NEW YORK CITY DEPARTMENT OF TRANSPORTATION DIVISION OF BRIDGES 2005 BRIDGES AND TUNNELS ANNUAL CONDITION REPORT



Examples of Large Loads Transported in 2005 With the Assistance of the Division's Truck Permit Section. Natasha, a 25-Year Old, 1,200-Pound Beluga Whale. (Credit: J.L. Maher/Wildlife Conservation Society). Consolidated Edison Relocated a 377,000 Pound Electrical Reactor – This was the Largest Equipment Move by the Utility Since the End of 2003. New Swarovski[®] Star at Rockefeller Center During the Holiday Season – the Star Measured 9.5 Feet in Diameter and Was Adorned With 25,000 Octagon-Shaped Crystals.

Michael R. Bloomberg, Mayor Iris Weinshall, Commissioner Judith E. Bergtraum, First Deputy Commissioner

Henry D. Perahia, P.E., Chief Bridge Officer

Russell Holcomb, P.E., Deputy Chief Engineer, Maintenance, Inspections & Operations Lawrence King, P.E., Deputy Chief Engineer, Roadway Bridges Kamal Kishore, P.E., Deputy Chief Engineer, Engineering Review & Support Albert P. Novak, P.E., Deputy Chief Engineer, Specialty Engineering & Construction Jay Patel, P.E., Deputy Chief Engineer, East River & Movable Bridges Jennifer Dee-Leibman, Chief Staff Manager/Executive Director, Community Affairs Dorothy Roses, Executive Director, Management & Support Services

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Cover Photograph

Macombs Dam Bridge Over the Harlem River in May 2005. (Credit: Peter Basich)

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A Message from the

Dear Friends,

On behalf of the many dedicated professionals who staff the Division of Bridges, it is my pleasure to present the 2005 Edition of the New York City Department of Transportation's Annual Bridges and Tunnels Condition Report, as mandated under New York City's 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 2005 calendar year.

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, 25,148 square feet of concrete were used to renew sidewalks, curbs, and road decks; some 9,279 cubic yards of debris were removed; 869 bridge drains were cleaned; and crews eliminated 4,403,955 square feet of graffiti. DOT crews also eliminated 473 safety flag conditions that presented clear vehicle or pedestrian traffic hazards. Also, in the Department's ongoing attempts to minimize construction disruptions, we consistently used incentive and disincentive clauses in contracts to reward contractors who finish work early and penalize contractors who finish work late.

The Division's proud tradition of design and engineering excellence was recognized with awards from various entities, including:

- The American Council of Engineering Companies of New Jersey's Honor Award for the reconstruction of the Belt Parkway Bridge over Ocean Parkway.
- The American Council of Engineering Companies of New York's Silver Award for the reconstruction of the Belt Parkway Bridge over Ocean Parkway.
- The Metropolitan Section of the American Society of Civil Engineers' 2005 Design-Build Project of the Year Award for the reconstruction of the Belt Parkway Bridge over Ocean Parkway.
- The National Steel Bridge Alliance's Merit Award for the design of the new Third Avenue Bridge over Harlem River.
- The New York Tri-State Metro Chapter of the Design-Build Institute of America's "Project of the Year" award for the reconstruction of the Belt Parkway Bridge over Ocean Parkway.
- *New York Construction Magazine* selected the reconstruction of the Third Avenue Bridge over the Harlem River as the Best Bridge Project of 2005.

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,

Wendall

Iris Weinshall Commissioner

Inventory

In calendar year 2005, the inventory of bridges under the jurisdiction of the Division remained at 790. Over the past 10 years, there has been a mostly steady decline in the number of bridges rated "Poor," and a somewhat steady increase in the number of bridges rated "Very Good," as shown below.

	1996 [*]	1997	1998	1999	2000	2001	2002	2003	2004	2005
Poor	48	40	24	16	13	9	8	4	6	4
Fair	524	530	516	507	481	459	451	429	456	458
Good	148	145	154	160	180	196	202	209	212	210
Vgood	59	55	75	81	85	88	94	111	116	118
Unrated	68									
	**847	770	769	764	759	752	755	753	[#] 790	790

* In 1996, NYCDOT adopted a new rating scale to be used to determine the verbal condition of bridges. The new scale matches the rating scale by New York State DOT. The new scale changed the dividing line between Fair and Good bridges from 4.500 to 4.999. The net effect of this change was that, in 1996, 157 bridges that would have been rated Good were classified as Fair. This accounts for the increase in Fair rated bridges and the decrease in Good rated bridges.

** The total count of structures in 1995 and 1996 still included the culverts.

[#] 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) are rated "Fair," which accounts for the increase in Fair rated bridges. 1 of the Parks additions is rated "Poor."

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 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).

2005 was a year in which the use of incentives/disincentives resulted in the early completion of several new bridge projects, such as:

The early completion in August 2005 of the reconstruction of the **Congress Street Bridge over Brooklyn-Queens Expressway** earned the contractor the maximum incentive of \$480,000.

In December 2005, the **17th Avenue Bridge over NYCT** was re-opened to traffic 29 days early, thus earning the contractor a \$300,000 incentive.

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 2004-2005, a total of 52,000 gallons of anti-icing chemicals 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. The construction work is expected to commence in spring 2007.

2005 Awards

In 2005, the outstanding work of the Division was recognized by the receipt of several awards. In March 2005, the American Council of Engineering Companies of New Jersey selected the reconstruction of the Belt Parkway Bridge over Ocean Parkway for an Honor Award in its 2005 Engineering Excellence Awards. In April 2005, the American Council of Engineering Companies of New York selected the reconstruction of the Belt Parkway Bridge over Ocean Parkway Bridge over Ocean Parkway for two Silver Awards in the structural systems category in its 2005 Engineering Excellence Awards. In June 2005, the Metropolitan Section of the American Society of Civil Engineers selected the reconstruction of the Belt Parkway as the 2005 Design-Build Project of the Year.

In July 2005, the National Steel Bridge Alliance selected the Third Avenue Bridge over Harlem River project for a merit award in the movable span category. The Prize Bridge Awards honor significant and innovative steel bridges constructed within the United States. Projects are judged on innovation, aesthetics, design, and engineering solutions. The winning projects were also announced and described in the November 2005 issue of Modern Steel Construction Magazine.

In September 2005, the New York Tri-State Metro Chapter of the Design-Build Institute of America selected the reconstruction of the Belt Parkway Bridge over Ocean Parkway as the 2005 Project of the Year in the transportation category. In December 2005, New York Construction Magazine selected the reconstruction of the Third Avenue Bridge over the Harlem River as the Best Bridge Project of 2005.

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.

The New York City Department of Transportation's Division of Bridges is comprised of six 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 790 bridges (including 6 tunnels), and 67 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 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 Specialty Engineering and Construction Bureau is responsible for all Component Rehabilitation activities, Emergency Declarations/Specialty Engineering Services, 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 (E.I.C.'s) 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.

The *Emergency Declarations/Specialty Engineering 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 spot and salt splash/spot painting. Salt splash/spot painting is performed five years after full steel painting, and spot painting is performed four years after salt splash/spot. Three years after spot, we once again perform full steel painting. The interval between full steel applications is 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.

DIVISION OVERVIEW

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. 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 Deputy Chief Engineer for Specialty Engineering and Construction also acts as the **Deputy Chief Bridge Officer**, assuming the responsibilities of the Chief Bridge Officer in that person's absence.

The **East River and Movable Bridges Bureau** 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 Bureau 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 (E.I.C.'s) 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 **Bureau of Roadway Bridges** 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 prepare plans and specifications for bridge rehabilitation/reconstruction 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 projects under construction by the **Bureau of Bridge Maintenance, Inspections and Operations**. 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 specifications prepared by consultants.

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

The *Specifications Unit* prepares and reviews specifications for all City-let in-house and consultant-designed bridge construction projects, processes the contracts for bidding, prepares and transmits addenda, maintains and updates City bridge construction boiler plates, and maintains an inventory of all NYC and NYS special specifications used in City-let bridge projects.

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, microfilming, 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 digital CDs, microfilm and indexes. 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 **Engineering Review Section** consists of five units: Engineering Review and Estimates, Utilities, Land Acquisition, Geotechnical Engineering, and Scope Development.

The Engineering Review and Estimates Unit reviews all City-let bridge construction contract drawings; reviews drawings from other Agencies and entities, as well as State and private companies; and ensures that the work to be performed conforms to NYCDOT requirements. This unit establishes design standards, including seismic requirements, and oversees estimates prepared by consultants. This unit also reviews superload truck permit applications and performs load analyses for the City's bridges. In addition, the unit conducts other, non-bridge engineering projects, such as the annual balloon wind study for the Macy's Thanksgiving Day Parade.

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

The *Land Acquisition Unit* reviews and maintains a database of easement issues, right-of-way, and Uniform Land Use Review Procedures (ULURP).

The *Geotechnical Engineering Unit* provides geotechnical-engineering services and oversees seismic design requirements for City-let contracts for bridge projects.

The Scope Development Unit reviews inspection reports and structural condition ratings to develop the scope of work for the rehabilitation of deficient bridges, and initiates the procurement of Design Consultant contracts.

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, structural steel and precast/prestressed structural components for all bridge projects, irrespective of the funding source, are handled by this section. Current major projects include the Macombs Dam, Third Avenue, Manhattan, Williamsburg, Metropolitan Avenue, Queensboro, and 145th Street Bridges.

Through its *Environmental Engineering Unit*, Quality Assurance also oversees the implementation of the Final Environmental Impact Statement (FEIS) 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, site safety, and OSHA compliance. The role of this unit in ensuring public safety has been recognized and commended by the community.

The unit has been instrumental in preparing and obtaining waste water discharge permits for numerous projects involving the generation and disposal of waste water. Waste water testing and analysis (as well as application of SPDES permits) for several movable bridges such as the Eastern Boulevard Bridge, Greenpoint Avenue Bridge and Hamilton Avenue Bridge, have also been a part of the waste water management program. The unit has provided environmental oversight on major capital projects such as the Third Avenue Bridge, the Willis Avenue Bridge, the Washington Bridge, 145th Street Bridge, and the Queensboro Bridge, as well as Component Rehabilitation projects and Design/Build projects.

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 790 bridges (including 6 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, photographs of 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.

The *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; 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. The unit contributed to the 1999 update of the Preventive Maintenance Manual for NYC bridges. In conjunction with the Port, Triborough Bridge and Tunnel, 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 2005, Bridge Operations effected a total of 6,454 openings, 5,163 of which allowed 8,027 vessels to pass beneath the bridges. The remaining 1,291 openings were for operational and maintenance testing. The section also operates the city's six 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.

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 six primary sections: *Office of the Executive Director, Administrative, Budget, Capital Procurement, Capital Coordination and Truck Sections.* 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 (EEO) enforcement, confidential investigations, Bridges' Engineering Service Agreements, space allocation, mail delivery, and special projects, the *Executive Director* oversees, on an executive level, the following areas and functions:

of the Administrative Section oversees administers The Director and 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 Descriptions; maintaining all Division organization charts; scheduling EEO 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 Two Rector Street in Manhattan. The Director of Administration also serves as the Deputy Director of the Bureau of Management and Support Services, and assumes the responsibilities of the Executive Director in that person's absence.

The Director of the Administrative Section also oversees the following two 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 NYCDOT Communication Center; and collects required documentation from field personnel for checking Driver Certifications with the Department of Motor Vehicles (DMV).

The **Director of the Budget Section** 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 (ACCO). The duties of this unit include: overseeing the Division's capital consultant contracts from inception to completion; acting as liaison between engineers and the consultant programs unit, handling all engineering questions and answers; preparing status reports; and coordinating Railroad Force Account Agreements for Division construction projects.

Railroad Force Account Agreements are a vital component in the rehabilitation/reconstruction program since train traffic affects 319 (40%) 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.

Our Legal Department and Division engineering staff work together to clarify force account language in an attempt to avoid ambiguity. New agreements are being designed to specify clearly when notices for outages or flagging protection are required, who will be responsible when outage/flagging is canceled, and specify those documents that can be audited to expedite reimbursement of bills. These additions will streamline payment processing. The use of a Master Agreement is not feasible since each railroad has its own rules and regulations governing its employees, its own scheduling procedures and different billing requirements/procedures.

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.

This approval process typically requires three to six months to complete. A tracking process for change orders has been implemented; it reduces the time for the approval process to one-and-a-half to three months.

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 \$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; developing and maintaining criteria by which the City's involvement in joint City/State projects is analyzed and evaluated; and determining applicability of projects for funding through the Federal Inter-modal Surface Transportation Efficiency Act (ISTEA).

The *Truck Section* issues Annual Overweight Load Permits, Annual Self-Propelled Crane Permits, and Daily Oversize/Overdimensional/Supersize Truck Permits, all in accordance with the New York City Department of Transportation Policy and Procedures and the New York City Traffic Rules and Regulations.

JANUARY

Indian Ocean Tsunami Victims Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on January 3, 2005 in tribute to the victims of the December 26, 2004 Indian Ocean tsunami. The tsunami left at least 216,000 people dead or missing and nearly 2 million homeless in 11 countries. The flags remained at half-mast until the end of the week.



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

Hamilton Avenue Asphalt Plant (Brooklyn)

On January 9, 2005, Division ironworkers repaired the plant's scrapers, chutes, bins, and scale. On January 15, 2005, Division ironworkers repaired the plant's stack, chutes, shaker, and cyclone.

Steinway Street Bridges over Grand Central Parkway WB & EB (Brooklyn-Queens Expressway) (Queens)

The temporary bridges were opened to two lanes of northbound traffic, as well as pedestrians, on January 10, 2005.



Opening of the Temporary Bridges.

52nd Street Bridge over LIIR Bay Ridge (Brooklyn)

The reconstruction of this bridge, which began on May 5, 2003, was substantially completed on January 11, 2005.

Manhattan Bridge

A Notice to Proceed for the reconstruction of the lower roadway (Contract #11) was issued to the contractor with a start date of January 14, 2005.



View of the Manhattan Bridge From the Brooklyn Bridge Walkway. (Credit: Russell Holcomb)

Anti-Icing

On January 16 and 17, 2005, Division personnel applied anti-icing chemicals 5 times to the East River bridges. Another 9 applications were made to the bridges on January 19 and 20, 2005.

18th Avenue Bridge over NYCT (Brooklyn)

Stage III reconstruction of the bridge began on January 20, 2005.

Anti-Icing

The blizzard of January 22 and 23, 2005 dumped 11.6 inches of snow in the Bronx, 13.8 inches in Manhattan, 15.5 inches in Queens, and 17.5 inches in Brooklyn. From January 22 through January 24, 2005, Division personnel applied anti-icing chemicals 15 times to the East River bridges. All of the priority overpasses were cleared by January 27, 2005. Another 3 applications were made to the bridges on January 29 and 30, 2005. Icicle patrols monitored the FDR Drive, the Battery Park Underpass, the Brooklyn-Queens Expressway, and the Cross Bronx Expressway.



Brooklyn Bridge Walkway. (Credit: Peter Basich)

Pulaski Bridge over Newtown Creek (Brooklyn/Queens)

At approximately 3:30 AM on January 24, 2005, the bridge failed to open due to the heavy snow. The bridge was placed back in service to marine traffic at 3:50 PM that afternoon.

Shore Road Bridge over Hutchinson River (Bronx) (a.k.a. Pelham Bay Bridge)

At approximately 7:50 AM on January 24, 2005, the south leaf of the bridge failed to lower after a vessel opening due to snow and ice accumulation on the main power cable. The bridge was placed back in service to marine traffic at 11:15 AM that morning.

Fire Lieutenant Curtis W. Meyran, Firefighter John G. Bellew, and Firefighter Richard T. Sclafani Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on January 25, 2005 in tribute to Fire Lieutenant Curtis W. Meyran, 46, Firefighter John G. Bellew, 37, and Firefighter Richard T. Sclafani, 37, who died in the line of duty on January 23, 2005. Fire Lieutenant Meyran, a 15 year veteran of the NYFD, and Firefighter Bellew, a 10 year veteran of the NYFD, were both fatally injured battling a three alarm fire in a four story apartment building in the Bronx. On January 25, 2005, Fire Commissioner Nicholas Scoppetta announced that he would posthumously promote Firefighter Bellew to the rank of Fire Lieutenant. Firefighter Sclafani, a 10 year veteran of the NYFD, was fatally injured battling a two alarm fire in east New York, Brooklyn.

The three firefighter deaths made January 23, 2005 the deadliest day the department had seen since the September 11, 2001 attack on the World Trade Center killed 343 firefighters. The flags remained at half-mast until February 1, 2005.

FEBRUARY

Andrews Avenue Bridge over LIRR (Queens)

The reconstruction of this bridge, which began on August 4, 2003, was substantially completed on February 1, 2005.

Hamilton Avenue Asphalt Plant (Brooklyn)

On February 5, 2005, Division ironworkers repaired the plant's grizzly ladder and door.

15th Avenue Bridge over NYCT (Brooklyn)

The reconstruction of this bridge, which began on September 29, 2003, was substantially completed on February 8, 2005.

Third Avenue Bridge over Harlem River (Bronx-Manhattan)

The bridge was re-opened to all five lanes of traffic at 5 AM on February 10, 2005.



Third Avenue Bridge Open to Traffic. Sidewalk, Guardrail, and Protective Fencing. (2nd View Credit: Michele N. Vulcan)

Belt Parkway Bridge over Mill Basin (Brooklyn)

On February 9, 2005, responding to a bridge operator report of a newly developed one square foot through-hole in the westbound right lane on the north leaf, Division repair crews installed a temporary plate. Permanent repairs were completed on the night of February 15, 2005, when Division personnel installed a recessed plate over the area of deteriorated grating.

Metropolitan Avenue Bridge over English Kills (Brooklyn)

Stage II reconstruction of the bridge began on February 16, 2005.

Anti-Icing

On February 20 and 21, 2005, Division personnel applied anti-icing chemicals 9 times to the East River bridges. Another 15 applications were made to the bridges on February 24 and 25, 2005. Icicle patrols monitored the FDR Drive, the Battery Park Underpass, the Brooklyn-Queens Expressway, and the Cross Bronx Expressway. The first storm dumped 5 inches of snow in Central Park, and the second left an additional accumulation of 6 inches.



Cleaned Brooklyn Bridge Walkway After the Storm. Cement Mason Joseph Cassella Behind the Wheel of a Gator Used to Plow the Brooklyn Bridge Walkway. (Credit: Russell Holcomb)

3rd Avenue Bridge over Gowanus Canal (Brooklyn), 49th Street Bridge over Grand Central Parkway (Queens), Jamaica Avenue Bridge over Cross Island Parkway (Queens), Metropolitan Avenue Bridge over Conrail (Queens), Bronx Boulevard Bridges (NB & SB) over Bronx River (Bronx), Fort Tryon Place Bridge over Entrance from Riverside Drive (Manhattan), Unionport Road Bridge over Amtrak (Bronx), and East 149th Street Bridge over Amtrak (Bronx)

A Notice to Proceed for the component rehabilitation of these bridges was issued to the contractor with a start date of February 28, 2005.



3rd Avenue Bridge over Gowanus Canal, 49th Street Bridge over Grand Central Parkway, and Jamaica Avenue Bridge over Cross Island Parkway. (Credit: NYSDOT)



Metropolitan Avenue Bridge over Conrail, and Bronx Boulevard Bridges (NB & SB) over Bronx River. (Credit: NYSDOT)



Fort Tryon Place Bridge over Entrance from Riverside Drive, Unionport Road Bridge over Amtrak, and East 149th Street Bridge over Amtrak. (Credit: NYSDOT)

MARCH

Award

In March 2005, the American Council of Engineering Companies of New Jersey selected the reconstruction of the Belt Parkway Bridge over Ocean Parkway for an Honor Award in its 2005 Engineering Excellence Awards. The Engineering Excellence Awards Program recognizes engineering achievements that demonstrate the highest degree of skill and ingenuity. This project also involved the reconfiguration of the interchange, roadway work on approximately a mile of the Belt Parkway, and roadway and associated landscaping work on Ocean Parkway from approximately Avenue Z to West End Avenue. The new bridge utilized many precast elements, including deck units, t-wall abutments, cap beams, parapets, and approach slabs.

Anti-Icing

On February 28 and March 1, 2005, Division personnel applied anti-icing chemicals 13 times to the East River bridges. The storm dumped 7.5 inches of snow in Central Park. The priority overpasses were monitored and cleaned as necessary, and icicle patrols monitored the FDR Drive, the Battery Park Underpass, the Brooklyn-Queens Expressway, and the Cross Bronx Expressway.

Hamilton Avenue Asphalt Plant (Brooklyn)

On March 5, 2005, Division ironworkers re-installed the section of the plant's crusher that had been removed and brought to the shop for repair on February 5, 2005.

Tracy Avenue Pedestrian Bridge over SIRT South Shore (Staten Island)

The project to repair the red-flagged bottom two steel girders of the bridge, which began on February 19, 2005, was completed by Division ironworkers and painters on March 6, 2005. The work was performed from the top of a wooden platform supported by steel scaffolding erected from ground level.



Tracy Avenue Bridge Girders Prior to Repair. Box Covers for the Third Rail. Carpenters Erecting the Scaffolding.



Transporting Materials by Crane to the Tracy Avenue Bridge Platform. Ironworkers Installing C-Channels to Stiffen the Girder. Working on the Extended Platform With Hanging Support Above the Train.



Train Running Below the Tracy Avenue Bridge Hanging Platform. Ironworkers Repairing the Girders. Painting Containment for Surface Preparation of Steel.



Painters Applying Primer. Repaired and Painted Girders. Tracy Avenue Bridge After Completed Repairs.

Anti-Icing

On March 8 and 9, 2005, Division personnel applied anti-icing chemicals 9 times to the East River bridges. Another 5 applications were made to the bridges on March 11, 2005. The priority overpasses were monitored and cleaned as necessary, and icicle patrols monitored the FDR Drive, the Battery Park Underpass, the Brooklyn-Queens Expressway, and the Cross Bronx Expressway.



Cleaned Brooklyn Bridge Roadway After the Storm. (Credit: Russell Holcomb)

Gun Hill Road Bridge over Metro North RR (Bronx)

Effective March 9, 2005, the southbound off ramp of the Bronx River Parkway at Gun Hill Road was closed to traffic for a three year duration.

Queensboro Bridge

March 30, 2005 marked the 96th anniversary of the opening of the bridge.



Queensboro Bridge at Night. (Credit: Jonathan Smith)

Boston Post Road Bridge over Hutchinson River (Bronx)

The replacement of the deteriorated timber fender system, which began in September 2004, was completed in March 2005.

APRIL

Awards

In April 2005, the American Council of Engineering Companies of New York selected the reconstruction of the Belt Parkway Bridge over Ocean Parkway for two Silver Awards in the structural systems category in its 2005 Engineering Excellence Awards. Founded in 1921, ACEC New York is the oldest continuing organization of professional consulting engineering firms in the United States.

Pope John Paul II Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on April 4, 2005 in tribute to Pope John Paul II, 84, who died on April 2, 2005. The pope led the Roman Catholic Church for 26 years.

Williamsburg Bridge

On April 6, 2005, Division personnel assisted DEP Director of Wildlife Studies Christopher Nadareski with access to the old south comfort station near the Manhattan anchorage for the building of a falcon nesting box. According to the DEP, New York State has 50 pairs of falcons, of which New York City hosts 16 on its bridges and buildings. Mr. Nadareski inspects and bands the City's new chicks every spring.



View From the Nesting Box. Christopher Nadareski Assembling the Box. (Credit: Peter Basich)

Grand Concourse Bridge over East 170th Street (Bronx)

The component rehabilitation of this bridge was substantially completed on April 7, 2005.



Parapet Repairs on the Grand Concourse over East 170th Street Bridge. Engineer Krishan Baweja Inspecting the Retaining Wall. (Credit: Nasir Khanzada) Completed Repairs.

Hamilton Avenue Asphalt Plant (Brooklyn)

On April 9, 2005, Division ironworkers repaired the plant's silo, paddles, and winches.

Willis Avenue Bridge over Harlem River (Bronx/Manhattan)

The emergency repairs to replace sections of deteriorated grating and their supporting members, which began on the night of April 15, 2005, were completed by Division personnel on the afternoon of April 18, 2005.



Opening the Grating on the Willis Avenue Bridge. Installing the Platform. View of the Bridge From the Manlift on the Barge. (Credit: Reza Taheri)



Platform Built by Bridge Painters for the Ironworkers' Repairs of the Willis Avenue Bridge. Deputy Director of In-House Painting Earlene Powell & Bridge Painters Joseph Guzzetta & Robert Aveilino Inspecting the Platform. Ironworkers Performing Emergency Repairs. (Repair Credit: Russell Holcomb)

Congress Street Bridge over Brooklyn-Queens Expressway (Brooklyn)

Stage IB reconstruction of the bridge began on April 18, 2005.

Cortelyou Road Bridge over NYCT (Brooklyn)

Stage IIIB reconstruction of the bridge began on April 18, 2005.

239th Street Pedestrian Bridge over Henry Hudson Parkway (Bronx)

Stage I reconstruction of the bridge began on April 25, 2005.

Fourth Annual "Take Our Children to Work Day"

On April 28, 2005, as part of the Agency's third annual "Take Our Children to Work Day," Division personnel hosted children at several trades' shops located at the Queensboro Bridge. The children were treated to demonstrations by the ironworkers, engineers, and painters, and were taken on a guided tour of the bridge.



Assistant Engineer-in-Charge Reza Taheri & Engineer-in-Charge Pinakin Patel With the Children at the Waterway Bridges & Tunnels Office. Bridge Painters Willie Tyler and Joseph Guzzetta, Supervisor Bridge Painter Hughie Flood, and Bridge Painters Frank Hollen and Robert Avellino in the Painters' Yard. (Credit: Reza Taheri)



Bridge Painter Joseph Guzzetta Demonstrating Climbing Technique in the Painters' Yard. Bridge Repairer & Riveter James Murray (Right) And Children Listening to Bridge Repairer & Riveter Gean Pilipiak Explain Procedures. (Credit: Reza Taheri)



Demonstration by Bridge Repairer & Riveters Dominick Santo, Sze Ming Liu, and James Wright III at the Ironworker Shop. Deputy Director of In-House Painting Earlene Powell With the Children on the Queensboro Bridge. (Credit: Reza Taheri)

Cross Island Parkway Bridge over Dutch Broadway – 115th Avenue (Queens) Cleaning and painting of the bridge began and was completed in April 2005.

Highland Boulevard Bridge (NB) over Vermont Avenue (Brooklyn) Cleaning and painting of the bridge began and was completed in April 2005.

MAY

Macombs Dam Bridge over the Harlem River (Bronx/Manhattan) May 1, 2005 marked the 110th anniversary of the opening of the bridge.



Macombs Dam Swing Span. (Credit: Peter Basich)

28th Annual Five Borough Bike Tour

In preparation for the 42-mile Five Borough Bike Tour on May 1, 2005, Division personnel performed mechanical sweeping along the route on the night before the event, including the Queensboro, Pulaski, Madison Avenue, and 145th Street Bridges, and performed asphalt repairs as necessary. In addition, they temporarily placed covers over the expansion joints on the Pulaski Bridge.

Congress Street Bridge over Brooklyn-Queens Expressway (Brooklyn)

Stage II reconstruction of the bridge began on May 4, 2005.

Hamilton Avenue Asphalt Plant (Brooklyn)

On May 14, 2005, Division ironworkers repaired the plant's chutes and drainpipe.

18th Avenue Bridge over NYCT (Brooklyn)

The reconstruction of this bridge, which began on September 29, 2003, was substantially completed on May 16, 2005.



Nearing Completion of the 18th Avenue Bridge.

Lincoln Road Bridge over BMT Subway (Brooklyn)

Effective May 19, 2005, the bridge was closed to traffic for rehabilitation, as agreed to by Community Board #9.

Brooklyn Bridge

May 24, 2005 marked the 122nd birthday of the bridge.



Water Taxi Dock Near the Bridge. Roebling Memorial Plaque. (Credit: Russell Holcomb)

Ocean Avenue Pedestrian Bridge over Sheepshead Bay (Brooklyn)

On May 28, 2005, the bridge partially collapsed. The south bulkhead had shifted towards the water, allowing the sidewalk at Exeter Street and Shore Boulevard to collapse into a void behind the bulkhead. The movement of the bulkhead also pulled two of the piles supporting the bridge out from under the bridge's bearings and undermined the wood ramp leading to the bridge. The Economic Development Corporation will restore and reconstruct the bulkhead and the bridge. A pontoon bridge was immediately installed to serve as a temporary pedestrian crossing. Division engineers reviewed the bridge reconstruction portion of the project.



Ocean Avenue Bridge Seawall Failure. (Credit: Russell Holcomb)



The Temporary Bridge. (Credit: Russell Holcomb)

Braddock Avenue Bridge over Cross Island Parkway (Queens)

Cleaning and painting of the bridge, which began in April 2005, was completed in May 2005.

Central Drive Bridge over Transverse Road #1 (at 65th Street) (Manhattan)

In April 2005, contractor crews began the nighttime installation of flat bar steel bracing for the bridge's arch stones, as well as the installation of expanded metal mesh to protect the public from possible falling debris. This project was completed in May 2005.

Clintonville Street Bridge over Cross Island Parkway (Queens)

Cleaning and painting of the bridge, which began in April 2005, was completed in May 2005.

Hempstead Avenue Bridges over Cross Island Parkway (Queens)

Cleaning and painting of the bridges, which began in April 2005, was completed in May 2005.

South Conduit Boulevard Bridge over Southern Parkway (Queens)

Cleaning and painting of the bridges, which began in April 2005, was completed in May 2005.

14th Avenue Bridge over Cross Island Parkway (Queens)

Cleaning and painting of the bridge began and was completed in May 2005.

JUNE

Award

In June 2005, the Metropolitan Section of the American Society of Civil Engineers selected the reconstruction of the Belt Parkway Bridge over Ocean Parkway as the 2005 Design-Build Project of the Year.



Deputy Director of Design-Build Beatriz Duran, Andre Celestin, and Director of Design-Build/Emergency Contracts Chris Sklavounakis at the Award Presentation. Belt Parkway Bridge in Spring 2005.

Hamilton Avenue Asphalt Plant (Brooklyn)

On the morning of June 2, 2005, Chief Bridge Officer Henry Perahia, Deputy Chief Engineer Russell Holcomb, and Division engineers and ironworkers went to the asphalt plant to investigate a report that one of the silos was in danger of collapse. The deformation of a patch on the silo wall and the downward movement of the top of the silo were visible to the naked eye. The silo was emptied and the plant's crane was used to prevent further downward movement of the silo top. Later that day, the ironworkers installed temporary supports for the machinery above the silo.



Investigating the Damage at the Asphalt Plant. (Credit: Hany Soliman)

Willis Avenue Bridge over Harlem River (Bronx/Manhattan)

On June 4 and 5, 2005, Division personnel performed red and yellow flag repairs to the purlins and open grating.



Repairing the Willis Avenue Bridge Grating. (Credit: Reza Taheri)

Pitkin Avenue Bridge over LIRR (Brooklyn)

Stage II reconstruction of the bridge began on June 6, 2005.

Bruckner Expressway over Westchester Creek (Bronx) (a.k.a. Unionport Bridge)

Due to heat expansion, the bridge was closed to marine traffic beginning at 1:25 PM on June 8, 2005. It was returned to service at 1:10 AM on June 9, 2005.

Hutchinson River Parkway Bridge over Hutchinson River (Bronx)

Due to heat expansion, the bridge was closed to marine traffic beginning at 1:25 PM on June 8, 2005. It was returned to service at 1:10 AM on June 9, 2005.

Cortelyou Road Bridge over NYCT (Brooklyn)

The reconstruction of this bridge, which began on April 22, 2002, was substantially completed on June 11, 2005.

Grand Street Bridge over Newton Creek (Brooklyn/Queens)

Due to heat expansion, the bridge was closed to marine traffic beginning at 11:35 AM on June 14, 2005. It was returned to service at 8:40 PM that night.

Grand Concourse Bridge over 167th Street (Bronx)

The project to install concrete caps along the length of the underpass, which began on September 13, 2004, was completed by Division masons on June 21, 2005. Approximately 10,000 square feet of concrete were installed to construct the caps and thereby end the chronic dumping problem.



Millings and Formwork. (Credit: Paul Schwartz) Poured Concrete Cap. (Credit: Joseph Saverino)



Masons and Carpenters Working on the East Side in March 2005. (Credit: Pinakin Patel)



Views of Completed Grand Concourse Concrete Cap Work in June 2005. (Credit: Paul Schwartz)

Hamilton Avenue Asphalt Plant (Brooklyn)

On June 11, 18, and 25, 2005, Division ironworkers repaired the plant's scales, chutes, paddles, conveyors, transfer chute, drag paddles, and silo support.

Belt Parkway Bridge over Shell Road (Brooklyn) (NYS)

On June 27, 2005, Division personnel addressed an emergency condition of failed expansion joints on this State-owned bridge by covering the areas with steel plates.

Carroll Street Bridge over the Gowanus Canal (Brooklyn)

Cleaning and painting of the bridge, which began in May 2005, was completed in June 2005.

Elliot Avenue Bridge over Queens Boulevard (Queens)

Cleaning and painting of the bridge began and was completed in June 2005.

Grand Concourse Bridge over East 204th Street (Bronx)

Cleaning and painting of the bridge, which began in May 2005, was completed in June 2005.

PS-5 Pedestrian Bridge over 10th Avenue (Manhattan)

Cleaning and painting of the bridge began and was completed in June 2005.

Queens Boulevard Bridge over Jackie Robinson Parkway (Queens)

Cleaning and painting of the bridge, which began in May 2005, was completed in June 2005.

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

In June 2004, netting was installed beneath the bridge's lift span to protect mariners from being injured by falling pieces of deteriorated steel formwork angles. In May, 2005, contractor crews began to raise the height of the netting to increase the clearance. This project was completed in June 2005.



Raising the Netting on the Roosevelt Island Bridge. (Credit: Peter Basich)

Woodhaven Boulevard Bridge over Queens Boulevard (Queens)

Cleaning and painting of the bridge, which began in May 2005, was completed in June 2005.

3rd Avenue Bridge over LIRR Bay Ridge (Brooklyn)

Cleaning and painting of the bridge began and was completed in June 2005.

3rd Street Bridge over Gowanus Canal (Brooklyn)

Cleaning and painting of the bridge began and was completed in June 2005.

65th Place Bridge over Brooklyn-Queens Expressway (Queens)

Cleaning and painting of the bridge began and was completed in June 2005.

JULY

Award

In July 2005, the National Steel Bridge Alliance selected the Third Avenue Bridge over Harlem River project for a merit award in the movable span category. The Prize Bridge Awards honor significant and innovative steel bridges constructed within the United States. Projects are judged on innovation, aesthetics, design, and engineering solutions. The winning projects were also announced and described in the November 2005 issue of *Modern Steel Construction Magazine*.

London Transit Bombing Victims Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on July 9, 2005 in tribute to the victims of the London, England transit bombings of July 7, 2005. The attacks killed 56 people and injured 700 on three Underground trains and a double-decker bus. The flags remained at half-mast until July 13, 2005.

3rd Street Bridge over Gowanus Canal (Brooklyn)

Due to heat expansion, the bridge was closed to marine traffic beginning at 4:25 PM on July 10, 2005. It was returned to service at 8:15 AM on July 11, 2005.

Belt Parkway Bridge over Mill Basin (Brooklyn)

Due to heat expansion, the bridge was closed to marine traffic beginning at 3 PM on July 11, 2005. It was returned to service at 11:20 PM that night.

17th Avenue Bridge over BMT Sea Beach (Brooklyn)

Effective July 13, 2005, the bridge was closed to traffic for rehabilitation.



Inspecting the 17th Avenue Bridge Before Construction.

Hamilton Avenue Bridge over Gowanus Canal (Brooklyn)

Due to heat expansion, the bridge was closed to marine traffic beginning at 3:25 PM on July 17, 2005. It was returned to service at 6:30 PM that night.

Belt Parkway Bridge over Mill Basin (Brooklyn)

Due to heat expansion, the bridge was closed to marine traffic beginning at 4:20 PM on July 18, 2005. It was returned to service at 7:30 PM that night.

Willis Avenue Bridge over Harlem River (Bronx/Manhattan)

On July 22, 2005, three trucks hit the bridge, causing a bridge fascia member to crack, and bending another interior steel girder. Contractor ironworkers removed loose and damaged steel bottom flange angles underneath the damaged steel structure. Division personnel removed loose concrete, and installed timber shoring and diagonal bracing. Traffic was restored by 8:00 AM on July 23, 2005.



Inspecting and Repairing the Damage. (Credit: Thomas Leung)



Close-up of the Damage. (Credit: Samuel Teaw)

Hamilton Avenue Bridge over Gowanus Canal (Brooklyn)

Due to heat expansion, the bridge was closed to marine traffic beginning at 10:40 PM on July 24, 2005. It was returned to service at 3:35 AM on July 25. Further heat expansion closed the bridge to marine traffic from 1:45 PM on July 26, 2005 until 7 AM on July 28, 2005, from 3:40 PM on July 29, 2005 until 7:30 AM on July 30, 2005, and from 5:45 PM on July 30, 2005 until 12:05 AM on July 31, 2005.

Hamilton Avenue Asphalt Plant (Brooklyn)

On July 30, 2005, Division ironworkers repaired the plant's chute, paddles, rap frame, and silo.

Northern Boulevard Bridge over Alley Creek (Queens)

Cleaning and painting of the bridge, which began in June 2005, was completed in July 2005.

Queens Boulevard Bridge over Access Road to Brooklyn-Queens Expressway (SB) (Queens)

Cleaning and painting of the bridge, which began in April 2005, was completed in July 2005.

3rd Avenue Bridge over Gowanus Canal (Brooklyn)

Cleaning and painting of the bridge, which began in June 2005, was completed in July 2005.

Queensboro Bridge

In July 2005, the Mayor's Office of Film, Theatre, and Broadcasting named this bridge as a "Location of the Month."

The Queensboro Bridge, which connects the Long Island City neighborhood of Queens with Manhattan, has long been a favorite of filmmakers for the beauty shots of the City it offers. Cameras mounted to vehicles or placed on the northern walkways are used for establishing shots of Manhattan's skyline, buildings and river. The bridge, which is currently undergoing renovations, has been used by productions including *Spider-Man* and *The Interpreter*.

Location of the Month. (July 2005),

http://www.nyc.gov/html/film/html/locations/location_gueensboro_bridge.shtml (accessed January 19, 2006).



View of the Queensboro Bridge from the East 51st Street Pedestrian Bridge. (Credit: Russell Holcomb)

AUGUST

Officer James D. McNaughton Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on August 4, 2005 in tribute to Police Officer James D. McNaughton of Transit District 2 in Lower Manhattan, who was killed in action on August 2, 2005, while serving in Iraq with the 306th Military Police Battalion. Army Reserves Staff Sergeant McNaughton, 27, was the first New York City police officer to die on active military duty in the war. There are 273 New York City police officers on active duty in Iraq. Officer McNaughton was a four year veteran of the New York City Police Department, and a member of the first police academy class to graduate after the September 11, 2001 attacks. The flag remained at half-mast until August 16, 2005.

Hamilton Avenue Bridge over Gowanus Canal (Brooklyn)

A Notice to Proceed for the reconstruction of this bridge was issued to the contractor with a start date of August 4, 2005.

Bruckner Expressway over Westchester Creek (Bronx) (a.k.a. Unionport Bridge)

Due to heat expansion, the bridge was closed to marine traffic beginning at 11:30 AM on August 5, 2005. It was returned to service at approximately 1 AM on August 6, 2005.

Congress Street Bridge over Brooklyn-Queens Expressway (Brooklyn)

The reconstruction of this bridge, which began on April 26, 2004, was substantially completed on August 5, 2005.

Greenpoint Avenue Bridge over Newton Creek (Brooklyn/Queens)

Due to heat expansion, the bridge failed to close after a vessel opening at approximately 4:20 PM on August 5, 2005. The bridge remained out of service to marine traffic until 3:00 AM on August 6, 2005.

Pulaski Bridge over Newtown Creek (Brooklyn/Queens)

Due to heat expansion, the bridge was closed to marine traffic beginning at 11:30 AM on August 5, 2005. It was returned to service at approximately 1 AM on August 6, 2005.

3rd Street and 9th Street Bridges over Gowanus Canal (Brooklyn)

Due to heat expansion, the bridges were closed to marine traffic beginning at 9:45 AM on August 8, 2005. They were returned to service at 8:40 AM on August 9, 2005.

Greenpoint Avenue Bridge over Newton Creek (Brooklyn/Queens)

Due to heat expansion, the bridge was closed to marine traffic beginning at 4:40 PM on August 12, 2005. It was returned to service at 7 AM on August 13, 2005.

Hamilton Avenue Bridge over Gowanus Canal (Brooklyn)

Due to heat expansion, the bridge was closed to marine traffic beginning at 12:55 AM on August 13, 2005. It was returned to service at 8:50 PM that night.

Hamilton Avenue Asphalt Plant (Brooklyn)

On August 6, 13, and 20, 2005, Division ironworkers repaired the plant's chute and drum paddles.

Rikers Island Bridge over Rikers Island Channel (Queens)

A Notice to Proceed for the rehabilitation of the bridge deck was issued to the contractor with a start date of August 24, 2005.

Brooklyn-Queens Expressway (EB) over Cadman Plaza (Brooklyn)

On August 15, 2005, Division personnel began PIA safety flag repairs to the retaining wall, removing loose bricks and corroded brackets, and placing steel angles to support the railing cap stones. The project was completed on August 25, 2005.



Bricklayer Ignazio Trapani, Highway Repairers Clifton Gravesande and Warren Chiles, & Cement Mason Joseph Cassella Removing the Bricks. (Credit: Michele N. Vulcan) Maneuvering the Bucket. (Credit: Peter Basich)



Maneuvering the Bucket. Large Piece in Mid-Flight. (Credit: Peter Basich) Loose Bricks. Completed Section of Wall. (Credit: Samuel Teaw)

Belt Parkway Bridge over Bedford Avenue (Brooklyn)

Cleaning and painting of the bridge was completed in August 2005.

Brooklyn Bridge

Repainting of the walkway markings, which began in June 2005, was completed in August 2005.

Carroll Street Bridge over the Gowanus Canal (Brooklyn)

The project to replace the wood deck's top layer (and middle layer, where necessary), which began in July 2005, was completed in August 2005.

Grand Concourse Bridge over Burnside Avenue (Bronx)

Cleaning and painting of the bridge, which began in June 2005, was completed in August 2005.

Grand Concourse Bridge over 167th Street (Bronx)

Cleaning and painting of the bridge, which began in April 2005, was completed in August 2005.

Union Turnpike Bridge over Austin Street (Queens)

Cleaning and painting of the bridge began and was completed in August 2005.

Yankee Stadium Pedestrian Bridge over East 153rd Street & Metro North (Bronx)

Cleaning and painting of the bridge began and was completed in August 2005.

147th Street Bridge over Cross Island Parkway (Queens)

Cleaning and painting of the bridge began and was completed in August 2005.

SEPTEMBER

Award

In September 2005, the New York Tri-State Metro Chapter of the Design-Build Institute of America selected the reconstruction of the Belt Parkway Bridge over Ocean Parkway as the 2005 Project of the Year in the transportation category. The Institute advocates and advances single source project delivery within the design and construction community. Members include practitioners from all project phases, plus public- and private-sector project owners. The organization was founded in 1993.



Looking South at the Bridge.

Hurricane Katrina and Chief Justice William H. Rehnquist Tribute

The American flags on the Brooklyn Bridge were lowered to half-mast by Division painters on September 4, 2005 in tribute to both the 1,321 victims of Hurricane Katrina and the death of Chief Justice William H. Rehnquist. The hurricane struck northwest Florida and the Gulf Coast states of Louisiana, Mississippi, and Alabama on August 29, 2005. Hurricane Katrina was a long-lived hurricane that made landfall three times along the United States coast and reached Category 5 at its peak intensity.



Brooklyn Bridge Flag at Half-Mast.

Supreme Court Chief Justice William H. Rehnquist, 80, died on September 3, 2005. Justice Rehnquist served from 1943-1946 as an Army Air Force Sergeant in North Africa. He then graduated first in his class in 1952 from Stanford Law School. Justice Rehnquist was appointed to the United States Supreme Court as an Associate Justice by President Richard M. Nixon in 1972. He was then elevated to Chief Justice by President Ronald Reagan in 1986 after the retirement of Chief Justice Warren Burger. Chief Justice Rehnquist was the 16th Chief Justice of the Court. The flags remained at half-mast until September 20, 2005.



society/suns/01_feature_g.html (accessed November 22, 2005).

Patriot Day Tribute

The Brooklyn Bridge flags flew at half-mast on September 11, 2005 to commemorate Patriot Day.

Hamilton Avenue Bridge over Gowanus Canal (Brooklyn)

Due to heat expansion, the bridge was closed to marine traffic beginning at 1:40 PM on September 12, 2005. It was returned to service at 3:55 PM that afternoon.

Conference

At the Third New York City Bridge Conference, held on September 12 and 13, 2005, Division Directors presented papers on the replacement of the Belt Parkway Bridge over Ocean Parkway and on seismic hazard analysis. In addition, Chief Bridge Officer Henry Perahia delivered a keynote session address on the salient features of the new City Island cable-stayed bridge, now under final design.



Chief Bridge Officer Henry Peraha Addressing the Conference. (Credit: Jagtar Khinda)

Brooklyn Bridge

The new \$40 million Staten Island Ferry, the "Spirit of America," completed its 22 day voyage from Marinette, Wisconsin to New York Harbor on September 15, 2005. The vessel's name honors how Staten Islanders pulled together and sacrificed during the September 11, 2001 tragedy.



New Ferry Passing Under the Brooklyn Bridge. (Credit: Chad Rachman/Staten Island Advance)

Hamilton Avenue Asphalt Plant (Brooklyn)

On September 17, 2005, Division ironworkers repaired the plant's drum, crusher, and smokestack. On September 19, 2005, they performed emergency repairs on the silo's transfer mechanism.

239th Street Pedestrian Bridge over Henry Hudson Parkway (Bronx)

Stage II reconstruction of the bridge began on September 22, 2005.

Assistant City Highway Repairer Nicky Antico and Judge Constance Baker Motley Tribute

The American flags on the Brooklyn Bridge were lowered to half mast by Division painters on September 28, 2005 in tribute to Assistant City Highway Repairer Nicky Antico of the Agency's Roadway Maintenance and Repair Division, who died on September 27, 2005 as a result of injuries suffered on the job on September 22, 2005. Mr. Antico and two other Department highway workers were struck by a hit-and-run driver as they were preparing to resurface Slosson Avenue near Lortel Avenue in Staten Island.

Mr. Antico, 35, was a six year veteran of the Department. His jokes and comedic impersonations were always remarked upon and admired by his colleagues and friends. After the 9/11/01 attack,
Mr. Antico volunteered to work at the World Trade Center site, doing everything he could to put his city back together. He is survived by his widow, Anna, and his eight year old daughter, Arianna. Mr. Antico was posthumously promoted to Highway Repairer, and the City Council passed legislation to ensure that his family would continue to receive health insurance coverage.



Nicky Antico.

The flags continued to be flown at half-staff in tribute to Judge Constance Baker Motley, 84, senior judge for the U.S. District Court for the Southern District of New York, who died on September 28, 2005. She was the only woman on the NAACP legal team that won the epochal school desegregation decision Brown v. Board of Education. She became the first black woman elected to the New York State Senate, and the first black woman to hold the office of Manhattan Borough President. In January 1966, President Lyndon B. Johnson named her to the District Court for the Southern District of New York, a region that includes Manhattan, the Bronx and six counties north of the city. The first African American woman to serve as a federal judge, she became Chief Judge in 1982. The flags remained at half mast until October 8, 2005.

Brooklyn-Queens Expressway over Prospect Street (Brooklyn)

Cleaning and painting of the bridge, which began in August 2005, was completed in September 2005.

Brooklyn-Queens Expressway over Washington Street (Brooklyn)

Cleaning and painting of the bridge, which began in August 2005, was completed in September 2005.

Hunters Point Avenue Bridge over Dutch Kills (Queens)

Cleaning and painting of the bridge, which began in June 2005, was completed in September 2005.



Peter Basich Photographing the Project's Progress. (Credit: Michele N. Vulcan) Preventing Paint From Falling Into the Dutch Kills. Supervisor Bridge Painter Georgeios Ploumis and Bridge Painter Goncalo Lima Painting the Bridge. (Credit: Sergiy Parayev)

East 12th Street over Belt Parkway (Brooklyn)

Cleaning and painting of the bridge, which began in August 2005, was completed in September 2005.



Bridge Painter Sadfar Ali Mixing Paint. Bridge Painters Brian Kavanagh, Thomas Jones, and Michael Scohi Working on the Bridge. (Credit: Sergiy Parayev)

Pedestrian Bridge over East 128th Street (Manhattan)

Cleaning and painting of the bridge, which began in August 2005, was completed in September 2005.



Freshly Painted 128th Street Bridge. (Credit: Sergiy Parayev)

149th Street Bridge over Cross Island Parkway (Queens)

Cleaning and painting of the bridge, which began in August 2005, was completed in September 2005.

OCTOBER

Bruckner Expressway NB over Amtrak (Bronx)

A tanker truck carrying home heating fuel overturned and caught fire on the 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, resetting all expansion plates on the abutment, and performing deck repair. The crews worked continuously, and the roadway was re-opened in time for the morning rush hour on October 6, 2005.



The Tanker Truck. Repairs and Cleanup. (Credit: Bojidar Yanev)

Queensboro Bridge

On October 18, 2005, at approximately 1:00 PM, a street light's electrical wiring started a fire in the painting contractor's containment over the upper roadway. No injuries were reported. The containment was undergoing abrasive blasting at the time of the fire and all debris and blast media were continuously being vacuumed during the blasting operations. Declared a four-alarm blaze, the fire drew 168 firefighters and 39 units. It took firefighters about two hours to get the blaze under control, pumping water from ground hydrants through a series of bridge pipes to douse the flames. The fire caused burnt debris, blasting grit, and loose paint to fall onto the upper roadway. Until the fire was extinguished and the structure inspected for damage, all lanes of the bridge remained closed. Notifications were made to the regulatory agencies of the release to land, air and water. The contractor mobilized its work force and commenced clean-up of the roadway and the damaged containment upon clearance from the Fire and Police Departments. By approximately 5:00 PM, after the lower roadways were cleared of debris, traffic was restored. Clean-up operations of the upper roadways continued through the night. Traffic was restored to the upper roadway by 5:00 AM on October 19, 2005.



Inspecting the Bridge After the Fire.

Hamilton Avenue Asphalt Plant (Brooklyn)

On October 22, 2005, Division ironworkers repaired the plant's drum and crusher.

Belt Parkway Bridge over Mill Basin (Brooklyn)

A Notice to Proceed for the reconstruction of the bridge grid deck was issued to the contractor with a start date of October 25, 2005.



Mill Basin Bridge Deck.

Pitkin Avenue Bridge over LIRR (Brooklyn)

The reconstruction of this bridge was substantially completed on October 27, 2005.



The New Pitkin Avenue Bridge. (Credit: Fred Arzideh)

Shore Road Bridge over Hutchinson River (Bronx) (a.k.a. Pelham Bay Bridge)

On October 31, 2005, Division ironworkers replaced the bridge's northwest semaphore gate, which had been struck by a vehicle on October 30, 2005.

Ms. Rosa Parks Tribute

The American flags on the Brooklyn Bridge were lowered to half mast by Division painters on October 31, 2005 in tribute to Ms. Rosa Parks, 92, who died on October 24, 2005. Ms. Parks' arrest on December 1, 1955 for refusing to give up her city bus seat to a white man in Montgomery, Alabama, made the black seamstress a heroine in the civil rights movement. Her disorderly conduct arrest led to the Montgomery Bus Boycott, which ran from December 1955 through November 1956, ending only when the United States Supreme Court declared that segregation on public buses was unconstitutional. In 1965 Ms. Parks joined the staff of U.S. Representative John Conyers of Michigan and served on his staff until her retirement in 1988. In 1979, she was awarded the NAACP's Springarn Medal for outstanding achievement by a black American. In 1996, Ms. Parks received the Presidential Medal of Freedom, awarded to civilians making outstanding contributions to American life. In 1999, she was awarded the Congressional Gold Medal, the nation's highest civilian honor. The flags remained at half-mast until sunset on November 2, 2005, the date of her interment.



Ms. Parks Sitting on a Montgomery, Alabama Bus in 1956.

Belt Parkway Bridge over Fresh Creek (Brooklyn)

Cleaning and painting of the bridge, which began in June 2005, was completed in October 2005.

25th Street Pedestrian Bridge over FDR Drive (Manhattan)

Cleaning and painting of the bridge, which began in September 2005, was completed in October 2005.

NOVEMBER

Gun Hill Road Bridge over Metro North RR (Bronx)

Stage II reconstruction of the bridge began on November 3, 2005.

Hamilton Avenue Asphalt Plant (Brooklyn)

On November 5, 2005, Division ironworkers repaired the plant's silo, adjusting rods, and drum.

New York City Marathon

In preparation for the Marathon on November 6, 2005, Division personnel inspected and cleaned the Queensboro, Pulaski, Madison Avenue, Third Avenue, and Willis Avenue Bridges. Division crews secured and ramped roadway plates on the Willis Avenue Bridge, and temporarily removed Jersey barriers on the Queensboro Bridge. Standard traffic configurations were restored before the next morning rush hour.



Preparing the Carpet for the Marathon on the Willis Avenue Bridge. Wheelchair Racers on the Bridge: Mexico's Aaron Gordian Minz (Wearing #5, Finished in 2nd Place); Australia's Kurt Fearnley (Wearing #6, Finished in 3rd Place); and Canada's Kelly Smith (Wearing #3, Finished in 5th Place). (Credit: Russell Holcomb)

Bruckner Expressway Bridge NB over Amtrak (Bronx)

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.

Grand Concourse Bridge over East 175th Street (Bronx)

The component rehabilitation of this bridge was substantially completed on November 10, 2005.



Grand Concourse over East 175th Street Bridge. Engineers Nasir Khanzada and Krishan Baweja Inspecting the Materials and Repairs. (Baweja Credit: Nasir Khanzada).



Repairs on the Grand Concourse over East 175th Street Bridge. Bridge Marker Detail.

Liberty Avenue Bridge over LIRR (Brooklyn)

The reconstruction of this bridge was substantially completed on November 15, 2005.

East 168th Street Bridge over Metro North (Bronx)

The component rehabilitation of this bridge was substantially completed on November 15, 2005.



East 168th Street Bridge Old Fence and Guardrail. New Fence and Guardrail.

Metropolitan Avenue Bridge over English Kills (Brooklyn)

The bridge was re-opened to vehicular and pedestrian traffic on November 18, 2005.



Northeast View of the Metropolitan Avenue Bridge.

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

On November 18 and 21, 2005, Bridge Operations personnel hosted first grade children from PS #321 on class trips to the bridges. Students, teachers, and parents enjoyed their visit.



Bridge Operator-in-Charge Tony Allen Answering Questions. Mr. Allen Has Been With DOT Since 1982. Students Observing & Drawing on the Carroll Street Bridge. Students Listening to Supervisor Bridge Operator Mohamed Adel Tork as the Union Street Bridge Opens.

Hamilton Avenue Asphalt Plant (Brooklyn)

On November 21 and 22, 2005, Division ironworkers performed emergency repairs to the plant's mixing drum and paddle.

Jamaica Avenue Bridge over Cross Island Parkway (Queens)

The component rehabilitation of this bridge was substantially completed on November 23, 2005.

79th Annual Macy's Thanksgiving Day Parade

Division engineers reviewed and approved the design specifications of four new large balloons to be introduced in the parade, as follows: JoJo the Clown, Dora the Explorer, Mr. Potato Head, and Scooby Doo. 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.

On November 24, 2005, Chief Bridge Officer Henry Perahia, Deputy Chief Engineer Kamal Kishore, Director of Engineering Review Abul Hossain, Mahabal Shah, and George Jarvis, as well as three consultants, were positioned at various locations along the parade route to ensure that the balloons were flown within the prescribed requirements for the wind conditions at that site.

At approximately 11:40 AM, the M&M balloon swung out of control on Broadway between 44th and 43rd Streets at Times Square, and its line got caught on a light pole. The luminaire came down and injured two people, who were treated and subsequently released from the hospital. The winds at the intersection at 44th Street were approximately 15 miles per hour, and the rope lengths were at the 15 miles per hour position at the time of the accident.



New JoJo the Clown, New Dora The Explorer, and New Mr. Potato Head.



Charlie Brown, New Scooby Doo, and Garfield.



Assistant Commissioner for Special Events Evan Korn; George Jarvis; Chief Bridge Officer Henry Perahia; Mahabal Shah; Police Commissioner Raymond Kelly (Speaking to Officers); Director of Engineering Review Abul Hossain; DOT Commissioner Iris Weinshall; Deputy Chief Engineer Kamal Kishore; and First Deputy Commissioner Judith Bergtraum.

Officer Dillon Stewart Tribute

The American flags on the Brooklyn Bridge were lowered to half mast by Division painters on November 28, 2005, in tribute to Police Officer Dillon Stewart of the 70th Precinct, who was fatally shot in East Flatbush, Brooklyn on November 28, 2005. Despite being shot in the heart during a car chase, he ignored the wound and helped try to catch his suspected shooter before dying later at the hospital. Officer Stewart, 35, and a five year veteran of the department, was a four time recipient of commendations for Excellent Police Duty. He was posthumously promoted to Detective, First Grade on November 30, 2005. This was the first fatal shooting of a New York City police officer in 2005. The flag remained at half-mast until after his interment on December 6, 2005.

Bedford Park Boulevard Bridge over Metro North (Bronx)

The component rehabilitation of this bridge was substantially completed on November 29, 2005.



Completed Bedford Avenue Bridge.

Bruckner Boulevard Overpass over 133rd to 135th Streets (Bronx)

Cleaning and painting of the bridge, which began in September 2005, was completed in November 2005.

DECEMBER

Award

In December 2005, *New York Construction Magazine* selected the reconstruction of the Third Avenue Bridge over the Harlem River as the Best Bridge Project of 2005. The award recognizes design and construction excellence, the contribution of key team members and the innovative solutions to a project's challenges.



Third Avenue Bridge.

Anti-Icing

In the first snow of the 2005-2006 winter season, 2.5 inches of snow were recorded in Central Park, and 3.2 inches in Queens on December 4, 2005. Another inch fell on December 6, 2005. Anti-icing crews were mobilized from 11:00 PM on December 3, 2005 to 11:00 AM the following day, and again from 6:00 PM on December 5, 2005 to 10:00 AM the following day. 20 applications totaling 10,500 gallons of potassium acetate were necessary to clear all of the priority overpasses.

Queensboro Bridge

The project to repair the fire-damaged nine steel barriers, which began on November 29, 2005, was completed by Division ironworkers on December 6, 2005.

DOT Employee Recognition Ceremony

Many Division personnel were among the DOT employees honored on December 7, 2005 for their years of service to the City. Commissioner Iris Weinshall and Lillian Roberts, Executive Director of District Council 37, led the ceremony, which took place at DC 37's headquarters at 125 Barclay Street in Manhattan.

47 Years of Service

Supervisor Highway Repairer Willie E. Tucker Sr.

35 Years of Service

Civil Engineer Saul Basri, and Administrative Engineer Balram Chandiramani.

30 Years of Service

Bridge Repairer & Riveter William Caputo, and Bridge Operator Wilbert Holt.

25 Years of Service

Administrative Engineer Jose Bartoli, Associate Staff Analyst William Donley, Associate Staff Analyst Darlene Lucchese, Area Supervisor Highway Maintenance Charles Remi, and Electrician Jerry Salzman.

20 Years of Service

Principal Administrative Associate Michele Adimu, Carpenter Stephen Buckley, Highway Repairer Deborah Cavaliere, Clerical Associate Marie De Madet, Supervisor Electrician Jose Done, Civil Engineer Saeid Edward, Principal Administrative Associate Paula Friend, Clerical Associate Loraine Fulgham, Area Supervisor Highway Maintenance Louis Garzia, Principal Administrative Associate Gail Hatchett, Oiler Stanley Karolewicz, Associate City Planner Dr. Paul-Michael Kazas, Supervisor Highway Repairer Joseph Lopez, Highway Repairer Dionisio Matos, Bridge Repairer & Riveter James Meyers, Staff Analyst Earlene Powell, Associate Staff Analyst Kalpakam Ramachandran, Bricklayer Salvatore Romano, Civil Engineer Ahmed Shakir, Bridge Operator In Charge George Siebor, Oiler Andrew Sorrentino, Highway Repairer Johnny Tavarez, Clerical Associate Elena Vega, and Stationary Engineer Electric Louis Vullo.

15 Years of Service

Bridge Painter Safdar Ali, Highway Repairer Darryl Anderson, Supervisor Bridge Painter Vincent Babajko, Bridge Operator In Charge Delonda Bates-Pinkney, Bridge Operator Shirley Bennett, Assistant Civil Engineer John Bost, Highway Repairer Leonard Buccola, Civil Engineer Kwing Chan, Civil Engineer Jin Chang, Highway Repairer Anthony Codianni, Assistant Civil Engineer Yousef Demis, Highway Repairer Edward Esposito, Civil Engineer Hani Faouri, Bridge Repairer & Riveter Michael Greenwood, Bridge Painter Branko Grzancic, Civil Engineer Albert Hong, Assistant Civil Engineer Mozzammel Hug, Civil Engineer Ferdinand John, Construction Project Manager Thomas Leung, Associate Staff Analyst Kevin Lobat, Area Supervisor Highway Maintenance John Lucchese, Assistant Civil Engineer Ramakumar Magge, Highway Repairer Paul Maguire, Principal Administrative Associate Linda Mangum, Bridge Painter Samuel Martinez, Bridge Painter Louis Masucci, Administrative Engineer Kevin McAnulty, Civil Engineer Seyed Mirhosseini, Carpenter Andrew Myjer, Civil Engineer Rajesh Naik, Associate Project Manager Patrick Nestor, Principal Administrative Associate Cedrick Niles, Principal Administrative Associate Jose Oliveras, Cement Mason John Padovano, Supervisor Highway Repairer Joseph Palemine, Civil Engineer Sudhakar Pallaki, Carpenter Mark Pavia, Area Supervisor Highway Maintenance Edward Pedersen, Oiler George Rivera, Supervisor Highway Repairer Gerard Rollino, Bridge Repairer & Riveter Peter Sciandra, Highway Repairer Luis Soto, Associate Staff Analyst Jennie Too, Research Assistant Nelly Tselnik, Electrician Donald White, Clerical Associate Gloria Wyche, Administrative Engineer Bojidar Yaney, and Staff Analyst Antoinette Zeitoun.

Anti-Icing

In the second storm of the 2005-2006 winter season, 5.8 inches of snow were recorded in Central Park, and 3.8 inches in Queens on December 9, 2005. Anti-icing crews were mobilized from 12:30 AM on December 8, 2005 to noon the following day. Nine applications were made. Priority overpasses were cleared and icicle patrols monitored the FDR Drive, the Battery Park Underpass, the Brooklyn-Queens Expressway, and the Cross Bronx Expressway.

Hamilton Avenue Asphalt Plant (Brooklyn)

On December 10, 2005, Division ironworkers repaired the plant's catwalk and its supports.

Officer Daniel Enchautegui Tribute

The American flags on the Brooklyn Bridge were lowered to half mast by Division painters on December 11, 2005, in tribute to Police Officer Daniel Enchautegui of the 40th Precinct, who was fatally shot attempting to stop a burglary in the Pelham Bay section of the Bronx on December 10, 2005. Despite being shot in the chest, he managed to fire eight rounds and wound both of his suspected attackers before dying. Officer Enchautegui, 28, was a three year veteran of the department. He was posthumously promoted to Detective, First Grade on December 14, 2005. This was the second fatal shooting of a New York City police officer in 2005. The flag remained at half-mast until after his interment on December 14, 2005.

17th Avenue Bridge over BMT Sea Beach (Brooklyn)

The bridge was re-opened to vehicular and pedestrian traffic on December 13, 2005, 29 days ahead of schedule.



Completed 17th Avenue Bridge.

Hunters Point Avenue Bridge over Dutch Kills (Queens)

December 14, 2005 marked the 95th anniversary of the opening of the bridge.



Hunters Point Avenue Bridge and Marker. (Credit: Michele N. Vulcan)

Hamilton Avenue Asphalt Plant (Brooklyn)

On December 17, 2005, Division ironworkers repaired the plant's bins.

East Tremont Avenue Bridge over Hutchinson River Parkway (Bronx)

The component rehabilitation of this bridge was substantially completed on December 21, 2005.



Engineers Nasir Khanzada and Krishan Baweja Inspecting the Joint Repairs on the East Tremont Avenue Bridge. (Baweja Credit: Nasir Khanzada) Repairs.



East Tremont Avenue Bridge Repairs.

Transit Strike

The Division of Bridges survived the 60-hour Transit Strike of 2005. The strike began on December 20, 2005, and ended on December 22, 2005. The overwhelming majority of the Division's employees made it to work and all critical functions were performed. On both the Manhattan and Williamsburg Bridges, Division staff coordinated and implemented lane reversals to accommodate the morning rush, and then again for the evening rush. In order to implement this, staff was at the bridges at 3:00 AM each morning. In addition, Division staff provided coverage at the Office of Emergency Management and at the ferry facilities at Whitehall Terminal, Pier 11, and 34th Street.



Commissioner Iris Weinshall, Mayor Michael Bloomberg, and OEM Commissioner Joseph Bruno Walking Across the Brooklyn Bridge on December 21, 2005. (Credit: Kristen Artz/Mayor's Office of Photography)

According to data collected during the strike, more than 34,000 pedestrians walked over one of the four East River bridges into Manhattan daily, compared with only 2,000 or so per day normally. In addition, an estimated 11,717 bicycles crossed the East River bridges on each day of the strike.



Brooklyn Borough President Marty Markowitz Greeting Commuters Walking and Cycling Across the Brooklyn Bridge on December 20, 2005. (Credit: John Heyer) <u>http://www.brooklyn-usa.org/Press/2005/dec21b.htm</u> (accessed January 11, 2006).

Pulaski Bridge over Newtown Creek (Brooklyn/Queens)

On December 23, 2005, Division ironworkers replaced the bridge's northwest warning gate, which had been struck by a vehicle on December 22, 2005.

New Year's Eve

On the night of December 28, 2005, at the request of the Mayor's Office of Special Events and the NYPD, Division ironworkers temporarily welded shut all manholes in the Times Square area in preparation for New Year's Eve. Celebrating the arrival of the New Year in Times Square started in 1904 by Adolph Ochs, owner of the *New York Times*. The ball dropping tradition began three years later.

Manhattan Bridge

December 31, 2005 marked the 96th anniversary of the opening of the bridge.



Manhattan Bridge at Twilight. (Credit: Michele N. Vulcan)

Astoria Boulevard (EB) over Brooklyn-Queens Expressway (WB) (Brooklyn)

Cleaning and painting of the bridge, which began in September 2005, was completed in December 2005.

Bulova Avenue Bridge over Brooklyn-Queens Expressway West Leg (Queens)

Cleaning and painting of the bridge, which began in October 2005, was completed in December 2005.

Greenpoint Avenue Bridge over Newton Creek (Brooklyn/Queens)

Cleaning and painting of the bridge operator house began and was completed in December 2005.



Greenpoint Avenue Bridge Operator House. (Credit: Michele N. Vulcan)

Pennsylvania Avenue Bridge over Belt Parkway (Brooklyn)

Cleaning and painting of the bridge, which began in October 2005, was completed in December 2005.

3rd Street Bridge over Gowanus Canal (Brooklyn)

Cleaning and painting of the bridge operator house began and was completed in December 2005.

49th Street Bridge over BQE West Leg (Queens)

Cleaning and painting of the bridge, which began in October 2005, was completed in December 2005.

Riverside Drive over West 125th Street & Others (Manhattan) (a.k.a. 12th Avenue Viaduct) & West 155th Street Pedestrian Bridge (Manhattan)

In December 2005, the Mayor's Office of Film, Theatre, and Broadcasting named these bridges as "Locations of the Month."

The 12th Avenue viaduct, encompassing 12th Avenue between 125-135th Streets, is a favorite among New York City productions. The location's large open space, limited through traffic, plethora of available parking and easy access via the West Side highway make staging larger and more complicated scenes possible. The Viaduct offers picturesque views of the water and classic New York City streets, and has been used in numerous music videos and productions including the film *Made, The Apprentice* and *Third Watch*.

Location of the Month. (December 2005), http://www.nyc.gov/html/film/html/locations/location_viaduct.shtml (accessed January 19, 2006).

The little-known pedestrian bridge connecting West 155th Street at Riverside Drive to Riverside Park offers the perfect opportunity for walking scenes across a bridge, with railroad tracks underneath. The location also features beautiful views along the Hudson River. Recently, it was featured in the Jennifer Lopez film *El Cantante*.

Location of the Month. (December 2005),

http://www.nyc.gov/html/film/html/locations/location_w155bridge.shtml (accessed January 19, 2006).



12th Avenue Viaduct & West 155th Street Bridge. (12th Avenue Viaduct Credit: NYSDOT)