DEPARTMENT OF INFORMATION TECHNOLOGY AND TELECOMMUNICATIONS TESTIMONY BEFORE THE CITY COUNCIL COMMITTEES ON LAND USE AND TECHNOLOGY FISCAL YEAR 2014 PRELIMINARY BUDGET MONDAY, MARCH 18, 2013

Good afternoon Chairs Comrie and Cabrera, and members of the City Council Committees on Land Use and Technology. I am Rahul Merchant, Commissioner of the Department of Information Technology and Telecommunications, or DoITT, and New York City's Chief Information and Innovation Officer. Thank you for the opportunity to testify about DoITT's Fiscal 2014 preliminary budget and some of the agency's initiatives and goals for the year to come. With me today are Jim Fowler, DoITT's Deputy Commissioner for Infrastructure Management; Brett Robinson, Deputy Commissioner for Financial Management and Administration; Charles Fraser, our General Counsel; and John Winker, our Associate Commissioner for Financial Services.

Before I begin, I must take a moment to thank Chairman Cabrera and Council Member Brewer for the advice and counsel they've offered me in my time with the City, which is now coming up on one full year. They have long been supportive of DoITT overall, and their candor and insights as seasoned legislators, I think, have only helped to improve the work we do for agencies citywide. Thank you both.

Now a summary of the agency's budget. DoITT's Fiscal 2014 Preliminary Budget provides for operating expenses of approximately \$415 million, an increase of \$8 million from the Fiscal 2014 November Budget, and a net decrease of \$46 million from Fiscal 2013's current modified budget. The addition of \$8 million represents a net increase related to funding that was added to DoITT's budget to fund some of the IFA positions that previously had their funding expire, maintenance cost associated with Capital Projects that have been recently approved, and intracity funding received from agencies for telecommunications costs. The net decrease between the Fiscal 2013 current modified and the Fiscal 2014 budget allocations is largely attributable to the drop of Inter-Fund Agreement funding after Fiscal 2013, and the one-time grant funding that has been reflected in the Fiscal 2013 current modified budget. Any unspent Fiscal 2013 grant funding will be rolled over into Fiscal 2014.

The budget includes \$82 million in Personal Services to support 1,050 full-time positions, and \$333 million for Other than Personal Services. Of the \$333 million, 35 percent, or \$117 million, represents Intra-City funds to be transferred from other agencies to DoITT for services it provides. Telecommunications costs represent the largest portion of the Intra-City expense; Fiscal 2013 Intra-City telecommunications expenditures are budgeted at \$89 million, while total telecommunications costs are budgeted at \$131 million.

Since we last appeared before the Council, DoITT has proceeded on a number of critical agency programs, perhaps best illustrated by recounting the agency's experience during and after the worst natural disaster in recent New York City history.

New York City government's internal IT and public-facing telecommunications systems and infrastructure, managed predominantly by DoITT, withstood the worst Hurricane Sandy had to offer. Vital services such as the NYC311 system and the City's official website, *NYC.gov*, were well-maintained and functioned with no interruption before, during, or after the storm. Internal systems – the City's Mainframe, Unix, Wintel, email, data, and radio systems – also remained up and running at all times.

However, systems administered and maintained by private sector companies – which either support City systems or provide services directly to the public – were negatively impacted by network and access failures.

It is clear, therefore, that the City's telecommunications providers will need to make significant enhancements to their infrastructure, their information sharing practices, and their disaster recovery planning. They must not solely restore capability and service to pre-storm levels, but also ensure sufficient resiliency and hardening so that the public – and the City agencies that serve them – may confidently rely on these systems in future catastrophic events.

By contrast, it is instructive to note the previous and ongoing investments in the internal City's technology infrastructure that made our systems so resilient in the face of the storm.

NYC.gov – As the storm approached, and using the lessons learned from Hurricane Irene, in anticipation of heavy traffic to *NYC.gov* we moved to a static version of the website with plain HTML versions of all main portal pages; these were then cached to further increase capacity. As a result, the *NYC.gov* home page remained up and operational before, during, and after Hurricane Sandy. Between October 29 and October 31, *NYC.gov* handled 2.3 million visits, and 4.8 million page views.

NYC311 – The City's non-emergency government information and services system, located in lower Manhattan, was connected to OEM headquarters throughout the event for updates and communications, and had staff onsite at OEM as well. We pre-positioned a generator in the days leading up to the storm to power the NYC 311 call center should the surrounding area lose power. When it did – as well as when all landlines in lower Manhattan went down, NYC311 remained operational and accessible throughout the storm. Calls to 311 during the storm were four times greater than the 2012 daily average, peaking as high as 274,000 in one day.

Wireless Technologies – Among the most heavily-used DolTT-managed services during Hurricane Sandy were its wireless technologies, which provided a communication lifeline to City agencies during response and recovery activities. In preparation for the storm, we ensured fueling of generators and hardening of infrastructure at key network sites, and worked with our vendors to ensure technicians were readied in each borough to support restoration efforts as needed.

Performance of Citywide Radio Systems – DoITT maintains two distinct mission critical radio systems – 800 MHz and the Citywide Radio Network – supporting more than 40 City agencies and some 25,000 radios with internal and interoperable communications among various jurisdictions. There was heavy reliance on these systems during and after Hurricane Sandy, as they were among the only reliable means of voice communications for critical response efforts in and around the impact zones. All told, DoITT deployed more than 900 radios in total to approximately two dozen agencies. These radio systems maintained 100% uptime and reliability throughout the emergency, which can be attributed to backup generators and digital microwave technology that lessened dependency on power and telecommunications providers.

Performance of Citywide Broadband Network – The New York City Wireless Network, or NYCWiN, the City's dedicated high-speed broadband network for public safety and service, performed as designed during the storm and its aftermath. It exceeded public safety standards for resiliency, telecommunications redundancy and backup power. After the storm, uninterrupted network accessibility was provided as bandwidth utilization and number of connected users increased 33% and 23%, respectively, compared to the week prior.

Moving now beyond DoITT-managed systems, the storm had a significant impact on commercially-provided voice and data services to City agencies – and thousands of their employees – located in lower Manhattan, and required that these agencies relocate their staff to available office space elsewhere.

Telecomm Providers – In the wake of Hurricane Sandy, DoITT conducted calls with Verizon several times daily to discuss the status of restoration operations and the state of its network. These discussions allowed us to ensure that the City offered Verizon whatever it required to restore service, such as, for example, facility access for technicians making repairs, provision of pumping equipment, etc.

We worked with telecom providers, cable companies, and several agencies to implement network and telecom components of the Disaster Assistance Centers in Brooklyn, Queens, and Staten Island. This included establishing broadband access to these locations, networking computer equipment and printers so that they could assist impacted communities.

DoITT also helped coordinate with City agencies and the major wireless telecommunications providers "National Disaster Recovery teams," to deploy mobile cell platforms, such as Cells on Wheels (COWs), and Cells on Light Truck (COLTs) to areas where mobile service was either non-existent or significantly diminished. Additionally, we worked with these teams to secure emergency generators and charging stations to affected areas so that residents in the Rockaways and Staten Island could charge their mobile devices as well as provide a level of wireless service while main systems were being restored.

Ongoing Efforts – Since the storm, DoITT has facilitated the provisioning of network data and voice services at these new locations. We deployed hundreds of Voice over Internet Protocol (VoIP) phones to maintain or restore business continuity, and we continue to migrate thousands of users for many of the agencies that are dependent on Verizon Centrex and may still be without phone service.

This includes the New York City Board of Elections (BOE), which was required to facilitate voting for millions of New Yorkers on Tuesday, November 6. In addition, we worked with BOE to update the City's **Poll Site Locator** with the new locations of polling sites requiring relocation due to storm damage.

While not directly related to Hurricane Sandy, DoITT's support of public-facing applications is also illustrated through **PlowNYC**. Developed in conjunction with the Department of Sanitation and leveraging DoITT's popular NYCityMap and NYCWiN, PlowNYC delivers a public view into the City's snow clearing operations. When activated during a snowstorm, this tool features a map to view plow activities, including color-coded street segments refreshed at 15-minute intervals, indicating when a roadway was last plowed. PlowNYC has recently been mobile optimized as well, making it accessible to users everywhere through any web-enabled device.

Other recent achievements, as well as initiatives DoITT will be pursuing in Fiscal 2014, include:

Reinvent NYC.gov – In Fiscal 2014 *NYC.gov* will be re-launched. Today, the City's official website is accessed by over 25 million users each year, and improving the effectiveness of its user interface will enhance service delivery to New Yorkers. The redesigned site will feature optimized viewing for smart phone and tablet mobile devices; improved content organization, search functionality, and tools to increase awareness of City programs/services; and deeper social media integration to ensure the content and information hosted on *NYC.gov* reaches an ever-widening audience.

Continue IT Consolidation through CITIServ – The City's IT infrastructure consolidation effort, or "CITIServ," will continue its progress with more data center, e-mail and service desk migrations in 2013. To date, DoITT has successfully migrated 16 agencies to the centralized CITIServ environment, and by June 2013 will have achieved a combined cost savings and cost avoidance of \$15.3 million; this of a total program cost savings and cost avoidance of more than \$23 million through Fiscal 2015.

This year, DoITT will also commission a new backup data center (known as "Site B"). Site B is designed to "mirror" the citywide Data Center at MetroTech Center in technical architecture, monitoring, reporting, and management tools. To ensure the same continuity we did for DoITT-supported systems and applications during the worst of Hurricane Sandy, City agencies will be required to identify their most critical systems currently hosted by DoITT that should be backed up at Site B.

Citynet Upgrade – The upgrade and hardening of the City's institutional fiber network, Citynet, will also be complete in 2013. When complete, this upgrade will increase the network's bandwidth, capability, and resiliency by maximizing the City's use of available dark fiber.

Reinventing the City's Public Pay Telephones – Later this year, the City will issue formal solicitation for the future of the payphone. In addition to the recently-completed *Reinvent Payphones Design Challenge*, this RFP will consider feedback from the Request for Information the City issued last summer and various pilot programs currently underway to test new services using extant payphone infrastructure. These pilots include digital advertising on phone kiosks around Times Square, interactive touchscreens around Union Square, and free public WiFi at locations across the city.

Open Data – Long championed and sponsored by Council Member Brewer, and signed by Mayor Bloomberg last March, Local Law 11 of 2012 (known as the "Open Data" bill) represents, by far, the most ambitious legislation of its kind in the country. Last September, pursuant to the first deliverable mandated by the bill, DoITT published a technical standards manual for City agencies, setting forth policies and standards for open data.

Then, earlier this month on March 7 – the date by which data on *NYC.gov* must also be made available in machine-readable formats on NYC OpenData, the City's centralized platform for data from more than 60 agencies – DoITT announced the strides made on implementation of this landmark legislation. There are now approximately 1,800 unique representations of more than 1,000 raw data sets available at no charge via NYC OpenData – with new data added every day. Available data sets span the full range of City operations, including cultural affairs, education, health, housing, property, public safety, social services, transportation, and more.

The next milestone pursuant to Local Law 11 arrives in September 2013 when DoITT, with assistance from City agencies, will publish an open data compliance plan categorizing all public data sets held by the City and outlining plans to make them available on NYC OpenData by December 31, 2018. Beginning July 15, 2014, DoITT will publish annual updates to the open data compliance plan, detailing the City's progress in opening public data sets since its last report.

Broadband Deployment / Enhancing Digital Inclusion – The Bloomberg Administration has developed a comprehensive strategy focused on targeted initiatives to expand access to broadband technology and to enhance broadband adoption in underserved communities across the City.

- ✓ By securing \$42 million in Federal Stimulus monies (from the American Recovery and Reinvestment Act of 2009), we're helping increase broadband access for public school students and families, and to launch new, free public computing centers citywide. New York City is the top recipient of Public Computer Center Project funding in the country.
- ✓ By tapping the City's regulatory authority over incumbent cable franchise providers (Time Warner Cable and Cablevision), we're bringing free and low-cost WiFi and other tech improvements to public parks, community centers, and commercial sectors valued at more than \$60 million.

Notably, benefits from DoITT's work to negotiate cable franchise renewal agreements have also accrued to the City Council. The Main Chambers and Committee Room have been upgraded with \$750,000 of cable company money, as a condition of their franchises with the City. Each facility is now outfitted with robotic HD cameras and equipment that allows the most flexibility, highest quality, and lowest cost to operate.

Also, the addition of "NYC gov," to the over-the-air broadcast (as channel 25.2) allows residents in the tri-state area to view the City government in action. This gives access to one million additional New Yorkers and 18 million local area residents.

NYC311 – Last Monday, I was honored to join Mayor Bloomberg in commemorating the tenth birthday of NYC311, the nation's largest and most comprehensive government information and services center. Announced by the Mayor in his 2002 State of the City Address and launched on March 9, 2003, NYC311 is available 24 hours a day, 7 days a week in nearly 180 languages and now serves more than 60,000 customers filing 7,700 daily requests via phone, online and text message. Since its launch, NYC311 has received more than 158 million calls and has been a clearinghouse for all things New York City government, providing information on more than 4,000 topics, routing details to the appropriate City agencies and providing customers with service request numbers for use in tracking the progress of their inquiry.

Minority and Woman-Owned Business Enterprises – In December 2012, the Department of Small Business Services awarded ACCO units for outstanding use of Minority and Womenowned Business Enterprises in the 'Small Purchase' category. DoITT was recognized for more than half of its small purchases being awarded to M/WBEs.

Every day across the City, DoITT powers the people, programs, and partners who serve more than eight million New Yorkers. Through the initiatives I have described above we look forward to continue doing so in Fiscal 2014 and beyond.

This concludes my prepared remarks. Thank you again for your time this afternoon. We would now be pleased to address any questions you have.