. OF 79TH ST		A		1	C	4/29/2011	3.700	F	900	\$3,600,000	107		
2266240	M	HHP SB	PED UNDERPASS INWD PK		A		1	S	1/11/2010	5.571	G	1,100	\$4,400,000	112		
2229321	M	HHP SB	RAMP FROM 96 ST		A		1	S	2/17/2010	5.133	G	2,000	\$8,000,000	107		
2229311	M	HHP SB	RAMP TO 96 ST		A		1	S	2/11/2010	4.455	F	2,000	\$8,000,000	107		
2229289	M	HHP VIADUCT	AMTRAK - W72 ST - W79 ST	A	A		145	S	12/7/2010	3.537	F	236,100	\$944,400,000	107		
2246580	BM	HIGH BRIDGE PDOVP	I87 - HARLEM RIVER	M	WA-PED	P	11	P	8/12/2002	3.759	F	34,100	\$136,400,000	112	204	
2230000	K	HIGHLAND BLVD E.B.	JACKIE ROBINSON PKWY		A		1	S	3/24/2010	4.724	F	4,900	\$19,600,000	305		
2230220	K	HIGHLAND BLVD NB	VERMONT AVE		A		1	S	5/18/2011	5.857	G	3,995	\$15,980,000	305		
2230010	K	HIGHLAND BLVD W.B.	JACKIE ROBINSON PKWY		A		1	S	3/24/2010	4.767	F	3,500	\$14,000,000	305		
2230020	K	HIGHLAND BLVD W.B.	JACKIE ROBINSON PKWY		A		2	S	3/25/2010	4.711	F	4,700	\$18,800,000	305		
2248280	Q	HIGHLAND PK PED.	PEDESTRIAN PATH		O-PED	P	1	C	10/20/2010	3.667	F	1,900	\$7,600,000	405		
2243780	K	HIGHLAWN AVE	BMT SEA BEACH	T	O		1	S	9/13/2011	6.400	VG	6,960	\$27,840,000	311		
2244060	K	HILL DR (CLEFT RIDGE SPAN)	PED PATH SO OF BOATHOUSE		O	P	1	C	5/4/2011	4.433	F	750	\$3,000,000	355		
2244120	K	HILL DR (TERRACE BRDG)	PROSPECT PK LAKE		WO	P	3	S	5/11/2011	2.927	P	7,800	\$31,200,000	355		
2231840	Q	HILLSIDE AVE	BCIP		A		2	S	4/8/2010	4.079	F	9,672	\$38,688,000	413		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2247320	Q	HONEYWELL ST	AMTRAK & LIRR YARD	AL	O		22	S	11/4/2011	5.903	G	99,036	\$396,144,000	402	401	
2232040	M	HOUSTON ST	FDR DRIVE		A		2	S	5/13/2011	3.955	F	11,010	\$44,040,000	103		
223204B	M	HOUSTON ST RAMP TO FDR NB	RELIEF		AR		4	S	1/22/2010	4.625	F	7,125	\$28,500,000	103		
2267240	M	HRD RAMP TO GWB	HARLEM RIVER DR SB		A		55	S	9/15/2010	3.264	F	122,900	\$491,600,000	112		
2249300	R	HUGUENOT AVE	SIRT SOUTH SHORE	S	O		2	S	10/3/2011	4.788	F	4,900	\$19,600,000	503		
2240450	Q	HUNTERS PT AVE	DUTCH KILLS		WMO		4	S	7/30/2010	5.083	G	12,168	\$48,672,000	402		
2241190	B	HUNTS POINT AVE	AMTRAK - CSX	AC	O		1	S	12/2/2010	4.984	F	10,049	\$40,196,000	202		
2241959	B	HUTCHINSON RVR PKWY	AMTRAK - CSX	AC	O		1	S	6/13/2010	5.780	G	15,444	\$61,776,000	210	211	
2075859	B	HUTCHINSON RVR PKWY	HUTCHINSON RIVER		WMA		7	S	10/24/2011	4.703	F	60,500	\$242,000,000	210	228	
2249810	R	HYLAN BLVD	LEMON CREEK		WO		1	S	3/10/2010	6.406	VG	11,400	\$45,600,000	503		
2245300	M	INWOOD HILL PK FTBR	AMTRAK 30 ST BRANCH	A	O-PED	P	6	C	11/5/2010	4.100	F	700	\$2,800,000	112		
2246700	M	ISHAM PK PED BRDG	HARLEM RV INLET		WO-PED	P	1	C	12/13/2010	3.552	F	300	\$1,200,000	112		
2246690	M	ISHAM PK VEHICULR	HARLEM RIVER INLET		O	P	1	S	6/11/2010	6.261	VG	911	\$3,644,000	112		
2248299	Q	J.R. PKWY-UNION TPKE	AUSTIN ST		O		1	S	6/2/2010	4.194	F	5,900	\$23,600,000	409	406	
2230099	Q	JACKIE ROBINSON PKWY	CYPRESS HILLS CEMETRY		A		1	S	1/14/2010	5.444	G	4,200	\$16,800,000	405		
2230179	Q	JACKIE ROBINSON PKWY	METROPOLITAN AVE		A		2	S	5/21/2010	5.286	G	8,673	\$34,692,000	482		
2247260	Q	JACKSON AVE	LIRR MONTAUK DIV	L	O		1	S	12/16/2010	6.117	VG	4,517	\$18,068,000	402		
2231819	Q	JAMAICA AVE	BCIP		A		2	S	3/25/2010	4.773	F	11,500	\$46,000,000	413		
2230287	B	JEROME AVE	MOSHOLU PARKWAY	T	A		3	S	4/22/2011	4.816	F	11,800	\$47,200,000	207		
2249070	R	JOHN ST	B&O RR (ABANDONED)	O	O-PED		2	C	9/2/2011	5.451	G	1,050	\$4,200,000	501		
2247480	Q	JUNIPER BLVD SO	CSX TRANSPORT	C	O		1	S	10/5/2011	5.000	G	9,000	\$36,000,000	405		
2230380	K	KANE ST	2781 (B.Q.E.)		A		2	S	4/9/2010	4.208	F	5,000	\$20,000,000	306		
2243770	K	KINGS HIGHWAY	BMT SEA BEACH	T	O		1	S	9/13/2011	6.767	VG	5,032	\$20,128,000	311		
2231449	K	KNAPP ST	BSHP		A		1	S	4/28/2010	4.391	F	9,500	\$38,000,000	315		
2241169	B	LAFAYETTE AVE	AMTRAK - CSX	AC	O		1	S	12/6/2010	5.730	G	12,000	\$48,000,000	202		
2249110	R	LAKE AVE	B&O RR (ABANDONED)	O	O		3	S	5/2/2011	5.333	G	5,900	\$23,600,000	501		
2247240	Q	LEFFERTS BLVD	LIRR MAIN LINE	L	O		3	S	9/29/2011	5.806	G	5,460	\$21,840,000	409		
2241139	B	LEGGETT AVE	AMTRAK - CSX	AC	O		3	S	12/6/2010	4.690	F	41,551	\$166,204,000	202		
2243850	K	LIBERTY AVE	LIRR BAY RIDGE	N	O		3	S	12/14/2010	6.294	VG	6,659	\$26,636,000	316		
2249460	R	LINCOLN AVE	SIRT SOUTH SHORE	S	O		1	S	11/18/2011	5.172	G	4,500	\$18,000,000	502		
2243190	K	LINCOLN PLACE	FRANKLIN SHUTTLE	T	O		1	S	1/17/2011	6.797	VG	2,460	\$9,840,000	308		
2243010	K	LINCOLN ROAD	BMT SUBWAY, BRIGHTON	T	O		1	S	12/23/2010	6.722	VG	6,016	\$24,064,000	355		
2231750	Q	LINDEN BLVD	BCIP		A		2	S	3/8/2010	4.432	F	6,700	\$26,800,000	413		
2243910	K	LIVONIA AVE PED BRDG	LIRR BAY RIDGE LINE	N	O-PED		6	C	3/2/2010	5.000	G	2,500	\$10,000,000	316		
2241159	B	LONGWOOD AVE	AMTRAK - CSX	AC	O		2	S	11/22/2010	5.306	G	10,625	\$42,500,000	202		
1240090	BM	MACOMBS DAM BRIDGE	HARLEM RIVER	M	WMO		52	S	11/30/2011	3.930	F	220,000	\$880,000,000	110	204	
2240079	BM	MADISON AVE BRIDGE	HARLEM RIVER		WMO		21	S	9/30/2010	4.944	F	80,000	\$320,000,000	111	201	
2249210	R	MAIN ST PED BRDG	SIRT SOUTH SHORE	S	O-PED		9	C	7/23/2010	4.309	F	400	\$1,600,000	503		
2240027	KM	MANHATTAN BRIDGE(LL)	EAST RIVER	T	WEO		23	S	12/17/2010	4.806	F	616,390	\$2,465,560,000	103	302	

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2240028	KM	MANHATTAN BRIDGE(UL)	NYCTA TRACKS-BMT	T	WEO		43	S	12/17/2010	4.071	F	587,424	\$2,349,696,000	103	302	
2229480	B	MANHATTAN COLL PKWY	HHP		A		3	S	4/29/2011	5.053	G	6,200	\$24,800,000	208		
2245040	M	MARGARET CORBIN DR	PED PATH NEAR CAFÉ		O	P	1	C	5/27/2011	4.933	F	598	\$2,392,000	112		
2245050	M	MARGARET CORBIN DR	PED PATH NR NO ENTR		O	P	1	C	5/3/2011	4.233	F	889	\$3,556,000	112		
2230190	Q	MARKWOOD ROAD	JACKIE ROBINSON PKWY		A		1	S	2/9/2010	5.167	G	4,400	\$17,600,000	482	406	
2249760	R	MARTLINGS AVE	RICHMOND LAKE DAM		WO		2	S	6/9/2011	4.600	F	7,000	\$28,000,000	501		
2269030	B	MATTHEWSON ROAD	MAC CRACKEN AVE		O		15	S	12/7/2010	4.526	F	14,880	\$59,520,000	205		
2243410	K	MCDONALD AVE	LIRR BAY RIDGE	N	O		1	S	12/9/2010	5.047	G	2,760	\$11,040,000	312		
2241110	B	MELROSE AVE	CSX TRANS - PT MORRIS	C	O		8	S	8/3/2011	5.611	G	37,854	\$151,416,000	203		
2231710	Q	MERRICK BLVD	BLP N.B.		A		1	S	2/22/2010	4.533	F	6,000	\$24,000,000	413		
2231720	Q	MERRICK BLVD	BLP S.B.		A		1	S	2/22/2010	4.200	F	6,000	\$24,000,000	413		
2247500	Q	METROPOLITAN AVE	CSX TRANSPORT	C	O		1	S	10/5/2011	4.233	F	18,650	\$74,600,000	405		
2240290	K	METROPOLITAN AVE	ENGLISH KILLS		WMO		5	S	6/28/2011	6.000	G	10,550	\$42,200,000	301		
1247560	Q	METROPOLITAN AVE	LIRR -NY&ATL	LN	O		2	S	9/29/2011	3.603	F	20,900	\$83,600,000	405		
2249470	R	MIDLAND AVE	SIRT SOUTH SHORE	S	O		1	S	11/22/2011	5.466	G	3,000	\$12,000,000	502		
2257569	M	MILLER HIGHWAY	TERRAIN		A		64	S	8/31/2011	4.746	F	272,475	\$1,089,900,000	104	107	
2249530	R	MINTHORNE ST PED BRDG	SIRT SOUTH SHORE	S	O-PED		26	C	7/21/2011	4.453	F	6,000	\$24,000,000	501		
2243240	K	MONTGOMERY ST	FRANKLIN SHUTTLE	T	O		1	S	8/11/2011	5.961	G	2,240	\$8,960,000	309		
2249090	R	MORNINGSTAR ROAD	B&O RR (ABANDONED)	O	O		4	S	5/4/2011	4.864	F	7,900	\$31,600,000	501		
2268930	M	MORRIS ST PED BRDG	BKLN-BATTERY TUNN PLZ		A-PED		3	C	6/21/2011	3.672	F	1,200	\$4,800,000	101		
2230250	B	MOSHOLU PARKWAY	BRONX RIVER		WA		5	S	1/13/2010	4.316	F	16,300	\$65,200,000	227		
2230300	B	MOSHOLU PARKWAY	CONRAIL (ABANDONED)	C	A		1	S	10/15/2010	4.271	F	4,600	\$18,400,000	226		
2230290	B	MOSHOLU PARKWAY	EQUESTRIAN PATH		A		1	S	1/22/2010	4.448	F	4,300	\$17,200,000	226		
2230260	B	MOSHOLU PARKWAY	METRO NORTH	M	A		1	S	5/13/2010	5.516	G	8,880	\$35,520,000	227	207	
2230310	B	MOSHOLU PARKWAY	SB RAMP TO HHP		A		2	S	9/26/2011	4.919	F	7,400	\$29,600,000	226		
2230270	B	MOSHOLU PARKWAY	WEBSTER AVE		A		1	S	5/13/2011	5.328	G	8,480	\$33,920,000	207		
2248100	Q	MOTOR PKWY (PED)	73RD AVE		O-PED	P	3	C	3/25/2011	4.825	F	2,600	\$10,400,000	408		
2248110	Q	MOTOR PKWY (PED)	ALLEY PK PED WALK		O-PED	P	1	C	7/14/2011	3.983	F	1,000	\$4,000,000	413		
2248060	Q	MOTOR PKWY (PED)	BELL BLVD		O-PED	P	2	C	6/20/2011	4.181	F	2,650	\$10,600,000	411		
2248059	Q	MOTOR PKWY (PED)	FRANCIS LEWIS BLVD		O-PED	P	2	C	6/16/2011	4.194	F	2,800	\$11,200,000	408		
2248080	Q	MOTOR PKWY (PED)	HOLLIS COURT BLVD		O-PED	P	3	C	11/1/2010	4.612	F	2,700	\$10,800,000	408		
2248070	Q	MOTOR PKWY (PED)	SPRINGFIELD BLVD		O-PED	P	3	C	6/14/2010	3.582	F	2,900	\$11,600,000	411		
2247110	Q	MURRAY ST	LIRR PORT WASH BR	L	O		1	S	9/15/2011	5.370	G	4,000	\$16,000,000	407		
2247620	Q	MYRTLE AVE	ABANDONED LIRR		O		3	S	1/12/2010	5.028	G	6,725	\$26,900,000	482	406	
2230120	Q	MYRTLE AVE	JACKIE ROBINSON PKWY		A		1	S	5/5/2010	5.354	G	6,400	\$25,600,000	405	482	
2231670	Q	N CONDUIT AVE WB	BLP E.B.		A		1	S	1/26/2010	4.917	F	4,000	\$16,000,000	413		
2231680	Q	N CONDUIT AVE WB	BLP W.B.		A		2	S	1/27/2010	4.932	F	6,500	\$26,000,000	413		
205580A	Q	N.BLVD WB TO 678I SB	VACANT LAND		AR		16	S	6/30/2010	5.571	G	8,600	\$34,400,000	407		
2249350	R	NELSON AVE PED BRDG	SIRT SOUTH SHORE	S	O-PED		3	C	7/18/2011	4.115	F	300	\$1,200,000	503		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
1067150	B	NEREID AVE (E. 240TH ST)	BRONX RIVER PKWY	M	O		10	S	10/6/2011	4.474	F	57,750	\$231,000,000	212		
2249430	R	NEW DORP LANE	SIRT SOUTH SHORE	S	O		2	S	10/14/2011	4.847	F	7,600	\$30,400,000	502		
2243660	K	NEW UTRECHT AVE	LIRR BAY RIDGE	N	O		1	S	12/23/2010	6.217	VG	2,350	\$9,400,000	311		
2243140	K	NEWKIRK AVE	BMT SUBWAY, BRIGHTON	T	O		3	S	10/5/2011	4.250	F	4,100	\$16,400,000	314		
2240240	K	NINTH ST BRIDGE	GOWANUS CANAL		WMO		3	S	5/27/2011	6.581	VG	5,772	\$23,088,000	306		
2269760	R	NORTH RAMP	SIRT	S	O	F	9	S	11/30/2011	4.042	F	17,589	\$70,356,000	501		
2240440	Q	NORTHERN BLVD	ALLEY CREEK		WO		2	S	8/12/2010	4.681	F	8,300	\$33,200,000	411		
2231870	Q	NORTHERN BLVD	BCIP		A		2	S	9/21/2010	6.125	VG	9,400	\$37,600,000	411		
2055802	Q	NORTHERN BLVD EB	FLUSHING RIVER		WO		40	S	10/18/2010	4.099	F	78,894	\$315,576,000	407		
2055801	Q	NORTHERN BLVD WB	FLUSHING RIVER		WO		40	S	10/21/2010	4.282	F	71,900	\$287,600,000	407		
2243500	K	NOSTRAND AVE	LIRR BAY RIDGE	N	O		2	S	11/30/2010	4.966	F	4,320	\$17,280,000	314		
2240138	BM	NYCTA IRT	HARLEM RVR/BROADWAY	TM	WMO		3	S	11/21/2011	4.720	F	19,520	\$78,080,000	112	207	208
2243480	K	OCEAN AVE	LIRR BAY RIDGE	N	O		2	S	12/1/2010	4.825	F	5,000	\$20,000,000	314		
2240320	K	OCEAN AVE PED BRDG	SHEEPSHEAD BAY		WO-PED		30	C	7/19/2010	3.939	F	4,450	\$17,800,000	315		
2243439	K	OCEAN PKWY	LIRR BAY RIDGE	N	O		1	S	12/10/2010	4.927	F	7,000	\$28,000,000	312		
2249269	R	PAGE AVE	SIRT SOUTH SHORE	S	O		4	S	8/25/2011	5.889	G	30,710	\$122,840,000	503		
2245470	M	PARK AVE N.B	E 45TH ST		O		1	S	6/16/2011	4.865	F	2,400	\$9,600,000	105		
2245460	M	PARK AVE S.B.	E 45TH ST		O		1	S	6/16/2011	4.514	F	2,400	\$9,600,000	105		
2246550	M	PARK AVE VIADUCT	E 42ND ST		O		10	S	12/7/2011	4.478	F	22,150	\$88,600,000	105		
2247600	Q	PARK LANE SOUTH	LIRR MONTAUK DIV	L	O		1	S	12/14/2010	6.983	VG	3,024	\$12,096,000	409	482	
2242099	B	PARK ROAD (204TH ST)	BRONX RIVER		WO		1	S	6/7/2010	4.793	F	4,700	\$18,800,000	212		
224001A	M	PARK ROW TO BKLN	WILLIAM ST N.B.		OE		4	S	6/21/2011	3.972	F	10,167	\$40,668,000	101		
2269780	R	PARKING ENTR RAMP	SIRT	S	O	F	3	S	1/14/2011	5.014	G	8,589	\$34,356,000	501		
2269730	R	PARKING EXIT RAMP	SIRT	S	O	F	10	S	10/31/2011	4.028	F	20,727	\$82,908,000	501		
2243020	K	PARKSIDE AVE	BMT SUBWAY, BRIGHTON	T	O		6	S	12/23/2010	4.000	F	48,700	\$194,800,000	314		
2247060	Q	PARSONS BLVD	LIRR PORT WASH BR	L	O		1	S	11/30/2010	4.745	F	4,200	\$16,800,000	407		
224001C	M	PEARL ST TO BKLN	LAND ADJ TO BRDG		OE		9	S	6/29/2011	3.746	F	6,365	\$25,460,000	101		
224001F	M	PEARL ST TO FDR DR	LAND ADJ TO BRDG		OE		3	S	6/21/2011	5.225	G	5,200	\$20,800,000	103		
222928C	M	PED BR AT 73RD ST	HHP - AMTRAK	A	A-PED	P	5	C	12/10/2010	4.145	F	3,480	\$13,920,000	107		
2246090	M	PED BRDG OPP 65 ST	TRANSVERSE RD #1		O-PED	P	1	C	7/24/2010	4.655	F	2,300	\$9,200,000	164		
2247630	Q	PED BRG NEAR UNION TPK	ABANDONED LIRR		O-PED		8	C	6/24/2011	5.046	G	1,449	\$5,796,000	406		
2244130	K	PED NR BOATHSE (LULLWATER BRDG)	PROSPECT PK LAKE		WO-PED	P	1	C	9/16/2011	4.898	F	1,000	\$4,000,000	355		
2246400	M	PED PATH OPP E79 ST	TRANSVERSE RD #2		O-PED	P	1	C	7/31/2010	4.233	F	3,700	\$14,800,000	164		
2241380	B	PELHAM BAY PK EQUES	AMTRAK - CSX	AC	O-PED	P	1	C	3/7/2009	3.508	F	4,223	\$16,892,000	228		
2231519	K	PENNSYLVANIA AVE	BSHP		A		2	S	5/20/2011	5.694	G	6,640	\$26,560,000	356		
2243870	K	PITKIN AVE	LIRR BAY RIDGE	N	O		2	S	12/14/2010	6.515	VG	5,328	\$21,312,000	316		
2243210	K	PRESIDENT ST	FRANKLIN SHUTTLE	T	O		2	S	1/3/2011	5.157	G	2,500	\$10,000,000	309		
2232167	M	PROMENADE OVER FDR	FDR - E81ST ST - E90TH ST		A-PED	P	53	S	7/9/2009	3.857	F	93.000	\$372,000,000	108		
2268760	M	PS-5 PED BRDG	TENTH AVE		O-PED		5	C	12/2/2010	4.735	F	1,285	\$5,140,000	112		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2240639	KQ	PULASKI BRIDGE	NEWTOWN CREEK		WMO		44	S	4/29/2010	4.606	F	205,770	\$823,080,000	301	402	
2230530	Q	QUEENS BLVD	278I (B.Q.E.)		A		2	S	11/1/2010	6.417	VG	25,543	\$102,172,000	402		
2230869	Q	QUEENS BLVD	ACCESS RD BQE S.B.		A		1	S	11/8/2010	5.727	G	7,900	\$31,600,000	402		
2247310	Q	QUEENS BLVD	AMTRAK & LIRR YARD	AL	O		19	S	12/16/2010	6.324	VG	92,400	\$369,600,000	402	401	
2230209	Q	QUEENS BLVD	JACKIE ROBINSON PKWY	T	A		5	S	7/23/2010	4.778	F	37,700	\$150,800,000	409		
2240047	MQ	QUEENSBORO BRIDGE (LL)	EAST RIVER	AL	WEO		53	S	11/4/2010	4.208	F	626,900	\$2,507,600,000	108	402	401
2240048	MQ	QUEENSBORO BRIDGE (UL)	EAST RIVER - LL		WEO		37	S	11/4/2010	4.189	F	322,300	\$1,289,200,000	108	402	401
2248040	Q	RAMP TO LINDEN BLVD	SO. CONDUIT AVE		O		1	S	6/10/2010	5.200	G	3,352	\$13,408,000	410		
223201D	M	RAMP TO N.B. FDR DRIVE	FDR & SOUTH ST.		AR		22	S	2/18/2010	5.033	G	15,825	\$63,300,000	101	103	
222934A	M	RAMP TO N.B. HHP	AMTRAK WEST SIDE	A	AR		26	S	12/8/2011	3.708	F	10,800	\$43,200,000	112		
2240350	R	RICHMOND AVE	RICHMOND CREEK		WO		3	S	6/8/2011	5.472	G	32,589	\$130,356,000	502		
2249270	R	RICHMOND VALLY ROAD	SIRT SOUTH SHORE	S	O		4	S	8/23/2011	5.284	G	9,440	\$37,760,000	503		
2244150	K	RIDGE BLVD	SHORE RD DRIVE		O		1	S	5/24/2011	6.667	VG	4,350	\$17,400,000	310		
2240660	Q	RIKERS ISLAND BRIDGE	RIKERS ISL CHANNEL		WO		56	S	11/16/2011	4.324	F	183,100	\$732,400,000	401	480	
2241430	B	RIVER AVE	METRO NORTH RR HUD	M	O		1	S	7/13/2011	6.156	VG	5,040	\$20,160,000	204		
2229510	B	RIVERDALE AVE	HHP		A		2	S	7/20/2011	5.079	G	5,200	\$20,800,000	208		
2246980	M	RIVERSIDE DRIVE	W 138TH ST		O		1	S	1/29/2010	4.767	F	6,700	\$26,800,000	109		
2267130	M	RIVERSIDE DRIVE	W 145TH ST		O		1	S	5/12/2011	4.867	F	5,800	\$23,200,000	109		
2246720	M	RIVERSIDE DRIVE	W 158TH ST - AMTRAK	A	O		77	S	9/30/2010	3.472	F	185,658	\$742,632,000	109	112	
2246970	M	RIVERSIDE DRIVE	W 96TH ST		O		3	S	5/18/2011	5.471	G	10,600	\$42,400,000	107		
2269240	M	RIVERSIDE DRIVE	W. 155TH ST		O		1	S	5/10/2011	4.640	F	2,780	\$11,120,000	109	112	
2246660	M	RIVERSIDE DRIVE	W125TH ST - W134TH ST		O		27	S	7/15/2011	4.306	F	148,300	\$593,200,000	109		
2300130	Q	ROCKAWAY BLVD	HOOK CREEK		WO		3	S	8/17/2011	6.271	VG	18,302	\$73,208,000	413		
2248369	Q	ROCKAWAY BLVD	THURSTON BASIN		WO		2	S	8/17/2011	5.474	G	6,000	\$24,000,000	483	413	
2230587	Q	ROOSEVELT AVE	278I (B.Q.E.)		A		2	S	10/28/2011	5.889	G	11,022	\$44,088,000	402		
2240507	Q	ROOSEVELT AVE	678I - FLUSHING RIVER		WA		27	S	12/8/2010	3.465	F	84,424	\$337,696,000	407	481	
2247380	Q	ROOSEVELT AVE	CSX - HELLGATE	C	O		2	S	8/30/2011	6.333	VG	7,380	\$29,520,000	402	403	404
2267160	Q	ROOSEVELT AVE	FLUSHING MDW PK ROAD		O		4	S	8/10/2011	4.746	F	7,280	\$29,120,000	408		
2240640	MQ	ROOSEVELT ISLAND BRDG	E. RIVER E. CHANNEL		WMO		8	S	11/17/2011	5.611	G	36,500	\$146,000,000	108	401	
2249420	R	ROSE AVE	SIRT SOUTH SHORE	S	O		2	S	8/8/2011	5.409	G	3,800	\$15,200,000	502		
2249410	R	ROSS AVE	SIRT SOUTH SHORE	S	O		2	S	8/5/2011	5.379	G	3,800	\$15,200,000	502		
2248200	Q	RUST ST	FLUSHING AVE		O		1	S	7/13/2011	5.000	G	2,940	\$11,760,000	405		
2231560	Q	S CONDUIT BLVD	BSOP		A		2	S	7/27/2010	5.465	G	15,776	\$63,104,000	410		
2242210	B	S OF ALLERTON AVE	BRONX RIVER		WO		3	S	6/7/2010	4.763	F	6,200	\$24,800,000	227		
2249770	R	S OF BROOKS LAKE	STREAM IN PARK		WO-PED	P	3	C	12/19/2011	4.676	F	700	\$2,800,000	501		
2230370	K	SACKETT ST	278I (B.Q.E.)		A		2	S	3/26/2010	4.431	F	5,000	\$20,000,000	306		
226771D	M	SB HHP RAMP TO 79 ST	79 ST BT BASIN GAR		AR	P	4	S	5/12/2011	4.516	F	2,601	\$10,404,000	107		
2244470	K	SEELEY ST	PROSPECT AVE		O		1	S	6/1/2011	4.033	F	8,482	\$33,928,000	307		
2249290	R	SEGUINE AVE	SIRT SOUTH SHORE	S	O		1	S	9/26/2011	6.016	VG	3,250	\$13,000,000	503		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2248220	Q	SERVICE RD TURNAROUND	FLUSHING AVE		O		1	S	7/13/2011	5.078	G	2,940	\$11,760,000	405		
2241390	B	SHORE RD CIRCLE	AMTRAK - CSX	AC	O		2	S	11/12/2011	3.569	F	4,800	\$19,200,000	228		
2240200	B	SHORE ROAD	HUTCHINSON RIVER		WMO		7	S	6/21/2011	4.537	F	43,576	\$174,304,000	228		
2270170	R	SI FERRY PED BRDG	PARKING LOT EXIT RDWY		O-PED	F	5	C	6/17/2010	3.163	F	2,917	\$11,668,000	501		
2249120	R	SIMONSON AVE	B&O RR (ABANDONED)	O	O		3	S	4/26/2011	5.963	G	5,819	\$23,276,000	501		
2249860	R	SLATER BLVD	NEW CREEK		WO		1	S	5/4/2011	5.510	G	2,037	\$8,148,000	502		
2242220	B	SNUFF MILL ROAD	BRONX RIVER		WO		2	S	1/15/2010	4.395	F	4,800	\$19,200,000	227		
2249200	R	SOUTH AVE	B&O RR (ABANDONED)	O	O		3	S	8/20/2011	6.709	VG	8,322	\$33,288,000	501		
2244440	K	SOUTH OF TILLARY ST	NAVY ST		O-PED		1	C	8/15/2011	3.958	F	6,200	\$24,800,000	302		
2241080	B	SOUTHERN BLVD	CSX TRANS - PT MORRIS	C	O		1	S	9/17/2010	4.167	F	3,900	\$15,600,000	201		
2242029	B	SOUTHERN BLVD	EAST FORDHAM ROAD		O		2	S	2/8/2010	4.553	F	12,900	\$51,600,000	227		
2231630	Q	SPRINGFIELD BLVD	BSOP		A		2	S	5/19/2010	4.614	F	8,500	\$34,000,000	413		
2268770	Q	SPRINGFIELD BLVD	EQUES. PATH (ABAND.)		O		1	S	4/20/2009	4.667	F	1,470	\$5,880,000	413		
2243180	K	ST JOHNS PLACE	FRANKLIN SHUTTLE	T	O		1	S	8/24/2011	6.781	VG	2,300	\$9,200,000	308		
2241700	B	ST PAULS PL PED BRDG	METRO NORTH RR HAR	M	O-PED		2	C	2/10/2009	5.000	G	600	\$2,400,000	203		
2241060	B	ST. MARYS & CONCORD	CSX TRANS - PT MORRIS	C	O		1	S	9/16/2010	5.370	G	4,500	\$18,000,000	201		
2230610	Q	STEINWAY ST	278I EB (BQE)		A		1	S	9/29/2010	6.581	VG	5,146	\$20,584,000	401		
2230600	Q	STEINWAY ST	278I WB (BQE)		A		1	S	10/4/2010	6.581	VG	5,229	\$20,916,000	401		
2243170	K	STERLING PLACE	FRANKLIN SHUTTLE	T	O		1	S	8/24/2011	6.500	VG	2,300	\$9,200,000	308		
223201B	M	STH ST RMP TO FDR S.B.	SOUTH ST		AR		10	S	7/13/2011	3.731	F	44,625	\$178,500,000	101		
2240540	K	STILLWELL AVE	CONY ISLAND CRK		WO		2	S	5/27/2011	6.292	VG	17,000	\$68,000,000	313		
2230350	K	SUMMIT ST PED BRDG	278I (B.Q.E.)		A-PED		2	S	4/1/2010	4.386	F	1,400	\$5,600,000	306		
2231650	Q	SUNRISE HWY W.B.	BLP E.B.		A		1	S	4/26/2010	4.393	F	4,100	\$16,400,000	413		
2231660	Q	SUNRISE HWY W.B.	BLP W.B.		A		2	S	3/11/2010	4.565	F	5,350	\$21,400,000	413		
2231800	Q	SUPERIOR ROAD	BCIP		A		2	S	4/13/2010	4.136	F	7,000	\$28,000,000	413		
2243890	K	SUTTER AVE	LIRR BAY RIDGE	N	O		3	S	12/15/2010	6.542	VG	5,497	\$21,988,000	316		
2241040	B	THIRD AVE	CSX TRANS - PT MORRIS	C	O		1	S	9/28/2010	4.563	F	2,700	\$10,800,000	201	203	
2240310	K	THIRD AVE	GOWANUS CANAL		WO		1	S	5/18/2011	6.900	VG	3,200	\$12,800,000	306		
2240069	BM	THIRD AVE BRIDGE	HARLEM RIVER		WMO		14	S	8/24/2010	6.521	VG	100,232	\$400,928,000	111	201	
2240250	K	THIRD ST	GOWANUS CANAL		WMO		5	S	5/19/2011	4.903	F	4,900	\$19,600,000	306		
2247300	Q	THOMPSON AVE	AMTRAK & LIRR YARD	AL	O		14	S	12/16/2010	5.042	G	61,280	\$245,120,000	402		
2241170	B	TIFFANY ST	AMTRAK - CSX	AC	O		1	S	11/1/2011	5.627	G	7,267	\$29,068,000	202		
224004H	Q	TO 21ST ST FROM NY	22ND ST		OE		43	S	11/23/2010	4.268	F	48,100	\$192,400,000	402		
224001B	M	TO BKLN FRM FDR	FRANKFRT & CITY		OE		31	S	12/9/2010	3.778	F	51,400	\$205,600,000	101	103	
224005B	B	TO BRUCKNER BLVD	RELIEF		OR		5	S	10/24/2011	6.746	VG	12,100	\$48,400,000	201		
224004A	M	TO E 60TH ST FROM QNS	FIRST AVE		OE		13	S	4/12/2010	5.394	G	14,800	\$59,200,000	108		
224004C	M	TO E 62ND ST FROM QNS	E 60TH - E 61ST ST		OE		10	S	9/24/2010	4.985	F	16,720	\$66,880,000	108		
224001D	M	TO FDR DR N.B.	PEARL STREET		OE		30	S	7/15/2011	4.868	F	49,600	\$198,400,000	101	103	
2245480	M	TO GWB OPP W 171ST ST	RIVERSIDE DRIVE		O		1	S	3/17/2010	4.952	F	10,800	\$43,200,000	112		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
224007A	M	TO MADISON AVENUE	E 138TH ST		OR		7	S	3/20/2010	5.225	G	19,880	\$79,520,000	111		
224004E	Q	TO NY FR THOMSON AVE	JACKSON AVE	L	OE		94	S	12/16/2010	4.717	F	104,600	\$418,400,000	402		
224004G	Q	TO NY FROM 11TH ST	TERRAIN (CHAMBER)		OE		36	S	9/10/2010	5.268	G	8,360	\$33,440,000	401	402	
224004F	Q	TO NY FROM 21ST ST	21ST ST		OE		63	S	11/24/2010	4.712	F	63,310	\$253,240,000	402	401	
224001G	M	TO PARK ROW	ROSE ST		OE		11	S	5/28/2010	4.521	F	16,551	\$66,204,000	101		
224001E	M	TO PEARL ST	LAND ADJ TO BRDG		OE		3	S	6/28/2011	5.141	G	5,300	\$21,200,000	101		
224004B	M	TO QNS FRM E 59TH ST	FIRST AVE		OE		13	S	4/13/2010	5.708	G	14,800	\$59,200,000	108		
224004D	M	TO QNS FROM E 58TH ST	E 59TH ST		OE		12	S	6/18/2010	4.321	F	11,781	\$47,124,000	106	108	
224004I	Q	TO THOMSON AVE FROM NY	JACKSON AVE	L	OE		39	S	12/16/2010	4.951	F	59,100	\$236,400,000	402		
2249040	R	TOMPKINS AVE	B&O RR (ABANDONED)		O		1	S	5/24/2010	6.047	VG	5,096	\$20,384,000	501		
2249840	R	TOMPKINS AVE	GREENFIELD AVE		O		1	S	3/17/2010	5.021	G	2,690	\$10,760,000	501		
2249510	R	TOMPKINS AVE	WILLOW AVE, SIRT	S	O		2	S	11/4/2010	5.328	G	5,378	\$21,512,000	501		
2249230	R	TRACY AVE PED BRDG	SIRT SOUTH SHORE	S	O-PED		9	C	7/13/2011	3.383	F	635	\$2,540,000	503		
2245380	M	TRANSVERSE RD #1 WB	PED PATH OPP E 66TH ST		O	P	1	S	1/7/2010	5.000	G	1,500	\$6,000,000	164		
2249870	R	TRAVIS AVE	MAIN CREEK		WO		1	S	9/26/2011	5.483	G	1,700	\$6,800,000	502		
2246410	M	TRNSVRS RD 1 EB (DENESMOUTH ARCH)	PED PATH OPP E 65TH ST		O	P	1	S	2/2/2010	4.727	F	1,739	\$6,956,000	164		
2246560	M	TUDOR CITY PLACE	E 42ND ST		O		1	S	2/1/2010	5.133	G	6,600	\$26,400,000	106		
2249170	R	UNION AVE	B&O RR (ABANDONED)	O	O		4	S	4/29/2011	5.167	G	6,500	\$26,000,000	501		
2230360	K	UNION ST	278I (B.Q.E.)		A		2	S	4/1/2010	4.236	F	5,000	\$20,000,000	306		
2243200	K	UNION ST	FRANKLIN SHUTTLE	T	O		2	S	1/3/2011	5.000	G	4,100	\$16,400,000	309		
2240270	K	UNION ST	GOWANUS CANAL		WMO		5	S	9/3/2010	4.000	F	4,900	\$19,600,000	306		
2247040	Q	UNION ST	LIRR PORT WASH BR	L	O		1	S	9/12/2011	6.234	VG	3,313	\$13,252,000	407		
2231850	Q	UNION TPKE	BCIP		A		2	S	4/1/2010	4.409	F	13,600	\$54,400,000	413		
2248129	Q	UNION TPKE	CREEDMOORE HOSP RD		O		1	S	6/24/2011	4.867	F	3,500	\$14,000,000	413		
2230180	Q	UNION TPKE	JACKIE ROBINSON PKWY		A		1	S	2/9/2010	5.797	G	5,359	\$21,436,000	482		
2241330	B	UNIONPORT ROAD	AMTRAK - CSX	AC	O		1	S	9/14/2010	4.781	F	7,631	\$30,524,000	211		
2231910	Q	UTOPIA PKWY	BCIP		A		2	S	3/19/2010	5.114	G	7,200	\$28,800,000	407		
2229550	B	VAN CRTLDT EQUES	HHP		A-PED	P	2	C	8/4/2011	4.556	F	2,100	\$8,400,000	226		
2229540	B	VAN CRTLDT PARK	HHP		A-PED	P	2	C	8/4/2011	4.306	F	3,900	\$15,600,000	226		
2249130	R	VAN NAME AVE	B&O RR (ABANDONED)	O	O		3	S	4/29/2011	5.186	G	5,474	\$21,896,000	501		
2249140	R	VAN PELT AVE	B&O RR (ABANDONED)	O	O		3	S	4/28/2011	5.576	G	5,000	\$20,000,000	501		
2269260	K	W. 8TH ST PED BRDG	SURF AVE.		O-PED	P	39	C	2/8/2011	3.629	F	14,742	\$58,968,000	313		
226672A	M	W 31ST ST	AMTRAK LAYUP TRACKS	A	O		9	S	12/28/2010	3.714	F	8,800	\$35,200,000	104		
224501B	M	W 33RD ST	AMTRAK 30 ST BRANCH	A	O		8	S	3/17/2010	4.611	F	16,500	\$66,000,000	104		
224501C	M	W 33RD ST	LAND ADJ TO AMTRAK	A	O		2	S	6/14/2011	4.472	F	2,360	\$9,440,000	104		
224501D	M	W 34TH ST	AMTRAK 30 ST BRANCH	A	O		4	S	6/6/2011	4.597	F	11,800	\$47,200,000	104		
224501E	M	W 35TH ST	AMTRAK 30 ST BRANCH	A	O		3	S	12/3/2010	4.028	F	6,500	\$26,000,000	104		
224501F	M	W 36TH ST	AMTRAK 30 ST BRANCH	A	O		7	S	10/6/2011	3.985	F	16,400	\$65,600,000	104		
2245060	M	W 37TH ST	AMTRAK 30 ST BRANCH	A	O		3	S	12/8/2011	6.190	VG	7,505	\$30,020,000	104		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2245070	M	W 38TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	10/1/2010	4.154	F	6,200	\$24,800,000	104		
2245080	M	W 39TH ST	AMTRAK 30 ST BRANCH	A	O		3	S	10/1/2010	4.196	F	6,300	\$25,200,000	104		
2245440	M	W 40TH ST	AMTRAK 30 ST BRANCH	A	O		4	S	10/16/2010	4.236	F	9,400	\$37,600,000	104		
2245330	M	W 41ST ST	AMTRAK 30 ST BRANCH	A	O		3	S	9/28/2010	4.388	F	6,200	\$24,800,000	104		
2245210	M	W 42ND ST	AMTRAK 30 ST BRANCH	A	O		4	S	8/4/2010	4.619	F	9,155	\$36,620,000	104		
2245090	M	W 43RD ST	AMTRAK 30 ST BRANCH	A	O		2	S	5/1/2010	4.662	F	4,100	\$16,400,000	104		
2245100	M	W 44TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	4/24/2010	4.662	F	4,300	\$17,200,000	104		
2245110	M	W 45TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	5/15/2010	5.485	G	4,100	\$16,400,000	104		
2245120	M	W 46TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	5/15/2010	4.500	F	4,100	\$16,400,000	104		
2245130	M	W 47TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	5/29/2010	4.721	F	4,100	\$16,400,000	104		
2245140	M	W 48TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	6/24/2010	4.618	F	4,100	\$16,400,000	104		
2245150	M	W 49TH ST	AMTRAK 30 ST BRANCH	A	O		3	S	5/26/2010	4.426	F	4,100	\$16,400,000	104		
2245340	M	W 50TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	5/26/2010	4.544	F	4,100	\$16,400,000	104		
2245160	M	W 51ST ST	AMTRAK 30 ST BRANCH	A	O		2	S	6/5/2010	4.882	F	4,300	\$17,200,000	104		
2245170	M	W 52ND ST	AMTRAK 30 ST BRANCH	A	O		2	S	6/5/2010	4.956	F	4,300	\$17,200,000	104		
2245180	M	W 53RD ST	AMTRAK 30 ST BRANCH	A	O		2	S	6/27/2010	5.103	G	5,100	\$20,400,000	104		
2245350	M	W 54TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	6/27/2010	5.476	G	4,700	\$18,800,000	104		
2245360	M	W 55TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	7/10/2010	5.353	G	4,300	\$17,200,000	104		
2245370	M	W 56TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	7/10/2010	5.618	G	4,400	\$17,600,000	104		
2245220	M	W 57TH ST	AMTRAK 30 ST BRANCH	A	O		3	S	6/28/2010	4.765	F	9,100	\$36,400,000	104		
2245190	M	W 58TH ST	AMTRAK 30 ST BRANCH	A	O		2	S	6/28/2010	4.706	F	4,100	\$16,400,000	104		
2246010	M	W 62 ST PED BRDG (PINEBANK ARCH)	BRIDLE PATH		O-PED	P	1	C	7/5/2011	4.404	F	1,000	\$4,000,000	164		
2245420	M	W 65TH ST ENTR EB	BRIDLE PATH W END		O	P	1	S	1/25/2010	5.167	G	1,600	\$6,400,000	164		
2269210	M	W 68TH ST	AMTRAK	A	O		3	S	12/12/2011	6.576	VG	5,382	\$21,528,000	107		
2269190	M	W 70TH ST	AMTRAK	A	O		3	S	12/9/2011	5.597	G	17,258	\$69,032,000	107		
2246140	M	W 72 ST ENTR (RIFTSTONE ARCH)	BRIDLE PATH		O	P	1	S	1/12/2010	4.533	F	3,600	\$14,400,000	164		
2246460	M	W77 ST ENTR (EAGLEVALE ARCH)	PED PATH OPP W77 ST		O	P	2	S	1/15/2010	4.263	F	5,800	\$23,200,000	164		
2246340	M	W77 ST PED (LADIES POND BRDG)	STREAM TO THE LAKE		WO-PED	P	3	C	11/15/2011	4.145	F	500	\$2,000,000	164		
2246320	M	W77 ST PED (OAK BRDG)	THE LAKE		WO-PED	P	3	C	12/20/2011	6.684	VG	919	\$3,676,000	164		
2229290	M	W 79 ST	AMTRAK	A	A		1	S	10/18/2010	4.492	F	4,500	\$18,000,000	107		
2246380	M	W86 ST PED (SW RESERVOIR BRDG)	BRIDLE PATH		O-PED	P	1	C	10/7/2010	4.143	F	700	\$2,800,000	164		
2246430	M	W110 ST ENTR (MOUNTCLIFF ARCH)	PED PATH OPP W109 ST		O	P	1	S	3/29/2010	4.383	F	1,200	\$4,800,000	164		
2246620	M	W 128TH ST PED BRDG	3RD AVE BRDG APPR		O-PED		18	C	7/1/2010	4.048	F	2,300	\$9,200,000	111		
2246670	M	W 134 ST	TERRAIN		O		4	S	7/13/2011	4.833	F	7,500	\$30,000,000	109		
2245230	M	W 148TH ST PED BRDG	AMTRAK 30 ST BRANCH	A	O-PED	P	3	C	11/5/2010	4.033	F	1,100	\$4,400,000	109		
2246710	M	W 153 ST	A.C. POWELL BLVD		O		1	S	2/11/2010	4.370	F	3,082	\$12,328,000	110		
2245290	M	W 155TH ST PED BRDG	AMTRAK 30 ST BRANCH	A	O-PED		3	C	10/31/2010	3.292	F	800	\$3,200,000	109	112	
2245250	M	W 158TH ST	AMTRAK 30 ST BRANCH	A	O		7	S	12/7/2011	6.125	VG	29,170	\$116,680,000	112		
2245260	M	W 173RD ST PED BRDG	AMTRAK 30 ST BRANCH	A	O-PED	P	2	C	10/29/2010	4.446	F	1,500	\$6,000,000	112		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPANS	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2246600	M	W 176TH ST PED BRDG	APPROACH TO G.W.B.		O-PED		1	C	12/7/2010	3.897	F	1,200	\$4,800,000	112		
2246489	M	W 181 ST	RAMP TO WASH BR		O		1	S	3/16/2010	4.500	F	8,200	\$32,800,000	112		
2229400	M	W 181ST ST PED BRDG	HHP N.B.		A-PED	P	7	C	1/25/2011	4.657	F	1,500	\$6,000,000	112		
M00001	M	W191ST ST PED TNL	BROADWAY - IRT #1 SUBWAY		O-PED		1	C	12/13/2010	5.000	G	2,000	\$8,000,000	112		
2241940	B	W 205TH ST	NYCTA IND YARDS	T	O		4	S	11/11/2010	5.625	G	32,508	\$130,032,000	207		
2240120	BM	W 207TH/W FORDHAM RD	HARLEM RIVER		WMO		5	S	8/20/2010	5.222	G	31,784	\$127,136,000	112	207	
2241489	B	W 225TH ST	CSX TRASP - PUTNAM	C	O		2	S	6/11/2010	5.149	G	10,900	\$43,600,000	207	208	
2241490	B	W 230TH ST	CONRAIL (ABANDONED) PUTNAM		O		1	S	4/8/2011	5.563	G	5,600	\$22,400,000	208		
2241509	B	W 231ST ST	CONRAIL (ABANDONED) PUTNAM		O		1	S	9/29/2010	4.745	F	4,723	\$18,892,000	208		
2241510	B	W 233RD ST	CONRAIL (ABANDONED) PUTNAM		O		1	S	4/7/2011	5.275	G	3,760	\$15,040,000	208		
2241520	B	W 234TH ST	CONRAIL (ABANDONED) PUTNAM		O		1	S	4/7/2011	5.176	G	3,770	\$15,080,000	208		
2231860	Q	W ALLEY ROAD	BCIP		A		2	S	7/20/2011	5.474	G	7,200	\$28,800,000	411		
2241470	B	W FORDHAM RD	METRO NORTH RR HUD	M	O		4	S	7/14/2011	5.694	G	16,052	\$64,208,000	207		
2241460	B	W TREMONT AVE	METRO NORTH RR HUD	M	O		8	S	6/14/2010	4.164	F	12,900	\$51,600,000	205		
2241070	B	WALEY AVE	CSX TRANS - PT MORRIS	C	O		1	S	9/27/2010	6.567	VG	2,535	\$10,140,000	201		
2241410	B	WALTON AVE	METRO NORTH RR HUD	M	O		1	S	6/1/2010	5.297	G	3,600	\$14,400,000	204		
2240620	M	WARDS ISLAND PED BRDG	HARLEM RIVER		WMO-PED		10	C	11/1/2008	4.367	F	12,600	\$50,400,000	111		
2243250	K	WASHINGTON AVE	FRANKLIN SHUTTLE	T	O		1	S	1/4/2011	6.281	VG	3,657	\$14,628,000	309	355	
2066919	BM	WASHINGTON BRIDGE	HARLEM RIVER	M	WO		9	S	11/12/2010	4.642	F	128,339	\$513,356,000	112	205	204
2246330	M	WEST DR (BALCONY BRDG)	STREAM TO THE LAKE		WO	P	1	S	2/1/2010	5.000	G	2,019	\$8,076,000	164		
2246080	M	WEST DR (DALEHEAD ARCH)	BRIDLE OPP W 64TH ST		O	P	1	S	1/5/2010	4.667	F	2,000	\$8,000,000	164		
2246000	M	WEST DR (GREYSHOT ARCH)	PED BET 61ST & 62ST		O	P	1	S	1/14/2010	5.400	G	2,500	\$10,000,000	164		
2244020	K	WEST DR (MEADOWPORT ARCH)	PED PATH NR GRND ARMY PLZ		O	P	1	S	4/26/2011	5.321	G	2,500	\$10,000,000	355		
2246360	M	WEST DR (WINTERDALE ARCH)	PED PATH OPP W 82 ST		O	P	1	S	1/27/2010	5.273	G	3,100	\$12,400,000	164		
2246120	M	WEST DRIVE	TRANSVERSE RD #1		O	P	1	S	4/2/2010	4.967	F	7,900	\$31,600,000	164		
2246240	M	WEST DRIVE	TRANSVERSE RD #2		O	P	1	S	3/23/2010	4.167	F	7,200	\$28,800,000	164		
2246260	M	WEST DRIVE	TRANSVERSE RD #3		O	P	1	S	3/26/2010	4.933	F	5,100	\$20,400,000	164		
2246280	M	WEST DRIVE	TRANSVERSE RD #4		O	P	1	S	3/24/2010	4.300	F	4,700	\$18,800,000	164		
2249710	R	WEST FOOTBRIDGE	CLOVE LAKE		WO-PED	P	2	C	8/1/2011	4.086	F	900	\$3,600,000	501		
2244100	K	WEST FOOTBRIDGE	PROSPECT PK STREAM		WO-PED	P	1	C	12/2/2010	4.875	F	3,200	\$12,800,000	355		
2267380	M	WEST STREET	RECTOR ST		AT		1	S	11/15/2011	5.033	G	25,760	\$103,040,000	101		
2241230	B	WESTCHESTER AVE	AMTRAK - CSX	AC	O		3	S	11/29/2010	5.944	G	15,600	\$62,400,000	202	209	
2240180	B	WESTCHESTER AVE	BRONX RIVER		WO		1	S	9/16/2011	4.608	F	5,476	\$21,904,000	202	209	
2241000	B	WESTCHESTER AVE	CSX TRANS - PT MORRIS	C	O		1	S	6/16/2010	4.660	F	1,740	\$6,960,000	201		
2075837	B	WESTCHESTER AVE	HUTCHINSON RVR PKWY		A		2	S	2/5/2010	4.306	F	15,858	\$63,432,000	210	211	
2241329	B	WHITE PLAINS ROAD	AMTRAK - CSX	AC	O		1	S	9/14/2010	4.719	F	6,900	\$27,600,000	211		
2248020	Q	WHITELAW PED BRDG	CONDUIT AVE		O-PED		7	C	10/8/2010	4.775	F	5,500	\$22,000,000	410		
1065210	Q	WHITESTONE EXP NB	BCIP (2065210)		A		1	S	7/22/2010	4.476	F	2,500	\$10,000,000	407		
2241369	B	WILLIAMSBRIDGE RD	AMTRAK - CSX	AC	O		2	S	10/1/2010	4.836	F	6,510	\$26,040,000	211		

INVENTORY SORTED BY FEATURE CARRIED

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED	RAIL ROAD	BRIDGE TYPE	OTHER OWNER	SPAN S	RT NG SRC	Inspection Date	Condition Rating	VR BL RT NG	DECK AREA	REPLACEMENT COST	CD	CD2	CD3
2240039	KM	WILLIAMSBURG BRIDGE	EAST RIVER	T	WEO		53	S	11/12/2010	4.653	F	824,000	\$3,296,000,000	103	301	
2240059	BM	WILLIS AVENUE	HARLEM RIVER		WMO		26	S	12/22/2010	6.403	VG	171,105	\$684,420,000	111	201	
2248019	Q	WOODHAVEN BLVD	ATLANTIC AVE		O		3	S	4/8/2010	4.236	F	19,400	\$77,600,000	409		
2248159	Q	WOODHAVEN BLVD	QUEENS BLVD		O		2	S	8/20/2010	4.275	F	11,500	\$46,000,000	404		
2230540	Q	WOODSIDE AVE	278I (B.Q.E.)		A		1	S	1/19/2010	5.797	G	7,529	\$30,116,000	402		
2247400	Q	WOODSIDE AVE	CSX TRANSPORT	C	O		1	S	9/8/2011	5.033	G	8,200	\$32,800,000	402	404	
2247120	Q	WOODSIDE AVE	LIRR MAIN LINE	L	O		3	S	10/28/2009	4.444	F	14,900	\$59,600,000	402		
786	OPEN BRIDGES				OPEN SPANS	4,409				OPEN SF		14,510,560	57,378,188,000	ALL		

STATEN ISLAND CULVERTS

BIN	BORO	FEATURE CARRIED	FEATURE CROSSED		BRIDGE TYPE	SPANS	SOURCE
R00003	R	DELAFIELD AVE	RAYMOND PLACE		O	1	CITY
R00004	R	DICKIE AVE	NEAR COLUMBUS PLACE		O	1	CITY
R00005	R	BIDWELL AVE	COLUMBUS PLACE		O	1	CITY
R00006	R	LIVERMORE AVE	WATCHOGUE ROAD		O	1	CITY
R00010	R	GALLOWAY AVE	MARIANNE ST		O	1	CITY
R00011	R	FOREST AVE	CRYSTAL AVE		O	1	CITY
R00013	R	NAUGHTON AVE	PATTERSON AVE		O	3	CITY
R00015	R	OLYMPIA BLVD	SLATER AVE		O	1	CITY
R00016	R	GRAHAM BLVD	JAY ST		O	2	CITY
R00021	R	HUNTER AVE	IDLEASE PLACE		O	1	CITY
R00022	R	IDLEASE PLACE	HUNTER AVE		O	1	CITY
R00023	R	MIDLAND AVE	HYLAN BLVD		O	1	CITY
R00024	R	LINCOLN AVE	SANILAC ST		O	1	CITY
R00025	R	GREELEY AVE	SANILAC ST		O	1	CITY
R00027	R	ELEANOR ST	ROCKLAND AVE		O	1	CITY
R00031	R	TARLTON ST	GREAT KILLS LANE		O	1	CITY
R00032	R	SEGUINE AVE	PURDY PLACE		O	1	CITY
R00034	R	ROCKLAND AVE	BRIELLE AVE		O	1	CITY
R00035	R	BRADLEY AVE	WILLOWBROOK ROAD		O	1	CITY
R00036	R	AMBOY ROAD	ARBUTUS AVE		O	1	CITY
R00038	R	MAGUIRE AVE	DEPEW PLACE		O	1	CITY
R00039	R	MAGUIRE AVE	DEPEW PLACE		O	1	CITY
R00040	R	113 MAGUIRE AVE	DEPEW PLACE		O	1	CITY
R00041	R	93 FOSTER ROAD	AMBOY ROAD		O	1	CITY
R00042	R	LEDYARD PLACE	LACONIA AVE		O	1	CITY
R00046	R	RICHMOND TERRACE	SNUG HARBOUR		O	2	CITY
R00048	R	VAN NAME AVE	WALKER AVE		O	1	CITY
R00049	R	VAN PELT AVE	WALKER ST		O	1	CITY
R00050	R	UNION AVE	NETHERLAND AVE		O	1	CITY
R00051	R	HARBOR ROAD	DUBLIN PLACE		O	1	CITY
R00055	R	TRAVIS AVE	VICTORY BLVD		O	1	CITY
R00059	R	WESTERN AVE	RR BRIDGE		WO	1	CITY
R00060	R	SIGNS ROAD	VICTORY BLVD		O	1	CITY
R00062	R	KISSEL AVE	SNUG HARBOR ROAD		O	1	CITY
R00065	R	HENDERSON AVE	WESTBURY AVE		O	1	CITY
R00068	R	FOREST AVE	RANDALL AVE		O	1	CITY
R00069	R	GREGG PLACE	RANDALL AVE		O	1	CITY
R00076	R	ROOSEVELT AVE	HAROLD ST		O	1	CITY
R00077	R	BUCHANAN AVE	HAROLD ST		O	1	CITY
R00078	R	WILLOW BROOK ROAD	FILLMORE AVE		O	1	CITY
R00079	R	FILLMORE AVE	WILLOW BROOK ROAD		O	1	CITY
R00084	R	ARTHUR KILL ROAD	MULDOON AVE		O	1	CITY
R00085	R	ARTHUR KILL ROAD	150' N.W. ELLIS ROAD		O	1	CITY
R00086	R	ARTHUR KILL ROAD	ENGLEWOOD ST		O	1	CITY
R00095	R	MEISNER AVE	ROCKLAND AVE		O	1	CITY
R00096	R	ROCKLAND AVE	MANOR ROAD		O	1	CITY
R00097	R	RICHMOND HILL ROAD	RICHMOND ROAD		O	1	CITY
R00101	R	ST ANDREWS ROAD	LIGHTHOUSE AVE		O	1	CITY
R00103	R	AULTMAN AVE	ST GEORGE ROAD		O	2	CITY
R00106	R	ARTHUR KILL ROAD	RICHMONDTOWN ROAD		O	1	CITY
R00111	R	ELTINGVILLE BLVD	KATAN AVE		O	2	CITY
R00114	R	SWEET BROOK ROAD	RIDGEWOOD ROAD		O	1	CITY
R00115	R	VICTORY BLVD	CLOVES LAKE PARK		O	3	CITY
R00122	R	ARTHUR KILL ROAD	RIDGEWOOD AVE		O	1	CITY
R00133	R	ARDEN AVE	HALPIN AVE		O	1	CITY
R00135	R	HYLAN BLVD	CORNELIA AVE		O	1	CITY
R00136	R	SNUG HARBOR ROAD	KISSEL AVE		O	1	CITY
R00137	R	RICHMOND TERRACE	WESTERN AVE		O	2	CITY
R00138	R	HOLLAND AVE	BENJAMIN PLACE		O	1	CITY
R00139	R	DE PEW PL	MAGUIRE AVE		O	1	CITY
R00141	R	ALTER AVE	STORM&GRND FED STREAM		O	1	CITY

A glossary of the terms most commonly used in bridge design, construction and maintenance is presented below. Cross-references are indicated through the use of BLOCK LETTERING.

AASHTO (AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS)

A nonprofit, nonpartisan association representing highway and transportation departments in the fifty states, the District of Columbia, and Puerto Rico, representing all five transportation modes air — highways, public transportation, rail, and water.

ABUTMENT

Walls of reinforced concrete or masonry. Abutments support a bridge's SUPERSTRUCTURE and APPROACHES, as well as retain the embankments that are positioned at the extreme ends of a multi-span bridge.



Hamilton Avenue Bridge and Battery Place Underpass Abutments.
(Credit: NYSDOT)

ADA (AMERICANS WITH DISABILITIES ACT)

The Americans with Disabilities Act gives civil rights protections to individuals with disabilities, similar to those rights provided to individuals on the basis of race, color, sex, national origin, age, and religion. It guarantees equal opportunity for individuals with disabilities in public accommodations, employment, transportation, state and local government services, and telecommunications.

ADMIXTURE

Material, other than water, AGGREGATE, and hydraulic cement, used as an ingredient of concrete, mortar, grout, or plaster and added to the batch immediately before or during mixing.

AGGREGATE

Inert material such as sand or stone that is mixed with cement, lime and water to produce grout or mortar.

ALIGNMENT

The relative horizontal and vertical positioning between the bridge and APPROACHES.

ANCHORAGE

A solid mass, usually comprised of concrete, that encases a grillage of heavy steel bars into which the ends of a SUSPENSION BRIDGE'S main CABLES are anchored. Anchorages are designed to resist the pull of the cables.



Inspecting the Exterior of the Manhattan Bridge Anchorage. (Credit: NYSDOT)

APPROACH

Roadway at each end of a bridge, beyond the ABUTMENT, providing access to the bridge.



Carroll Street Bridge Approach. (Credit: NYSDOT)

ARTERIAL BRIDGE

Any bridge upon which an arterial highway runs as it crosses streets, water, railroads, etc.

AS-BUILT DRAWINGS

Drawings that are prepared from measurements taken on-site to accurately depict the actual sizes and location of elements of the construction project. The as-built drawings indicate variations from the construction documents that occurred during construction.

ASPHALT

Black bituminous surface material made from AGGREGATE and processed petroleum.



Hamilton Avenue Asphalt Plant Silo. (Credit: Sheena Diaz)

BACKFILL

Material used to refill an excavated area.

BASCULE BRIDGES

Bascule bridges are movable bridges, typically referred to as "draw bridges" which rotate the superstructure vertically. The movable leaf of the structure - known as a *bascule* - is counterbalanced by weights of such size that minimal power is required for operation - just enough to overcome inertia, frictional resistance, wind and snow loads. Such bridges are relatively speedy to operate and provide unlimited vertical clearance. Examples of bascule bridges currently under the jurisdiction of the New York City Department of Transportation include the **Unionport**, **Shore Road (Pelham)**, **Hamilton Avenue**, Third Street, Union Street, and **Greenpoint Avenue** Bridges.



Unionport Bridge. (Credit: NYSDOT) Hamilton Avenue Bridge. (Credit: NYSDOT) Union Street Bridge. Greenpoint Avenue Bridge. (Greenpoint Credit: Michele N. Vulcan) Shore Road Bridge in July 2011. (Credit: Sergey Parayev)

BASE COURSE

The layer of compacted ASPHALT directly under the WEARING SURFACE.

BEAM

A linear structural member designed to span from one support to another.

BEARINGS

Designed to transmit the load from the SUPERSTRUCTURE to the SUBSTRUCTURE. Divided into two types, expansion and fixed, bearings are needed to ensure that certain elements are not forced to take more load than that for which they were designed and that the bridge can move slightly under load and temperature changes as needed.



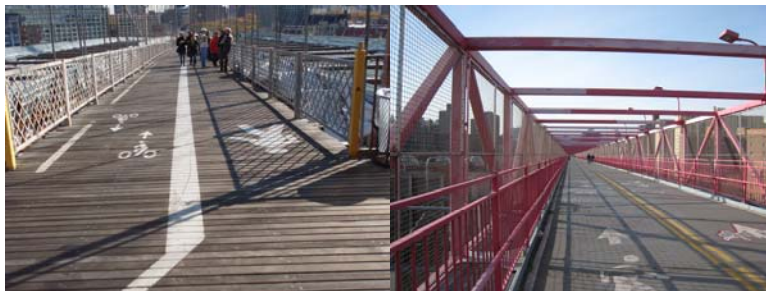
Truss Bearing on Manhattan Bridge.
(Credit: NYSDOT)

BICYCLE LANE

A portion of the roadway that has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicycles. (New York State Vehicle and Traffic Law, Title 1, Article 1, §102-a)

BICYCLE PATH

A path physically separated from motorized vehicle traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way and which is intended for the use of bicycles. (New York State Vehicle and Traffic Law, Title 1, Article 1, § 102-b)



Brooklyn Bridge and Williamsburg Bridge Bicycle/Pedestrian Paths in 2010.
(Williamsburg Credit: Russell Holcomb)

BID

A contractor's formal proposal, including prices, to perform the work set out in the project SPECIFICATIONS.

BMP (BEST MANAGEMENT PRACTICES)

Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage, or leaks, sludge or waste disposal, or drainage from raw material storage.

BORING

A soil exploration technique of drilling into the ground at various locations in an attempt to construct an accurate subsurface profile.



Conducting Soil Borings in 2008 as Part of the Seismic Retrofit Design of the Manhattan Bridge. Drilling to a Depth of Approximately 210 Feet to Obtain an 8-foot Long Hard Rock Sample. A 2 1/2 –Foot Long Hard Rock Sample Taken From a Depth of Between 202 and 204 ½ Feet.

BOX BEAM

A hollow structural beam with a square, rectangular, or trapezoidal cross-section.

BRIDGE

A structure connecting two points, greater than 20 feet in distance, which carries vehicular and/or pedestrian traffic over water, a descending slope, or another road.

BULKHEAD

A RETAINING WALL-like structure commonly composed of driven piles supporting a wall or a barrier of wooden timbers or reinforced concrete members.

CABLE

A steel rope, composed of parallel or twisted wires, used to support the road deck of SUSPENSION BRIDGES or CABLE STAYED BRIDGES.



Inspector on Manhattan Bridge Cable.
(Credit: NYSDOT)

CABLE STAYED BRIDGES

Bridges in which the superstructure is directly supported by cables, or stays, passing over or attached to towers located at the main piers.



East 64th Street Pedestrian Bridge over FDR Drive.

CAISSON

A rectangular or cylindrical chamber for keeping water or soft ground from flowing into an excavation.

CAMELBACK TRUSS

A TRUSS having a curved top chord and straight bottom chord meeting at each end. There is a camelback truss on the Macombs Dam Bridge.



Macombs Dam Camelback Truss.

CANTILEVER BRIDGES

A cantilever is a BEAM that is supported only on one end. In a cantilever bridge, the tree branch-like beams project toward each other, forming a span of the bridge when connected in the center. Bridges of this type are economical to build because they require less material in construction and less condemnation of property is necessary for the narrow piers which are sufficient for support. Typically, no falsework is required during construction and the bridge does not exceed 1,800 feet in length. NYCDOT's *Ed Koch Queensboro Bridge* is a notable example of this type of structure.



Ed Koch Queensboro Bridge.
(Credit: Russell Holcomb)

CAST-IN-PLACE

Concrete that is poured and cured in its final position at the project site.

CATCH BASIN

A receptacle, commonly box shaped and fitted with a grided inlet and a pipe outlet drain, designed to collect the rain water and floating debris from the roadway surface and retain the solid material so that it may be periodically removed.

CATWALK

A narrow walkway for access to some part of a structure.



Ed Koch Queensboro Bridge Lower Level Flooring System Catwalk under Lower Level Queens Approach. Manhattan Bridge Brooklyn Tower Catwalk.
(Credit: NYSDOT)

CHANGE ORDER

An approved modification of the SPECIFICATIONS or the costs in a construction contract.

CHIPPING HAMMER

A welder's compressed-air tool for cleaning steel after welding. It is also used by bridge inspectors.

CLADDING

Non-load-bearing stone or brick veneer used as the facing material in exterior bridge wall construction.



East Approach Cladding on the East 174th Street Bridge. Abutment Wingwall Cladding on the West 173rd Street Bridge.

CLEARANCE

The unobstructed vertical and horizontal space provided between two objects.



United Nations – 1st Avenue Tunnel and Macombs Dam Bridge Vertical Clearance Postings. (Credit: NYSDOT) Retro-reflective Material Improves Visibility of These Low Vertical Clearance Bridges: East 60th Street Bridge Over FDR Drive and Westchester Avenue Bridge over Hutchinson River Parkway.

COFFERDAM

A temporary dam-like structure constructed around an excavation to exclude water.

COLONNADE

A series of regularly spaced columns.



Manhattan Bridge Colonnade.
(Credit: Peter Basich)

COMPRESSION

The stress resulting from a pushing force on a structure.

CONDITION RATING

A judgment of a structure's condition in comparison to its original as-built condition.

COPING

The material forming the top layer of a masonry unit which protects the MASONRY below from penetrating water.

CORE

A cylindrical sample of concrete removed from a bridge component for the purpose of destructive testing.



Removing a Core From 252nd Street Bridge over Henry Hudson Parkway in January 2009.
(Credit: Masroor Mahmood)

CORROSION

The general disintegration of surface metal through oxidation.

COUNTERWEIGHT

A weight which is used to balance the weight of a movable member; in bridge applications counterweights are used to balance a movable span so that it rotates or lifts with minimum resistance.

CRITICAL PATH

The set of activities that must be completed on time for the contract completion date to be met. Activities on the critical path have no slack time.

CULVERT

Any structure under the roadway with a clear opening of twenty feet or less, measured along the center of the roadway.



Idlease Place Culvert. Sweet Brook Road Culvert.

CURING

Process of maintaining freshly placed concrete mortar, grout, or plaster moist and at a favorable temperature for a suitable period of time during its early stages so that the desired properties of the material can develop. Curing assures satisfactory hydration and hardening of the cementitious materials.

DEAD LOAD

The weight of the bridge itself without any traffic or external loads.

DECK

The supporting slab and wearing surface of a bridge.



Hamilton Avenue Bridge, and West 8th Street and Chambers Street Pedestrian Bridge Decks.
(Hamilton Credit: NYSDOT)

DELAMINATION

The subsurface separation of concrete into layers.

DESIGN-BUILD CONTRACTS

A delivery procedure where one company is retained to perform both design and construction, thus expediting the capital bridge rehabilitation program.

DOLPHIN

A group of PILES driven close together and placed to protect portions of a bridge or other structure exposed to possible damage by collision with marine traffic.



Greenpoint Avenue Dolphin & Fender System.
(Credit: Peter Basich) Hunters Point Avenue Dolphins.
(Credit: Michele N. Vulcan)

DRAINAGE SYSTEM

A collection of surface and/or subsurface drains and pumps that are used to remove surface or ground water.

EFFLORESCENCE

White salts that water movement brings to the surface of porous construction materials.



Moderate Efflorescence on the Brooklyn Bridge Brooklyn Tower North Gothic Arch in 2004. (Credit: NYSDOT)
Efflorescence on the Underside of the Masonry Stones on the End Abutment of the Margaret Corbin Drive Bridge over Pedestrian Path Near Café.

ELECTRICAL MAINTENANCE

Preventive maintenance to electrical systems on the East River bridges (e.g., travelers, lighting systems) and the movable bridges (e.g., contacts, relays, switches, controls, limit switches, and lighting systems).

EXPANSION JOINTS

Located throughout a bridge, expansion joints are located in the deck, directly above the BEARINGS. Expansion joints allow parts of the structure to expand independently and therefore relieve stresses that may otherwise cause damage.

EYEBARS

Steel bars with each end shaped like the eyes of giant needles. They provide total anchorage of the suspension cable and are buried deep within the ANCHORAGE structure.

FACE

The outer, exposed surface of a MASONRY unit.

FATIGUE

Cause of structural deficiencies (such as metal fracture) due to repetitive (or cyclic) loading over time.

FENDER

A structure that acts as a buffer to protect the portions of a bridge exposed to floating debris and water-borne traffic from collision damage.



Rikers Island Dolphin & Fender System. (Credit: NYSDOT)

FINGER DAM

EXPANSION JOINT in which the opening is spanned by meshing steel fingers or teeth.



Manhattan Bridge Finger Dam. (Credit: Jagtar Khinda)

FIRE HAZARD

Accumulation of debris, where the debris is of sufficient quantity, in a location where, if it caught fire, it would compromise the structural integrity of the bridge.

FIXED PRICE CONTRACT

A contract with an overall predetermined price for the project work.

FLAG CONDITIONS

A “Flag” is a hazardous or potentially hazardous condition on a bridge. A “Flag” is classified as either Red, Yellow, or Safety. A “Red Flag” requires prompt evaluation and, possibly, corrective action. A “Yellow Flag” is used to report a potentially hazardous structural condition, which if left unresolved will most likely become a danger to the soundness of the bridge and a hazard to the public. In the case of a “Safety Flag,” there is no danger of partial or complete structural failure of the bridge; however, if left unattended, those conditions can present a vehicular or pedestrian hazard.

FLOORBEAMS

Horizontal members placed crosswise to the bridge’s major BEAMS, girders, or TRUSSES to support the deck.



South Transit Floorbeams, Stringers, and Bracing Members on the Manhattan Bridge. Ed Koch Queensboro Bridge North Outer Roadway Floorbeam. (Credit: NYSDOT)

FOOTINGS

Part of the substructure known as the bridge foundation, they are masses of reinforced concrete which can be found beneath the ABUTMENTS and PIER and which spread the load to allow the soil to support the structure above.

FORMS

The temporary molds that hold concrete in place while it is hardening; also known as form work.

FULL STEEL PAINTING

A bridge painting technique that involves cleaning of steel surfaces using approved environmentally safe paint removal techniques (blasting, power tools, or hand tools). A full primer, intermediate and finish coat are applied using combinations of brush, roller, or (if necessary) spray painting.

FUNCTIONALLY OBSOLETE

A status used to describe a bridge that, because of its geometry, is no longer functionally adequate for its task. Reasons for this status include that the bridge doesn’t have enough lanes to accommodate the traffic flow, it may be a drawbridge on a congested highway, or it may not have space for emergency shoulders. “Functionally Obsolete” does not communicate anything of a structural nature. A functionally obsolete bridge may be perfectly safe and structurally sound, but may be the source of traffic jams or may not have a high enough CLEARANCE to allow an oversized vehicle.

GENERAL CONTRACTOR

has overall responsibility for a construction project. The general contractor may break down the project into smaller pieces to be handled by subcontractors.

GEOMETRIC IMPROVEMENT

Roadway improvements other than a surface treatment, such as shoulder and lane widening, curb and gutter, or roadway alignment.

GIRDER SPAN BRIDGES

are primarily employed in bridging short distances, and may be classified as either simple or continuous. The steel girders carry the roadway and roadway load to end supports. The Midtown Highway, **Hook Creek**, Little Neck and **Brooklyn Third Avenue Bridges** are of this type.



Hook Creek Bridge and Brooklyn's Third Avenue Bridge. (Credit: NYSDOT)

GRADE

The degree of inclination of the ground surface.

GRID FLOORING

A steel floor system comprising a lattice pattern which may or may not be filled with concrete.



Installation of Full Width Grid Deck Panels on the Manhattan Bridge Lower Roadway in 2006. Pouring the Concrete.

GRIZZLY

A coarse screen used to remove oversize pieces from ASPHALT or earth.



New Grizzly Under Fabrication for the Agency Hamilton Asphalt Plant. (Credit: Russell Holcomb)

GUTTER

A paved drain commonly constructed in conjunction with the curbs of the roadway.

JACKING

The mechanical lifting or sliding of an element.



Ed Koch Queensboro Bridge Bent Column Ready for Jacking in 2005.

JERSEY BARRIER

A low, gradually narrowing, reinforced concrete wall used as a highway divider and as a means of preventing a vehicle from crossing a median or leaving the roadway. These barriers were first used on the New Jersey Turnpike.

LIVE LOAD

The weight of the traffic crossing a bridge and of other external loads applied to the structure (excluding the weight of the bridge itself.)

LOAD RATING

A value that indicates the LIVE LOAD capacity of a bridge.

LUBRICATION MAINTENANCE

Lubrication of mechanical parts of the East River bridges (e.g., travelers, cables, solid rod suspenders, and EYEBARS), and the movable bridges (e.g., bearings, brakes, limit switches, and gates).

MAINTENANCE AND PROTECTION OF TRAFFIC

The control plan for traffic around and through a construction site.

MARINE BORERS

Mollusks and crustaceans which live in water and destroy wood by digesting it.

MASONRY

Construction materials made of concrete, brick, tile, or stone.



Cleaning the Masonry of the North Face of the Manhattan Bridge's Brooklyn Anchorage and of the North and East Faces of the Roosevelt Island Pier of the Ed Koch Queensboro Bridge. Masonry of the East Drive Bridge Over Eastwood Arch.

MORTAR

Mixture of cementitious materials, fine AGGREGATE, and water, which may contain ADMIXTURES, and is usually used to bond MASONRY units.

MOVABLE BRIDGE

A type of bridge which carries vehicular or pedestrian traffic over a navigable waterway, and which opens to permit the passage of a ship, barge or boat. The 25 movable bridges currently under the jurisdiction of the New York City Department of Transportation include the Harlem River group (Broadway, West 207th/West Fordham Road, Macombs Dam, 145th Street, Madison Avenue, Third Avenue, Willis Avenue, and **Wards Island**); the Bronx group (Bruckner Expressway/Bronx River, Hutchinson River Parkway, **Shore Road**, and

Bruckner Expressway/Westchester Creek); the Queens group (Borden Avenue, Grand Street, Greenpoint Avenue, Hunterspoint Avenue, **Pulaski Avenue**, and **Roosevelt Island**); and the Brooklyn group (Hamilton Avenue, Ninth Street, Third Street, Carroll Street, Union Street, Metropolitan Avenue, and Mill Basin.)



Roosevelt Island Bridge in 2010. Shore Road Bridge in 2009. (Shore Road Credit: George Kern) Wards Island Pedestrian Bridge in 2009. (Credit: Duane Bailey-Castro) Pulaski Bridge in 2010. (Credit: Sergey Parayev)

MOVING LOAD

A LIVE LOAD that is moving, for example, vehicular traffic.

NECKLACE LIGHTS

The necklace lights are those lights on the main cables of suspension bridges which, when illuminated at night, resemble a necklace.



A Bulb of the Ed Koch Queensboro Bridge Necklace Lights. (Credit: Peter Basich) Repairing a Manhattan Bridge Necklace Light. (Credit: Hany Soliman)

NONDESTRUCTIVE TESTING

A method of checking the structural quality of materials that does not damage them.

NOTICE TO PROCEED

The formal document authorizing the contractor to commence work under its contract.

OPERATOR'S HOUSE

The building containing the power plant and operating machinery and devices required for the operator's (bridge tender's) work in executing the complete cycle of opening and closing a MOVABLE BRIDGE span.



Metropolitan Avenue Bridge over English Kills Operator House.

PANEL POINT

The point at which two members of a TRUSS cross.

PARAPET

A low wall along the outmost edge of the roadway of a bridge to protect vehicles and pedestrians.

PEDESTRIAN BRIDGES

Bridges designed and constructed to provide means of crossing for pedestrian traffic only.



Morris Street, West 8th Street, PS-5, Carroll Street over Franklin Shuttle, and Chambers Street Pedestrian Bridges.

PIER

Part of a bridge's substructure, piers are the intermediate supports or columns which support a multi-span bridge. Piers may be composed of steel or reinforced concrete, and can appear as columns or solid walls.



Pier 1 of Hamilton Avenue Bridge. Pier 17 of Rikers Island Bridge. Pier 1 of Hunters Point Avenue Bridge. Ed Koch Queensboro Bridge Pier. Pier 35 of Macombs Dam Bridge. (Credit: NYSDOT)

PILES

A concrete, steel or timber column located beneath the FOOTINGS of a bridge and embedded in the soil. Piles are employed in bridges only if the soil directly below the footing is not firm enough to support the bridge loads.

PLAZA

An area designated for use by pedestrians, which may vary in size and shape; which may abut a sidewalk and is located fully within the bed of a roadway; may be at the same level as the roadway or raised above the level of the roadway; may be physically separated from the roadway by curbing, bollards, or other separators; may be treated with special markings and materials; and may contain benches, tables, or other facilities for pedestrian use.



Manhattan Bridge Brooklyn Plaza. Evening View of the Plaza Looking Southeast With Benches, Lights, and Granite Pavers in Foreground. Aerial View of the Plaza. Looking South From the Pedestrian Entrance.

PLUMB BOB

A weight hanging on a string (plumb line), used by bridge inspectors to show the direction of the vertical distance.

POINTING

The compacting of the mortar in the outermost portion of a joint and the troweling of its exposed surface to secure water tightness or desired architectural effect.



Pointing Joints on the East Face of the Brooklyn Anchorage of the Manhattan Bridge.

PORTLAND CEMENT CONCRETE

The most common concrete used in construction. It was patented in England in 1820, and is so named because when hard, it resembles Portland stones from Dorset.

POSTED

An announcement or sign limiting dimension, speed, or loading, indicating that larger dimensions and higher speeds and loads cannot be safely taken by the bridge.



Roosevelt Island Bridge Vertical Clearance Restriction and Posted Weight Signs.
(Credit: NYSDOT)

POTHOLE

A hole in a roadway or pavement, usually caused by heavy vehicular traffic or weathering.

PRECAST CONCRETE

Concrete members that are cast and cured before being placed into their final positions on the construction site.

PREVENTIVE MAINTENANCE

Preventive maintenance involves cleaning, protecting, and performing minor repairs of bridge components to prevent deterioration from becoming so extensive that major REHABILITATION or RECONSTRUCTION is needed. Specified interval maintenance, such as cleaning DRAINAGE SYSTEMS and lubrication, are done on a scheduled basis. Other maintenance is carried out when inspectors point out the need for it, such as resealing an EXPANSION JOINT or replacing the wearing surface. Preventive maintenance tasks on the bridges include: the cleaning of drainage systems, gratings, and expansion joints; the washing of the deck area and salt splash zones; full-steel, salt splash, and spot painting; the patching of sidewalks; the maintenance of electrical devices; and the oiling of mechanical components.



Power Washing the Corrosive Deicing Solvents Within the Range of the Roadway Splash Zone on The Manhattan Bridge in October 2007. Particular Attention is Directed to Cleaning the Gusset Plate. (Credit: Albert Hong)
Performing Wear and Tear Resurfacing Work on the Roosevelt Avenue Bridges in April 2010: Assistant City Highway Repairer Victor Magagna, Supervisor Highway Repairer Joseph Palemine, Assistant City Highway Repairer Jonathan Adorno (Obscured), Assistant City Highway Repairer Anthony Montalbano, and Area Supervisor Highway Maintenance Edward Pedersen. Assistant City Highway Repairers Jonathan Adorno and Victor Magagna. (Credit: Joseph Flood)

PRIMER

The first layer of paint used to cover the unsealed surface. This is followed by at least one more coat of paint.

PUNCH LIST

A catalogue of minor items still outstanding at the end of a construction project.

QUALITY ASSURANCE

An independent evaluation of a service (i.e., an inspection) to establish that a pre-described level of quality has been met.

RAILING

A fence-like construction built at the outermost edge of the roadway or the sidewalk portion of a bridge to protect pedestrians and vehicles.



Manhattan Bridge Railing. (Credit: Russell Holcomb) Greywacke Arch Railing.

RAILROAD FORCE ACCOUNTS

Railroad force accounts are contracts between the Agency and railroads by which the railroads supply flag personnel so the Division can perform repair work on bridges that cross over railroad tracks.

REHABILITATION

Extending the useful life of a bridge by painting, repairing or replacing the DECK or selected elements of the SUBSTRUCTURE or SUPERSTRUCTURE. This type of work is performed primarily on those structures not classified as deficient, but which contain specific components that have low condition ratings.

RETAINING WALL

A structure designed to restrain and hold back a mass of earth.



Kappock Street Retaining Wall in Riverdale, Before and After Repairs. The Existing 300-Foot Long Parallel Concrete Roadway Retaining Walls on Both Sides of Kappock Street Were Deteriorated and Leaning, and Were Replaced with New Modular Retaining Walls in the Summer of 2009.

RETARDING AGENT

A chemical added to mortar to slow down the set.

RETRACTILE BRIDGES

Retractile bridges are movable bridges that are mounted on tracks that are positioned to one side of a navigational channel. To open, the bridge is withdrawn or "retracted" to shore. Although fascinating to observe and efficient to operate, retractile bridges are considered obsolete because of the expansive land areas that must be condemned in order to accommodate their tracks. The New York City Department of Transportation currently possesses two retractile bridges - the **Borden Avenue** and **Carroll Street** bridges, rare examples of the bridge builders' art.



Borden Avenue Bridge. (Credit: Peter Basich) Carroll Street Bridge. (Credit: NYSDOT)

RETROFIT

Upgrading parts of an existing structure to meet current standards.

RIGHT-OF-WAY

A general term denoting land, property, or interest therein, usually in a strip, acquired for or devoted to transportation purposes.

RIPRAP

Irregularly broken, random-sized pieces of rock used for a foundation or to prevent soil erosion.



Eroded Riprap Pier Protection at Pier 11 of Old Willis Avenue Bridge in 2008. (Credit: NYSDOT)

ROADWAY

The portion of the road intended for the use of vehicular traffic.

ROCKER BEARING

A bridge support that accommodates expansion and contraction of the superstructure through a rocking action.

SADDLE

A special curved casting atop a SUSPENSION BRIDGE tower into which the cables are placed to avoid sharp bends in directional changes of the cable.



Manhattan Bridge Saddle.
(Credit: Jagtar Khinda)

SALT SPLASH ZONE PAINTING

A bridge painting process that involves preparation of the area to be painted by power wash, using clean water or steam. After power washing, hand and power tools are used in areas which have started to show deterioration from accumulated de-icing agents. Solvent cleaning is done in locations where oil and grease need to be removed from the steel surface. A spot PRIMER coat and finish coat are then applied by brush or roller. Occasionally, when there is no danger of overspray, spray painting may be performed.

SCOUR

The washing away of stream bed material around or underneath the bridge abutments or piers that is caused by water channel flow.



Scour on Pier 2 End Face of Mosholu Parkway Bridge Over Bronx River in 2008. (Credit: NYSDOT)

SCREED

A long section of metal or wood which is dragged across freshly placed concrete to both smooth the surface and consolidate the concrete.

SCUPPER

An opening in the floor portion of a bridge to provide means for rain or other water accumulated upon the roadway surface to drain through it into the space beneath the structure.



Scuppers on the Pulaski, Madison Avenue, and Brooklyn Bridges. (Credit: NYSDOT)

SET

When the consistency of mortar changes from plastic to hard.

SHORING

Temporary bracing to support a structure.

SHOTCRETE

MORTAR or small-AGGREGATE concrete that is conveyed by compressed air through a hose and applied at high velocity to a surface. Also known as gunite and sprayed concrete.

SOFFIT

The underside of a structural component, such as a beam or arch.

SOUNDING

A method of checking for voids or DELAMINATIONS in concrete by striking a hammer against the structure and listening for a hollow sound.

SPALLING

The flaking or breaking out of concrete parallel to the main surface, caused by a blow, or by the action of weather or pressure.



Spalled Section of Curb on the East 8th Street Bridge in 2006. (Credit: NYSDOT)

SPAN

The distance between consecutive supports of a bridge.

SPECIFICATIONS OR SPECS

A detailed listing of required construction materials and methods to be used in the project. This information is a supplement to the blue prints and working drawings.

SPLAY CASTING

A steel or cast-iron collar fitted around a bridge suspension CABLE at the location where it spreads out (splays) into separate bundles of wires which are then attached to the ANCHORAGE EYEBARS. It is used to control the degree and location of the splay. These castings are usually located at the entry point of the cable into the anchorage chamber.

SPOT PAINTING

When the surface to be painted is contaminated with de-icing salts, sea salt, bird excrement, or other corrosive agents, the area is prepared by power washing, using clean water or steam. When grease or oil is present, it is removed by solvents. Mechanical cleaning with hand and/or power tools is performed in the areas containing deteriorated paint. A spot PRIMER coat and a single finish coat are applied by brush or roller. Occasionally, when there is no danger of overspray, spray painting may be performed.

STAGED CONSTRUCTION

Construction done so that traffic may be maintained on a portion of an existing bridge structure while a longitudinal section of a new structure is constructed. Traffic is then shifted over to that portion of the new structure while the existing structure is removed and the new structure is completed.

STEEL ARCH BRIDGES

Steel arch bridges consist of either a single arch or a series of arches fashioned from steel or concrete. Aesthetically one of the more attractive bridge types. Arch structures can prove economical to construct if the bridge spans between high ABUTMENTS. At present, there is only one bridge of this kind in steel under

the guardianship of the NYCDOT; the twin-arched **Washington Bridge**, positioned over the Harlem River at 181st Street. This bridge opened to traffic in December 1888 and, with its approaches, is 2,375 feet long.



Washington Bridge. (Credit: NYSDOT) Washington Bridge in 2008. (Credit: Duane Bailey-Castro)

STEM

The vertical part of a retaining wall, usually made of concrete or masonry.



East Face of Brooklyn Bridge North Stem Wall.
(Credit: NYSDOT) West 176th Street Pedestrian
Bridge Beginning Abutment Stem Wall.

STOPPING SIGHT DISTANCE

The distance required for a vehicle to stop before hitting a stationary object in its path. It is equal to the distance required for the driver to react and apply the brakes plus the distance required for the vehicle to stop once the brakes are applied.

STRAIN GAUGE TESTING

Small strips of material (imagine a small band-aid) are glued onto part of a structure to measure the stress in the material under load. Inside the small "band-aid" are tiny electrical wires. When a structure is under load it stretches (tension) or contracts (compression). When this happens, the resistance in the tiny wires in the strain gauge changes, resulting in a change in the wire's current. What is actually being measured are changes in the electrical current in the tiny wires. Knowing the physical properties of the structural member that the gauge is attached to, (such as steel), a calculation can then be made to convert these changes in current to changes in stress. The readings are taken with special instruments that record the information over the desired period of time or loading sequences.



Division Staff Installing Strain Gauges
in 2006 on the Greenpoint Avenue
Bridge. Checking the Measurements.
(Credit: Vera Ovetskaya)

STRAND

Comprised of hundreds of thin wires laid parallel to form a bundle, strands comprise the base element in the CABLES, or main cables, on a SUSPENSION BRIDGE or cable stayed bridge.

STRINGER

A part of a bridge's SUPERSTRUCTURE, a stringer is essentially a BEAM parallel to the span used to support the road DECK.



Stringers on the Manhattan Bridge. (Credit: NYSDOT) Bridge Repairer and Riveter Joseph Antony Repairing a Red-Flagged Stringer on the Bridge. (Credit: Hany Soliman)

STRUCTURAL DEFICIENCY

An engineering term-of-art used by the Federal government to indicate that there are elements of the bridge that need to be monitored and/or repaired. It covers a wide range of conditions and does not reflect the fundamental integrity of a structure. Any city bridge deemed unsafe would be shut to the public.

STRUCTURAL HEALTH MONITORING

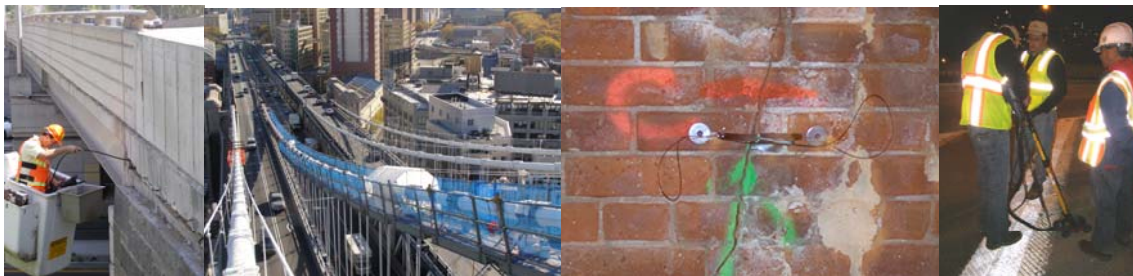
The continuous or regular monitoring of the condition of a structure or system using built-in or autonomous sensory systems, and any resultant intervention to preserve structural integrity.

Borescope Investigations: The borescope is a high-tech device combining fiber-optic technology with digitized computer memory. It allows scanning and photographing of otherwise inaccessible locations.

Corrosion Sensors: Corrosion sensors were developed for the first time under a FHWA contract specifically for New York City's suspension bridges.

Fiber Optic Sensors: Fiber optic sensors can measure very small displacements as well as strain gauges, but are more resilient and insensitive to temperature changes. The information is readily transmitted online and lends itself to real-time monitoring.

Ground Penetrating Radar: Ground penetrating radar uses the propagation and retraction of high frequency waves through materials such as concrete to detect the presence of voids.



Director of Bridge Management Kevin McNulty Inspecting the Bridge Carrying the Belt Parkway over Ocean Parkway, Utilizing the Unit's Borescope. Experimental Corrosion Sensors Installed for a Test on Cable D of the Manhattan Bridge in 2011 (Left Corner). A Fiber Optic Sensor Monitoring a Crack in the Masonry of the Brooklyn Bridge's Manhattan Approach. A Ground Penetrating Radar Inspection of the Belt Parkway Bridge over Ocean Parkway. (Credit: Bojidar Yanev)

SUBSTRUCTURE

The name given to those elements below a bridge's road deck system, namely the ABUTMENTS, ANCHORAGES, BEARINGS, and PIERS.

SUPERSTRUCTURE

The superstructure is all that part of a structure above the bearings of simple and continuous spans, skewbacks of arches and top of footings of rigid frames; excluding backwalls, WINGWALLS and wing protection railings.

SUSPENDER

A wire rope or a short vertical rod that enables the forces of the roadway of a **SUSPENSION BRIDGE** to be translated into an axial force in the supporting **CABLES**.



Manhattan Bridge Suspenders. (Credit: NYSDOT and Jagtar Khinda)

SUSPENSION BRIDGES

Suspension bridges are high level bridges with spans that usually exceed 1,500 feet in length. Supported by large wire **CABLES** that are anchored to masses of concrete and which pass over the tops of towers, the road **DECK** is suspended at regular intervals by smaller cables called suspenders. While the main cables carry the entire live and dead load, stiffening **TRUSSES** are required to distribute the **LIVE LOAD** and prevent excessive deflection at any point. The Brooklyn, **Manhattan** and **Williamsburg** Bridges are noted New York City examples of this type.



Manhattan Bridge. (Credit: Bernard Ente) Williamsburg Bridge. (Credit: Peter Basich)

SWING BRIDGES

Swing bridges are movable bridges that are supported on a center **PIER** in the center of a waterway, and are opened by rotating the **SUPERSTRUCTURE** horizontally on wheels riding on a circular track. Two channels are provided on either side of the bridge for navigational ease when the bridge is in the open position. Because swing bridges are slow to operate and restrict channel width, they are rarely constructed today. Examples of swing bridges in New York City include the **Third Avenue, Madison Avenue, 145th Street, University Heights, Grand Street** and **Macombs Dam** Bridges.



Third Avenue University Heights Bridge. (Credit: Michele N. Vulcan) Grand Street Bridge. (Credit: NYSDOT) Macombs Dam Bridge. (Credit: Michele N. Vulcan)

TEMPORARY BRIDGE

A pedestrian and/or vehicular bridge built to carry traffic around an active construction site in lieu of **STAGE CONSTRUCTION**. The structure is removed after the new bridge is open to traffic.

TORSION

Twisting force usually caused by unbalanced or asymmetrical loading.

TOWER

Often the most majestic element in a SUSPENSION or cable stayed bridge, the **tower** serves as a support for the structure's main CABLES.



Inspectors on Manhattan Bridge Tower. (Inspector Credit: NYSDOT) Manhattan Bridge Tower. (Credit: Michele N. Vulcan) Manhattan Bridge Tower Detail. (Credit: Russell Holcomb) Brooklyn Bridge Brooklyn Side Tower Detail. (Credit: Jagtar Khinda)

TRAVELER MAINTENANCE

The maintenance of a traveler (movable underdeck platform) that runs under the East River Bridges so maintenance, inspections and repairs can be performed to the underside of the bridge.



Manhattan Bridge Traveler. (Credit: NYSDOT)

TRUSS

A rigid framework built of interconnecting steel beams, creating a large "girder" to support the floor system and transfer loads to the substructure over a longer span.



Brooklyn Bridge Franklin Square Truss. (Credit: Andy Hoang). General view of Manhattan Bridge Trusses B and C From the Lower Roadway on the Main Span. (Credit: NYSDOT) Chambers Street Pedestrian Bridge Truss.

TRUSS BRIDGES

Truss bridges possess road decks that are supported by Steel TRUSSES that rest on PIERS and ABUTMENTS, and which span short distances. The 174th Street Bridge in the Bronx is an example of a truss bridge.



East 174th Street Truss Bridge over Sheridan Expressway. (Credit: NYSDOT)

VERTICAL LIFT BRIDGES

Vertical lift bridges are movable bridges which have road DECKS that operate in much the same fashion as an elevator. Comprised of supporting end CABLES that are attached at one end to the road DECK and at the other to rotating drums, these bridges are raised and lowered to allow for the safe passage of marine traffic. The **103rd Street - Wards Island Pedestrian Bridge**, **Ninth Street Bridge**, and **Broadway Bridge** are examples of this type of bridge.



Wards Island Pedestrian Bridge. Ninth Street Bridge. (Credit: Bojidar Yanev) Broadway Bridge. (Credit: Bernard Ente)

VIADUCT BRIDGES

Viaduct bridges are multi-span bridges containing two end spans and any number of intermediate SPANS. The end spans are supported by an ABUTMENT on one end and a PIER on the other. The intermediate spans held aloft by piers.



Park Avenue Viaduct Bridge. Experiencing the Viaduct in a Whole New Way During Summer Streets 2009.

WEARING SURFACE

The topmost layer of material applied on the DECK or roadway that receives the traffic loads; also known as wearing course.



Brooklyn Bridge Wearing Surface. Manhattan Bridge Wearing Surface and Safety-Shaped Barriers. (Credit: NYSDOT)

WATERPROOFING MEMBRANE

A protective sheet placed between a WEARING SURFACE and concrete DECK to shield the concrete deck from water and corrosive chemicals which could cause DELAMINATION and SPALLING.

WELD

To fasten together metals by bonding with molten metal.

WINGWALL

Walls of reinforced concrete or stone that prevent the soil behind the ABUTMENT from eroding away and leaving a void beneath the APPROACHES of the bridge. Also known as a retaining wall.



Broadway Bridge, Bay Ridge Avenue Bridge, Ed Koch Queensboro Bridge, and Center Drive (Playmates Arch) Wingwalls. (First Three Credit: NYSDOT)

WINTER INSPECTION

Inspection of a site known to have a greater hazard potential during winter. This may be due to low ambient temperatures, accidental or deliberately set fires.



Timber Shoring Supporting a Failing Steel Beam – a Potential Winter Hazard.

(Credit: Bojidar Yanev)

COMPONENTS OF THE PREVENTIVE MAINTENANCE PROGRAM

Bridge Protection through Dirt and Water Control

Cleaning of Abutment and Pier Tops Removal of debris, dirt and vegetation from abutment and pier tops; cleaning and lubrication of bridge bearings.

Pier Top Cleaning of Bridges Over Water (including Pigeon Waste Removal)

This work consists of removing all debris, including pigeon waste, from bridge abutments and pier tops. Workers pull the material from the edges into the center of the pier with a broom or shovel while supervisors monitor the work to ensure that, to the maximum extent practicable, material is not pushed from the pier during the cleaning process. Using hand tools, debris is collected and removed for disposal. When removing pigeon waste, a 3.5 gallon manual spray canister is used to apply a bleach/water solution to the waste and to the area to be cleaned. The solution is sprayed at a low height to limit aeration and prevent material from falling into the waterway. Once the waste has been sufficiently treated, it is removed for proper disposal.

Cleaning and Lubrication of Bearings of Bridges Over Water

This work consists of cleaning bearings, as well as removing old and applying new lubricant where required. For bearings on flat, solid surfaces, located 12 inches or more from the edge of the structure, no containment/bulkhead will be used. A containment/bulkhead will be used when cleaning or lubrication bearings located less than 12 inches from the edge of the structure. Dirt and old lubricant are collected and disposed of properly.

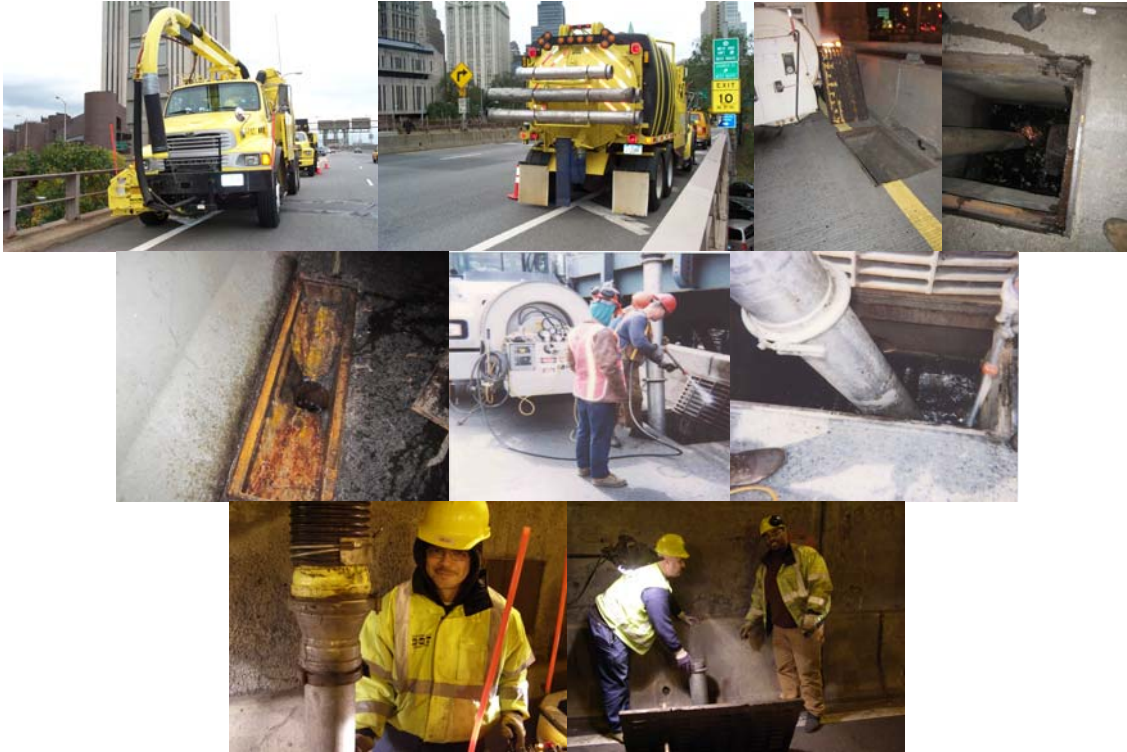
Debris Removal Removal of spilled trash; removal of rocks, wood, plastic or metal objects, tires, mufflers, wheel covers, and other traffic droppings; removal of paper products, bottles, cans, accumulated dirt and other trash. Debris removal is also required for walkways and plazas. For movable bridges and bridges over water, the protective fender systems need to be cleared of debris. The removal of debris from bridges is an important and critical component of maintenance. Debris can cause safety and hazard conditions. In addition, debris traps moisture and salts on the structure and prevents proper drainage.



Manhattan Bridge Tower After Debris Removal. (Credit: Peter Basich) 161st Street Pedestrian Bridge Over Major Deegan Expressway. Assistant City Highway Repairer Lashawn Elam and Highway Repairer Anita Ramos Removing Vegetation and Other Debris.

Cleaning of Drainage System Removal of debris, dirt and vegetation from drainage systems, including gutter gratings, gutters and leaders, scuppers, down spouts and scupper piping systems. The cleaning of surface gratings and gutters requires hand tools, brooms and brushes. In some cases, an air compressor might be needed to blow out some gutters. Cleaning the scuppers and scupper piping systems requires specialized equipment.

COMPONENTS OF THE PREVENTIVE MAINTENANCE PROGRAM



Drain Truck on Brooklyn Bridge Ramp. (Credit: Peter Basich) Drain Cleaning on the Williamsburg Bridge in September 2011. (Credit: Shaikh Islam) Cleaning Catch Basins on the Manhattan Bridge. Drain Crew: Highway Repairer Anthony Irizarry, Supervisor Highway repairer Michael Parise, and Assistant City Highway Repairer Giovanni Caballero. (Crew Credit: James Campbell)

Cleaning of Expansion Joints

Removal of debris and dirt from the troughs using compressed air or water; and cleaning and resealing of the joints. Performed on all bridges. Expansion joints are located at the surface level where they are subjected to impact and vibration and are exposed not only to the elements such as water, dust, grit, ultra-violet rays and ozone, but also to the effect of chemicals such as salt solutions, cement alkalis and petroleum derivatives. In addition to regular lubrication of moving parts, penetration of water, silt and grit must be effectively prevented or provision made for their removal.



Manhattan Bridge Expansion Joint Cleaning in 2008: Supervisor Highway Repairer Thomas Cruz, Assistant City Highway Repairer Antonio Asaro, Highway Repairer Louie Dumeng, and Oiler Stanley Karolewicz. Assistant City Highway Repairers Jonathan Adorno and Antonio Asaro, Oilers Stanley Karolewicz and Ronald Grady. (Credit: Thomas Whitehouse)



Expansion Joint Cleaning on the Williamsburg Bridge in September 2011. (Credit: Shaikh Islam)

COMPONENTS OF THE PREVENTIVE MAINTENANCE PROGRAM

Cleaning of Open Grating Decks Removal of debris and dirt from open-grating decks and washing with high-pressure water jets.

Sweeping Sweeping each bridge with a mechanical sweeper along each curb.



Mechanical Sweeper – Side and Rear Views. (Credit: Peter Basich)

Washing of Decks and Salt Splash Zones Washing of decks and salt splash zones to remove remnants of de-icing salts; use of compressed air and water jets to clean tight corners.



Washing the Williamsburg Bridge in July 2011 and the Ed Koch Queensboro Bridge in August 2011.

Roadway Surface Maintenance

Crack Sealing in Pavement and Curbline Sealing Cleaning of cracks and filling them with sealant; sealing with mastic material along the curb line to prevent water leakage onto bridge components. This maintenance function is sensitive to weather conditions.

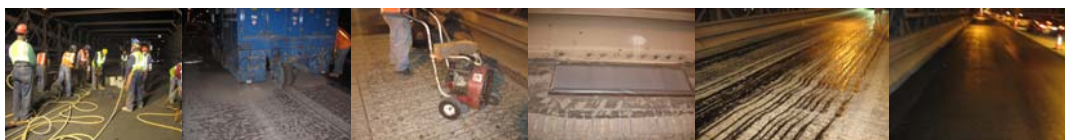
Repair of Sidewalks and Curbs Sidewalk repair to restore sidewalk to original condition. Curb repair to be undertaken along with this task.



Sidewalk Repairs in August 2010 at Houston Street Bridge over the FDR Drive: Tractor Operator Robert Noordzy (in Tractor), Bricklayer Vincent Sciulla, Cement Masons Frank Finizio and Victor Porowski, and Bricklayer Luigi Cuffari. Bridge Repairer and Riveter Brook Budd and Bricklayer Luigi Cuffari. Tractor Operator Noordzy (in Tractor), Cement Masons Frank Finizio (Foreground) and Victor Porowski (Background), and Bricklayer Vincent Sciulla. Bricklayer Vincent Sciulla, Bridge Repairer and Riveters James Philip and Brook Budd, Bricklayer Luigi Cuffari, Tractor Operator Robert Noordzy, Supervisor Bricklayer Edward Alfano, and Cement Masons Frank Finizio and Victor Porowski. (Credit: Russell Holcomb)

COMPONENTS OF THE PREVENTIVE MAINTENANCE PROGRAM

Replacement of Wearing Surfaces Removal of old wearing surface; preparation of exposed concrete slab or steel plate; installation of new wearing surface. The wearing surface is a two-inch course of bituminous concrete. Also includes minor deck repair, cleaning and waterproofing of deck.



Removing the Old Micro-Surfacing on the In-Bound Brooklyn Bridge. Shot Blasting for Surface Preparation. Cleaning the Roadway Surface. (Credit: Fouad Althaibani, Emad Shaker, and Sunil Desai) 2008: Covering all the Drainage Systems Before Applying the Micro-Surfacing on the In-Bound Brooklyn Bridge. Applying the Tack Coat for the Micro-Surfacing. Applying the New Micro-Surfacing Materials. (Credit: Fouad Althaibani, Emad Shaker, and Sunil Desai)



Resurfacing the Belt Parkway Bridge over Mill Basin on August 3, 2009. The Crew Completed a 13'x29' Cut in the Eastbound Center Lane, West Approach Spans. The Area Exhibited Rutting, Cracking and Excessive Patching. Breakout and Removal of Deteriorated Wearing Surface. Ironworker Assisting the Crew. Installation of New Asphalt. (Credit: Yousef Demis) Compacting the Asphalt With the Assistance of a Gasoline Roller Engineer From the Roadway Repair and Maintenance Division. (Credit: Ali Mozaffari)



Repaving the Williamsburg Bridge in 2011.

Electrical and Mechanical Component Maintenance of the 4 East River Bridges and 25 Movable Bridges

Maintenance of Electrical Devices Checking and servicing electrical systems such as travelers, relays, auxiliary contacts, meters, overload relays, time delay relays, span and tail locks, brake systems, transmitters, transformers, fuses, wiring, resistors, etc. Also includes checking interior anchorage lighting, caution lighting, navigation lighting, and necklace lighting. During inspection, the travelers of the East River Bridges are operated to ensure proper calibration of electric motors. If motors are not calibrated properly, the travelers may rotate and jam along their guides. Many of the movable bridges are very old and replacement parts are difficult to find or may not be available any longer. When necessary, Division personnel fabricate machine parts such as shafts, and brake and warning gate components. In addition to inspection of systems, the electrical technicians replace poor condition components with electric systems before corrective maintenance is required. This preventive maintenance strategy avoids disruption of bridge service to motorists. This is important, because once corrective maintenance is necessary, it may require the bridge to be out of service for lengthy periods.

COMPONENTS OF THE PREVENTIVE MAINTENANCE PROGRAM



Construction Project Manager Gholamali Mozaffari, and Electricians Nelson Crooks and Gary Emmanuel Fixing Machinery in the Ninth Street Bridge Operator House in April 2008. (Credit: Vera Ovetskaya) Repairing the Navigation Lighting on the Hunterspoint Bridge. On the Bridge: Oilers Carl Wharton, Richard Morreale, and Paul Califano, Mozaffari Ali, Electrician Naum Golburt, and Highway Repairers Manny Nardiello and Kevin Donahue. In the Snooper Bucket: Harry Parmaman and Supervisor Electrician Jose Done. (Credit: Samuel Teaw)

Maintenance of Mechanical Components Cleaning and lubrication of all movable parts and bridge cables for the four East River Bridges and the twenty-five movable bridges. Cleaning and lubrication of travelers; cleaning, wedging and oiling of the main cable strands and eyebars; cleaning of truss bearings; cleaning and lubricating air and fire line valves. Cleaning and lubrication is required to keep components from corroding and becoming immobile. Allowing components to seize could cause operating failure and introduce unsafe structural stresses.



Repairing the Brooklyn Bridge Standpipe System, 130 Feet Below the Roadway. Maintenance Crew Conducting the Annual Cleaning and Lubrication of the Solid Rod Suspenders Spherical Bearings on the Brooklyn Bridge. (Credit: Anatoly Orlov) Oiler T. McAuliffe at the 9th Street Bridge. Assistant Mechanical Engineer Vera Ovetskaya Climbing to the Brooklyn Bridge Tower in 2008. (Credit: Gennadiy Kaplun)



Oiler Tom Strommen Maintaining the Hydraulic Power Unit at the Hamilton Avenue Bridge in February 2010. (Credit: Vera Ovetskaya) Cleaning and Lubricating the Broadway Bridge. (Credit: Reza Taheri) Executive Director of Bridge Preventive Maintenance and Repair Thomas Whitehouse (Wearing Yellow Jacket) Inspecting the Broadway Bridge Machinery Room and Instructing the Contractor. (Credit: Albert Hong)

Steel Protection – Painting**

Total Paint Removal and Repainting Constructing negative pressure containment (Class 1A); washing and surface blasting to commercial-blast or near-white metal condition (Society for Protective Coating SP-6 or SP-10); constructing Class 3P containment; power tool cleaning to bare metal condition (Society for Protective Coating SP-11 or SP-15); lead monitoring and disposal; applying lead-free paint; primer, intermediate coat and top coat. Surface preparation is accomplished by abrasive blasting. The containment materials include tarps, plywood, scaffolding, and cables. Equipment includes blasting machines, needle guns, spray pumps, compressors, dust collectors, filters, and ductwork.

COMPONENTS OF THE PREVENTIVE MAINTENANCE PROGRAM

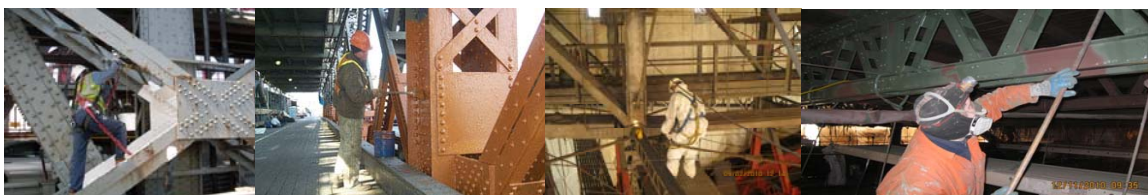


Assembly of Containment System at Franklin Square – in July and September 2010. Brooklyn Bridge Side Span Containment System – in November 2010.

The Division treats all lead paint waste as hazardous waste, and stores and disposes of it according to the Resource Conservation and Recovery Act (RCRA). Waste is stored in approved leak-proof drums and containers which are, in turn stored temporarily in a fenced, secured area on-site until they are transferred to a disposal/recycling facility.

Full-Steel (Overcoating) Overcoating of the entire bridge. Solvent cleaning and cleaning of steel surfaces in areas with deteriorated paint is conducted using approved environmentally safe paint removal techniques, and either power tools, hand tools or combination hand/power tools. Power tool cleaning is performed in a Class 3P containment, and hand tool cleaning in a Class 4 containment. Combination hand/power tool cleaning is performed in a Class 3P containment. A localized primer coat and a single finish coat are then applied by brush, roller, or spray over the entire bridge.

Salt Splash/Spot Painting This is a new process that combines salt splash with spot painting. It involves preparation of the area to be painted by power wash, using clean water or steam. Solvent cleaning is done in locations where oil and grease need to be removed from the steel surface. Areas to be power washed and painted are: the superstructure (up to six feet upwards from the deck), the underdeck steel (up to three feet from each side of the center line of the expansion joints), and the outside of the bridge's steel faces. In addition to these painted areas, we now perform localized surface preparation and painting of any deteriorated locations as mentioned in our spot painting definition above. After power washing, hand and power tools are used in areas that have started to show deterioration from accumulated de-icing agents. Power tool cleaning is performed in a Class 3P containment, and hand tool cleaning in a Class 4 containment. Combination hand/power tool cleaning is performed in a Class 3P containment. A spot primer coat and finish coat are then applied by brush or roller. Occasionally, when there is no danger of overspray, spray painting may be performed.



Williamsburg Bridge in June 2010: Application of Finish Coat at North Truss Diagonal. Salt Splash Painting on the Williamsburg Bridge. (Salt Splash Credit: Fouad Althaibani). Inspection of Blasting Surfaces Inside the Franklin Square Arch Containment in September 2010. Brooklyn Bridge Main Span Painting in December 2010.

COMPONENTS OF THE PREVENTIVE MAINTENANCE PROGRAM

TASK	IMPACT*
Debris Removal	6.1%
Sweeping	5.3%
Clean Abutments & Piers	8.1%
Clean Open Grating	7.0%
Clean Expansion Joints	9.1%
Wash Deck & Splash Zones	5.1%
Paint	4.2%

TASK	IMPACT*
Spot Paint	3.7%
Drain Cleaning	10.6%
Sidewalk & Curb Repair	2.5%
Pavement & Crack Sealing	12.2%
Wash Underside	15.9%
Mechanical Device Maintenance	6.7%
Replace Wearing Surface	3.5%

*IMPACT ON BRIDGE RATING



Cleaning the Brooklyn Bridge Brooklyn Anchorage in July 2007. (Credit: Serag Saad) During Fall Protection Training in August 2010, Executive Director of Bridge Preventive Maintenance and Repair Thomas Whitehouse Was Hoisted in the Air While Wearing a Full Body Harness - Demonstrating How to Deploy and Use the Foot Stand to Prevent Orthostatic Intolerance (Commonly Referred to as Suspension Trauma), Which Can be Fatal if Not Prevented. (Credit: Gean Pilipiak)

*Consortium of Civil Engineering Departments of New York City Colleges and Universities. *Preventive Maintenance Management System For New York City Bridges: Update 1998. Technical Report No. 98-1. 1999.* **Descriptions modified in November 2003.

MAINTENANCE PERSONNEL RESOURCES IN 2011

Preventive maintenance, corrective repair, flag repair, and painting work on the bridges and other structures within the City is performed by mechanics and supervisors in a variety of trades. The bridge operators provide safe and expedient passage to all marine and vehicular traffic under and on movable bridges. A breakdown of this work force by trade is:

	SUPERVISORS	MECHANICS
BRICKLAYERS	2	4
BRIDGE OPERATORS (INCLUDES ASSISTANTS)	22	65
BRIDGE PAINTERS	7	26
BRIDGE REPAIRERS/RIVETERS	3	42
CARPENTERS	3	14
CEMENT MASONS	-	9
ELECTRICIANS (INCLUDES HELPERS)	4	23
HIGHWAY REPAIRERS (INCLUDES ASSISTANTS & SEASONAL WORKERS)	25	76
MACHINISTS	-	2
MOTOR GRADER OPERATORS	-	1
OILERS	-	14
TRACTOR OPERATORS	-	1
TOTALS	66 SUPERVISORS	277 MECHANICS



Bridge Operator Mary Harrigan at the Union Street Bridge. (Credit: Adal Maldonado) Bridge Repairer Riveter Damian Venezia Squeezing Between the Girders to Access a Floor Beam That Needed to be Reinforced on the Ed Koch Queensboro Bridge – August 2010. (Credit: Hany Soliman) Supervisor Electrician Ben Cipriano Repairing a Damaged Electrical Cable on The Ed Koch Queensboro Bridge in March 2007. (Credit: Bala Nair) Civil Engineer Omar Makki at the Inspection of the Carroll Street Bridge - December 2010.



Bridge Operator-in-Charge Delonda Bates-Pinkney at the Controls of the 9th Street Bridge. She has worked for the Department since 1989. (Credit: Keith Burrowes) BOIC Bates-Pinkney Preparing to Check the Bridge's Mechanisms. (Credit: Vera Ovetskaya) Administrative Engineer John Kurre and Assistant Civil Engineer Sergey Parayev Preparing to Inspect the Borden Avenue Bridge Project Site in September 2010.

Revised 10/24/11

MAINTENANCE PERSONNEL RESOURCES IN 1900



A breakdown of the Department of Bridges work force by trade in 1900:

	SUPERVISORS	MECHANICS
AXEMAN		8
BLACKSMITH	1	2
BOILERMAKER		1
BRICK MASON	1	4
BRIDGE TENDER	15	137
CARPENTER	1	23
DOCKBUILDER		1
DRIVER		11
FIREMAN		18
FITTER		3
GATEMAN		7
INSPECTOR (INCLUDING STEEL)		10
LABORER (INCLUDES HELPERS)	7	111
LEVELER		4
LINEMAN		3
MACHINIST (INCLUDING HELPERS)		13
MASONRY INSPECTOR		7
MECHANIC	1	2
PAINTER	1	16
RIGGER		11
RIVETER	1	6
RODMAN		4
SHIP CARPENTER		4
SOUNDER		4
STABLEHAND		3
STEAM ENGINEER (INCLUDES DYNAMO)		15
STONE CUTTER/STONE MASON	1	2
SUPERINTENDENT ELECTRIC LIGHT	1	
SUPERVISOR (INCLUDES ASSTS)	12	
TOOLMAN		2
TRANSITMAN		7
TRIMMER		2
TOTALS	42 SUPERVISORS	441 MECHANICS



Willis Avenue Bridge Curbing and Road Repair in the Early 1920's. Gateman J. J. McDonough (on left), Great-Grandfather of Deputy Chief Engineer Russell Holcomb

BRIDGE INSPECTION EQUIPMENT LIST

Inspector Equipment	Inspection Team Equipment	Inspection Van Equipment
Boots-Knee High Dust Masks (Disposable) Safety Goggles Hard Hat With Liner Rain Hat & Jacket Work Gloves Long Cuff Work Gloves Unlined Work Gloves Lined Work Boots Chipping Hammer Clip Boards Deceleration Lanyards Flashlight (2 "D" Cell) Safety Vest Level 9" (Magnetic) Tool Bags (24") Class III Body Harness Lanyards Bridge Inspection Manual (New York State) Technical Advisories For Inspection Manual Emergency Procedure Instructions OSHA Approved Respirator & Filters Belt With Two Drop Forged D-Rings Hard Hat Flashlight	5 Boro Map Binoculars Broom Digital Camera Camera Card Reader Hand Compass Screwdriver Set (Regular) Screwdriver Set (Phillips) Dye Penetrant Kit Lantern D-Meter With Test Block Marking Paint Spray Retract Survey Rod 25' Portable Laser Distance Meter Handheld Computer Thermometer Spray Penetrating Oil Cell Phone/Radio Vernier Calipers Wrenches 12" Tool Pouch Lumber Crayons Spray Paint Awl Calipers Hacksaw Hacksaw Blades (Extra) Paint Scraper Inspection Mirror Level 24" Pliers 8", Vinyl Coated Plumb Bob Pocket Knife Ruler 25' or 30' (Metal) Ruler 100' (Fiberglass) Scraper Blades (Extra) Wire Brush Folding Ruler 8' Rope 5/8" With 100' Coil Digital Angle Gauge	Tool Chest Clip Boards Flashlight (3 "D" Cell) Fire Extinguisher First Aid Kit 3 Safety Flags Step Ladder 6' or 8' 10 Traffic Cones <div style="text-align: center;">Special Equipment for Inspection of Bridges Over Railroads</div> <div style="text-align: center;">Third Rail Insulating Mat</div> <div style="text-align: center;">Put In Trucks By Highway Repairers When Needed</div> <div style="text-align: center;">Generator Oil For Generator Extension Ladder 32' Extension Ladder 24' Extension Ladder 16' Shovel Push Broom Dust Pan & Sweep Broom Bottled Water Bolt Cutter Flood Lights Approved Safety Gasoline Can Sledge Hammer (8 lbs.) Extension Cord Winder </div>
 <p>Team Leader Thirugnanam Mohan Inspecting City Island Bridge. (Credit: Bojidar Yanev). Diver Preparing to Inspect the Borden Avenue Bridge in April 2009. (Credit: Bernard Ente)</p>		 <p>Brooklyn Bridge Biennial Inspection in October 2010.</p>

*New York City Department of Transportation, Division of Bridges. *Inspections and Bridge Management Section Equipment Checklist*. 2006, Revised 11/15/10.

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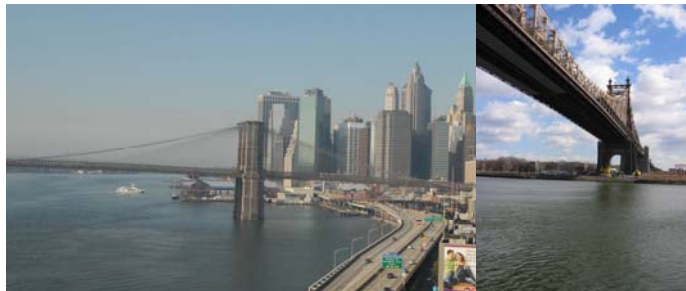
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Bridge Flags Engineer Rajendra Pandya and Harlem River Bridges Engineer Reza Taheri. (Credit: Peter Basich) Deputy Chief Engineer Russell Holcomb on Ed Koch Queensboro Bridge. Mechanical Engineering Intern Christopher Brathwaite Assisting in Strain Gauge Balance Testing on Unionport Bridge in October 2010.



Design-Build Engineer Leonid Gitis. Component Rehabilitation Engineer Malgorzata Banka. Assistant Civil Engineer Andrew Hoang. (Credit: Peter Basich) Civil Engineer Tiffany Wong on the Brooklyn Bridge Traveler. (Credit: Andrew Hoang)

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Assistant Civil Engineer Elena Maressova, Associate Project Manager Mariya Zhurakhinskaya, Assistant Civil Engineer Ajda Ozyurt. Project Manager Tamara Berlyavsky, Assistant Mechanical Engineer Nancy Guernsey. Construction Project Manager Beatriz Duran. (Credit: Kamran Sikandar). Future Engineers on the Brooklyn Bridge. (Children Credit: Joseph Flood)

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Brooklyn Bridge: 1909 View, 2009 Tower Closeup, and 2010 View. (2009 Credit: Emily Goodman, 2010 Credit: Jagtar Khinda)

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Manhattan Bridge Plaque Detail. (Credit: Peter Basich)

Revised 12/29/11

2011 INVENTORY LOCATION MAPS

On these maps, all Community Boards consist of three (3) digits. The first digit is for map plotting purposes. The next two digits identify the Community Board. In cases of certain parks and airports, the Community Board number does not correspond with any Community Board. These exceptions are:

Bronx	26=Van Cortlandt Park	Brooklyn	55=Prospect Park
	27=Bronx Park		56=Gateway Nat'l Rec. Area/Floyd Bennett Field
	28=Pelham Bay Park	Queens	80=La Guardia Airport
Manhattan	64= Central Park		81=Alley Pond Park
			82=Cunningham Park
			83=JFK Airport
			84= Gateway Nat'l Rec. Area/Fort Tilden-Jacob Riis Park

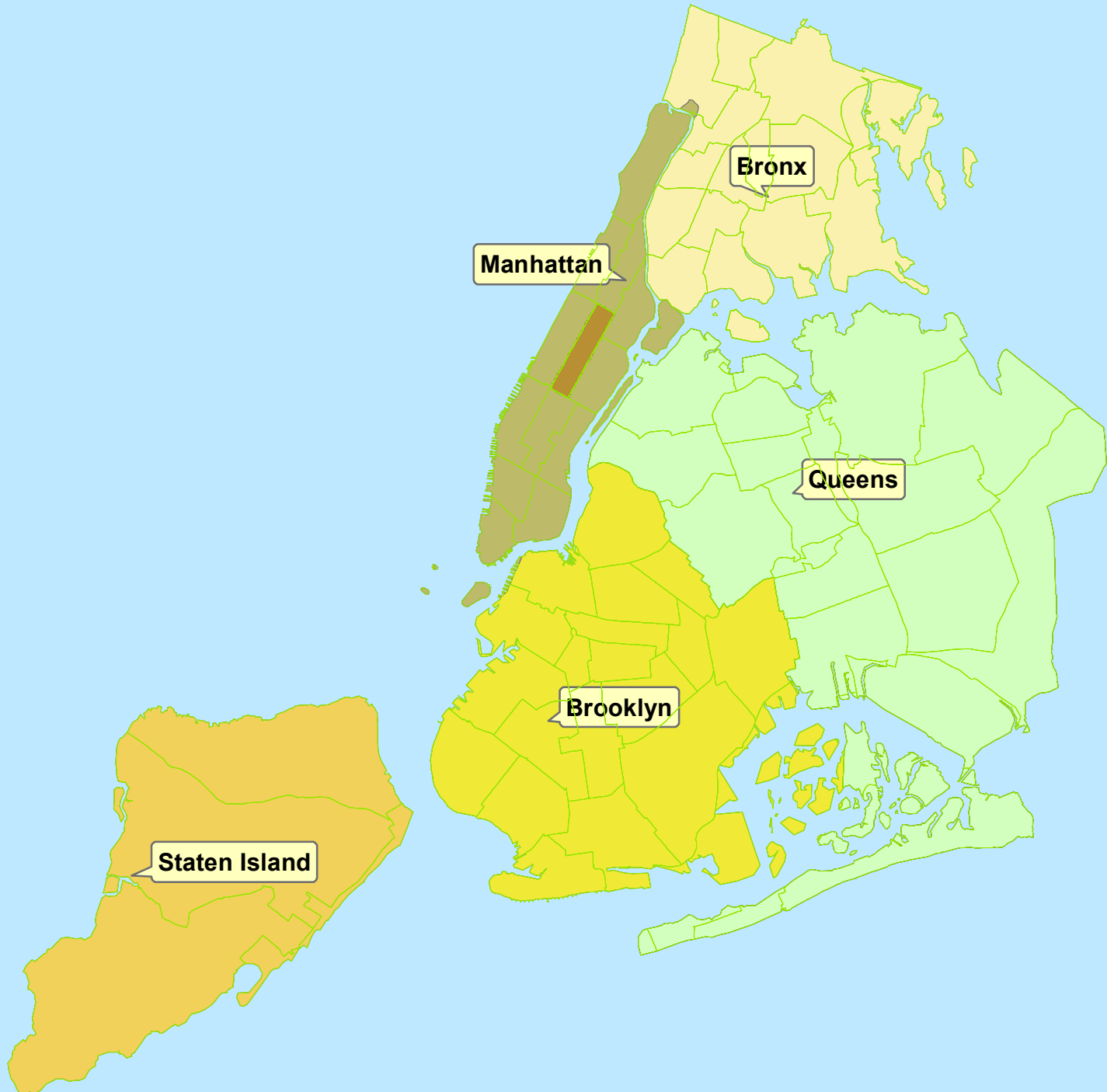
The Community Board listings correspond to those listed in the inventory, which begins on page 176.

Some structures fall on Community Board dividing lines: their additional Community Boards are identified in the inventory in columns CD2 and CD3.



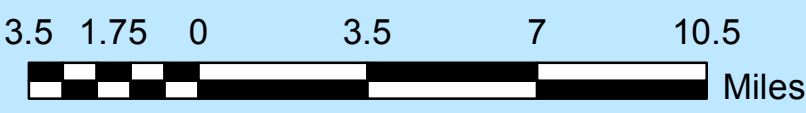
Brooklyn, Manhattan, and Williamsburg Bridges. (Credit: Michele N. Vulcan) University Heights Bridge in October 2010. (Credit: Duane Bailey-Castro)

ALL BOROUGHES

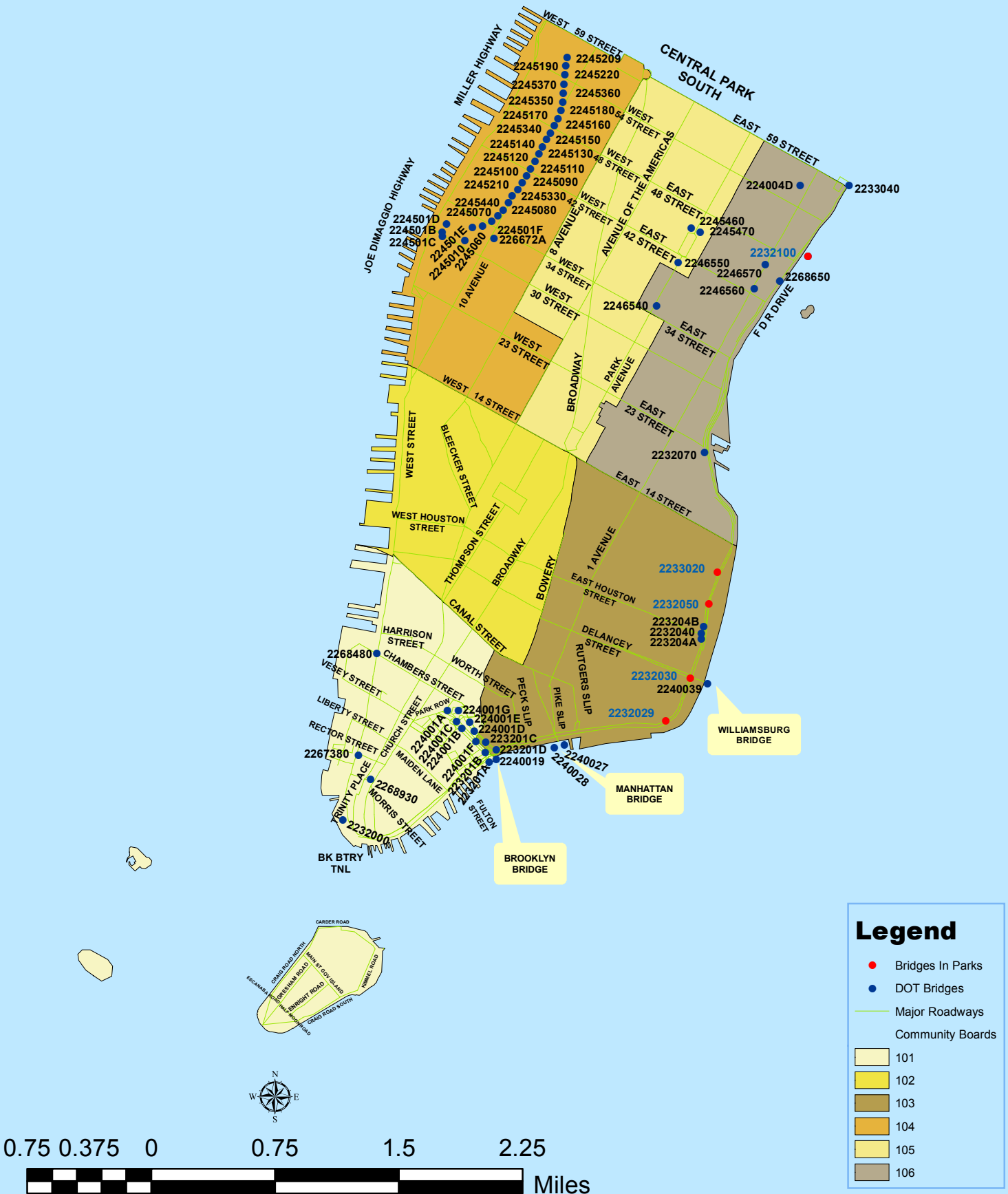


Legend

- Central Park
- The Bronx
- Brooklyn
- Manhattan
- Queens
- Staten Island



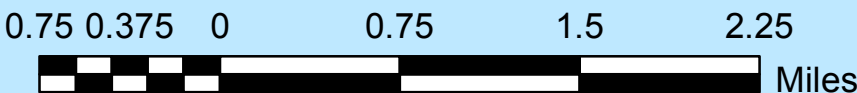
DOWNTOWN MANHATTAN



Legend

- Bridges In Parks
- DOT Bridges
- Major Roadways
- Community Boards

	101
	102
	103
	104
	105
	106



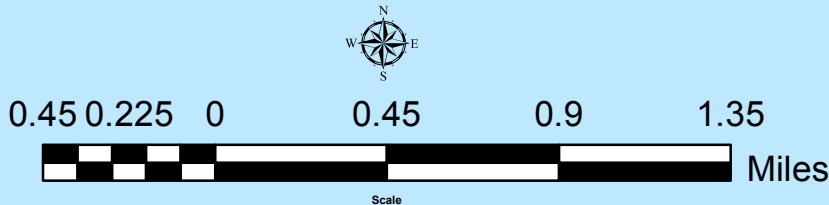
Scale

MIDTOWN MANHATTAN

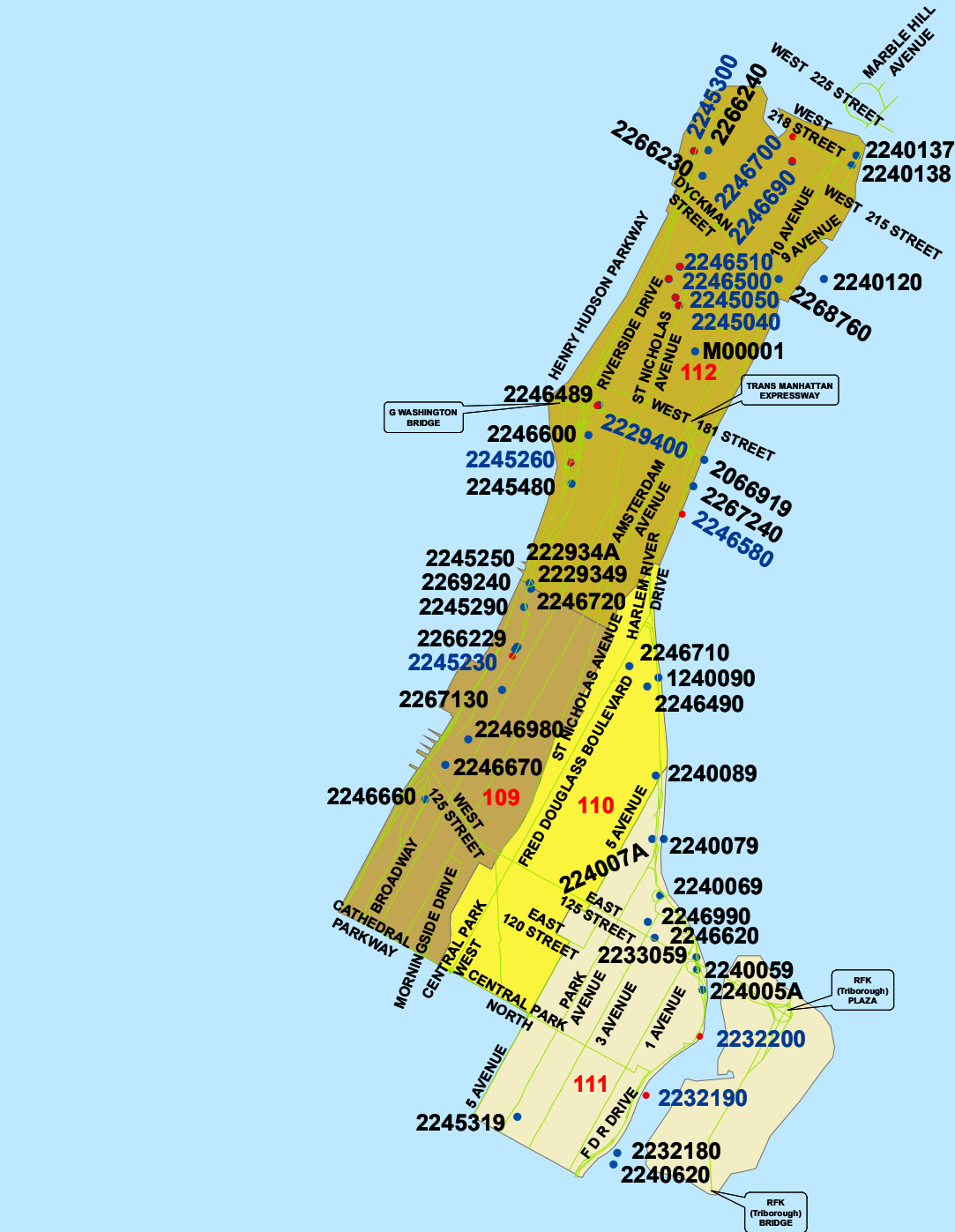


Legend

- Bridges In Parks
- DOT Bridges
- Major Roadways
- Community Boards
 - 107
 - 108
 - 164

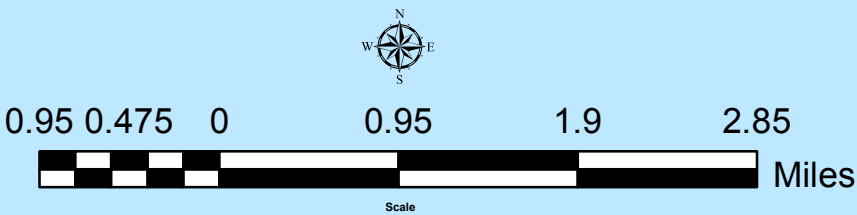


UPTOWN MANHATTAN



Legend

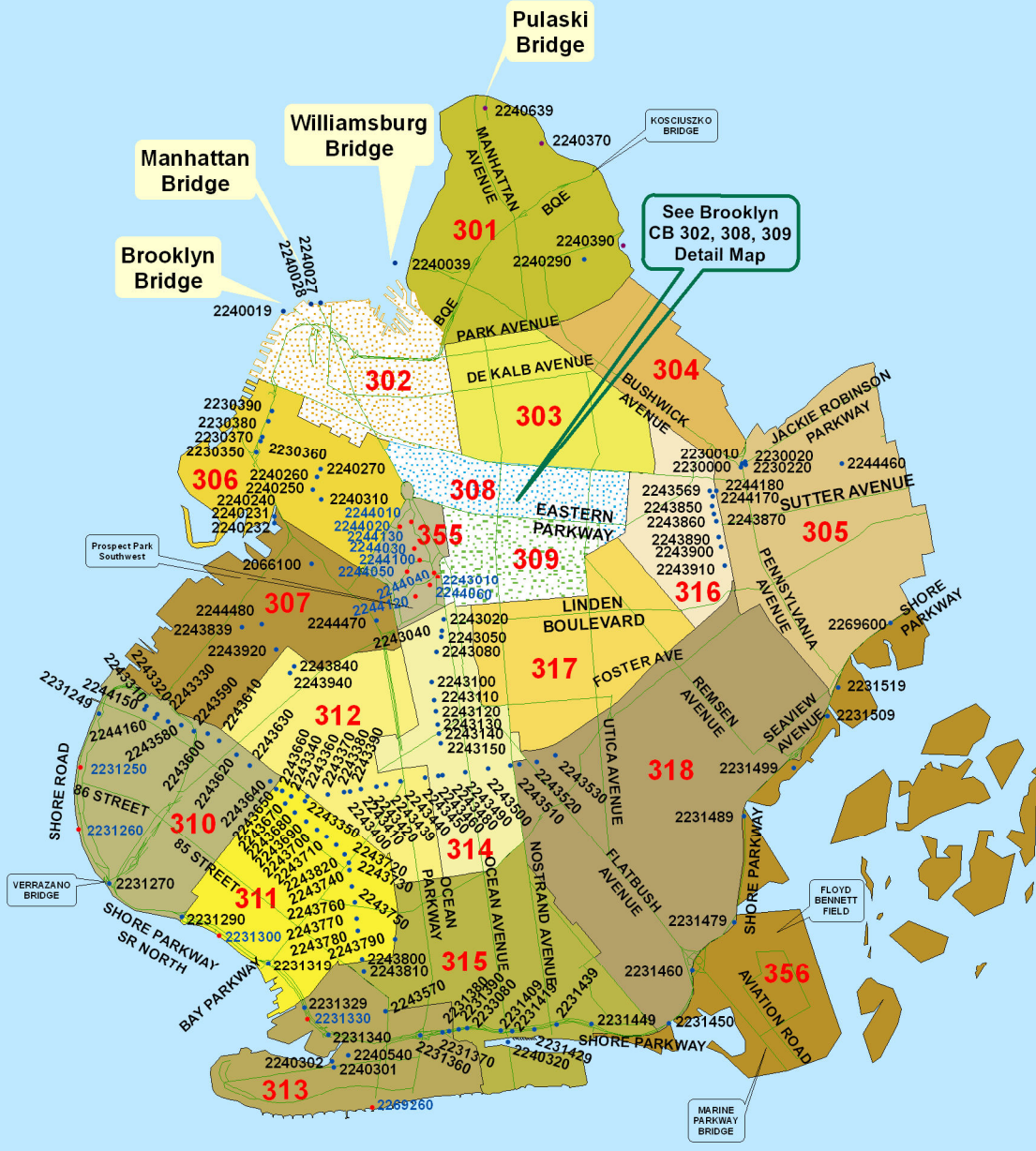
- Bridges in Parks
- DOT Bridges
- Major Roadways
- Community Boards
- 109
- 110
- 111
- 112



BRONX



BROOKLYN

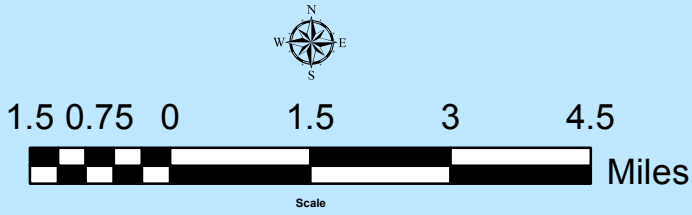


Legend

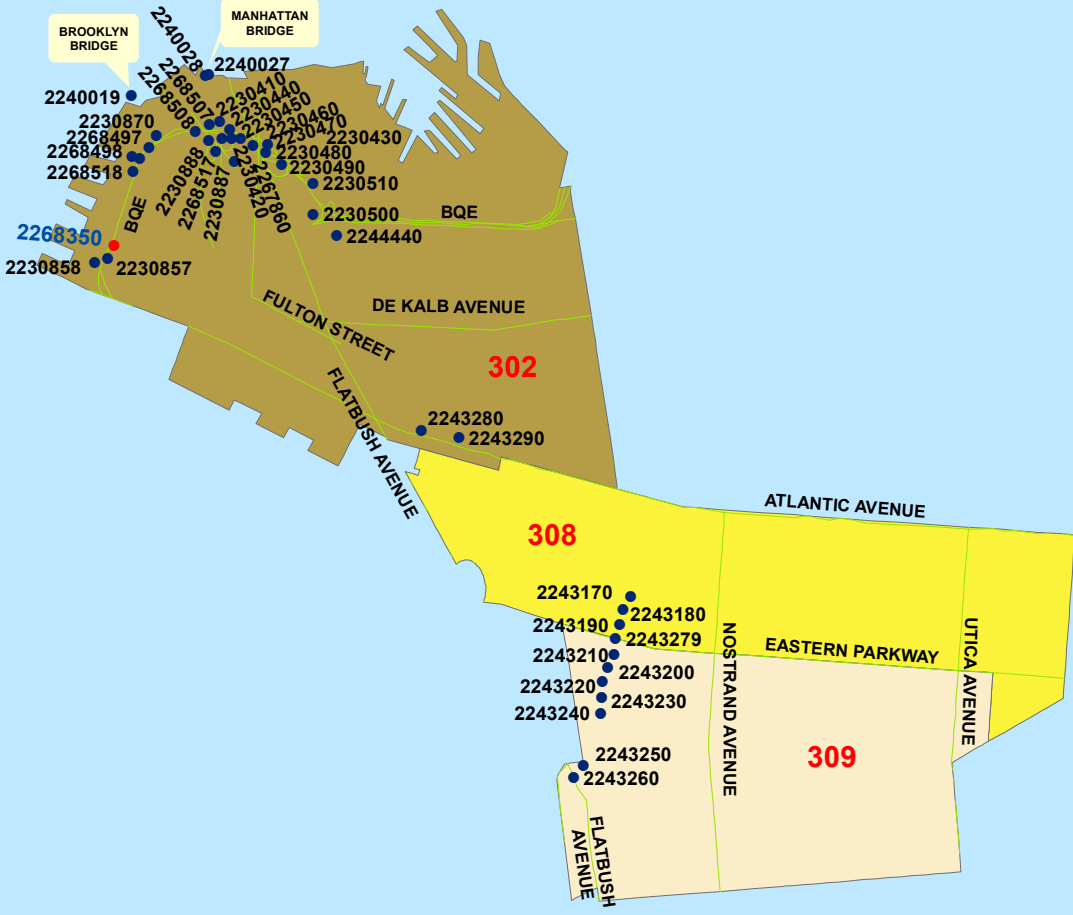
- Bridges In Parks
- Brooklyn/Queens Bridges
- Manhattan/Brooklyn Bridges
- DOT Bridges
- Major Roadways

Community Boards

	301
	302
	303
	304
	305
	306
	307
	308
	309
	310
	311
	312
	313
	314
	315
	316
	317
	318
	355
	356

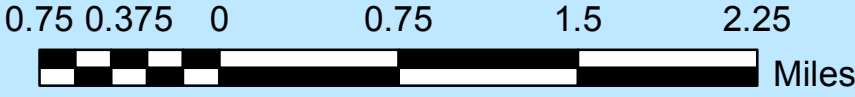


BROOKLYN CD 302, 308, & 309 DETAIL



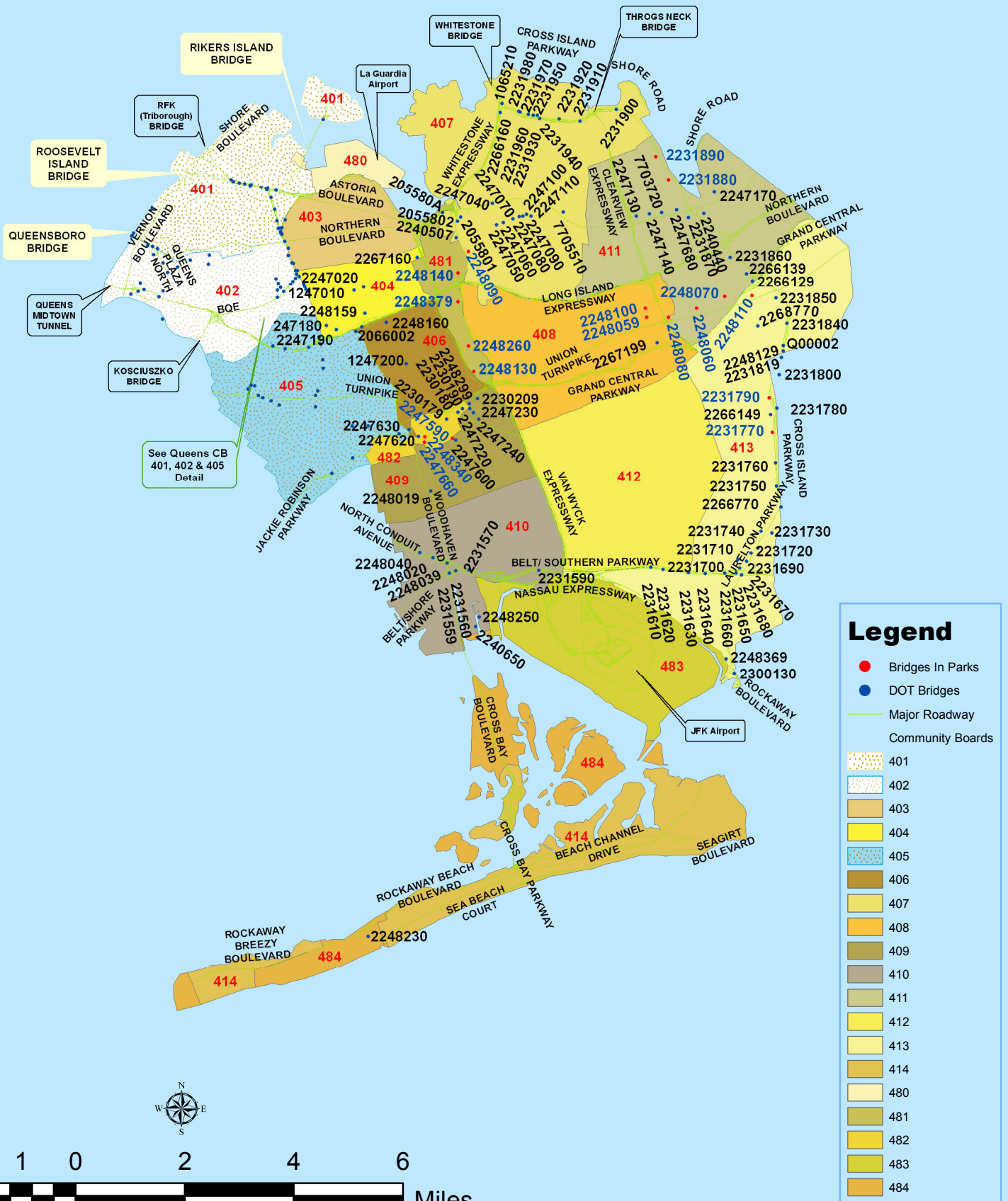
Legend

- Bridges In Parks
- DOT Bridges
- Major Roadways
- Community Boards
- 302
- 308
- 309



Scale

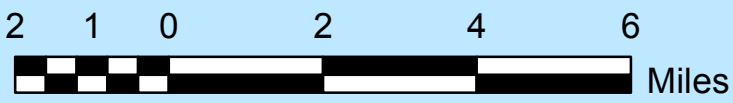
QUEENS



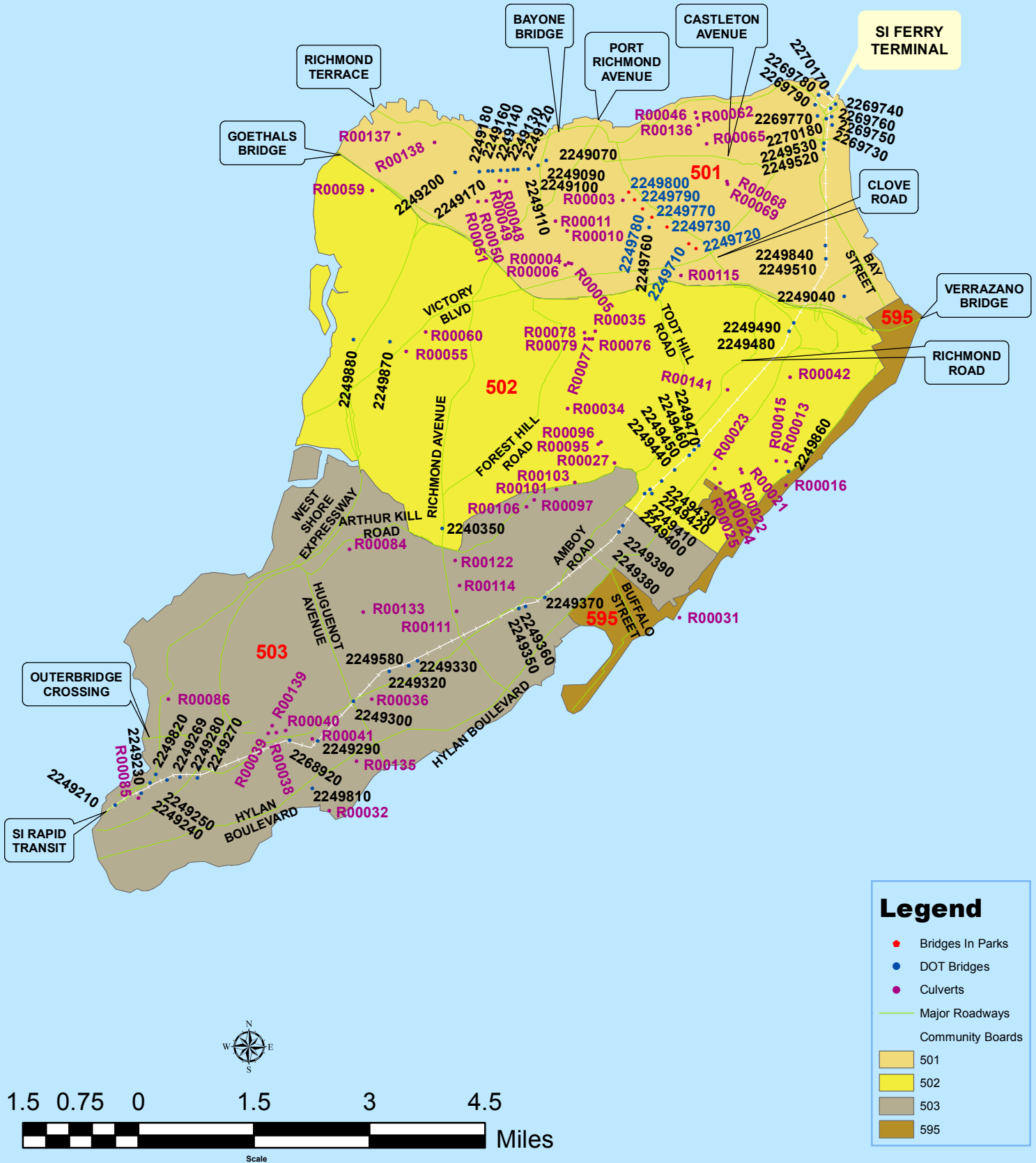
See Queens CB
401, 402 & 405
Detail

Legend

- Bridges In Parks
 - DOT Bridges
 - Major Roadway
 - Community Boards
- | | |
|--|-----|
| | 401 |
| | 402 |
| | 403 |
| | 404 |
| | 405 |
| | 406 |
| | 407 |
| | 408 |
| | 409 |
| | 410 |
| | 411 |
| | 412 |
| | 413 |
| | 414 |
| | 480 |
| | 481 |
| | 482 |
| | 483 |
| | 484 |



STATEN ISLAND



SI FERRY TERMINAL

RICHMOND TERRACE

BAYONE BRIDGE

PORT RICHMOND AVENUE

CASTLETON AVENUE

GOETHALS BRIDGE

CLOVE ROAD

VERRAZANO BRIDGE

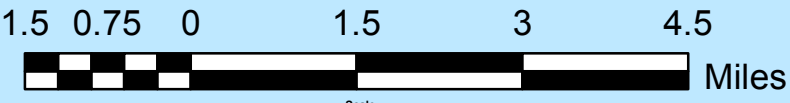
RICHMOND ROAD

OUTERBRIDGE CROSSING

SI RAPID TRANSIT

Legend

- Bridges In Parks
- DOT Bridges
- Culverts
- Major Roadways
- Community Boards
- 501
- 502
- 503
- 595





Michael R. Bloomberg
Mayor



Janette Sadik-Khan
Commissioner