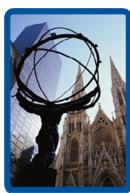


Plan T







New York City

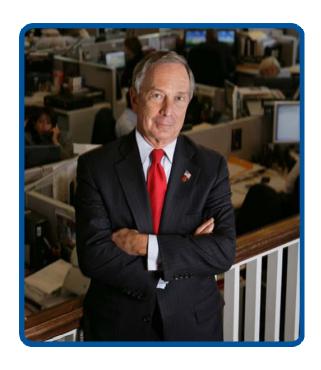
Technology Plan

Better Government Through Customer Service 2008



Message From The Mayor





New Yorkers expect and deserve responsive and effective customer service.

Over the past several years, our Administration has worked to meet these expectations by implementing technologies designed to make our government more *accessible, transparent* and *accountable*. We've focused on critical areas of our City's life, including economic development, public safety, social services, education and community services. Together, these efforts have strengthened our City, and with our new NYC Technology Plan—PlanIT—we are preparing for the next big step in our efforts to give all New Yorkers the high-quality government service they deserve.

In this Plan, you will find the vision and framework for how the City will leverage information technology in the years ahead to improve New Yorkers' lives. The framework is the product of a collaboration between

the City's business and IT leadership, and the agencies that will benefit from this Plan. Led by DoITT Commissioner Paul Cosgrave, the Citywide team has produced a road map for change that will result in systems and solutions to significantly enhance the delivery of our services, the performance of our employees, and the satisfaction of our constituents.

The City's business needs, as well as the technologies in the marketplace, are continuously evolving, and so too will this Plan. However, the principles at the core of this Plan—accessibility, transparency and accountability—will always guide our strategies in everything we do.

With the technological innovations already forged over the past six years and the new ideas that PlanIT will foster and help implement, we can ensure that our great City will be an even better place to live, work and visit for years into the future.

Michael R. Bloomberg Mayor

Message From The Commissioner Of DoITT





I am proud to present PlanIT—the NYC Technology Plan, a framework for sustainable, effective and efficient Citywide IT progress. The catalyst for this Plan's development has been Mayor Bloomberg's unwavering focus on providing better City services through a more *accessible, transparent* and *accountable* City government. That objective has driven unprecedented collaboration between our City agencies, their stakeholders and the technology community. The outcome, as envisioned in this Plan, will be a range of critical IT-enabled services that are more responsive and accessible to New Yorkers. I am grateful for the hard work of the City agency leaders and their staff who teamed with us to build this framework.

This Plan maps the critical applications, programs and initiatives that will enhance City services and their delivery

in key mission areas. It also outlines the steps needed to achieve a single-city information technology enterprise, the principles of security and rationalized consolidation to ensure its integrity, and the enhancements required to optimize its performance. With the publication of PlanIT, the City will be able to move forward on many priority IT initiatives and continue the tough job of integrating disparate data and systems. These initiatives will impact all the City's mission areas—economic development, public safety, social services, education and community services. For each, a measure of success will be to enhance the customer services being delivered.

While near-term results are important, equally vital is the Plan's specification of the infrastructure and technology initiatives that will constitute the foundation for long-term viability and service enhancement. So, too, is the crossagency collaboration that developed the Plan, which will serve as a model for ongoing planning, assessment and development.

As the City executes against the Plan, constituents will continue to see improvements in the quality and accessibility of City services; services provided will be flexible and driven by constituent needs; New Yorkers will continue to know that personal information is safeguarded and secure; taxpayers will be assured that investments are chosen and managed wisely; and government employees will have the tools needed to provide the highest-quality services to their customers.

Because this has been a true team effort, the Mayor and I have many to thank for their input and dedication. To all, I look forward to continuing to work with you as we turn this Plan into action.

Paul Cosgrave Commissioner, DoITT

Linkage To Mayoral Goals And Vision



PlanIT is directly aligned with and linked to three critical strategic goals championed by Mayor Michael R. Bloomberg for the City of New York and its government services: accessibility, transparency and accountability. The strategies, tactics and specific programs and applications described in the Plan will enable the achievement of these goals. The Plan's strategies deliver this support in the following ways.

To make City government more accessible, the City will employ technical solutions to make it easier for residents, businesses and visitors to obtain information and services, to simplify navigation among the various City agencies that provide these services, and to allow the public to obtain information and services in their own language and in a way that is convenient to them.

To build greater transparency into government activities, the City will use technologies to provide increased visibility into its operations. Whether it is a scorecard indicating an agency's performance, or easily obtained information on the status of a service request to the 311 Customer Call Center, this information will become conveniently available to all constituents.

Finally, the City will develop IT applications to ensure accountability. The City will use performance information to improve service levels and hold agencies accountable for achieving targeted service levels.

The three goals—and PlanIT—share a core vision:

New York City transforms the way we interact with residents, businesses, visitors, and employees by leveraging technology to improve services and increase accessibility, transparency and accountability across all City agencies.

For both the near and long terms, this vision and the foundational architecture, network and innovative applications that evolve from it will enable sustainable growth for our City, and continue this Administration's commitment to improve the quality of life for all. This Plan describes the path toward that future, and the transformational changes needed to achieve it.

Business Strategies And IT Implications



The City has developed a set of business strategies in support of Mayoral goals. These strategies are cross-agency and are aligned to the six key mission areas and two mission support areas of the City. Overarching these strategies is an additional goal of creating a Citywide focus on improving Customer Service. Underlying them are the key foundational IT initiatives, such as Data Center Rationalization and Greening that will be put into place to support the Strategic Initiatives. These key areas are depicted below:

Mission

Mission

Mission

Mission

Supporting Infra-structure

Supporting Infra-structure

Figure 1. New York City Business Framework

Together, these strategies have clear implications for how information technology should be used to support the goals of the City.

New York City has defined 23 strategic, business-focused information technology initiatives to pursue this IT vision and to support the business goals of the Customer Service, Mission, and Mission Support areas. These initiatives do not represent the entire inventory of IT initiatives that the City will pursue. Rather, they are considered to be initiatives that will have a significant impact on achieving Mayor Bloomberg's goals of accessibility, transparency and accountability, as well as directly supporting cross-agency business goals. Each of these initiatives will deliver substantial value to all New Yorkers.

The business strategies, IT implications and technology initiatives are summarized on the following pages.

Mission Areas Introduction



The Mission Areas consist of public-facing agencies that directly interact with the City's residents, businesses and visitors. The six mission areas are Economic Development and Sustainability, Public Safety, Social Services, Education, Community Services, and City Infrastructure. Their strategies and associated IT implications follow.

Overarching these mission areas is the City's emphasis on improving customer service. The goal is that customers will be able to choose how, when and where they conduct transactions with, and obtain information from, the City. They will be able to access information and services 24 hours a day, seven days a week, 365 days a year via many different channels and in the language of their choice.





Customer Service

Responding to our customers' needs—the requirements and the expectations of our businesses, residents, visitors and employees—will be the core purpose of the strategic initiatives emerging from this Plan.

Building off of successful models already in place such as the 311 Call Center, Access NYC and Business Express, the City will continue to take significant actions to improve service for all the City's customers.

The improved service will be designed to integrate service delivery; streamline permitting and licensing; strengthen the City's data centers and networks; provide self-service access to critical records; and ease the process of requesting a service. This Plan sets forth the components of the platform on which it will be delivered...over the phone, online or in person.

With PlanIT, the transformation of the way the City works continues. The Plan's Customer Service goals and associated IT implications are as follows.

Business Goals

- Enhanced service experience by making it easier to interact with City government
- One-stop, convenient and responsive interactions with New York City
- Improved accessibility and transparency of services

- Facilitate automated workflow and information exchange across agencies and functions
- Expand online self-services and links to back-end systems
- Use technical solutions to provide better, more convenient ways to access City services

Customer Service

Strategic IT Business Initiatives

- Customer Service Transformation
 - New York City is committed to a customer-centric environment that emphasizes transparency, accountability and accessibility. To date, through the development of the 311 Call Center, the City has already successfully transformed City government by drastically increasing agency productivity and responsiveness while reducing the frustration long associated with the delivery of City services. Since its inception in March 2003, 311 has serviced more than 50 million calls, and it is committed to servicing the next 50 million and beyond with an even greater focus on the customer experience. To achieve this goal, the City is implementing a number of significant enhancements to its award-winning 311 call center and Customer Service Management System (CSMS). These enhancements will provide the supporting capabilities that many of the other initiatives in this Plan will use to achieve their goals.
 - **311 on the Web.** The vision is to provide on the Internet, through *NYC.gov*, the same information and services that are available by calling 311.
 - Close the loop on service requests. Today, when a caller requests a service through 311, the request is passed on to the servicing agency, with limited visibility by 311 into the status of the request. The goal is to integrate agency systems with the CSMS system so that information is more seamless, and callers can easily check the status of their request.
 - Automated escalations. There are times when non-emergency, but critical conditions become apparent through increased calls to 311. Automated triggers will be developed to escalate these issues to the appropriate agencies to ensure rapid notification regarding the condition.
 - Photos and videos. The City will be piloting the ability to allow New Yorkers to submit photos or video associated with their service request, providing additional useful information to the agencies that are responding to the request.

These innovations will contribute to the City's larger effort of improving the customer service experience at City agencies.





Economic Development and Sustainability

Economic Development and Sustainability encompasses those activities that increase the economic strength of the City. These activities create opportunities for residents and businesses to increase their economic wealth, as well as to improve the general quality of life in the City, making it a more attractive place to live, conduct business and visit. The goals (and the IT implications) of Economic Growth and Sustainability are closely aligned to the Customer Service goals. Making it easier to do business in NYC will increase the economic strength of the City as well as provide economic opportunities for its residents and visitors.

Business Goals

- Increased economic strength of NYC
- Easier to do business with NYC
- Community-based self-sufficiency and wealth creation for residents
- Enhanced, sustainable urban environment

- Reduce the complexity of opening and operating businesses through process automation and online selfservice tools
- Improve the convenience of conducting financial transactions with the City through system consolidations
- Technology initiatives should contribute to the "greening" of the City



Economic Development and Sustainability

Strategic IT Business Initiatives

Business Express

The businesses located in NYC are a key element of the economic lifeblood of the City. Business Express will make it easier for businesses to open, operate and grow. Utilizing a Web-based "wizard" that provides information and steps a business through the requirements for obtaining licenses and permits, all information will be available in a single place. This information will be available in several languages, thus providing greater ease and convenience. No longer will businesses have to figure out how to navigate through the complexities of State and local regulations to be able to operate in the City.

Enterprise Billing, Payment and Collections

Constituents have many relationships with the City and receive many bills for services, taxes and other items. Payment mechanisms are not always convenient. Enterprise Billing, Payments and Collections will simplify the process by providing constituents with a consolidated statement of what is owed to the City and by providing a variety of convenient payment mechanisms (for example, credit and debit cards). In addition, it will simplify the submission of forms and reduce paperwork through the use of electronic signatures.

Congestion Pricing

New York City is committed to making substantial contributions to improving the environment. Traffic during peak hours in the City creates delays and inconveniences, and contributes significantly to air pollution. The proposed congestion pricing plan will improve traffic flows and reduce delays by collecting fees to access designated areas within the City. By reducing the volume of traffic, emissions will be reduced and air quality improved.

Comprehensive Neighborhood Economic Development (CNED)

CNED will increase self-sufficiency and grow the economic wealth of residents by matching employment opportunities with residents' skills through community and neighborhood programs. By providing comprehensive tracking of labor and job data, it will improve targeting of education and training investments and help bridge skill gaps.







Public Safety

Public Safety remains a key focus for New York City. The City maintains one of the lowest crime rates in the country. City fire services and emergency response capabilities are also a key priority. The goals of Public Safety are to improve upon these successes and leverage leading technology to achieve these goals. Technologies such as those supporting the Real Time Crime Center are critical to ensuring the safety and well-being of residents and visitors.

Business Goals

- Continue to make NYC a safer place for its residents, businesses and visitors
- Improve the City's emergency preparedness and response capabilities
- Improve public safety by leveraging emerging public safety technology

- Improved resiliency and redundancy of emergency systems
- Use technology to improve coordination of multi-agency emergency dispatch and to reduce response times
- Upgrade systems to improve communication between public safety responders in the field and their command and supervisory centers
- Expand data trend analysis and reporting capabilities to improve response capabilities and emergency preparedness



Strategic IT Business Initiatives

Emergency Communications Transformation Project (ECTP)

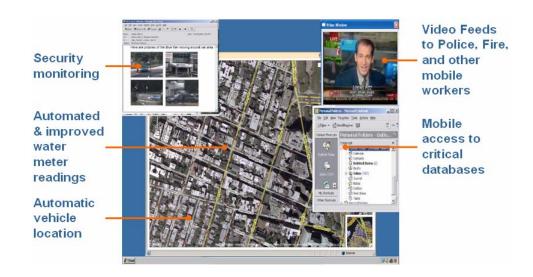
Coordinated and timely emergency response is a key focus for NYC public safety agencies. ECTP will contribute significantly to these goals by providing state-of-the-art technology to support the City's Public Safety Answering Centers. By providing better communication among the various emergency responders and improving the resiliency and redundancy of emergency systems, this program will significantly contribute to assuring the safety of NYC residents and visitors.

Wireless Public Safety Applications

The Public Safety Wireless initiative will improve communication between public safety responders in the field and their command centers. Improved communication will increase the effectiveness and efficiency of public safety responders and contribute to increased public safety by providing video, maps and building plans to emergency responders.

Integrated Justice Expansion

The Integrated Justice project has already provided significant value to the City by enabling justice agencies to share case-related information in a confidential manner. Current efforts will expand this information sharing to include juvenile justice as well as automating the arraignment process. Information sharing will enable the City to streamline processes as well as analyze data for trends that can then be acted upon. Automation of the arraignment process will reduce time-to-arraignment and increase the effectiveness of criminal justice, juvenile justice and public safety personnel.







Social Services

The focus of Social Services is to increase accessibility and effectiveness of the wide variety of social services programs offered by the City. A significant part of this effort is providing better visibility into, and linkage across, City, State and federal programs by making information available in one place and making it more accessible to individuals in need. Facilitating access to Social Services programs enhances self-sufficiency and contributes to the economic growth of the City.

Business Goals

- Resident self-sufficiency through coordinated cross-agency services
- Improved access to services
- Improved effectiveness of services through a more integrated approach to the delivery of services
- Increased cross-agency collaboration and data sharing
- Increased ease of access to leverage City, State and federal programs

- Make it easier to access information and services for residents and for the employees serving them using technical solutions
- Improved integration across social services technology solutions
- Use technical solutions to improve information sharing (as appropriate and ensuring confidentiality) across agencies and systems



Strategic IT Business Initiatives

Human Services Management Solution (ACCESS NYC)

The Human Services Management Solution will make it faster and easier for residents to receive social services. For example, New Yorkers can be screened and begin the process to apply online for food stamps or school meals. Eventually, if they so choose, residents will only have to provide their information once, regardless of the program for which they are applying. The system will provide online pre-screening, eligibility, verification, enrollment and case management tools that can be utilized across City agencies.

Enhanced 311

New York City, in partnership with State and community-based 211 providers, will offer comprehensive and simplified access to Health and Human Services information and referrals through its well-established 311 call center. Call takers will provide these services in more than 170 languages to ensure that callers' needs are met. Call takers will be trained and certified to match callers' needs with the appropriate information or referral.

Electronic Health Records

Electronic Health Records will improve the quality of healthcare by facilitating information sharing among health providers, and prompting doctors about needed care. By streamlining and automating Medicaid eligibility, formulary and medication history, this system will improve preventive care and chronic disease management of Medicaid (and other) patients. In addition, it will reduce cost and effort associated with public health reporting for community providers.







The strength of New York City's future requires that today's students be provided with the education and support they need to prosper and become leaders in the community, City, country and world. To do this, the City will provide educators, who are the critical element in the system, with the tools they need to provide NYC students with the best education possible. Equally important, the City will focus on students' families, providing them with convenient ways to participate in the education process.

Business Goals

- Education shaped to meet student needs and increase achievement
- Increased participation of families
- Ensure out-of-school-time programs are effective

- Improved tools to support student assessment and reporting
- Multimedia access for parentteacher collaboration
- Systems should facilitate comprehensive tracking and reporting of out-of-school-time activities



Strategic IT Business Initiatives

Education Accountability (ARIS)

Education of students and, more importantly, student performance, are critical to the future of NYC. The Achievement Reporting and Information System (ARIS) will help drive student achievement by allowing teachers to develop and adjust curriculum and instruction based on current student achievement information. By monitoring and measuring the performance of students, teachers and schools will be more accountable for student achievement. In addition, parents and guardians will be able to access and review student achievement online.

Out-of-School-Time (OST) Online Participant Tracking

OST Online Participant Tracking will increase the effectiveness and quality of out-of-school-time programs by increasing the accuracy of available information and facilitating the evaluation of multiyear longitudinal data. It will facilitate sharing information across agencies, thereby improving the transparency and equity of youth services.







Community Services

New York City continuously strives to improve the quality of life for living in, working in or visiting the City. The City's greenery and open spaces are very important to the quality of life. Through the Million Tree initiative, the City will make it easier to request the planting of a new tree and care for existing trees, which contributes to New Yorkers' health and well-being. The City will also improve the street-permitting process for local events to minimize disruptions to residents and businesses. Finally, the City will continue to invest in and support its cultural institutions.

Business Goals

- Enriched quality of life for constituents
- Easier to use, and enjoy, public spaces
- Ease of scheduling cultural and community events
- Increased participation in cultural events

- Use technical solutions to facilitate management of the City's trees, parks and public spaces
- Improve mechanisms for applying for, allocating and tracking grants to support cultural institutions
- Deploy technologies that expand cultural outreach and marketing activities
- Implement solutions that automate event permitting activities and enable workflow integration and information exchange across City agencies





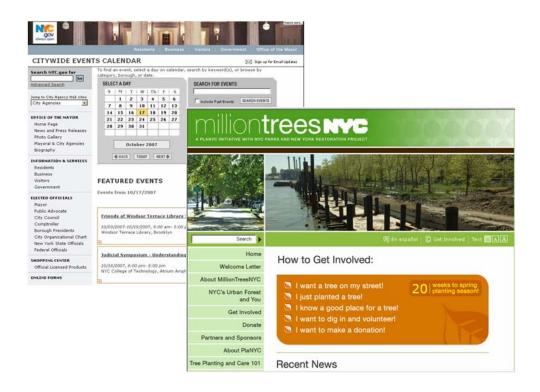
Strategic IT Business Initiatives

Cultural Relationship Management

NYC will continue to be a premier center for cultural and community events. The Cultural Relationship Management program will drive increased participation in cultural events, and increase the effectiveness of cultural grant funding allocations by improving applying for, allocating and tracking grants. A Citywide, online cultural events calendar will be a centralized, authoritative source of information. The calendar will be accessible via NYC.gov and will be viewable in many public locations.

Street Permitting

Street Permitting will coordinate the issuance of street permits among City agencies (for example, Police, Health, Transportation, Mayor's Office of Film, Theatre and Broadcasting, NYC Marketing) to improve event management and coordination. The program will reduce traffic congestion, improve removal of construction hazards prior to an event, improve event clean-up, and improve public safety. By simplifying the permitting process and reducing the complexity of managing an event, the City will be increasingly attractive for staging cultural and community events.







City Infrastructure

The focus of City Infrastructure is to facilitate construction in the City, ensure that roads, bridges and other public infrastructure are safe and in good repair, and minimize public disruptions during construction or repair work. To support economic growth, the business goals focus on making the permitting and inspection processes easier for entities that do business with the City, contractors and employees.

Business Goals

- Assure the safety and integrity of the City's physical infrastructure
- Provide infrastructure to support economic growth
- Increase the efficiency and effectiveness of the inspection process to reduce burden on constituents

- Consolidate and refine existing property-related systems and processes to improve the quality of property-related information, and create one reliable source for this data
- Develop automated tools that provide cross-agency integration to improve the quality and timeliness of inspections



Strategic IT Business Initiatives

Property Share

The City has recognized that rapid access to accurate property information can improve a range of services that the City delivers. Property Share is a concept under consideration that will leverage the City's geographic data architecture to improve the quality of property-related information (such as address, ownership and zoning). This information, combined with access to source data, will improve emergency response and public safety, facilitate more accurate and faster issuance of permits, and increase owner accountability for compliance with building and environmental laws.

Enterprise Inspections

Enterprise Inspections is an effort under review to improve the quality and timeliness of City inspections, and improve responsiveness to customer needs. It could leverage work already underway by several City agencies. By optimizing scheduling and route management, it will greatly improve the performance and efficiency of inspectors. Mobile technology will allow agencies to send alerts and change routes, as well as capture inspection-related information for use in other applications.



Mission Support Areas Introduction



Mission Support Areas provide "back-office" functions to the public-facing agencies. Their primary role is to support the other City agencies and ensure that New York City is in compliance with all relevant legal and regulatory requirements.





Citywide Administration

Citywide Administration focuses on supporting
City agencies by improving administrative
services, such as the City's procurement
processes. By making the acquisition of goods
and services more efficient, agencies will be
better able to focus on their missions. In addition,
City Administration will improve the human
resource processes (for example, benefits,
timekeeping) to improve customer service for City
employees, providing them with additional
automated tools that facilitate employee
interactions with their agencies.

Business Goals

- Improved Citywide administrative processes to support the agencies in their missions
- Strengthened integrity and transparency of City government
- Increased efficiency of budgeting, payroll and management staff
- Improved service to employees through self-service and online services

- Provide solutions to track and report campaign contributions to comply with Campaign Finance Reform legislation
- Support optimized procurement procedures, processes and systems, given regulatory constraints
- Provide technology support for standardization, centralization and automation of Citywide processes
- Implement one centralized human resource system
- Use technology to improve the ability to share and exchange information within and across agencies

Citywide Administration



Strategic IT Business Initiatives

Automated Personnel System (NYCAPS)

The New York City Automated Personnel System (NYCAPS) is an enterprisewide, integrated Human Resource Management and Benefit Administration System. The system, in conjunction with establishing the centralized administration of health benefit services, will improve service to employees. Processes will be streamlined, data will be more accurate, and employees will be able to conduct many transactions such as address changes, leave requests and benefit enrollment through an online service capability. An electronic "personnel folder" will provide a single, authoritative source of employee information.

End-to-End Procurement Automation

Procurement of goods and services by the City is a paper- and labor-intensive process that is time-consuming and inefficient. This End-to-End Procurement Automation will streamline and automate processes to facilitate more-timely procurements and improve visibility into the procurement process, from solicitation to registration of a contract. By providing better information, it will improve management and accountability across agencies. Finally, it will improve relationships with vendors as well as increase their accountability to the City.

CityTime

CityTime will increase the efficiency of budgeting, payroll and management staff and ensure compliance with the Fair Labor Standards Act (FLSA) by uniformly and accurately capturing time worked, leave and overtime. In addition, it will support the complex scheduling and workforce management requirements of the uniformed services agencies. CityTime will result in improved accuracy of payroll and related information, which will provide increased transparency of workforce management efficiency.

Document Management and Data Retention

Document Management and Data Retention are areas under review to reduce the storage costs of physical records while improving the ability to retrieve, share and exchange information. In addition to scanning and maintaining electronic copies of paper documents, other media such as e-mail messages, video and pictures will be managed. This will support compliance with eDiscovery requirements, Litigation Readiness, and storing and retrieving electronic evidence.





Legal Affairs

Legal Affairs focuses on ensuring the City is in compliance with all relevant legislation, protecting the City's employees and assets, ensuring the fairness of the process for participants, and ensuring that its legal processes are effective and efficient. A primary focus of Legal Affairs will be to improve the adjudication process to increase efficiency for constituents and City employees.

Business Goals

- Faster, easier and more-effective adjudication
- More-understandable and transparent processes
- Improved operations to meet City needs

- Automate processes and implement electronic case files to improve tribunal processes
- Provide the public with information on tribunal processes and how to better participate in the process via the Web
- Make tribunal information accessible through 311

Legal Affairs



Strategic IT Business Initiatives

Adjudication Reform

Adjudication Reform will make tribunals more convenient for participants by providing the public with better information about tribunal processes and how to participate. Tribunal processes and results will be more transparent, thereby increasing accountability of the tribunals and participating agencies. In addition, it will increase quality of life for City residents and visitors by helping to improve enforcement of violations.

Campaign Finance Reform

This initiative supports Campaign Finance Reform legislation and provides improved transparency and accountability of campaign contributions. By tracking and monitoring contributions by businesses and contractors who do business with the City, New York can ensure that it is addressing "Pay to Play" issues and not showing favoritism to campaign contributors.



Supporting IT Infrastructure Introduction



Supporting IT Infrastructure refers to those information technology capabilities that are needed to support the requirements of the Mission and Mission Support areas.

These capabilities include data centers, networks, IT services, information security and enterprise architecture.





Foundational Information Technology

Successful implementation of the strategic IT initiatives requires that a robust IT infrastructure be in place. To support the strategic IT initiatives, the Department of Information Technology and Telecommunications (DoITT) will undertake a number of efforts to strengthen and rationalize the IT infrastructure, strengthen standards and security, and position the City's information technology so it can support future developments. DoITT will continue to ensure that the City of New York has the necessary data center and network capacity to meet its needs. DoITT will upgrade the City's data center, network and wireless communications infrastructure. In addition, DoITT will ensure that the City's IT infrastructure contributes to the "greening" of New York City by using energy resources wisely. DoITT will also undertake significant efforts to fortify IT security, including establishing information security policies and standards, and ensuring security of information both internally (that is, within the City agencies) as well as externally (that is, with the public). In addition, DoITT will establish architecture standards for the City to facilitate information sharing among agencies, reduce redundant efforts, and increase overall standardization of services. Finally, DoITT will continue to prepare for the future by planning for the systematic modernization of legacy systems. By pursuing these programs, DoITT will ensure that the City will realize the benefits of its strategic IT initiatives and is well-positioned to continue to evolve the City's technology over the longer term.

Business Goals

- Support business applications with robust and resilient data centers
- Promote collaboration across agencies and interactions with constituents
- Enhance public safety responses by improving command and control capabilities
- Provide easy access to information combined with the appropriate safeguards and security
- Improve accuracy and access to information

- Rationalize data centers to provide more efficient and effective resources
- Provide secure and reliable IT and telecommunications
- Ensure that security and access policies and procedures meet the City's needs
- Establish a more architected environment
- Converge on fewer, more robust technology platforms
- Plan for and migrate aging and obsolete applications



Foundational Information Technology

Foundational IT Initiatives

Data Center Strengthening, Greening and Rationalization

The vision is to create a "hub and spoke" arrangement of key data centers. The "hub" data centers would be the central DoITT-managed utility. The data centers will be interconnected using the City's network infrastructure. Each data center on the spokes would be theme-based, that is, created around common business missions. The "spoke" data centers would be managed by either the theme area or by DoITT. DoITT will provide oversight and standards for the individual data centers. Importantly, this initiative will contribute to more-efficient energy usage and therefore a greener environment.

Network Strengthening and Rationalization

In addition to strengthening 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. New fiber assets will be used to add and integrate additional locations into the core network.

Citywide Mobile Wireless Network Implementation (NYCWiN)

The NYCWiN initiative is the build-out of a highly secure wireless network that will provide Citywide wireless, mobile applications support and enhanced communications capabilities for agencies. Enabled by this network, mobile applications can provide high-speed data access to an agency's intranet systems and the Internet, as well as commonly used City, State and federal databases.

Information Security Policies and Standards

DoITT is creating an information security program that establishes a framework to ensure a consistent level of security across the City's information technology infrastructure. It will provide support for the City's management efforts to establish and maintain a secure environment by defining clear standards for application development efforts and providing centrally located and easily searchable content.

User Identity and Access Management

This initiative defines the City User Identity and Access Management architecture to ensure that individual investments are consistent with an overall Citywide strategy and direction with respect to Identity and Access Management. The delivery of Identity and Access Management for the City encompasses a number of key areas including single identity, automated provisioning and de-provisioning, centralized authentication, registration of identities, reduced/single sign-on and policies/standards.



Foundational Information Technology

Foundational IT Initiatives (Cont)

Enterprise/Service-Oriented Architectures

The Enterprise Architecture (EA) initiative will leverage past architecture decisions and standards to support the design of current and future technology projects. It will also dispatch subject matter experts to cross-agency teams to support the development of current and target architectures and transition plans, ensuring that they are in accordance with the City's overall architecture. The initial focus of the EA program will be to provide architecture guidance to the Strategic IT Initiatives defined in this Plan.

Geographic Data Architecture

The Geographic Data Architecture initiative will provide the City with a common repository containing a single, unified street and address inventory for all City agencies that use geo-coded information. This initiative will establish a Citywide Geographic Information System and Geofile platform that will support collection and dissemination of accurate geographic data. This will contribute to improved emergency response capabilities, more-accurate billing and collection, and will enable the City to better track development and construction activities throughout the City.

Legacy Systems Modernization

The City relies on information technology applications to accomplish numerous critical functions. Many of these applications have been developed over time on technologies that were "state-of-the-market" when the application was developed but are no longer contemporary when compared to current technology standards and industry best practices. Additionally, the skill sets required to maintain these "older" (legacy) applications is becoming more scarce as newer technologies support current development efforts. Because of the criticality of these applications, the City will undertake a review of the City's legacy applications and supporting technology portfolio. An application will be a target for modernization once its level of reliability, serviceability or functionality is no longer viable.

IT Services Consolidation and Delivery

In today's environment, IT services such as problem tracking, change control and asset management occur in many places in the City. As a result, services suffer and user problems may not be promptly addressed. Furthermore, the City continues to use multiple e-mail environments, creating communications challenges as well as challenges with respect to user directories. This initiative addresses these challenges through two key programs: Enterprise Systems Management (ESM)—Service Desk, Change Management and Asset Management; and consolidating City agencies onto a single e-mail solution.

Information Technology Vision



The IT vision for New York City is to use information technology to treat its residents, businesses and visitors as customers, providing information and services when and how desired, and eliminating the need to understand how City agencies are organized. The City should be viewed as a single provider of services, regardless of how a customer accesses those services, or where they are actually delivered.

To accomplish this, the City, under the leadership of the Department of Information Technology and Communications (DoITT), the Office of Management and Budget (OMB) and the Mayor's Office of Operations, will view each large technology initiative as an opportunity to move closer to this vision. Information technology initiatives will be evaluated for opportunities to create Citywide capabilities that can be used across multiple agencies or business areas. By creating these capabilities, the City will develop a more seamless and integrated set of services. This vision is depicted below:

NYC Customers are Businesses **Visitors** Residents **Employees** provided... ...simple and accessible services from NYC... Common Set of Citywide Capabilities **Customer Relationship** Human Services Case Management (CRM) Management ...through technology-enabled Business Intelligence and E-Transactions capabilities... Performance Reporting Account Management Document Management Inspections **Multi-language Capabilities** Permitting IT Strategic Initiatives ...developed through business-driven IT initiatives. IT Foundational Initiatives

Figure 2. New York City IT Vision

Strategic Outcomes





Implementation of these strategic, business-focused IT initiatives will transform the City's landscape in support of Mayor Bloomberg's goals: accessibility, transparency and accountability of City government. The initiatives are clearly focused on improving services to the customers of New York City: its residents, businesses, visitors and employees. To achieve these improvements, City agencies will need to work more closely in an integrated fashion. Finally,

the close alignment of IT initiatives with business goals ensures that the City's IT investments are directed wisely. These outcomes are depicted in the following scorecard:

Figure 3. Strategic Outcomes

Customer Perspective Financial Perspective Services available any time, any place Funds invested wisely Personal information secure Streamlined processes increase efficiency and accountability Easy access to information Real-time status of service requests Single entry of customer information Accessibility Transparency Accountability Operations Perspective Employee Perspective Service platform driven by customer NYC is an employer of choice needs Staff has access to on-demand tools Technical solutions flexible and and support and IT training interoperable ■ Staff has self-service access to Cross-agency technical solutions benefits and other services **Automated business processes**

Positioned For Success





Development of PlanIT was a joint effort involving the business and technology leaders across City agencies. The initiatives chosen were those that are the most critical to achieving specific business goals while also enabling substantial progress toward the Mayor's overall goals. This Plan has the support and endorsement of the City's senior leaders. Each strategic initiative has the executive sponsorship of a Deputy Mayor. The First Deputy Mayor, Deputy Mayors, the Office of Management and Budget, Mayor's Office of Operations and the DoITT Commissioner comprise the City's Technology Steering Committee (TSC). The TSC is committed to providing the leadership and support needed to enable progress toward the realization of the strategic initiatives and establishing a technology platform that will serve as a lasting foundation for the future.