



Department of Information Technology and Telecommunications

ANNUAL REPORT 2011

Enabling the Connected City: Year in Review

Michael R. Bloomberg, Mayor Caswell F. Holloway, Deputy Mayor for Operations Carole Post, Commissioner

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DoITT is...

- Making NYC information available for 50.5 million visitors per year
- Enabling 591 million annual page views on NYC.gov
- Facilitating 770,000 wireless automated water meters
- Supporting 300,000 City employees
- Serving 230,000 businesses
- Serving 8 million residents
- Providing voice services for 100,000 desk and mobile telephones
- Responding to 76,000 Service (Help Desk) calls per year
- Providing 785 public data sets on <u>NYC Open Data</u>
- Supporting more than 120 Mayoral Agencies and additional City boards, offices and commissions
- \$1 billion capital plan over four years
- \$375 million dollar budget
- \$132 million in cable television franchise revenue per year
- 1,200 DoITT employees:

Programmers Contract Analysts Service Desk Operators Desktop Support Directory Services Engineers Quality Assurance Specialists Network Providers Network Support Optical Network Specialists Database Administrators Project Managers Field Technicians Graphic Artists Application Developers 311 Call Takers Security Specialists System Administrators Wireless Data Technicians Virtual Systems Support Technical Writers Purchasing Agents Applications Support Lawyers Business Associates Budget Associates Contract Analysts Mainframe Specialists



Mayor's Message

As the City's technology leader, DoITT is responsible for maintaining the foundational IT infrastructure and systems that touch every aspect of City life – from public safety to human services, and from education to economic development. DoITT is at the center of shaping New York City IT strategy and policy, especially as it relates to the emerging and innovative technologies that make government transparent, effective and user-friendly. DoITT is "Enabling the Connected City" and shaping the IT future of New York City.

We are committed to ensuring that New York remains the greatest and most technologically advanced city in the world.

Together with DoITT, our City can look forward to more progress toward our goals in 2012.

Michael R. Bloomberg Mayor



From the Commissioner

DoITT empowers New Yorkers and City agencies with sustained, efficient and effective IT services, infrastructure and telecommunications. Technology is the engine that enables better business processes, and more efficient service delivery. Our efforts are committed to harnessing technology to make government more responsive, accountable and accessible.

This year's annual report, "Enabling the Connected City", highlights our progress as we centralize and consolidate the City's technology, deliver essential IT services and build costefficient applications. In 2011, we also applied multiple innovative and accessible technology solutions to transform public access to information and services. These initiatives include, releasing open and accessible City data, launching collaborative platforms and providing broadband access to populations throughout New York. All of these are vital to our economic future, they help our City engage with customers and lead to more collaborative and effective government.

None of this would be possible without the contributions of the dedicated New York City public servants represented in these pages and our many public and private partners across the technology spectrum. I would like to thank those who contributed to a successful 2011 and look forward to more accomplishments in 2012.

Carole Post Commissioner New York City Chief Information Officer



"The Department of Information Technology and Telecommunications (DoITT) provides for the sustained, efficient and effective delivery of IT services, infrastructure and telecommunications to enhance service delivery to New York City's residents, businesses, employees and visitors."



Introduction

DoITT provides the IT infrastructure and service delivery that New York City relies on. In 2011, DoITT ensured that New York City government IT operations were seamless, effective and user friendly for the city's more than eight million residents, 300,000 employees, 230,000 businesses and 50.5 million visitors.

DoITT deploys technology to transform the current and future performance of IT service delivery in New York City. In 2011, DoITT leveraged cutting-edge tools, innovative methods and strategic partnerships to increase IT operations' efficiency, transparency and performance, and ensure the overall security of the City's data - all the while, keeping an eye on the bottom line.

With a staff of more than 1,200 and an operating budget of \$375 million, DoITT delivers a broad range of IT and telecommunications services, including expanding broadband access, assisting cable television consumers and maintaining public pay telephones.

The 2011 Annual Report describes these efforts in detail, and the work of the indispensable people who deliver them.



We Deliver IT Services

DoITT ensures the sustained delivery of City IT services that touch the lives of every New Yorker.

DoITT provides state-of-the-art IT practices to modernize and optimize the City's hundreds of thousands of assets in its IT infrastructure. These IT assets include applications, databases, facilities, hardware, mainframes, operating systems, security, software, telecommunications, virtual systems and more. DoITT ensures that these assets operate efficiently.

Citywide IT Infrastructure Services Program (CITIServ)

DoITT launched CITIServ in 2010 to modernize and optimize the City's IT infrastructure. Through CITIServ, City agencies are provided a unified set of shared services and customer support including 24x7 service desk, hosting, storage, email, virtualization and network services support. CITIServ reduces the City's IT operating costs and infrastructure footprint. Ultimately, shared IT infrastructure improves IT services to better serve the City's businesses, visitors and residents. CITIServ:

- Lowers the City's cost of operations
- Reduces energy consumption and emissions
- Strengthens physical and data security
- Provides City agencies with enhanced reliability and issue resolution through a unified service desk

2011 CITIServ Progress and Achievements

1. Citywide Data Center

In early 2010, DoITT began technology and architecture build-outs, adhering to Green IT principles, for the City's new data center facility in downtown Brooklyn. The facility incorporates modern thermodynamic design concepts and utilizes high-energy-efficiency components. Now open, the data center offers resiliency, energy efficiency and security features to City agencies. It provides the capacity and services needed to ensure seamless transitions for agencies, particularly those with systems nearing end-of-life or those seeking to expand to meet space, storage or power needs. Those agency investments can now be combined, reduced or eliminated because of the data center. The site was commissioned in February 2011 and occupies nearly 18,000 square feet.

2. Email Hosting

In 2011, DoITT continued to centralize email hosting for all City agencies, per Executive Order 140, signed in late 2010. A substantial planning effort occurred in the first part of the year with migrations commencing in fall 2011 and continuing into winter 2012.

In 2011, DoITT migrated 5,476 mailboxes and 558 BlackBerry® Smartphones for four agencies:

- Department of Homeless Services (DHS)
- Department of Housing Preservation & Development (HPD)
- Office of Labor Relations (OLR)
- Mayor's Office of Media and Entertainment (MoME)

DoITT's migration of City agency email systems is conducted in sequential phases, specifically: discovery, planning, staging and migration. The remaining agencies are expected to be completed by the end of 2012, at which point *all City agency e-mail will be centrally hosted from a unified environment.*



Mayor Bloomberg opens the consolidated Citywide Data Center in 2011.



3. Data Center/Application Migrations

DoITT continued to migrate and centralize City agency data centers in 2011. Given the complex nature of an agency data center migration, a multi-staged process is required. The CITIServ team works closely with agency staff and leadership to develop an appropriate time line and schedule for migration. Migration schedules account for agency peak operating periods and other circumstances and are coordinated to ensure minimal disruption to agency operations. Following a successful migration, each agency benefits from a state-of-the-art IT environment that includes:

- Application Hosting Services: standard dedicated and virtual hosting environments
- Data and Storage Services: modern, flexible storage solutions for all hosted applications
- Collaboration Services: email with archiving, BlackBerry®, eFax, instant messaging
- Network Services: CityNet, Voice over Internet Protocol (VoIP), video conferencing

By close of 2011, DoITT was actively migrating fourteen locations for nine City agencies. By mid-2012, DoITT expects to have migrated and decommissioned 25 percent of all City data centers.

4. Citywide Service Desk Migrations

As part of CITIServ, each agency can leverage DoITT's Citywide Service Desk to support and supplement their internal help desk operations or decommission them entirely. DoITT works closely with each agency to be "on-boarded" to determine the service desk scope and deployment timeline that best suits the agency's need. DoITT provides support throughout all phases of transition (e.g. scripts, documentation of existing processes). DoITT-supported IT infrastructure management tools ensure agencies are provided with the highest quality service and allow agency IT staff to interface efficiently with DoITT. Upon migration, agencies have a 24x7, single contact point to report incidents or outages, request technical services or check ticket status.

In 2011, DoITT migrated ten agency service desks into the Citywide Service Desk environment. DoITT now provides Tier 1 service desk services for every agency hosted in its IT infrastructure environment. The remaining agencies will be migrated in concert with their data center migrations.



Providing space, storage and power.



Citywide Service Desk migration.



Citywide Service Desk staff.

We Deliver IT Services

Citywide Service Desk

The Citywide Service Desk is a 24X7, single point of contact for agency customers to report incidents or outages, request technical services, or check ticket status. The consolidation of ten additional agency service desks in 2011 enabled the City to be more efficient in the resolution of IT incidents and requests for services. Among the services that are provided by the Citywide Service Desk are:

- 1. Incident Management collecting, assessing, troubleshooting, as well as escalating and routing of incidents on issues such as:
 - Application and Account Authentication
 - Office productivity suite support

- Password resets and intruder lockouts
 - Desktop and peripheral devices
- Case Management managing all tickets through their life cycle, monitoring and reporting on incident service levels, and providing customer feedback reports based on customer satisfaction surveys.
- 3. Request Fulfillment includes general request management, routing and assignment, such as:
 - User account management (adding and removing account roles)
 - IT security requests such as certificate signing, firewall, remote access and URL filtering
 - Network drive access requests
- 4. Communications providing maintenance and outage notifications affecting the hosted agency for issues such as email servers or other high-impact outages, and alerting users to issues and advising on the resolution.





NYC.gov

DoITT manages <u>NYC.gov</u>, New York City's official website. NYC.gov is the gateway for all City services, with more than 25 million unique visitors per year and 500 million page views annually. The site provides information about the initiatives, news, resources and services of more than 130 City agencies, offices, boards, authorities and special initiatives. NYC.gov also serves as a critical communications conduit for the City, and, in times of emergency, it becomes part of the City's official emergency management effort designed to alert the public and provide real-time information. Typical site traffic is in the range of 400,000 page views per day. During Hurricane Irene, in August 2011, NYC.gov received more than 4.3 million page views in the course of a single day.

2011 New & Redesigned Websites

In 2011, <u>NYC.gov</u> launched more than thirty-four new and/or redesigned websites and nine special Internet projects for agencies and entities across the City. Some of these are represented below:



Telecommunications

DoITT provides voice services for more than 100,000 wired and wireless end points. These voice services include desk telephones and several call/contact centers, including 311. Services are administered through a wide array of providers, including: Centrex/Intellipath, Private Branch Exchange (PBX), Plain Old Telephone Service (POTS) and Voice Over Internet Protocol (VOIP). DoITT also manages support for approximately 32,000 mobile devices, including cell phones, BlackBerry® smartphones, tablets and air cards.

DoITT leverages the City's internal network to reduce overall cost and provide enhanced services, allowing for increased productivity. In 2011, DoITT conducted a study of 15,000 Centrex and PBX lines at 15+ agencies and in 2012 will initiate the migration of these telephone lines to VOIP.

In February 2012, DoITT issued a Request for Information (RFI) from vendors for voice and data telecommunication services. DoITT's goal in issuing this RFI is to perform market research regarding current and soon-to-be-available service offerings, which can help ensure that the City obtains voice and data telecommunication services efficiently and effectively (including the receipt of services at the lowest cost). DoITT expects to release a Request for Proposal for these service offerings later in 2012.

CityNet

Owned, operated and managed by DoITT, CityNet – the City's institutional fiber network – is the pathway by which voice and data services are provided to 300,000 City employees and hundreds of municipal facilities across the five boroughs. This pivotal infrastructure consists of a collection of physical locations (nodes) interconnected by fiber optic cables. To meet the City's current and future growth requirements, DoITT is upgrading and improving its infrastructure to support Dense Wave Division Multiplexing (DWDM) – a technology that layers multiple optic signals onto a single fiber stand by using different wavelengths of light.

In 2011, DoITT commenced the first phase of this project, consisting of physical site remediation and software, and eight core optical equipment upgrades. In 2012, upgrades to 18 network nodes will commence. Once completed, DWDM will enable single fiber strands that can be divided into 40 wavelengths at once, supporting higher-bandwidth speeds between all network connections and providing for accelerated provisioning of new circuits.

6,668 Telecommunication Incidents Per Year



Average Days to Resolve Telecommunication Incidents



Mobile Devices Supported





Wireless Technologies

DoITT's New York City Wireless Network (NYCWiN) and land-mobile radio systems support the City's mission-critical communications through access to reliable, resilient and secure wireless voice and broad-band data technologies.

NYCWiN

NYCWiN provides the City with dedicated communications infrastructure created to support public safety and City operations. In 2011, NYCWiN enabled more than 300 applications spanning 29 City agencies that protect public safety and improve vital public infrastructure. This dedicated government network currently supports 10,000 users and nearly 800,000 devices. NYCWiN delivers Citywide coverage with 24x7 monitoring, full network redundancy and resiliency.

Land-Mobile Radio

DoITT's land-mobile radio team manages and maintains mission-critical radio communications systems to meet the daily emergency and interoperable communication needs of the City's public safety and essential public service agencies. DoITT's land-mobile radio systems provide more than 95 percent on-street portable coverage. These systems are designed for availability 24x7 during all operating scenarios (normal operations, planned events and emergencies). The infrastructure is hardened and secured end-to-end, with multiple levels of backup maintained to achieve the highest level of redundancy.

By the end of 2011, DoITT maintained nearly 23,000 radios spanning 40 agencies, supporting mission critical and interoperable land-mobile radio communications citywide. More than 4,650,000 calls were made.

The DoITT land-mobile radio team supported various agencies' communications needs during emergencies and scheduled events including the North River Plant fire, Hurricane Irene and the September 11th Commemoration.





A Wireless Technologies Command Post.



DoITT Radio Command Post at 911 Memorial Event.

NYCWiN Featured Applications and Network Developments

- The Department of Transportation (DOT) Urban Traffic Management Program commenced in 2010 to address traffic congestion by wirelessly integrating City traffic signals at intersections. In 2011, DoITT equipped 3,000 additional intersections, bringing the total to 5,500 of the planned 10,500 locations.
- In July 2011, DOT implemented "Midtown in Motion" to ease midtown traffic congestion by proactively and remotely changing traffic patterns using cameras, microwave motion sensors and E-ZPass Readers. NYCWiN modems with enhanced sensor functionality were installed at 100 Midtown Manhattan intersections enabling this innovative program to be implemented remotely at little or no cost.
- In July 2011, the Fire Department's (FDNY) Electronic Fire-ground Accountability System (eFAS) utilizes NYCWiN to transmit real-time radio assignments of firefighters at the incident scene to the FDNY Operations Center. The application recognizes multiple radio identities on mobile data terminals in FDNY vehicles. The data is transmitted to the FDNY Operations Center, enhancing responder safety and situational awareness.
- In 2011, 785,967 or 94 percent (up from 70 percent in 2010) of the Department of Environmental Protection's (DEP) automated water meter-reading (AMR) devices were installed citywide. These AMR devices use NYCWiN to send accurate readings to a computerized billing system up to four times a day eliminating the need for estimated bills.
- In 2011, DoITT installed 1,145 mobile modems in NYC Police Department (NYPD) patrol vehicles, enabling access to a wide array of crucial information to officers on the move- including driver's license scanning and license plate reader capabilities.
- In 2011, the Department of Sanitation (DSNY) "Snow Scout" team and City Hall's "Storm Scout" team
 used NYCWiN during severe weather events to feed back real-time conditions and connect personnel
 in the field to City command centers. This streaming live video enabled command vehicles and watercraft equipped with mobile cams to enhance situational awareness and aid in remote decision-making.



Mobile modem in NYPD vehicles.



Snow Scout team member streaming live video.

2010-2013 NYCWiN Forecast

- 5,489 additional DOT traffic control modems
- 500 personal radiation detectors for NYPD
- 1,700 mobile modems for NYPD and FDNY
- 2,000 laptop modems/Panasonic mobile computing devices
- 100 remote office modems
- 834,000 automated water meters in home residences, 100% completed

Emergency Response

A coastal storm event reached landfall in New York City on August 28, 2011. DoITT was prepared on many fronts and learned several valuable lessons that will strengthen future responses. Specifically, DoITT:

- Ensured coverage for all essential IT services.
- Provided round-the-clock Citywide Service Desk coverage at the City's Emergency Operations Center.
- Launched the <u>NYC Severe Weather</u> site to coordinate all hurricane information and continued support of the <u>Hurricane Evacuation Zone Finder Application</u>.
- Employed creative solutions to manage record amounts of web traffic before and during the storm.
- Enhanced remote access to meet remote connectivity needs for agencies.
- Procured, purchased and coordinated with carriers and franchisees to ensure sustained service.
- Installed a generator to support the 311 Customer Support Center.





Mayor Bloomberg at OEM Emergency Operations Center during Hurricane Irene.



Handheld radios deployed during Hurricane Irene.

Information Security

DoITT plans, formulates and coordinates the security of data and other information stored in the City's IT infrastructure (i.e., the data centers, networks, and Web portals that support critical City agency functions). To do so, DoITT:

- Manages security services for use by City agencies, including perimeter firewalls, intrusion detection and an industry-standard three-tier hosting model for Internet applications with layered security and citywide malware/spyware protection.
- Promulgates *Citywide Information Security Polices and Standards* policies and standards to ensure the confidentiality, integrity and controlled accessibility of all electronic information.
- Conducts information security auditing to assist agencies in minimizing internal exposures that could compromise sensitive data, disrupt agency operations, cause liability or diminish public trust.
- Monitors application security through the Security Accreditation Process, which is required of all applications that are either multi agency or public facing in nature.
- Manages NYC.ID, a citywide identity management (IDM) platform to ensure that City employees, contractors, partners and customers are definable and recognizable. NYC.ID provides a platform of identity-based services for individual agencies and citywide applications, including the management of contact information, access privileges and credentials.

2011 Highlights

- DoITT's 2011 award-winning IT Security Team worked with McAfee to deploy an integrated network, host and cloud solution and to leverage threat analytics to support 180,000 users from 52 City agencies.
- 25 major applications were accredited in 2011, including eHire, the September 11th Tenth Anniversary Website and the first externally hosted cloud application, the Department of Transportation's Feedback Portal. Additionally, more than 1,500 vulnerabilities that could have led to the compromise of private data were uncovered and remediated before the applications went live.



30,132

Users Migrated to McAfee Security Cloud in 2011

New/Modified Security Policies

NYC.ID Average Availability



NYC.ID Authentications Per Day

Emergency Communications Transformation Program (ECTP)

New York City operates the largest 911 emergency communications system in the United States, handling more than 11 million calls per year. The Emergency Communications Transformation Program (ECTP) was initiated to address the needs of the City's emergency public call taking and dispatch operations that arose out of the September 11, 2001 attack and the August 2003 power outage. ECTP's purpose is to consolidate the City's emergency communications services—specifically the call-taking and dispatch functions of the NYPD and FDNY – into shared facilities at two Public Safety Answering Centers (PSACs).

In 2011, a major milestone in the City's 911 emergency call system overhaul was achieved. For the first time, 911 emergency call takers and dispatchers from the NYPD and FDNY services were located on the same floor and operated on the same technology, improving inter-agency communications and emergency response. The upgraded, state-of-the-art system, implemented with the assistance of DoITT, can handle 50,000 calls per hour, more than 40 times the average daily volume and nine times more than the peak hourly call volume on September 11, 2001. Further, the upgraded system now provides the City's 911 call takers with onscreen maps of the caller's location, and critical redundancy to the City's emergency communications infrastructure to ensure delivery of the more than 11 million 911 calls received each year.







Mayor Bloomberg announces major milestone for 911 system overhaul.

IT Projects by Agency









We Build IT Applications

DoITT develops and supports IT applications and service initiatives.

In 2011, DoITT worked with agency partners to complete 152 IT projects. Nearly two-thirds of these projects were for 29 other City government agencies or entities. Projects supported citywide administration (government operations), community services (such as improving streets, parks, and libraries), infrastructure (such as buildings, roads and water supply) and economic development (helping businesses form and grow).

Project Management Services

DoITT's Project Management Services Office (PMO) oversees most of the agency's IT projects from idea to implementation. Working hand-in-hand with all DoITT Units (e.g. Enterprise Application Services, Geographic Information Services, Financial Management & Administration, etc.) and other City and government organization stakeholders, PMO project managers ensure that City IT projects are delivered on schedule and on budget.

Working from a structured software development process, each project idea goes through an extensive review from enterprise, technical and security perspectives to ensure that the delivered solutions are documented, scalable and economical.

Enterprise Application Services

DoITT's Enterprise Application Services (EAS) team works with the PMO and agency business customers to create technical solutions by designing, building and supporting enterprise software. These solutions are deployed to the public through NYC.gov, 311 and agency sites, and to City employees on CityShare. EAS deploys a mix of state-of-the-art technologies and prepackaged applications. Once complete, applications are put through rigorous testing to ensure they meet agency business needs and DoITT security standards.

2011 IT Project Highlights

Citywide Administration

• **City Council <u>Discretionary Funding Online Application</u>:** Transforms a lengthy paper application process into a user-friendly online form. This simplified process allows the City Council to more effectively disseminate discretionary funding. In 2011, nearly 17,000 applications were submitted.

Economic Development

 Taxi and Limousine (TLC) <u>Online License Renewal System</u>: Allows holders of TLC driver licenses to pay their renewal fees online. TLC is responsible for renewing the licenses of 105,000 drivers once every two years. This enhancement improves processing and transaction times. More than 1,000 drivers used this system from April – December 2011.

Infrastructure

- <u>eSignature</u>: The Department of Housing Preservation and Development (HPD) accepts electronic Certificates of Correction for Notices of Violation using authentication and document storage services provided by DoITT. The first of its kind for the City, these authentication services can be easily leveraged for other applications in the future.
- Department of Finance (DOF) <u>NYCServ Upgrade</u>: The NYCServ eService Center is the City's online payment and hearing center for issues such as parking and traffic violations, property and business taxes, water charges and more. It provides New Yorkers with user-friendly online payment forms and status checks. NYCServ now runs on an upgraded operating system and transmits data over newly installed fiber-transfer software to make the tool even faster.

Legal Affairs

• **eArraignment:** Reduces time to arraignment by automating the arrest-to-arraignment process. The program creates a time-stamp monitoring tool and imports data from the NYPD and other City and New York State agencies, including court systems. This application improves criminal justice data.

Community Services

 Department of Cultural Affairs (DCLA) <u>Cultural Management Planning System</u>: Helps the agency streamline internal processes related to managing grant funding, capital projects and relationships with grant recipients. This application enables cultural organizations to apply for funding via DCLA's website.



NYCServ eService Center





Geographic Information Services (GIS)

NYCityMap, the City's online map portal, contains a wealth of geographically based data for City agencies. DoITT maintains and supports all location-based NYCityMap initiatives for City agencies and the public. Through the map, users can obtain a bird's-eye view of City services, transportation options and building and neighborhood data, including locations of schools, day care centers, senior centers, libraries, hospitals, subways and much more.

In 2011, DoITT made updates to NYCityMap to:

- Add 2010 aerial photographs to those already available from 1924, 1951, 1996, 2006 and 2008.
- Provide new user features and tools, including "Zoom to Layer" and "Identify Result".
- Improve performance enhancements and reduce the initial map load time.

In 2011, DoITT also made significant updates to the webmap framework (shared with NYCityMap) including:

- <u>Street Closures</u> Displays full street closures provided by the Department of Transportation and the Office of Citywide Event Coordination and Management. The application provides details about current and planned full street closures obstructing normal traffic due to roadwork, street fairs, block parties, special events or parades and allows users to conduct searches by date, time and location.
- Zoning and Land Use Web Application (ZoLa) Provides New York City residents up-to-date information on zoning and land use.
- Hurricane Evacuation Zone Finder Displays New York City's hurricane evacuation zones.
- <u>311 Service Request Map</u> Displays location of service requests to 311 to better identify trouble spots.
- <u>Snow Complaint Map</u> Provides users with the ability to submit information on stuck vehicles and streets either cleared or not yet cleared of snow.







Strategic Technology Development

DoITT designs and builds emerging and innovative technologies that make government more effective and user-friendly.

- <u>NYC Open Data</u>: Launched in October 2011, this new system replaced and improved upon NYC Datamine. NYC Open Data is a platform to share high-value City data sets with the public to increase transparency and accountability, encourage civic engagement and spur economic development. The public can comment on data sets and records, search metadata, access visualization tools, view application programming interfaces (APIs) and see personalized, filtered views of data.
- Big Apps 2.0 and Big Apps 3.0: This annual competition held in 2010-2011 and 2011-2012 in partnership with the New York City Office of Economic Development (NYCEDC), gives software developers and members of the public the opportunity to create Web or mobile applications using official City and Metropolitan Transportation Authority data maintained on NYC Open Data. NYC BigApps 2.0
 - 58 applications submitted, 14 winning applications with a \$40,000 cash prize. NYC BigApps 3.0
 - 96 applications submitted, judging and public voting underway and winners to be announced in spring 2012 with a \$50,000 cash prize.
- Change by Us NYC: Released in July 2011, Change by Us is a collaboration tool that encourages the public to create projects in their neighborhoods and to connect with City resources. The platform supports blogs, idea crowd sourcing and interactive project pages.
- <u>NYC Share</u>: This tool encourages the City, the public and the technology/development community to share knowledge and ideas. Users can write blogs, post on discussion boards, share documents, publish wikis and create polls.
- **Notify NYC:** In partnership with the Office of Emergency Management, DoITT supports Notify NYC, a program that enhances New York City's emergency public communications. The public can register for Notify NYC to receive important City updates via email, SMS, phone, Twitter, or an RSS feed.





2011 Notify NYC Communications

Unique Messages	297
Unique Calls	41,170
Emails	224,118
SMS Contacts	50,628

Reinvent NYC.gov

Since NYC.gov was last redesigned nearly 10 years ago (in 2003), there is a significant need to update the site for more effective communication between New Yorkers and the City. To accomplish this goal, the <u>Reinvent NYC.gov</u> project will modernize the site's architecture, content organization, user interaction and visual branding. The idea of a site redesign was first outlined in <u>DoITT's 30-day Report: Enabling the Connected City</u> issued in 2010. The new platform for NYC.gov is expected by summer 2012, and the redesign will launch in early 2013.

Goals:

- Provide an excellent customer service experience to NYC.gov users on all devices.
- Create a user-centric platform for New Yorkers in which they are always the most important stakeholder.
- Help website visitors find exactly what they are looking for as quickly as possible.
- Redesign the portal so that it is visually attractive, engaging, easy-to-navigate and appealing to a diverse audience.
- Anticipate user needs with an intuitive content taxonomy based on common user search requests and traffic patterns – not government terminology or jargon.
- Make NYC.gov visitors feel respected and welcome.
- Implement a design that is easy to maintain and update.







Reinvent NYC.gov Hack-A-Thon.



We Are in the Neighborhood

DoITT expands broadband services throughout the community.

Broadband Technology Opportunities Program (BTOP): As part of the American Recovery and Reinvestment Act (ARRA), BTOP is a national effort to expand broadband technologies throughout the United States. In 2010, DoITT received three grants totaling over \$42 million from the U.S. Department of Commerce to expand broadband access in underserved communities within New York City.

- **Connected Communities:** Expands the availability of public computer centers in New York City's underserved areas. The program invests in City libraries, public housing facilities, senior centers and community centers. *Grant Amount:* \$13.9 million in Federal award and \$7.2 million match funds.
- **Connected Foundations:** Helps transfer students develop the skills necessary for graduation and a successful transition to college or career. The program provides students and their families at transfer high schools with computer training, refurbished computer equipment and internet access subsidies. Connected Foundations will serve approximately 1,600 students by July 1, 2012 and 3,560 students in the 2012-13 school year. *Grant Amount:* \$5.96 million in Federal award and \$2.5 million match funds.
- Connected Learning: Provides sixth graders in underserved communities with enhanced school and home learning environments. This includes: free computers, discounted broadband service, digital literacy training, technical support and an array of educational resources. A total of 9,027 students/families were served in 2011. *Grant Amount:* \$22.2 million in Federal award and \$5.9 million in match funds.



We Are in the Neighborhood

NYC SPARK (Speedy Procurement and Rapid Contracts): Gives individuals and small businesses the opportunity to apply for available consulting jobs, through a single, easily accessible website. In 2012, NYC SPARK will engage the expertise of the growing entrepreneurial and tech developer community and expand the pool of qualified developers available to work on IT projects through the City's preferred vendors.

NYC STEPS: Designed and coordinated by DoITT and NetApp in an innovative public-private partnership, NYC STEPS helps prepare underserved New Yorkers for careers in the technology industry. NYC STEPS was offered at the NYC Family Justice Center (FJC) in Queens. Clients attended weekly sessions led by guest instructors and assisted by FJC personnel, who provided support and instruction. The first NYC STEPS graduates were 12 survivors of domestic violence, working toward self-sufficiency, jobs and financial independence. The participants, women from ten different countries ranging in age from 28 to 53, finished the program in October 2011. They were then directed to Workforce 1 and its partners to receive help and referrals for entry-level job opportunities. In 2012, NYC STEPS will continue ongoing sessions in Queens and will expand programs to the Bronx and Brooklyn.

MOUSE: Providing underserved youth with opportunities for IT mentorships and shadowships in the City. In 2011, DoITT joined the MOUSE Corps program becoming one of their shadowship and internship partners. MOUSE received a \$ 20,000 grant from the Juniper Networks Foundation Fund in 2011 to support the MOUSE Corps Career Pathways program and to strengthen their partnership with DoITT.









We Ensure Professional & Technical Development

DoITT offers support and training to enhance employees' technical expertise.

DoITT seeks and maintains the best talent available to deliver top-quality IT services and provide a foundation for future public servants to continue building our achievements.

The Office of Professional Development

In 2011, DoITT launched the Office of Professional Development to provide DoITT employees with support and training for their current jobs and skills for professional growth. The professional development office helps staff achieve their highest career potential through various programs, senior-level leadership and standards of excellence.

DoITT STARS

DoITT STARS recognizes employees who have demonstrated extraordinary performance, commitment, effort or accomplishment. The Top Byte Award recognizes one DoITT employee every month and the Squad Nod Award recognizes one DoITT team quarterly.

Top Byte Winners

October: Robert "Max" Joseph, a Wireless Radio and Data Technician in DoITT's Wireless Technologies unit, was recognized for his emergency deployment experience and problem-solving skills. Max demonstrated his expertise restoring communications to the North River Wastewater Treatment Plant following a fire in July, 2011.

November: Diana Petty, an Agency Relations Manager in the Project Management Office, was the first Communications Associate in the Office of Policy, Planning & Communications. Diana was recognized for her communications and organizational skills as well as her constant multi-tasking to raise awareness of DoITT initiatives.

December: Robert Quinones, an Enterprise Architect in Project Management Services, was recognized for his strategic and thoughtful contributions to DoITT and citywide IT governing bodies as well as his input on a number of critical technology services.

2011 Squad Nod Winners

October: For their work implementing New York City's Marriage Equality law, DoITT awarded 23 employees in more than eight divisions. These staff worked tirelessly and on tight deadlines to prepare for the first day the law took effect on July 24, 2011. The team updated the online marriage application and provided technical support leading up to and during the first several days of the new law. 659 couples were served on the first day of marriage equality.

Town Halls: In 2011, DoITT hosted numerous town hall meetings so staff could meet with the Commissioner to discuss any work-related topic. From those discussions, DoITT launched several new initiatives, including:

- Metrotech Data Center Tours
- DoITT SWAP (Sharing With Agency Peers) allows DoITT staff to work in another division to learn about different aspects of the agency.
- Professional Development Task Force
- Creation of a DoITT Employee Policy Intranet Portal

Human Resources Benefits Lunch & Learn – In early 2012, DoITT Human Resources launched a new series of Benefits Lunch & Learn seminars during lunch hours. The seminars give employees a better understanding of time and leave regulations, procedures and other supplementary programs offered by the City of New York.







We Ensure Professional & Technical Development

Project Management Workshops - In addition to training courses arranged by DoITT Human Resources and through the Department of Citywide Administrative Services (DCAS) Citywide Training Center, DoITT's Project Management Office (PMO) offers workshop training on project management and project delivery topics that focus on specific aspects of the Project Management Life Cycle. In 2011, 463 people from 28 different City agencies attended workshops including:

- Project Management Work Planning
- Project Risk Management
- Siebel Customer Relationship Management
- Introduction to Web Technology
- Introduction to Web Content Management

- Introduction to Mobile Development
- Testing Standards
- Requirements Elicitation
- Requirements Generation
- Software Configuration Management

In early 2012, DoITT's PMO workshops received accreditation as a Registered Education Provider (REP) by the Project Management Institute (PMI). This means that City employees participating in DoITT's workshops can earn credits towards receiving and maintaining PMI credentials. This is a significant milestone in DoITT's commitment to promoting professional development and ensuring that project managers across the City have access to the latest trends in IT project delivery.

DoITT Honors Achievement at Annual Employee Recognition Ceremony

Each year, DoITT recognizes the dedication and hard work of staff members who have achieved 15, 20, 25, 30, 35 and 40 years of service with the City. These employees have demonstrated exemplary effort and continued commitment to serving New Yorkers.

1st Quarter 2012 Workshops



Earn 2 PMI® PDUs each for attending Project Management Work Planning and/or Project Risk Management

Project Management Work Planning - 2 PDUs - Wed, March 21st @ 2:30pm

Project Risk Management - 2 PDUs

- Wed, February 15th @ 2:30pm
- Wed, March 14th @ 10:00am

Requirements Elicitation

- Wed, March 7th @ 3:00pm

Requirements Generation

- Wed, March 14th @ 2:30pm

<u>Testing Standards</u>

- Tues, March 13th @ 2:30pm

Software Configuration

Management - Tues, March 6th @ 2:30pm



We Are Helping Consumers

Provide greater access to broadband, assist cable television consumers and ensure the maintenance of public pay telephones on City streets.

Franchise Administration

DoITT grants and administers all telecommunications franchises for New York City: cable television, local high capacity telecommunications, mobile telecommunications and public pay telephones.

2011 Accomplishments

City Franchise Revenues and Customer Services

- More than \$132 million collected from cable franchises (the City's five percent commission on video services revenues).
- More than \$7 million collected from high capacity telecommunications franchises.
- Nearly \$2 million collected from the five mobile telecommunications franchises.
- More than \$15 million in commissions for pay phone advertising and usage (13 public pay telephone franchisees with 13,696 public pay telephones).
- 1,369 cable franchise complaints were referred to DoITT in 2011. The average time to resolve complaints was 12 days, and more than 99 percent were resolved within 30 days.
- Nearly 95 percent of pay phones met the City's standards for cleanliness in 2011. DoITT conducted more than 8,000 inspections that resulted in 1,300 violations.

• **Cable Franchise Renewal** - The City approved cable television franchise renewal agreements with Time Warner Cable and Cablevision Systems, providing a range of public benefits, estimated at approximately \$60 million.

Broadband Expansion

Wi-Fi in City Parks

- Together, the City and AT&T are providing free Wi-Fi service in 20 New York City parks across the five boroughs, including Battery Bosque in Battery Park, the north-end playground in Joyce Kilmer Park in the Bronx and around the recreation center at Thomas Jefferson Park in East Harlem. Additional locations will be added in 2012.
- Time Warner Cable and Cablevision Systems will also spend approximately \$10 million over the next two years to equip City parks across the five boroughs with Wi-Fi service and maintain the systems through 2020.
- <u>Public Computer Centers</u> Time Warner Cable will create 40 public computer centers, in partnership with local not-for-profit organizations, to provide free broadband access to low-income communities across the City. Cablevision Systems will provide free commercial-grade Internet service to all public libraries in its service area.
- **Expansion of Broadband in Underserved/Industrial Areas** The companies will invest nearly \$2 million per year to bring communications infrastructure to currently underserved commercial/indus-trial/manufacturing locations in support of the City's economic development initiatives.







Inspector Arief, Franchise Enforcement.



We Are Being Recognized

Gf2011

The City of New York took the top prize in the <u>2011 GovFresh Awards</u>, winning City of the Year in addition to Best Use of Social Media. The GovFresh Awards honor tech innovations within city government that foster communication and collaboration between the public and the municipalities that serve them.

2011 Web 2.0 Awards

New York City Recognized for Excellence in Web 2.0 Technologies and Social Media Tools The <u>Public Technology Institute (PTI)</u> identifies local and state governments across the country as leaders in the innovative application of Web 2.0 technologies to achieve impressive results in constituent engagement, government accountability and operational efficiencies. In the inaugural year of PTI's Web 2.0 Awards, New York City was selected as one of the top cities in the nation for its innovative initiatives, such as 311 Service Request Map, NYC DataMine and the BigApps competition, NYCityMap and the plethora of Twitter, Facebook and mobile apps across City agencies.

gf2011



2011 ISE North America Leadership Awards

Associate Commissioner & CISO Dan Srebnick awarded the ISE North America Government Project winner. The Information Security Executive (ISE) program holds annual awards to recognize information security directors and teams who demonstrate outstanding leadership in risk management, data asset protection, regulatory compliance, privacy and network security. This year, DoITT was recognized in the Government Project Category for "Security Consolidation with McAfee Cloud Service." DoITT's IT Security Team worked with McAfee to deploy an integrated network, host and cloud solution and to leverage threat analytics to support 180,000 end users from 52 agencies. Mr. Srebnick and his team worked with McAfee to deploy cloud services that protected 180,000 end users across 52 City agencies from cyber threats.

2011 Best of New York - Excellence in Project Management

DoITT's Associate Commissioner for Wireless Technologies, Steve Harte, received the <u>New York State</u> <u>Excellence in Project Management</u> award for DoITT's collaboration with the FDNY on the Innovative Land-Mobile Radio Internet Protocol Solution, which received the Most Innovative Use of Technology award. The solution bridges the gap between traditional radio and advanced broadband communications. As a result, FDNY Command Center personnel and en-route staff can monitor on-scene radio transmissions in real time—improving firefighter safety, situational awareness and command and control capabilities. The project equipment allows access via radio, landline phone, IP phone, cellular and satellite devices.

2011 Excellence In Technology Awards – On the 10th anniversary of these awards saluting IT professionals in New York City government in New York City government, 18 DoITT employees were honored for creating transformational change.

- Demonstrated Excellence in Project Management Data Center Planning/Technical Architecture: Barry Feddema
- Green IT Award Dynamic Form System (DFS): Bob Einbinder, Emerald Mark





Steve Harte, Associate Commissioner for Wireless Technologies.

We Are Being Recognized

- Overall Excellence in Technology Award Construction, Demolition & Abatement (CDA)
 Data Integration: Vikram Saireddy, Michael Hayes, Larisa Levitskaya
- Best IT Collaboration eArraignment: Ron Bauer, Michael Hayes, Larisa Levitskaya, Robert Plikaytis, Vikram Saireddy
- Commissioner's Award for Enabling the Connected City Live Wireless Streaming for Mayoral Events: Chris Long, Ben Fernandes, Tin Lau, David Ocasio
- Excellence in IT Service and Support Manager: Michelle Coke
- Excellence in IT Service and Support Staff: Fritzgerald Grandchamps

2011 New York State Public Sector CIO of the Year

Commissioner Carole Post was named the <u>2011 New York State Public Sector CIO of the Year</u>. The annual award recognizes CIOs who demonstrate exemplary leadership, strategic vision, innovation and collaboration. The award was presented at the 2011 New York State CIO Academy, sponsored by Government Technology Executive Events and the New York State Office of Technology.

2011 New York State CIO Academy - Outstanding IT Manager of the Year

Assistant Commissioner of Web and New Media, Chris Long, was named an <u>Outstanding IT Manager</u> <u>of the Year</u>. Mr. Long is responsible for NYC.gov, which provides information about the initiatives, news, resources and services of more than 130 City agencies, offices, boards, authorities and special initiatives. The award was presented at the 2011 New York State CIO Academy, sponsored by Government Technology Executive Events and the New York State Office of Technology.



Award Winner Descriptions 2011 Excellence in Technology Awards Program



Christoper Long, Assistant Commissioner of Web and New Media.



Additional Highlights & Information

State of Our City Panel - February 24th

Commissioner Post joined DEP Commissioner (now Deputy Mayor for Operations) Caswell Holloway and DCAS Commissioner Edna Wells Handy on a panel to discuss "Technology and Operational Services," moderated by David Birdsell from Baruch College's School of Public Affairs.

Beyond the Beltway 2011 - March 7th

Commissioner Post joined Chief Information Officers from Miami, Los Angeles and Boston to discuss recent IT developments in their respective cities.

Open Government Research and Development Summit - March 22nd

Commissioner Post joined a panel of state and local Chief Information Officers (CIOs) to discuss open government initiatives and how it can spur economic growth and improve the quality-of-life for Americans.

CIO Leadership Group Meeting - April 28-29th

Commissioner Post joined senior technology officials and leaders from cities across the country to learn and share ideas on critical topics and IT solutions.

Government IT Leadership Forum - May 5th

Commissioner Post joined Federal CIO Vivek Kundra and other federal, state, and local CIOs at the 2011 Government IT Leadership Forum to discuss new strategies for customer service, innovation in government, and collaboration opportunities.

311 Customer Service Center Enhancement - May 5th

The City's gateway to government services, 311, provides non-emergency information via short message service (SMS) text. Customers with an SMS-capable mobile device can access the 311 Customer Service Center by "texting" a question about City services to short code 311NYC (311692) and receive an immediate response. The City does not charge for this service, but text messaging or data rates may apply. The 311 Customer Service Center is also available by phone, online (www.nyc.gov/311) and iPhone application (download for free).

Partnership for New York City - May 11th

Commissioner Post spoke to senior women executives on DoITT's role in the city and the key challenges and projects facing the agency.

4th Annual Internet Week - June 6-13th

Commissioner Post joined Chief Digital Officer Rachel Sterne, NYC Economic Development Corporation President Seth Pinsky and Twitter's Adam Sharp for an innovative panel on the role of government and technology. The session, "Setting the Digital Standard: Open Government in NYC," covered open data, mobile apps, economic development, crowdsourcing and much more.

CIO Leadership Workshop - June 7th

Commissioner Post participated in a CIO Leadership Workshop hosted by Columbia University to discuss "Shared Services in a 'Federated' Enterprise."

Computer For Youth's Innovative Learning Awards - June 16th

Commissioner Post introduced FCC Chairman Julius Genachowski at CFY's Innovative Learning Awards.

North River Plant Emergency Response - July 20th

The Wireless Technologies unit supported the communications restoration efforts following the plant fire. They assessed impact to plant-wide communications, deployed emergency radios and base station equipment, and restored temporary communications. The Unit also assisted the Department of Environmental Protection (DEP) in design and implementation of a permanent plant-wide system with advanced features and integration to the DEP console system supporting all DEP plants.

Imagine Cup Worldwide Finals - July 13th

Microsoft Corp. held its ninth annual Microsoft Imagine Cup finals, a technology competition that honors student innovations that address global problems, such as improving road and fire safety, eradicating poverty and creating a more sustainable environment. The winning student projects hail from Bangladesh, Brazil, Denmark, France, Greece, Ireland, Korea, Poland, Romania and Taiwan, but all students gathered in New York for a week of idea sharing and showcases around their projects. The awards ceremony included a speech by Mayor Bloomberg, and Commissioner Post presented the IT Challenge Award.

DoITT Staff Support September 11th Commemoration

As 15,000 attendees commemorated the tenth anniversary of the September 11th attacks, more than 200 DoITT staff members provided targeted support throughout the day. Volunteers coordinated families and press, and assisted with radio operations.

2011 O'Reilly Strata Summit - September 20th

Commissioner Post keynotes the summit on New York City's role in the open government movement.

Netapp's Women in Technology Event - September 23rd

Commissioner Post spoke about DoITT's role in the City, and NYC STEPS, a program that provides training and workplace computer skills to help individuals prepare for and access entry-level jobs in the growing technology industry.

2011-2012 Strategic Roadmap - September 27th

To accomplish our wide-ranging mandates, DoITT created this blueprint outlining the major goals and tasks for each division through 2012. The document unifies the agency's sense of purpose and ensures that there is a 360° view across the agency of our objectives and respective tasks.

Interop New York Conference - October 7th

Commissioner Post led a keynote session on how DoITT is modernizing, unlocking and innovating to improve IT infrastructure and service delivery in New York City.

Digital Communications Panel - October 28th

Commissioner Post joined a panel of leading technology innovators to discuss how open source and crowdsourcing initiatives are improving New York City government. This event, hosted by City Hall News, brought together leaders in government, business and the nonprofit world to discuss the future of new technologies in effecting change.

DoITT Website Refresh - November 17th

DoITT's website relaunches with a new look and feel.

2011 NPower Technology Service Corps Graduation - December 16th

Commissioner Post delivered the keynote at the NPower Technology Service Corps 26th class graduation.

Additional Image Captions and Credits

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Photo 1: Staff heading to the DoITT Retreat.Photo 2: Image of Commissioner Post by Alanblaustein.com

Photo 3: Staff at the DoITT Retreat.

Photo 4: Commissioner Post and First Deputy Commissioner Fowler with staff at the DoITT Retreat.

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Photo 1: Workers at Empire State Building installing broadband antenna tracking system.

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Photo 1: Mayor Bloomberg, Commissioner Post, DoITT Deputy Commissioner Bimonte, Brooklyn Borough President Markowitz and DoITT First Deputy Commissioner Fowler

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Photo 1: Nigel Chamakoon, Mike Lambert, Steve Harte and Rich Ramirez of DoITT's Wireless Technology Unit.

Photo 2: Kenny Pescetto of DoITT's Wireless Technology Unit.

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Photos 1& 2: Credit: Ed Reed

Page 16 - Photo Credits: Ed Reed

Photo 1: Mayor Bloomberg, Commissioner Post & FDNY Commissioner Cassano.

Photo 3: Mayor Bloomberg, NYPD Commissioner Kelly & NYPD staff.

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Photo 2: Credit: Mimi Chun, General Assembly

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Photo 1: Citywide Service Desk staff.

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Photo 1: Credit: Samantha Modell

Additional photo credits to Bruce Ribakove, DoITT Director of Contract Administration, and Marvin Williams, DoITT Community Associate.

