DEPARTMENT OF INFORMATION TECHNOLOGY AND TELECOMMUNICATIONS TESTIMONY
BEFORE THE CITY COUNCIL COMMITTEES ON LAND USE AND TECHNOLOGY IN GOVERNMENT
FISCAL YEAR 2010 PRELIMINARY BUDGET
THURSDAY, MARCH 19, 2009

Good afternoon Chairs Katz and Brewer, and members of the City Council Committees on Land Use and Technology in Government. My name is Paul Cosgrave, the Commissioner of the Department of Information Technology and Telecommunications, or DoITT, and New York City CIO. Thank you for the opportunity to testify today about DoITT's Fiscal 2010 preliminary budget and some of the agency's initiatives, accomplishments, and goals for the year to come. With me today are Mitchel Ahlbaum, DoITT's General Counsel and Deputy Commissioner for Franchise Administration, John Winker, our Associate Commissioner for Financial Services, and Vincent Grippo, DoITT's Chief of Staff.

DoITT's Fiscal 2010 Preliminary Budget provides for operating expenses of approximately $347.4 million, a decrease of $24.8 million from the Fiscal 2009 Adopted Budget, and a net decrease of $33.3 million over Fiscal 2009's current modified budget. The budget includes $76.8 million in Personal Services to support 1,069 full-time positions, and $270.6 million for Other than Personal Services. Of the $347.4 million, $112.6 million represents Intra-City funds to be transferred from other agencies to DoITT for the services it provides. Telecommunications costs represent the largest portion of the Intra-City expense. Fiscal 2009 Intra-City telecommunications expenditures are budgeted at $94.0 million, while total telecommunications costs are budgeted at $123.4 million.

311 Customer Service Center

It is clear from the budget reductions I have just described that DoITT, along with agencies across the City, has been significantly impacted by the current economic climate. The agency's largest cuts have been sustained at the 311 Customer Service Center, where on January 1 staffing levels were lowered resulting in 16% fewer staff members than 311's budget provides for, and fully 20% less than this same time one year ago. Coupled with overtime expenditures having been drastically reduced and the ability to hire new staff slowed, 311 will be challenged in the coming year to maintain the record-setting service levels previously set.

Even as staff has been reduced significantly, 311's long record of success in making New York City more accessible than ever to its customers continues to result in historic call volumes. In 2008, the Call Center received a record 16.1 million calls, servicing 95% of them in 30 seconds or less and answering all calls in an average of seven seconds. Last year's record call volume surpassed the previous mark of 15.3 million calls, set in 2007, and was largely driven by the nearly 600 new services added to the system in 2008, such as the Financial Education Network, *MillionTreesNYC* program, and accessible taxicab dispatch. Following the record-setting 2008, the trend continued this past January, with nearly 2.1 million calls received – a new single-month record; through March 18, in fact, 311 calls are up 50% in 2009 as compared to the same period in 2008. Most recently, the 226,830 calls received during the snowstorm on March 2 represents a single-day volume total surpassed only by the 241,000+ calls received during the first day of the December 2005 Transit Strike.

While our top inquiries continue to be topics of immediate concern – such as noise and no heat/no hot water – calls seeking to access government services and support are on the rise. Indeed, as more New Yorkers look for information and services to help weather the economic crisis, 311's role as the "front door" to government and human services has never been more important. Not only is the total volume of calls up significantly, but as 311 continues to enhance the services it offers, human service-related and non-English calls also increase at a higher rate. Since such calls are more complex in nature – and as a result generally longer overall – this also contributes to growing demand among callers.

As we continue to work collaboratively with our fellow City agencies on meeting the needs of these callers, I am confident that agencies are effectively responding to these callers' identified needs – and as a City we will continue to do so.

To further manage record call volumes, 311 continues aggressively employing new technology measures to efficiently serve its customers. The use of automated messaging prior to reaching a representative allows customers to access more commonly-called about information quickly – such as Alternate Side Parking Status, school/street closures, and special event information – while providing customers who require a representative for assistance more available call takers. Other innovations, such as the ability for the public to both create and check the status of 311 service requests online via *NYC.gov* has helped to reduce the need for a customer to make multiple calls about the same issue, also freeing up call takers to service other calls more quickly – and to spend more time with the callers who need it most.

These efficiencies, and more web-based enhancements to come, will better position the Call Center to do more with less going forward. As a lifeline to timely and accurate City information for many New Yorkers, we are committed to working to ensure that critical 311 services remain available to the public.

By leveraging the efficiencies we have gained through automated messaging and the enhancement of web-based services – along with six years worth of call volume data and patterns – we believe the proposed $4.4 million reduction to 311's budget can be absorbed while preserving the public's access to essential services with at least an 80% service level. The Committees should note here that 80% of calls answered in 30 seconds or less is in-line with the call center industry standard of 80%, and was itself the 311 standard in place from call center launch through Fiscal 2007.

Shared Services Initiative

Elsewhere, DoITT is pursuing cost-savings and cost reduction measures that can be realized by the more efficient delivery of the IT services we provide our sister agencies. Consistent with the goals described in *PlanIT* – the City's first-ever comprehensive technology strategy for coordinated, effective and efficient citywide IT implementation – our goal is to extend DoITT's current capabilities and proven methodologies to maximize fiscal investment, increase performance and recognize economies of scale through process consolidation – contributing to the greening of the City's IT infrastructure. These goals will be realized in 2009 and beyond through what we are terming as the City's "Shared Services" initiative, consisting of the following citywide IT infrastructure efforts: data center and server consolidation/virtualization; rationalization and strengthening of network infrastructure; leveraging telephony assets; further consolidation of City call centers, service desks and email systems; and continued development of citywide IT contacts.

1) First, DoITT is implementing a plan to **consolidate data centers** citywide. This consolidation effort will reduce the City's data center footprint and realize cost savings, cost avoidance, and greater energy efficiency. For example, today there are 55 data centers throughout the City, most of which are lacking economies of scale. Consolidation of these inefficient facilities will immediately reduce load requirements; and, equally important, provide opportunities for greater savings through citywide standardization, energy savings, gains of process, tools, staff, and governance.

   A significant part of this consolidation is data center/server virtualization. Virtualization contributes to the greening of the City by enabling agencies to install and run multiple virtual machines on the same physical hardware.

The ability to share hardware resources among virtual machines creates an environment that maximizes hardware and resource utilization – and funding for virtual machines is less than 10% of the cost of a physical server. With virtualization, agencies can reduce the number of servers and related IT hardware in the data center, leading to reductions in real estate, power and cooling requirements, and maintenance costs – resulting in significantly lower IT costs without sacrificing availability or performance. These costs benefits go hand-in-hand with reductions in CO2 emissions. For example, for every 500 servers that we consolidate through virtualization, the energy we save is the equivalent of taking 750 cars off the road, or planting 10,000 new trees.

2) Secondly, in addition to consolidating its computing facilities, the City will **rationalize and strengthen its network infrastructure**. In particular, DoITT will upgrade its optical network to increase system availability and reliability, and new fiber assets will be used to add and integrate additional locations into the core network.

   In this way, agencies that had previously relied on expensive, vendor-supplied telecommunications lines will now be able to leverage the City's enhanced fiber network, *Citynet*, which is operated at much lower cost. DoITT will also aim to identify opportunities for consolidation of other agencies' networks onto *Citynet* to eliminate redundancy and realize greater economies of scale.

   A recent example of leveraging network capability to serve large amounts of users is our work in advance of the Presidential Inauguration ceremonies on January 20. In anticipation of increased usage by *CityNet* users of streaming data feeds from various Internet sites that day, DoITT provided a feed to Inauguration Day coverage on CityShare, the City's intranet site. Accordingly, agency heads and CIOs citywide were asked to instruct all staff viewing streaming content of the event to utilize the CityShare link. By doing so, DoITT was able to maximize network performance and avoid any significant degradation of service by offering multicast web access to users via a single stream, rather than having multiple streams running from various external sites.

   As a result of our work in implementing this measure, the capability to provide video streaming via multicast has been added to *Citynet* going forward. The new multicast delivery method allows for a single server video stream to be accessed by multiple users at multiple agencies – meaning that now, it takes 1,000 web users to consume the same amount of network resources that a single user would have previously. This new capability will be utilized for future intranet broadcast events citywide.

3) Next, in the area of **telephony**, many agencies operate their own phone systems or use the Centrix phone service provided by Verizon. Today, however, there exists the ability to support multiple agencies on the City's own voice-over IP network, an initiative which could lead to cost reductions on the City's telephone bills. Moreover, the multi-language IVR capability developed at 311 over the past year represents a major improvement in customer service that can now be leveraged across agencies citywide.

4) Furthering this thought, we can speak more broadly of **call centers** in general. While approximately 40 City call centers were consolidated with the launch of the 311 Customer Service Center, a number of them – focused on specialty services (i.e., payments/credit card processing, customer account maintenance, etc.) – still exist. Folding these remaining call centers into 311 will allow the City to leverage economies of scale, IT infrastructure support, and improve customer service.

Furthermore, consolidation of existing call centers should yield financial savings and increase efficiencies by leveraging DoITT's telephony and network infrastructure, software licensing, and production support functions; 311's recruitment, hiring, training and quality assurance processes; and existing Call Center operations management. Accordingly, DoITT is now working to integrate the Department of Finance's parking violations call center into the larger 311 framework.

5) In further support of a consolidated IT infrastructure, additional efficiencies can be achieved by **consolidating service desks and email systems**. A single point-of-entry, coupled with citywide standardization, will enable proactive resource utilization to address priority items as well as reduce or eliminate redundant incidents entirely. Two key programs here – Enterprise Systems Management (consisting of Service Desk, Change Management and Asset Management), and consolidation of City agencies onto a single email solution – will create change and efficiencies to stand for the next 15-20 years while ensuring best practices for citywide continuity of operations.

6) Finally, as part of the shared services initiative, DoITT continues its pioneering work in **developing citywide contracts**, enabling the City to leverage its considerable size and purchasing power to ensure significant cost savings for IT goods and services. To this end, DoITT has recently negotiated and secured an Enterprise License Agreement (ELA) for virtualized server services. When added to previous citywide agreements, including large contracts for citywide software licenses and voice and data services, the City can expect ongoing efficiencies of approximately $10 million. While these savings are not directly reflected in our agency budget, they demonstrate DoITT's commitment to help do more with less in a challenging fiscal environment.

Aside from our work at 311 and the shared services initiative, there are a number of additional projects DoITT is pursuing, consistent with our firm belief in the power of technology to be transformative for people and the agencies serving them.

Federal Stimulus Funding

As you know, the American Recovery and Reinvestment Act of 2009 was signed into law on February 17. It includes federal tax cuts, expansion of unemployment benefits and other social welfare provisions, and domestic spending in education, health care, energy efficiency and infrastructure. Furthering the Administration's commitment to transparency in City government, the Mayor's of Operations and DoITT are collaborating on the delivery of the NYCStat Stimulus Tracker, an online tool that New Yorkers can use to track the allocation of these federal recovery funds to the City.

The NYCStat Stimulus Tracker website on *NYC.gov* launched in its general format with useful information on March 9. A more fully-interactive tool is currently under development and is expected to be launched in the coming weeks. When complete, the public will be able to:

- **View how funding sources are distributed to building projects and other City programs;**
- **Track key performance measures – such as jobs created – showing how these projects and programs benefit the City;**
- **Drill down to see details of the process – such as the start and end dates of construction projects, and the status of contracting steps for outsourced projects; and**
- **Help hold City government accountable by easily identifying progress toward program goals.**

As part of Federal stimulus package, there is approximately $4.7 billion available in the form of competitive grants for the expansion of broadband facilities in public access centers and to encourage sustainable adoption of broadband service.

As part of its commitment to greater digital inclusion, the City will seek to supplement its ongoing efforts, which I will describe below, by aggressively pursuing its fair portion of this Federal funding.

Broadband Deployment and Digital Inclusion

At the local level, DoITT commissioned a leading technology consultant to conduct a study from 2006-2007 evaluating broadband availability and adoption citywide. While the study showed that service is widely available – residential coverage is close to universal and business access is strong – it found a gap among New York City residents in terms of adoption. While middle- and high-income City residents subscribe to broadband at a rate comparable to the national average, low-income residents adopt the technology at less than half that rate, with the primary reasons cited being the cost of hardware and service.

Elsewhere, the study identified only one major gap in service availability – the City's industrial and manufacturing areas. Businesses located in these areas, according to the study, are often forced to make do with limited options, or simply do without connectivity.

Moreover, the study also examined the effectiveness of programs to improve broadband access worldwide and concluded that, to be effective, any such program must holistically address the components of the problem – access to service, affordability of hardware and service, access to training, demonstration of the value of technology and long-term technical support – in concert.

Based on these findings, the City has designed a broadband initiative comprised of four major programs:

1) **Expansion of public access computer centers in low-income communities to provide computers, broadband access, and training relevant to the social and economic needs of the populations served;**
2) **Delivery of computers, broadband access and training to a select group of low-income residents in their homes;**
3) **Deployment of Wi-Fi in City parks and public spaces, aimed at broadly increasing accessibility;**
4) **Build-out of broadband infrastructure to businesses located in the City's traditionally underserved industrial and manufacturing areas.**

In addition to any potential stimulus funding, the City has already has $4 million in private seed money available for the expansion of broadband services to community access centers. We intend to bolster this amount with additional private contributions. Along with a potential Federal stimulus match, such funding might truly allow us to eradicate the City's digital divide, which unfortunately makes it difficult for underprivileged New Yorkers today to compete for jobs, access government and social services, and generally avail themselves of all the digital world has to offer.

The $4 million already secured is available as part of the historic, citywide cable television franchise the City granted Verizon last year. Under the agreement, announced last April and subsequently approved by the City's Franchise and Concession Review Committee, Verizon is offering cable service to every New York City household – establishing a competitive marketplace in an industry that has been dominated by single providers. Accordingly, Verizon is installing highly-advanced, fiber-to-the-home technology – known as FiOS – throughout the City, which offers greater capacity and download speeds than existing cable television technologies. Verizon has committed to installing this state-of-the-art fiber system in every street over the next six years.

The deployment schedule, which is proceeding as planned, has seen 30 percent of the City already completed; going forward, 50 percent of residences are to be passed by the end of 2010 with completion of the network targeted for completion by 2014.

As you know, DoITT is also engaged in the renewal process for the City's current cable television franchise agreements with Cablevision and Time Warner. Early last year agency hosted public hearings in each of the five boroughs regarding the performance of the City's current franchisees, and gathered feedback providing us valuable insight in our renewal discussions. These franchises are critical revenue generators for the City – during Fiscal 2010, in fact, we anticipate collecting more than $130 million in franchise revenues, primarily attributable to cable television.

Apart from improved cable service, DoITT has consistently heralded greater broadband access as a means by which City government can become – and remain – ever transparent and accountable to its customers. By way of recent example, there is implementation of the Doing Business Accountability Project, initiated pursuant to Local Law 34 of 2007. This initiative creates a unified database to track entities and their executives doing business with the City of New York, as well as an interface providing the public access to the listing. To achieve this goal, the first phase of this project – including the creation of a unified doing business database populated with information about vendors, lobbyists, franchises, and concessions – was deployed in February 2008.

Phase 2 of this project included information about proposals, pension fund investments, grants, economic development agreements, and senior managers. The third and final phase, including the addition of parties to real property transactions and parties to land use actions was certified by DoITT and the Campaign Finance Board last November; LL34 became effective for these parties thirty days from that final certification in December 2008.

Public Safety Initiatives

With respect to public safety, DoITT continues its significant citywide role in building systems and developing technologies used to enhance the capabilities of our first responders. Following are some recent accomplishments in this regard.

Since DoITT has last testified before the Council, we have launched the **New York City Wireless Network**, or NYCWiN. NYCWiN is a high-speed, mobile data network representing the most aggressive commitment by any municipality in the country to provide a next-generation public safety network. The network provides first responders high-speed data access to support large file transfers, including federal and state anti-crime and anti-terrorism databases, fingerprints, mug shots, city maps, automatic vehicle location, and full-motion streaming video. A fully-interoperable, IP-based network, NYCWiN enhances coordination by linking first responder personnel, on-scene, wirelessly with incident managers at remote sites through real-time data and video feeds.

During periods of non-emergency, NYCWiN is also leveraged by City agencies to improve service delivery to New Yorkers. Automated water meter reading, automatic vehicle location, traffic signal control and myriad handheld inspectional programs are now planned or underway, allowing New York City's mobile workforce to not only to function more efficiently, but also to realize substantial cost savings across participating agencies.

For example, DoITT and the Police Department are now working toward installation of wireless modems in 1,800 marked patrol fleet vehicles, which will enable officers in the field to access critical applications via NYCWiN previously available only from their desktops – moving traffic violations information being a prime example.

Leveraging NYCWiN's capabilities, over the past year DoITT has worked to create an interoperable video management system (IVS) that allows the Mayor's Office, Police Department, Fire Department, Office of Emergency Management, and a variety of other agencies to wirelessly access shared, incident-based video feeds. For instance, in the event of a building fire, incident video could be sent through the IVS to be viewed by emergency responders and City management – whether they are operating in the field or at a fixed location.

Of recent note, after U.S. Airways Flight 1549 ditched into the Hudson River on the afternoon of January 15, the IVS was quickly mobilized at the incident scene, enabling the Fire Department's IVS-equipped Command Tactical Unit vehicle to stream video back to both the FDNY Operations Center and the Office of Emergency Management.

As you know, the **Emergency Communications Transformation Program** is a multi-year, multi-agency effort to modernize the City's Emergency 911 System. Significantly, this spring, the City will open the completed Public Safety Answering Center (PSAC), which will serve as the primary call-taking environment for all of the City's emergency first responders. As a result, NYPD and FDNY staffs who handle emergency calls from the public – people who perform an incredibly important function – will for the first time be seated side-by-side under the same roof and use the same telephone system, greatly improving emergency communication and coordination.

Furthermore, PSAC 2, a new 550,000-square foot facility that will house the City's backup 911 call answering / dispatch center, will be located in the Bronx, on a site at the intersection of the Hutchinson River Parkway and Pelham Parkway. It will operate in conjunction with PSAC, sharing the call load. This project is expected to start construction later this year, and will take approximately three years to complete. The Uniform Land Use Review Process, or ULURP, applications for this project (site selection and acquisition and street mapping) were approved by the Department of City Planning last month, now subject to approval by the City Council.

Also near completion is the **Citywide Radio Network**. Addressing the radio infrastructure recommendations made by the 9-11 Commission, the Citywide Radio Network will replace current Fire Department and Emergency Medical Service dispatch systems and provide added coverage, expanded capacity, and enhanced operational capacity for the City's FDNY and EMS responders. When fully implemented later this spring, the network will further enhance radio interoperability in the City amongst all public safety wireless communications (NYPD, FDNY, EMS and OEM).

NYC Media Group

Finally, I would like to address the New York City Media Group's recent work in two important areas. In preparing for the impending conversion to digital television, NYC TV successfully upgraded its full-power transmitter, transmission line, antenna and related equipment at its transmission facility, which serves the entire New York metropolitan area, well in advance of the Federally-mandated February 17, 2009 deadline. That deadline has since been delayed to June 12, and NYC TV is now broadcasting in both analog and digital until the deadline.

An NYC TV segment of particular interest to the Council, and Chair Brewer in particular, is *City Scoop*, which has recently been nominated for two New York Emmy Awards. As you know, *City Scoop* is a weekly news magazine providing summaries of recent news and announcements from elected officials across the City.

On the radio side, earlier this month I joined Mayor Bloomberg in announcing launch of a new high definition radio transmitter for WNYE-FM Radio New York, the City's official radio station. This upgrade dramatically improves the signal reception and clarity for WNYE-FM, located at 91.5 FM on the radio dial, due to the increased elevation of the new transmitter at the top of 4 Times Square. In addition to improved reception and CD-quality sound, WNYE-FM's transmitter upgrade also paves the way for multiple high definition audio streams or channels, the first of which is a simulcast of the station's current programming now airing, with more to come. This upgrade also improves the reception and clarity of the full power FM station signal beyond New York City to serve the entire tri-state area, allowing the station to reach new audiences in parts of Long Island, Upstate New York, New Jersey and Connecticut.

Thank you for your time this afternoon. We would now be pleased to address any questions you may have.