

OVERVIEW

TECHNOLOGY  
PLATFORMS

PROCESSES

PARTNERSHIPS

PEOPLE & CULTURE



# Chief Information & Innovation Officer Progress Report

December 2013

**NYC**

## Letter from the Mayor

Technology is changing the way we live, and it's up to governments to keep pace. To strengthen our city's position as a global tech leader, we have made it easier for our 8.4 million residents to interact with their government, find information, and request City services. Several tech initiatives in particular are helping us improve government performance. This year, we launched a new version of NYC.gov, updating the design and infrastructure of the City's official website. Through our NYC Open Data platform, more than 1,100 public data sets are now available to anyone interested in creating applications from City data. Tech is also making New Yorkers safer, supporting the critical voice, video, and data communications of our first responders. And through partnerships among schools, libraries, community centers, and the private sector, we are bringing technology access and training to more people across the five boroughs.

Together, these innovations are making government more data-driven, more efficient, and more effective every day. Thanks to this strong foundation, New Yorkers can look forward to making the most of the new technologies that come next.

Michael R. Bloomberg  
Mayor  
The City of New York



## Letter from the Chief Information & Innovation Officer

Last year Mayor Bloomberg offered me the opportunity to continue the customer-service revolution that his administration has brought to New York City - leveraging technology to give New Yorkers unprecedented access to City services and transparency into government operations.

With a focus on people, processes, technology platforms, and partnerships we have made great progress to ensuring that the City of New York continues to be a leader in public sector service delivery and technology innovation.

We provide core IT assets - scalable, critical infrastructure and a backbone for City operations. We operate data centers, independent fiber and wireless networks, and digital services like NYC.gov and 311 that ensure uninterrupted public access in times of emergency and non-emergencies alike. And we are establishing innovative partnerships by collaborating with public and private entities to build the city's digital resources - WiFi in public spaces, computer centers, and technology training programs - providing access to more New Yorkers than ever before. This work continues as we focus on expanding fiber optics to businesses and residents.

We have also led the City's open government efforts, unlocking public data and providing powerful tools for engagement, efficiency, and transparency. More than 1,100 datasets are available through the NYC OpenData portal enabling the City to better serve New Yorkers through collaborative innovation.

I am pleased to present the CIIO Report detailing our achievements over the last year and a half. Through the efforts of our dedicated employees, we've modernized government technology platforms; we've initiated new processes that enable a more efficient and effective government; and through a focus on our people and culture we've laid the groundwork for more innovation to come.

Rahul N. Merchant  
Chief Information & Innovation Officer/Commissioner, NYC DoITT



## NYC Technology and Telecommunications

In the last year and a half there has been unprecedented change in the City of New York's information technology development and management. Data-driven decision making has led to innovation – innovation that is based on four pillars that support the achievement of our goals.

These pillars – **Technology Platforms, Processes, Partnerships, and People and Culture** – keep us focused on providing solutions that help New York City remain a leader in public service and technology innovation.

## Organization

### Citywide Chief Information and Innovation Officer (CIIO)

The CIIO oversees the City's information technology development and management across all City agencies, including: analyzing existing practices to isolate areas for improvement or enhancement, fostering partnerships to extend services to customers, and working with senior executives to ensure initiative alignment with mayoral priorities. The CIIO is also responsible for establishing and overseeing the New York City Technology Development Corporation – a City-sponsored not-for-profit IT consulting firm.

### The Department of Information Technology and Telecommunications (DoITT)

DoITT, the City's technology leader and IT utility, is responsible for implementing state-of-the-art information technology to improve services and make government more transparent and accountable. It does so by employing cutting-edge tools, methods, and partnerships to empower New Yorkers.



## Strategic Innovation

### Technology Platforms:

- Established a metrics-based culture to continuously improve technology platform delivery.
- Reinvented digital services like *NYC.gov* and 311 to ensure seamless and uninterrupted access in times of emergency and day-to-day.
- Streamlined internal processes via platforms like APT, Enterprise Licenses & Permitting, and SMART.
- Expanded fiber optics to businesses and residents.
- Strengthened core IT assets like CityNet and NYCWiN to provide scalable, critical infrastructure for City operations.
- Upgraded critical data centers, independent fiber, and wireless networks.

### Processes & Partnerships:

- Led the City's open government efforts; unlocked public data and provided powerful tools for innovation, engagement, efficiency, and transparency.
- Established innovative public-private partnerships to bridge the digital divide—public WiFi, computer centers, and technology training— increasing digital access for more New Yorkers.
- Brought new sources of talent and methodology into project management to improve project delivery through the Technology Development Corporation.

### People & Culture:

- Expanded recruitment across new web and social media channels to reach and attract top talent.
- Enhanced training and mentorship opportunities to retain staff.

# Technology Platforms

*The only constant in technology is change.*

*“A **data-driven city** is a city that intelligently uses data to better deliver critical services, while increasing accountability through transparency.”*

INTERNAL  
APPLICATIONS

EXTERNAL  
APPLICATIONS

**DATA**

INTERNAL  
INFRASTRUCTURE

EXTERNAL  
INFRASTRUCTURE

**Data-Driven Innovation**

Making City data easily available and accessible by the public fosters creative solutions to civic challenges. Local Law 11 of 2012 – the most progressive open data law in the country – mandates that all qualifying City-managed data be made available to the public through a single web portal at [nyc.gov/data](http://nyc.gov/data) by 2018. Further proof of the Bloomberg Administration's commitment to these efforts, the City appointed a Chief Analytics and Open Platform Officer to oversee open data initiatives and provide actionable insights through data analysis.

**By the numbers**

**Mar 2012** – NYC Local Law 11 of 2012 enacted.

**Feb 2013** – NYC Chief Analytics Officer appointed.

**Sept 2013** – inaugural NYC Open Data Plan published.

**Dec 2018** – all public data open on [nyc.gov](http://nyc.gov).

**Open Government**

- **NYC Open Data:** 1,100+ data sets are now available spanning the full range of City operations. High value data unlocked in 2012-2013 includes: PLUTO & mapPLUTO, MMR & PMMR Indicators, Building Permit Information, and TLC Licensed Drivers.
- **NYC Developer Platform:** Provides links to documentation, code fragments, applications, and policies. Providing developers with tools to build innovative applications.
- **NYC BigApps:** This year's annual challenge featured 120 projects, \$150,000 in prizes, 42 data providers and 13 events aimed at improving the quality of life in New York City.

**By the numbers**

**1,100+** datasets available, up from 350 in 2011

**517** NYC BigApps participants in 2013

**300** NYC BigApps applications since 2009

**Internal Data Platforms**

- **DataShare:** Enables agencies to transmit and receive data in real-time, automating processes, boosting internal efficiencies, and reducing customer wait-times.
- **Data Bridge:** Allows the City to perform advanced analysis, including data discovery and predictive analytics. The Risk Based Inspection System application, which uses data from multiple sources, enables the City to assess and prioritize 50,000 buildings firefighters inspect annually.

**By the numbers**

**40** agencies using DataShare

**105** live data exchanges

**100M+** pieces of information

**30** different City and non-city organizations integrated into DataBridge



## Application Services

DoITT works on approximately 65 projects at any given time. Implemented using industry best practices, these projects support government operations, community services, infrastructure modernization, and economic development by introducing new technology solutions and services.

In 2012-13, DoITT and agency partners completed more than 150 technology projects. DoITT provides quality assurance and performance testing services to ensure these projects are delivered to specification and can withstand expected usage.

Once launched, many of these solutions and services continue to be hosted, supported, and maintained by DoITT. Application Services currently supports 116 applications across more than 33 agencies.

## By the numbers

**150+** projects completed (2012-13)

**116** applications supported

**65** active projects

FROM / FOR  
CULTURAL & ARTS  
@shoresite

Pat  
Find  
Childcare  
Melissa Gasperito

Reproductive  
Health Edu.  
Community; Paternity  
resources  
university; employees  
Danelle

USING TECH  
To MENTOR  
+  
INSPIRE (Particularly  
University)  
@CLAVASCH  
Sara Gordon

Volkan Usur  
How to work  
in  
interdisciplinary  
CYBORG  
Teams...as a developer

@gubbs  
building and  
sustaining OPEN  
SOURCE communities  
#betaNYC

Telling Stories:  
How to win supporters (+hackathons)  
and solve big problems in  
3 simple narrative steps  
@kathrinpetros

(FOOD)  
MARKET DEALS

BICYCLE-FRIENDLY  
NYC

@KIMBURGAS

**Automated Procurement Tracking**

Each year, the City procures billions of dollars in goods and services. For greater efficiency and transparency in the City's procurement process, the Mayor's Office of Contract Services and DoITT created APT, modernizing how City agencies conduct procurement by introducing automated workflow and business rules, electronic forms, and advanced reporting capabilities. APT application support occurs in house, allowing the City, rather than contractors, to maintain and enhance the system.

**By the numbers**

**8,759** procurements processed

**\$34,233,016,807**

value of procurements

**Enterprise Licensing & Permitting**

The Enterprise Licensing and Permits program replaces several City agencies' client management systems to provide seamless data exchange. This allows businesses to apply for certain licenses, permits, and renewals both in person and for the first time online. Current agencies using this enterprise system are the Department of Health and Mental Hygiene, and Department of Consumer Affairs. The Department of Buildings is also in the process of implementing this system at their agency.

**By the numbers**

**36,000+** transactions handled

**\$21M+** payments processed

**98** license types available

**7,000+** registered users

**Sanitation Management Analysis and Resource Tracking (SMART)**

SMART will transform the NYC Department of Sanitation's (DSNY) core information technology systems including the agency management, analysis, and resource tracking, which improves DSNY's ability to manage their vast operations. The first phase of the project, an operations dashboard, tracks and assigns resources required to maintain city services - including trash and recycling collection, snow removal and street sweeping. Having the ability to electronically assign routes, equipment, and staff will allow DSNY to effectively and efficiently fulfill the agency's daily mission.

**By the numbers**

**10,500+** tons of refuse collected daily

**7,197** uniformed sanitation workers

**5,700+** support vehicles

## INTERNAL APPLICATIONS

DEPARTMENT	PROJECT	PRIMARY PROJECT TYPE	MAYORAL THEME
CJC	eArrestment Release (3 releases)	Application Enhancement	Citywide Administration
CJC	Financial Intelligence Center	Application Enhancement	Citywide Administration
COIB	COIB - Annual Filing (2 releases)	Application Enhancement	Citywide Administration
DCAS	PlaNYC SEPTS Environmental - Heating Oil Tanks	Application Build	Citywide Administration
DOF	GIS Digital Tax Map Application	Application Build	Citywide Administration
DoITT	GIS Poletop Application Enhancements	Application Support	Citywide Administration
DoITT	My Desk - Self-Service Portal	Application Build	Citywide Administration
DoITT	Resource Planning for IT Services, Wireless, Project Management & App Dev	Application Enhancement	Citywide Administration
FJC	Client Intake and Safety Project (3 releases)	Application Build	Community Services
HHS Connect	HHS Connect Access Management SiteMinder Upgrade	Application Enhancement	Social Services
HHS Connect	HHS-Common Client Index	Application Enhancement	Social Services
HHS Connect	HHS-Connect Worker Connect (7 maintenance releases)	Application Enhancement	Social Services
HRA	Managed Care Systems Hosting	Application Enhancement	Community Services
Multi-Agency	Enterprise Correspondence Agency Roll Out (5 releases)	Application Enhancement	Public Safety
Multi-Agency	Enterprise Licensing & Permitting	Infrastructure Build	Infrastructure
Mayor's Office	Expansion of 458A Website to Include Parks and Film Events	Application Enhancement	Community Services
Mayor's Office	Citywide Event Management System (4 releases)	Application Build	Community Services
MOCS	Automated Procurement Tracking (5 releases)	Application Enhancement	Citywide Administration



**NYC.gov**

NYC.gov receives approximately 35 million visits each year. DoITT recently upgraded and modernized the site, including the design and build of key portal pages, as well as the introduction of new information architecture, content taxonomy, user functionality, interface and interaction design, and visual branding. This significantly improves the City's ability to serve the public. The new platform also upgrades existing City Clerk online forms, 311 Online, Taxi and Limousine Commission License Application Renewals, and Department of Records Online Forms.

**By the numbers****35M** visits annually**250M** page views annually**99.9%** uptime of NYC.gov in FY13**NYC 311**

NYC 311 has received more than 161 million calls and has been the main source for New York City non-emergency government information since 2003. Today, NYC 311 is available in nearly 180 languages. Each day it serves 50,000 customers, filing 7,700 requests by telephone, smart phone apps, online self-service, text messaging, Skype, and Twitter. DoITT is continually expanding how its customers can interact with 311 through innovative technology. The latest additions being an interactive Frequently Asked Questions, a trial program for online chat and predictive answers, expanded mobile capability, and greater social media interaction.

**By the numbers****180** languages**50,000** daily calls**12,000** daily online visits**Geographic Information Systems**

DoITT Citywide GIS provides enterprise-wide support for geospatial applications – developing and hosting interactive maps and geo-referenced data along with associated tools and applications such as NYCityMap. Recently launched and enhanced interactive maps and tools include: PlowNYC, Hurricane Evacuation Zone Finder, and the Geoservice API. A Crime Map developed in collaboration with the NYPD launched in early December.

**By the numbers****10,000+** concurrent users can be supported in FY13, compared to a peak of 1,800 in FY12**820,000+** NYCityMap views annually

## EXTERNAL APPLICATIONS

DEPARTMENT	PROJECT	PRIMARY PROJECT TYPE	MAYORAL THEME
DCP	NYC Census Fact Finder 3.0	Application Enhancement	Citywide Administration
DoITT	311 Mobile Application Project (6 releases)	Application Build	Citywide Administration
DoITT	Captcha for Online Forms and Applications	Application Enhancement	Citywide Administration
DoITT	Cloud-based Mapping Solution	Infrastructure Enhancement	Citywide Administration
DoITT	Geoservice API	Application Build	Infrastructure & Community Services
DoITT	GIS 2012 Aerial Photography	Infrastructure Enhancement	Infrastructure & Community Services
DoITT	GIS 2012 Planimetric Update	Other	Infrastructure
DoITT	GIS Searchable Property Environment eDatabase Portal	Application Build	Citywide Administration
DoITT	GIS Webmap Framework	Application Build	Infrastructure
DoITT	NYC Developer Platform	Application Build	Community Services
DoITT	NYC Open Data (7 releases)	Application Build	Legal Affairs & Community Service
DoITT	Reinvent NYC.gov Re-Architecture	Infrastructure Build	Citywide Administration
DoITT	Reinvent NYC.gov Re-design	Application Build	Citywide Administration
DoITT	Plow NYC Snow Plow Tracking Application	Application Build	Community Services
DoITT	Who's On the Ballot	Application Build	Community Services
HHS Connect	Connect Access NYC (15 maintenance releases)	Application Enhancement & Application Support	Social Services
HRO	Community Development Block Grant	Application Build	Citywide Administration
Mayor's Office	NYC Business (5 releases)	Application Build	Economic Development & Business Affairs
Multi-Agency	NYC BigApps	Other	Community Services
OPS	311 Integration (6 releases)	Application Enhancement	Citywide Administration & Community Services
OPS	Data Element Exchange Program (30 releases since 5/30/2012)	Application Build	Citywide Administration
OPS	Mayor's Management Report Update	Application Build	Citywide Administration
OEM	Hurricane Evacuation Zone Finder Update	Application Enhancement	Public Safety

## Infrastructure Management

Infrastructure Management is charged with the implementation, operation, and support of all citywide IT infrastructure. The division supports its clients by: building, securing, and maintaining technology infrastructure to fulfill City agencies' business needs.

Infrastructure Management hosts or administers hundreds of thousands of IT and telecommunications assets for the City. To effectively provide these services, DoITT follows best practices and utilizes state-of-the-art facilities and technologies.

**Citywide Data Center**

Drawing together more than 60 data centers fragmented across 83 city agencies, CITIServ provides unified data center operations, business continuity, and other shared services. By December 2013, most City agency e-mail will be centrally hosted. CITIServ has a combined savings and cost avoidance of \$15.3 million, resulting in a projected total program cost savings of more than \$47 million through Fiscal 2015. In 2013, DoITT opened additional data centers to maintain continuity for DoITT-supported systems and applications in emergencies.

**By the numbers**

**4,500** environments hosted  
**21** agencies migrated to CITIServ  
**70** agencies and related entities with centralized email hosting  
**66,000+** email accounts in FY13 vs. 54,500 in FY12

**CityNet/Network Services**

CityNet, the City's fiber network, provides voice and data services to City employees and hundreds of municipal facilities. All 27 locations have been upgraded on time and on budget, increasing the network's bandwidth, capability, and resiliency by maximizing the City's use of available dark fiber. DoITT also provides voice services for more than 108,000 desk telephones and mobile devices. In 2012-2013, DoITT expedited the migration of approximately 5,000 city telephones to Voice over Internet Protocol (VoIP), a more resilient telephony network and allowed the City to maintain a network uptime of 99.97 percent for Fiscal 2013.

**By the numbers**

**300,000** City employees connected to CityNet  
**75,000** desk telephones, including 15,000 VoIP telephones, up from 10,000 VoIP telephones in 2012  
**33,000** mobile devices

**Wireless Technologies**

- **New York City Wireless Network (NYCWIn):** Provides mission critical high-speed wireless data communications to first responders and essential service agencies. Coverage is available throughout the five boroughs, enabling real-time secure access and transfer of critical information to agency back-end databases via portable, mobile, and fixed-location technologies. In 2013, the total number of NYCWiN modems increased by 36%.
- **Citywide Radio Network (CRN):** DoITT's mission critical radio systems - 800 MHz and the Citywide Radio Network - support more than 40 City agencies with internal and interoperable communications among various jurisdictions.

**By the numbers**

**35,000** radios  
**60** City, state and federal agencies using CRN  
**850,000** devices supported by NYCWiN

**IT Security**

DoITT's integrated security network consolidates desktop and service security on a single citywide platform. This cloud solution now supports more than 80,000 computer systems. DoITT also maintains the security, including email, intrusion prevention systems, firewall protection, security monitoring, and domain name system for 60 City entities. Applications given accreditation in 2012-13 include: 311 Mobile, NYC.gov Re-architecture, the Hurricane Evacuation Zone Finder, Taxi & Limousine Commission License Application Renewal System, Criminal Justice Center Financial Intelligence Center

**By the numbers**

**80,000+** computer systems managed daily

**6,000+** additional systems hosted in 2013

**60** City entities protected today, up from 49 in FY12

**Citywide Service Desk**

DoITT operates the Citywide Service Desk, open 24/7/365, as a single point of contact for 16 City agencies to report IT incidents, make technical service requests, or check a ticket's status. In 2013, DoITT launched "My Desk," a self-directed IT service site that empowers City employees to explain their IT incidents and requests online. To improve overall operations, DoITT leveraged 311's expertise in call center operations to perform a review of the Citywide Service Desk and implemented various recommendations to further our goal of becoming a center of excellence.

**By the numbers**

**1,100+** urgent incidents in FY2013

**219,600+** total service incidents in FY2013

**92%** of calls answered in 30 seconds or less (current average)



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**Internal Infrastructure**

**INTERNAL INFRASTRUCTURE**

DEPARTMENT	PROJECT	PRIMARY PROJECT TYPE	MAYORAL THEME
BBP	Installation of Accounting Software	Infrastructure Build	Community Services
DCAS	Energy Efficiency Metering System	Application Enhancement	Infrastructure
DOB	2-Tier to 3-Tier Migration (2 releases)	Infrastructure Enhancement	Infrastructure
DOC	Hart Island Application	Infrastructure Enhancement	Infrastructure
DOF	Citywide Payments & Receivables Repository (2 releases)	Infrastructure Enhancement	Infrastructure
DOITT	CEMS Migration to TMG Security	Migration	Infrastructure
DOITT	CITIServ Data Center Upgrades and Agency Migrations	Infrastructure Enhancement	Infrastructure
DOITT	CityNet Upgrade	Infrastructure Enhancement	Infrastructure
DOITT	Citywide Radio Network: National Mutual Aid Channels	Infrastructure Enhancement	Public Safety & Infrastructure
DOITT	Citywide Radio Network: IP Core Upgrade	Infrastructure Enhancement	Public Safety & Infrastructure
DOITT	DataBridge	Infrastructure Enhancement	Infrastructure
DOITT	DataShare - MQ Upgrade	Infrastructure Enhancement	Infrastructure
DOITT	DoITT Operations Center	Infrastructure Build	Citywide Administrative
DOITT	Emergency Communications Mobile Command Vehicle	Other	Public Safety & Infrastructure
DOITT	GIS Geospatial Data Maintenance & Map Production	Other	Citywide Administration
DOITT	GIS Linux version of Geosupport	Application Build	Infrastructure
DOITT	IT Security Application Accreditations	Infrastructure /Application Support	Public Safety & Citywide Administration
DOITT	IT Security DNSSEC Implementation	Infrastructure /Application Support	Public Safety & Citywide Administration
DOITT	McAfee ePO, Anti-Virus-Malware Installations	Infrastructure /Application Support	Public Safety & Citywide Administration
DOITT	NYCWiN Network Hardening	Infrastructure Enhancement	Infrastructure
DOITT	NYCWiN Security Solutions	Infrastructure Enhancement	Infrastructure
DOITT	Operations Center Dashboards	Other	Citywide Administration
DOITT	Service Desk Knowledge Base/Troubleshooting Tool	Application Build	Citywide Administration
DOITT	Site B Data Center for Mainframe	Infrastructure Build	Infrastructure
DOITT	Site B Data Center for Open Systems	Infrastructure Build	Infrastructure
DOITT	Upgrades and Expansion of IT Service Management Tools	Infrastructure Enhancement	Infrastructure
DOITT	VoIP Telephony Migrations	Infrastructure Enhancement	Infrastructure
DPR	Skire Unifier and Udesigner Software Hosting	Infrastructure Build	Infrastructure
HPD	Intro 501A Application	Infrastructure Build	Infrastructure
MBP	Network Migration	Infrastructure Build	Citywide Administration
Multi-Agency	Accela/Enterprise Licensing & Permitting - DoHMH CAMIS Replacement Phase	Application Build	Infrastructure
NYDA	Citrix Web Gateway	Infrastructure Build	Legal Affairs
OATH	Health Tribunal ATAS Migration	Infrastructure Build	Citywide Administration
OCME	Emergency Response Vehicle/Family Assistance Center Project	Other	Public Safety & Infrastructure
OEM	Citywide Asset and Logistics and Management System	Infrastructure Build	Public Safety
TDC	Data Connectivity for the Technology Development Corporation	Infrastructure Build	Citywide Administration
TLC	Electronic Summoning Project (ESAP)	Infrastructure Build	Economic Development & Business Affairs

**Reinvent Payphones**

In 2012, the City embarked on a multi-pronged approach to gain public input into the future of public pay telephones. First, it issued a Request for Information, next it launched several pilot programs to test new functionality including digital advertising, interactive touch screens, and free broadband hotspots, and lastly held a public pay phone design challenge. Results of all these initiatives will be incorporated into a formal Request for Proposals for the future payphone.

**By the numbers**

**10,000+** payphones on city streets

**125+** design challenge submissions

**25+** payphones with free WiFi

**101,255** minutes of WiFi used/month

**Parks WiFi**

Today, more than 50 City parks across the five boroughs offer WiFi service provided as part of our franchise agreements with cable TV providers and other agreements with telecommunications companies. Construction of WiFi hotspots in additional parks is continuing.

**By the numbers**

**130,000+** WiFi sessions (July-Sept 2013)

**50+** parks with WiFi

**Broadband Technology Opportunities Program (BTOP)**

DoITT is increasing public access to and adoption of broadband in underserved communities through public computer centers, training programs, and access to WiFi in public spaces. In 2010, DoITT secured approximately \$42 million through the federal American Recovery and Reinvestment Act. To date, more than 3 million New Yorkers have benefitted from DoITT's BTOP-funded programs, initiatives that are narrowing the digital divide across all five boroughs. DoITT will sustain the Connected Communities component of the program moving forward.

**By the numbers**

**3 million +** New Yorkers served  
**4,000+** visitors to NYCHA Digital Vans to date

**Microtrenching**

Launched in late 2012, this innovative approach to fiber construction speeds the deployment of fiber optic cabling to businesses and residences across the five boroughs while minimizing construction time, environmental impact, and cost. Microtrenching is the process of installing small conduits within the edges of City sidewalks to house fiber optic cabling that delivers voice, Internet, and cable television service. With the pilot having demonstrated the potential value of the technique, microtrenching becomes an official method for deploying fiber in January 2014.

**By the numbers**

**14** microtrenching locations  
**4,500+** feet of conduit installed  
**82%** construction debris reduction  
**8** minute installation/per linear foot

**Harlem Outdoor Public WiFi**

Construction of the Harlem WiFi network is now underway with the first phase, extending from 110th to 120th Streets, live by the end of December 2013, and the remaining phases complete by May 2014. When finished, the Harlem WiFi network will extend 95 city blocks, from 110th to 138th Streets between Frederick Douglass Boulevard and Madison Avenue making it the largest continuous free outdoor public wireless network in the nation. The network will increase digital access for approximately 80,000 Harlem residents, including 13,000 public housing residents, as well as the area's businesses and visitors. The network is funded through a public-private partnership with the Fuhrman Family Foundation.

**By the numbers**

**95** city blocks, largest continuous free outdoor public WiFi network in the nation  
**80,000** residents served as well as the area's businesses and visitors  
**13,000** NYCHA residents

## EXTERNAL INFRASTRUCTURE

DEPARTMENT	PROJECT	PRIMARY PROJECT TYPE	MAYORAL THEME
ACS	Preventive Services Search Engine	Infrastructure Build	Community Service
DCAS	City Record Online	Infrastructure Support	Citywide Administration
DCAS	Green Book Online	Infrastructure Build	Citywide Administration
DDC	Employment Opportunities Application	Infrastructure Build	Infrastructure
DFTA	Exergamer NYC	Other	Social Services
DOE	Connected Foundations and Connected Learning Initiatives	Other	Social Services
DOF	ACRIS Rewrite	Infrastructure Build	Economic Development & Business Affairs
DoHMH	Beach Status Application	Application Build	Community Services
DoHMH	NYC Quits Hosting	Infrastructure Build	Social Services
DoITT	FiOS Rollout	Infrastructure Build	Infrastructure
DoITT	Reinvent NYC.gov Re-Architecture	Infrastructure Enhancement	Citywide Administration
DoITT	Reinvent Payphones Design Challenge	Other	Community Services
DoITT	Payphone Digital Advertising Pilot	Infrastructure Build	Infrastructure / Economic Development & Business Affairs
DoITT	Payphone Smart Screens Pilot	Infrastructure Build	Infrastructure / Community Services
DoITT	Payphone WiFi Pilot	Infrastructure Build	Infrastructure / Community Services
DoITT	Information Services Franchises (2)	Other	Economic Development & Business Affairs
DPR	FORMS replace public website	Application Enhancement	Community Services
HHS Accelerator	Application/Hosting Release	Application Enhancement	Social Services
Law	Districting Commission Database Hosting	Infrastructure Support	Community Services
Multi-Agency/ Partnerships	Public Computer Centers (libraries, recreation centers, public tech centers, & more)	Other	Infrastructure / Community Services
Multi-Agency/ Partnerships	Parks WiFi	Infrastructure Build	Infrastructure / Community Services
Multi-Agency/ Partnerships	Public Libraries Wired	Infrastructure Build	Infrastructure / Community Services
Multi-Agency/ Partnerships	Google/Chelsea WiFi	Infrastructure Build	Infrastructure / Community Services
Multi-Agency/ Partnerships	Micro-trenching Pilot	Infrastructure Build	Infrastructure / Economic Development & Business Affairs
Multi-Agency/ Partnerships	NYCSTEPS	Other	Social Services
Multi-Agency	Accela Enterprise Licensing & Permitting - Infrastructure Implementation, Phase 1	Infrastructure Build	Citywide Administration
NYC Media	Video on Demand Player Hosting	Infrastructure Build	Citywide Administration
NYCHA	Digital Van	Application Enhancement	Social Services

# Processes

*That which is measured, improves.*

### Performance Driven Organization

Fact-based decision making and continuous improvement are part of our core-values.

- **DoITT Stat:** Cross-divisional meetings to discuss performance in key areas have created a data-driven culture across the organization and enable staff to share strategies for improvement.
- **Business Management Reviews:** Deputy Commissioners meet monthly with the Commissioner to review performance measures. This ensures executive staff is collaborating to improve operations and run IT as a business.
- **Goals and Initiatives Tracking:** Every quarter the senior staff meets with the Commissioner to discuss and track progress and, if necessary, tactics to remove roadblocks.

### Lean Provisioning

To improve our process for building and hosting environments for agencies, DoITT clearly defined required information, created a standardized review and prioritization process, and different build tracks. This has dramatically improved delivery times, on schedule deliveries, and customer satisfaction. To expand the benefits of lean provisioning to other areas, project managers are familiarizing themselves with lean processes by acting as infrastructure liaisons to oversee infrastructure requests and help expedite the process.

### Improved Project Management Methodologies

DoITT has formalized methodologies that use best practices in project management and take the project landscape of City government into consideration. There are now three project methodologies that have been shared with agencies, vendors, and the general public, including a hybrid approach that merges traditional waterfall with agile delivery practices. To ensure compliance with our standard methodologies, solicitations for system integration proposals released since April 2013 now require the vendor to address their approach to these methodologies.

### By the numbers

**11,700+** additional incidents resolved in FY13 at higher service levels

**99.8%** average uptime of key DoITT infrastructure

**29** key initiatives completed

### By the numbers

**501** environments provisioned since July 2012

**296** environments provisioned in FY13, up from 154 in FY12

**91%** of infrastructure completed on schedule or early

### By the numbers

**14** project management workshop topics

**1,500** participants from 33 agencies

### Innovative IT Contracting

Fostering competition and creating choice is key for delivering complex projects on time. To ensure NYC technology projects succeed, DoITT is transforming IT contracting by leveraging the City's tech sector, using iterative project management, and providing stronger roles and accountability in IT projects. New citywide Systems Integration (SI) contracts are designed for two classes of service enabling a diverse range of firms to submit proposals. New citywide Quality Control contracts provide enhanced project monitoring, clear requirements for reporting, higher minimum experience requirements, payments tied to agreed-upon functionality, and coordination with the NYC Technology Development Corporation to help ensure new contractors deliver projects that best serve taxpayers.

### By the numbers

**20+** Systems Integration & Quality Control vendors, up from 8 in FY13

**3** tiers of Quality Control contracts

**168** DoITT contracts awarded to M/WBEs in FY13, up from 90 in FY12

### Emergency Preparedness

DoITT is a primary responder to IT and telecommunications emergencies, and a co-responder with NYPD to cyber attacks. DoITT supports the Office of Emergency Management, City agencies, and first responders during emergencies ensuring the resilience of IT services, restoring IT and telecommunication systems, and providing technical support. During Hurricane Sandy DoITT implemented technology for Disaster Recovery Centers, provided radios for essential public service agencies, and telephony for impacted agencies. Vital services such as NYC 311 and the City's official website, *NYC.gov* functioned with no interruption. Internal systems – the City's Mainframe, Unix, Wintel, email, data, and radio systems – also remained up and running at all times.

### By the numbers

**274,000** 311 calls on the busiest day during Hurricane Sandy

**5,000** VoIP telephones migrated since Hurricane Sandy

**2.3M** visits to NYC.gov between October 29-30, 2012

**900+** radios deployed during Hurricane Sandy response

# Partnerships

*Collaborating for an even greater New York City.*



## NYC Technology Development Corporation

Established by the City in 2012, the New York City Technology Development Corporation (TDC) is a not-for-profit IT consulting firm that serves only one client - the City of New York. At the request of the CIIO, the TDC provides senior project management and consulting services for the City's most critical and complex technology projects. In addition, TDC provides a host of other services to agencies managing their own projects. The TDC reports to a Board of Directors composed of public and private members, with the CIIO serving as its Chair.

TDC objectives include:

- improving citywide IT delivery by infusing new sources of talent and methodology into project management;
- building new capabilities in business analysis, and solution architecture;
- increasing transparency in citywide IT activity and providing IT portfolio management services;
- reducing reliance on expensive and revolving for-profit IT vendors by providing a pool of stable, highly qualified, and experienced IT professionals within TDC;
- holding IT vendors accountable for delivering projects on-time and within budget by utilizing new contractual models and tighter project governance;
- providing project governance tools and templates for all aspects of technology development projects across the city, including a model for supporting applications upon their release.

## By the numbers

**\$5M** in projected annual savings compared to traditional consulting

**9** full-time highly experienced technology professionals

**10** agencies served

**11** engagements

**3** projects live: NYC.gov, Enterprise Licensing & Permits, and Harlem WiFi

## Technology Collaboration

Through strategic partnerships with public, private, nonprofit and academic entities, DoITT is able to advance IT citywide and develop an infrastructure for the future at virtually no cost to taxpayers. Examples include:

- **NYC STEPS** a public-private partnership delivered by DoITT, the Mayor's Office to Combat Domestic Violence, and other City agency and private-sector parties to provide workplace and computer training to survivors of domestic violence.
- **Innovative Senior Center** partnerships provide interactive opportunities for seniors to engage with technology while enhancing their physical and mental wellbeing.
- **Franchise Partnerships** with the City's telecommunications franchises to bring free and low-cost WiFi and other tech improvements to public parks, community centers, and commercial sectors.
- **Broadband Technology Opportunities Program** expands the availability of public computer centers and invests in high-quality digital resources, and digital literacy training through agency partners including NYCHA, DFTA, DOE, and all public library systems.
- **NYC OpenData & NYC BigApps** enables the City to collaborate with the technology community and civic innovators to develop solutions to civic challenges.
- **Reinvent Payphones** engaged the City's innovation community to imagine the future of public pay telephones.

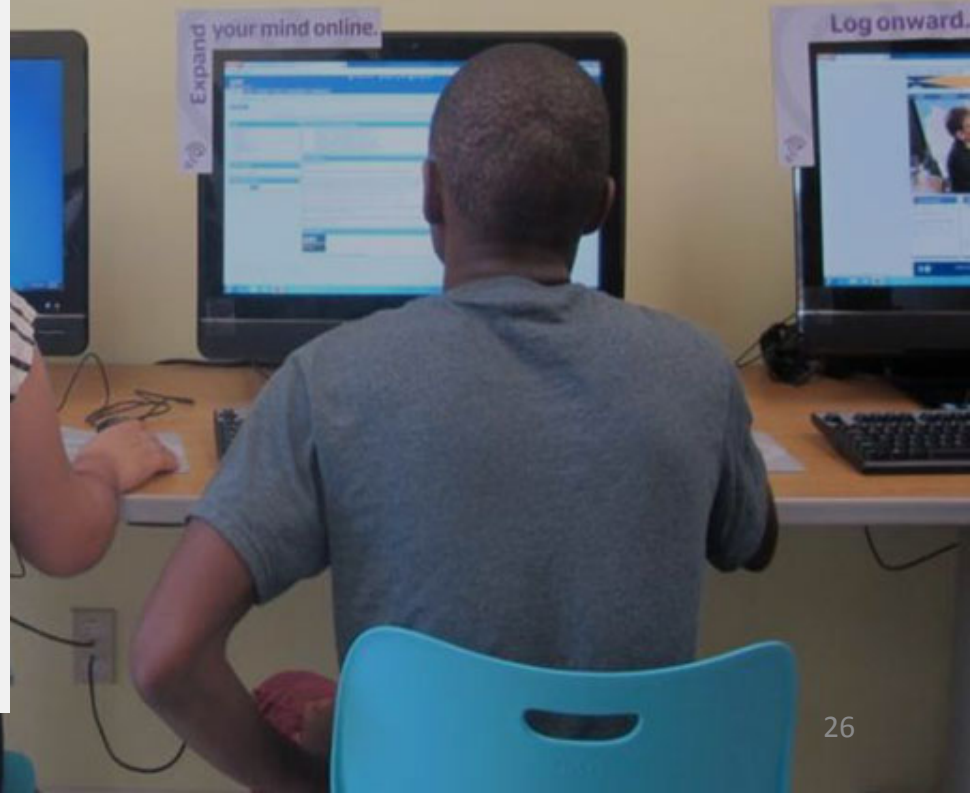
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**Community Technology Centers:** As part of the 2011 cable television renewal agreements with the City, Time Warner Cable is opening 40 public computing centers over the term of its agreement. Ten centers have opened across the City, with four new locations set to open each year through 2020.

## By the numbers

**\$100M+** in investments secured  
for public technology benefits

**97** NYC STEPS graduates





# People & Culture

*Our people are our greatest asset.*

### Attracting Top Talent

DoITT works hard to attract and retain a diverse and talented IT workforce. Today it fills vacancies faster than it did just a year ago and reaches a larger audience of potential employees. DoITT is increasing recruitment efforts across new web and social media channels to reach and attract top talent. Recent recruitment sources include: DoITT's LinkedIn page, Twitter, NYC Careers, DoITT's website, Monster, Dice, and Indeed. Leveraging multiple recruitment channels extends open positions across a range of business networks and enables DoITT employees to share information and participate in an open dialogue about professional opportunities.

### By the numbers

**33%** reduction in vacancies  
**20%** reduction in hiring time for posted vacancies  
**4,500+** DoITT LinkedIn followers  
**10%** of hires recruited via social media channels

### Developing Top Talent

Cultivating talent is a priority at DoITT. Ongoing training opportunities include:

- **DoITT SWAP:** Promotes collaboration and enables staff to broaden their skills by shadowing other divisions.
- **Lynda.com Online Learning:** Allows employees to learn what they want, when they want.
- **Project Management Workshops:** From project management basics to application testing.
- **Human Resource Trainings:** Structured Interviewing, Performance Management, Benefits, and more
- **Citywide Training Center Courses (CTC):** In the past 18 months, 240 DoITT employees attended.

### By the numbers

**1,204** HR training attendees  
**120+** employees attend skill-sharing sessions  
**1,524** Lynda.com logins

## Diversity and Inclusion

DoITT is committed to equal employment opportunity; our goal is to attract and retain a diverse team and serve as a model for other organizations. A variety of events have celebrated our diverse workforce, including a Women in Technology Panel; a Diversity Film Festival; a Lean-In Reading Circle; and a Disability Mentoring Day.

A workforce that reflects the diversity of New York City enhances our work environment and increases our success. The Office of Equal Employment Opportunity (EEO) & Diversity ensures that hiring managers adhere to best practices in the candidate selection process. Expanded resources devoted to recruiting diverse candidates has resulted in an increase in diversity at the senior staff level and throughout the agency.

## By the numbers

**58%** of Senior Staff appointed since 2012 are women or minorities

**43%** of the Commissioner's Executive Staff members are women

**60%** of DoITT employees are minority group members

**42%** of DoITT's employees are women

## Culture & Mentoring

DoITT emphasizes a culture of professionalism and respect amongst colleagues. Support, training, and team-building help make DoITT a place where people want to work.

- **Employee Recognition Ceremony:** Each year DoITT honors exemplary service, education achievements, and milestone years of service
- **DoITT Stars:** Recognizes DoITT employees (Top Byte award) and teams (Squad Nod award) who have demonstrated extraordinary performance, commitment, effort, or accomplishment above and beyond their job descriptions.
- **DoITT Connect Mentoring Program:** Matches senior managers and employees for a four-month period.
- **Customer Service Week:** Celebrates our employees through a series of localized events across the agency.
- **Annual Retreat:** Hosted by DoITT on Governor's Island, this full-day retreat allows employees to interact through structured and unstructured activities

## By the numbers

**100+** DoITT Stars recognized

**200+** staff honored at the Annual Employee Recognition Ceremony