

# Office of the Chief Technology Officer OCTO (TO)

#### **MISSION**

Leverage the power of technology to improve service delivery, drive innovation and bridge the digital divide to build a world-class city.

#### **SUMMARY OF SERVICES**

OCTO is the central technology organization of the District of Columbia Government. OCTO develops, implements, and maintains the District's technology infrastructure; develops and implements major enterprise applications; establishes and oversees technology policies and standards for the District; provides technology services and support for District agencies, and develops technology solutions to improve services to businesses, residents, and visitors in all areas of District government. Combining these services into a customer-centered mission-driven organization is the responsibility of the Office of the Chief Technology Officer. Department performance expectations in FY2011 are listed by functional division.

#### **ACCOMPLISHMENTS**

#### ✓ Expanded DC-Net's (District's fiber optic telecommunications network) capability:

- OCTO deployed and maintained network infrastructure for federal government agencies including its sponsorship of the U.S. Department of Energy's Solar Decathlon 2011 - an award-winning program that challenges 20 collegiate teams to design, build, and operate solar-powered houses that are costeffective, energy-efficient, and attractive;
- OCTO deployed and maintained the first link in the District's new high-speed fiber network, the D.C. Community Access Network (DC-CAN), that went live with 100-gigabit-per-second (100G) service that makes the District the first municipality in the nation to build a network that is 10 times faster than typical service-provider networks today. This technology achievement will enable the kind of technology-infrastructure development vital to competing in a 21st-century economy; and
- OCTO signed a \$13 million multi-year contract with the U.S. Office of Personnel Management (OPM) that provided the resources for DC-Net to add / upgrade / convert over 1,000 voice services, 7 data circuits, processed 1,055 service orders, 2,938 service tickets and 13 voice disconnects in June, delivering enhanced services to the District agencies and U.S. OPM.

Mayoral priorities for this accomplishment relates to: Education Quality, Fiscal Stability and Job Creation

#### ✓ Provided project and grants management:

OCTO coordinated the grant award to the District of Columbia of more than \$27 million in American Recovery and Reinvestment Act (ARRA) funding for broadband delivery to community anchor institutions such as charter schools, health clinics, non-profits, public housing, a citywide network of computer education centers and computer training programs for underserved residents in Wards 5, 7, and 8.

Mayoral priorities for this accomplishment relates to: Education Quality, Job Creation and Self Determination

#### ✓ Launched the new DC 311 mapping application (GIS):

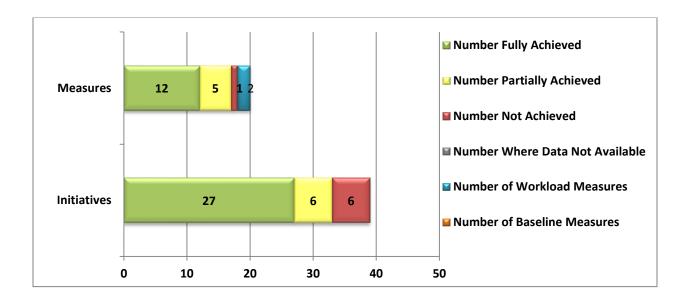
 OCTO launched the new 311 map application which allows the public to see 311 service requests by location, date (2 days, 7 days and 30 days) and status, making it easier for District residents to track service requests online. The data shown for service requests on this application are automatically accessed and updated every hour Monday through Sunday. By clicking on a service request icon on



the map, users can view complaint type, request created date, responsible agency and status of the service (open, closed, or open overdue).

Mayoral priorities for this accomplishment relates to: Public Safety

#### **OVERVIEW OF AGENCY PERFORMANCE**





#### **Performance Initiatives – Assessment Details**

Performance Assessment Key:

Fully achieved



Partially achieved



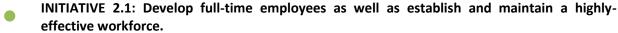
Not achieved



Data not reported

#### **Agency Management Program**

OBJECTIVE 2: Lower the cost of government operations and enhance service through innovative technologies.



Fully achieved - 100% of the initiative was achieved.

In FY2011, OCTO's Human Resources (HR) conducted mid-year performance evaluations of all full-time employees to keep them informed of their progress and opportunities for training and development. In addition, all OCTO line-managers were enrolled in the Department of Human Resources (DCHR) Workforce Development Association (WDA) training classes by spring 2011 and OCTO has achieved 100% attendance to these mandatory classes. These classes allowed managers to provide better guidance to their staff as they work to building career paths that will assist them to achieve their personal objectives.

#### **Application Solutions**

OBJECTIVE 1: Provide and maintain a ubiquitous, reliable, and secure computing environment for the government as well as residents, businesses, and visitors.

INITIATIVE 1.1: Complete DC.gov upgrade for residents, businesses and visitors to better access government services.

Not achieved - Less than 75% of the initiative was achieved.

In FY2009, OCTO began the conversion of the DC.Gov home page, agency websites and associated web portals to a new web platform and design that is more customer-centric. DC.Gov's new design allows agencies to post and share content quickly and easily, and automate publication of some content items through feeds, syndication and publication dates, make better use of social media and positions the District to bridge the digital divide through the implementation of a mobile platform. In FY2010, OCTO began to migrate agency websites and the DC.Gov home page to the new platform with the new look and feel, allowing agencies to incorporate social networking technologies, improve online service workflow and improve resident access to District services and information. By the end of FY2011, 41 DC.Gov websites had been converted to the new web system and design, including the DC.Gov home page. In May 2011, OCTO adopted a more cost effective open source web platform to consolidate the existing two platforms into a more modern and innovative system. The Development, Quality Assurance, and Production systems for this new platform were installed and configured in the summer 2011. New content types and modules were developed and deployed to allow for the successful launch of the Office of the State Superintendent of Education (OSSE) website in September 2011, as well as the initiation of additional agency website projects. The change to this open source web platform has allowed OCTO to implement a number of design changes to agency websites that we believe has improved visitor access to the agency sites. For example, the home page navigation of agency sites moves from a left hand accordion style of navigation



to a horizontal navigation style at the top of the agency home page, which is more consistent with web experience. Additional development continues for a more mature design. When OCTO changed to the new open source web platform in May 2011, OCTO has made the decision to make further updates to the Web Standard Guide that accommodated the new changes implemented in the summer and fall of 2011 before publishing. OCTO will publish the guide by winter 2012.

### INITIATIVE 1.2: Migrate all applications managed/developed by OCTO Application Solutions out of OCTO Data Center 2.

Fully achieved - 100% of the initiative was achieved.

The decommissioning of OCTO Data Center 2 project has been extended to the end of spring 2011 and OCTO has migrated all of the applications managed or developed by OCTO to the colocation site by spring 2011. OCTO has ensured all of the application architecture is documented and adequate hardware resources are available for application development, testing, production, and fail-over. All applications have been configured prior to the migration and the technical documentation for core applications has been made available to OCTO programs following the migration.

# OBJECTIVE 2: Lower the cost of government operations and enhance service through innovative technologies.

## INITIATIVE 2.1: Migrate the District's enterprise resource planning systems to low-cost Linux servers to increase operating efficiencies.

Fully achieved - 100% of the initiative was achieved.

OCTO maintains two enterprise resource-planning systems for the District of Columbia, the automated procurement system and human resource management system. OCTO has migrated these two enterprise systems in winter 2011 to lower-cost Linux servers, which provide standardized hardware and operating systems, knowledge transfer of system maintenance amongst personnel and simplify license costs.

# INITIATIVE 2.2: Apply agile methodology tools and techniques to the Software Development Life Cycle (SDLC).

Fully achieved - 100% of the initiative was achieved.

Currently, the Application Solutions Implementation team uses a traditional "waterfall" methodology to define requirements, design, code, test, and implement new systems. To increase productivity and speed up time to market, the team also implemented the use of the Agile methodology to divide the work into smaller deliverables that can be deployed more quickly and efficiently. This methodology enables multiple releases to be worked on concurrently. In fall 2011, the team assessed projects with agile opportunities and identified changes. In winter 2011, OCTO piloted the agile methodology tools and techniques and expanded the pilot across the Implementation team through summer 2011. By the end of summer 2011, the Application Solutions Implementation team was able to initiate 21 projects using the Agile technique, exceeding the goal of 10 for FY2011.

## INITIATIVE 2.3: Implement a Service Oriented Architecture (SOA) based middleware for use across the District.

Not achieved - Less than 75% of the initiative was achieved.

Integration software known as middleware is required to move data between applications or for applications to communicate with one another. There was a plan to build a District-wide Service



Oriented Architecture (SOA)-based middleware that will be adaptable and usable by all applications. Resources necessary to complete this initiative were not available due to the reduction in OCTO's FY2011 budget and will not be completed until the end of FY2012.

# INITIATIVE 2.4: Provide simple, global access to data and useful presentations to both internal government customers and the public.

Partially achieved - 75% to 99.99% of the initiative was achieved.

OCTO's nationally-recognized Data Transparency & Accountability program provides a centralized access point for enterprise-wide data with a focus on providing data that enables decision support and government transparency. By the end of FY2011 the amount of publiclyavailable data sets and visualization options has increased to more than 483, new data sets including the Department of Health's food safety inspections data as well as the District's payment to all vendors by Certified Business Enterprise (CBE) status. Changes to TrackDC, a government accountability dashboard launched in FY2010 and the re-design of the Data Catalog did not occur in FY11 as planned. This is attributed to unforeseen staff transitions, which required a temporary shift in resource allocations and project priorities necessary to sustain operations and meet the needs of our agency customers. However, dashboards providing data visualizations for other agency customers were completed during FY2011. The following fall into this category: the IT ServUs Dashboard, which provides IT ServUs and their customers with a means of tracking fiscal year expenditures, the ability to forecast for next year's costs to adequately budget, and the tracking of performance management against Service Level Agreements made with District agencies; the Fire and Emergency Medical Services (FEMS) Situational Dashboard, which provides real-time data visualizations including the exact locations and wait time of their fire and emergency medical services vehicle assets, alarm level alerts and the escalation of emergency events. This tool allows FEMS operations with the business intelligence necessary for the successful deployment of these assets to emergency events; the District Department of Environment (DDOE) Green Dashboard, which provides data visualizations in the form of gauges, trending charts, and tables to the public that showcases environmental indicators displaying the "environmental health" of the District. This dashboard also provides the public with environmental initiatives set forth by District government and timely information related to the environment in general. Further, the dashboard allows the public to provide comment directly within the application for greater communications of public concerns and for a greater degree of government transparency and accessibility.

# INITIATIVE 2.5: Partner with District Department of Transportation (DDOT) to improve situational awareness for snow events.

Fully achieved - 100% of the initiative was achieved.

OCTO's Geographic Information System (GIS) team provides District agencies and the public a "one-stop shop" for disseminating geospatial data and enterprise applications. Since the launch of the snow removal tracking tool in FY2008, the system required manual input of data from multiple systems. In FY2011, OCTO partnered with DDOT and DPW to improve the District's situation awareness for snow events through further automation. OCTO added more useful data for more spatial information/context shown on the map, developed a better presentation of the nationally-recognized online snow removal tracking tool, as well as create a tighter integration between 311, Storm Track and other related systems in managing snow events in fall 2010. The enhancements made it easier for the users to see what has not been plowed, the ability to see 311 calls for snow removal on the map, getting more useful reports and more spatial info on map. This allows the snow command center staff and snow removal vehicle operators to have a



much more complete picture of the District's storm response to ensure smooth snow removal operations.

# INITIATIVE 2.6: Partner with the Department of Motor Vehicle (DMV) to enhance DMV's core application to ensure continued premier customer service to the District residents and businesses.

Fully achieved - 100% of the initiative was achieved.

OCTO supported the DMV's performance plan initiatives with innovative solutions and 5 new functional releases for the Destiny application. The first four releases provided system enhancements to reduce DMV Customer Service Representatives (CSR's) processing time on customer transactions and enhancements to the DMV website to enable District residents to conduct more transactions on-line and avoid a trip to the DMV service center. In parallel, development to support the American Association of Motor Vehicle Administrator's (AAMVA) Commercial Driver's License Information System (CDLIS) modernization was underway, in order to implement the federally required name format changes in the Destiny application in January 2012. The fifth FY11 functional release to the Destiny application provided a new Digital Imaging Solution (DIS) for the DMV by integrating scanning, image storage and image retrieval capabilities with the DMV Destiny application in support of Federal requirements for Real ID processing. All of these system enhancements enable the DMV to provide improved quality services for District residents and businesses. However, due to these priorities, DMV postponed the implementation of the National Motor Vehicle Titling Information System (NMVTIS) until FY2012.

### INITIATIVE 2.7: Upgrade the District's Human Resources Management and Payroll System with new functionalities.

Not achieved - Less than 75% of the initiative was achieved.

The Workforce Analytics module was not implemented in FY2011 due to budget constraints. This module provides the tools to measure, manage, and maximize its workforce performance to help the District plan workforce strategies, analyze workforce trends, simulate and strategize workforce growth and retention and measure workforce progress.

# INITIATIVE 2.8: Create an Enterprise Case Management and Business Process Automation System for District Licensing and Permitting.

Fully achieved - 100% of the initiative was achieved.

OCTO created the necessary hardware and software environments to host multiple agencies on a Licensing, Permitting and Case Management automation system. OCTO upgraded existing systems and provide a common integration framework to share data and information across FY2011. The upgraded systems for Alcoholic Beverage Regulation Administration (ABRA) and the Office of the State Superintendent of Education (OSSE) were successfully launched in the summer of 2011. In the past, several separate systems were used to support and automate agency key business processes for a number of land and business related functions such as licensing, permitting, inspections and case management. This resulted in redundant expenditures for hardware, software and peripherals across the District.

## OBJECTIVE 3: Ensure high quality service delivery of technology projects and enforce architectural standards.

INITIATIVE 3.1: Deploy the new enterprise service management system District-wide to improve the current IT service management platform.



Not Achieved - Less than 75% of the initiative was achieved.

In FY2011, the Remedy Services group had a major overhaul and was transitioned to be part of the IT ServUs under the Technology Support Services division to deliver better services to the agencies on Service Request, Change Management, Asset Management and Workflow Management. This major effort involved detailed evaluation and examination of the group's operations, finances and services. The upgrade of the IT Service Management platform to its current product version was put on a hold in FY2011 to re-plan the project migration to the latest version due to changes in staffing and budget.

#### **OBJECTIVE 4: Bridge the digital divide and enable economic development.**

INITIATIVE 4.1: Provide bi-annual maps of broadband availability and adoption in the District leveraging American Recovery and Reinvestment Act (ARRA) funding.

Fully achieved - 100% of the initiative was achieved.

In FY2010, the District was awarded a federal stimulus grant to fund the mapping of its broadband availability. In FY2010, OCTO delivered the first set of data to the U.S. Department of Commerce. In FY2011, OCTO partnered with the Public Service Commission and delivered data on-time for our October 2010 and April 2011 deadlines. Our data submissions were accepted by the National Telecommunications and Information Administration and the Federal Communications Commission. DC GIS has also published wireline broadband adoption by Census Tract on website at data.dc.gov . OCTO will continue to report the broadband availability data every six months for next fiscal year. In addition to meeting the federal requirements, this data will help the District of Columbia to measure its success in bridging the digital divide.

#### **Program Management Office**

OBJECTIVE 1: Provide and maintain a ubiquitous, reliable, and secure computing environment for the government as well as residents, businesses, and visitors.

INITIATIVE 1.1: Upgrade and maintain technology for DC Public Schools.

Partially achieved - 75% to 99.99% of the initiative was achieved.

In FY2010, OCTO collaborated with DCPS to conduct a thorough inventory of all computers deployed in the schools and administrative sites, ensuring that aging and out-of-warranty equipment were repaired or disposed of properly. In FY2011, OCTO continued to monitor and ensure IT service delivery and make strategic decisions in partnership with DC Public Schools (DCPS) administrators to benefit teachers and students. The PMO met weekly with DCPS to report on the status of projects and recommend a path forward. In fall 2011, OCTO worked with DCPS Nutrition services staff to optimize all "point of sale" computers at each school site. In winter 2011, OCTO conducted a Technology Coordinator training to better empower schoolbased IT staff. Over 95 Technical Coordinators attended this training and the agenda included detailing OCTO/DCPS IT policies, offering suggestions for streamlining procurement of technology, and explaining existing processes for Telecom requests. OCTO has also held several trainings for coordinators interested in gaining administrative rights to local computers. This allowed the coordinators to complete basic tasks on site (i.e. adding printers to a network) and reduce the need to call IT ServUs for assistance. In FY2011, OCTO launched a dashboard of IT service metrics organized by school. Due to budget and resource constraints, the integration of a new HR recruitment module with District's human resources management system will be completed in FY2012 instead.



# INITIATIVE 1.2: Coordinate technical support for the new Statewide Longitudinal Education Data System (SLED).

Fully achieved - 100% of the initiative was achieved.

The Statewide Longitudinal Education Data System (SLED) is a single, comprehensive repository of student and education-related data needed to improve education planning, management, reporting, instruction and evaluation. The SLED will provide the District of Columbia community with a system for accessing standardized information about students' academic development over multiple years and across the District's education institutions. In winter 2009, the Office of the State Superintendent of Education (OSSE) deployed the initial release of the SLED system. In spring 2010, OCTO collaborated with OSSE to draft a Request For Proposal (RFP) for SLED 2.0. In FY2011, OCTO supported OSSE in the selection process of a vendor for SLED 2.0 by serving on the SLED 2.0 RFP Review panel for technical expertise. In late FY2011, the SLED RFP was modified and released to the public again. OCTO will continue to serve on the RFP panel in FY2012.

# OBJECTIVE 2: Lower the cost of government operations and enhance service through innovative technologies.

# INITIATIVE 2.1: Implement the Open 311 API to leverage social media outlets external channels for customer service requests.

Fully achieved - 100% of the initiative was achieved.

Open311 is an OCTO created API that has been implemented with SeeClickFix - a free mobile and web platform that allows citizens to submit online reports of non-emergency public problems to governments. During FY2011, OCTO paired SeeClickFix and Open311 with the District's existing 311 application, expanding the avenues available to residents, businesses and visitors for requesting city services and reporting non-emergency problems instantly using a smart phone. The SeeClickFix platform is available in many locations and formats, including mobile phones and widgets on the Washington Post and other city blogs. When a citizen reports a problem on SeeClickFix, the Open311 API will create a service request in the District's 311 system. For example, a citizen who spots a pothole, graffiti, bulk trash or a downed tree can use a mobile device to snap a photo with the GPS location or address and submit it to SeeClickFix. In less than 30 seconds, the problem can be on its way to resolution. When the status of a service request is updated, the District's 311 system generates an automatic alert to the requester and citizens tracking the issue. The Open 311 API is open to the public and OCTO has also used the API internally to create a voice-based application for submitting parking meter service requests as well.

# INITIATIVE 2.2: Deploy customer relationship management application to track technology-related activity with customer agencies.

Partially achieved - 75% to 99.99% of the initiative was achieved.

In partnership with the Office of the Chief Financial Officer (OCFO), an electronic Memorandum of Understanding (e-MOU) using a CRM system was released for District agency use in February 2011 to significantly reduce the time it takes to approve MOUs and transfer funds between agencies. Eight training sessions were conducted in collaboration with the OCFO CIO office to ensure users have the adequate knowledge to utilize this new tool. In FY2011, OCTO has piloted and evaluated two customer relationship management (CRM) enterprise solutions to find one that could help support customer agencies more efficiently and effectively. The first solution was an open source system but it was determined that this tool is too limited in functionality, and did not meet the business management need of the OCTO PMO. The second solution was a



Commercial Off-The-Shelf (COTS) product and it met the PMO's requirements. During the pilot, PMO has developed a pipeline workflow that mimics the "Request to Engagement" segment of the pipeline including collecting the user request, creating the opportunity, tracking assessments and MOU's. The pipeline also tracks budgets to actual expenditures. Management reports are being developed to provide enterprise level data with drill-down capability. However, due to budget constraints, no funds were available to purchasing licenses for this product.

#### INITIATIVE 2.3: Improve audit functions to bring OCTO into compliance with Quick Payment Act.

Fully achieved - 100% of the initiative was achieved.

In FY2010, OCTO partnered with the Office of Finance and Resource Management (OFRM) to improve the business processes and performance metrics for invoice processing in order to ensure compliance with the Quick Payment Act. In FY2011, OCTO re-engineered the previous business processes to ensure validity of all Master Lease funded purchases and maintain Master Lease funding compliance throughout the life cycle of the purchase. By winter 2011, OCTO has achieved 90% compliance with this new process.

#### • INITIATIVE 2.4: Provide direct oversight of District-wide IT budget formulation.

Fully achieved - 100% of the initiative was achieved.

The District-wide IT budget formulation process is conducted every year in partnership with the Office of Budget and Planning (OBP). In FY2011, OCTO required agencies with an IT budget to complete an IT Strategic Plan in addition to the IT Budget Forms. OCTO PMO reviewed the IT budget forms, identified redundancies and ensured OCTO services are budgeted correctly, in addition to making sure that the IT budget aligns with the IT Strategic Plan provided by the agency. All OCTO IT assessments were completed and submitted to Office of Budget and Planning on-time for FY'2012 Budget. Rather than a memo, cost savings recommendations to eliminate IT redundancies across the District was communicated with the City Administrator in a different format. In addition, OCTO worked with the Budgeting team and Office of the City Administrator to finalize shared services Memorandum of Understanding (MOU) sweep as a result of changes in FY2011.

#### • INITIATIVE 2.5: Provide direct oversight of District-wide IT expenditures.

Fully achieved - 100% of the initiative was achieved.

As outlined in its implementing legislation, OCTO supports the centralized technology procurement process and monitors all IT requisitions across the District to avoid redundant costs and ensure best practices for implementation and operations of the District's IT investments. The electronic Project Initiation Form (e-PIF) is essential because each e-PIF is reviewed by OCTO for project scope, schedule, resources, and cost elements before the project is authorized. In FY2011, the e-PIF process was complimented with a business case, including success metrics, for IT project costs greater than \$250,000. The business case and Return on Investment (ROI) templates were developed for District agencies to use as part of the e-PIF process. A presentation and demonstrations of the tools were given at the DC CIO Council meeting in December 2010. There were 55 out of 59 e-PIFs were approved in FY2011.

#### INITIATIVE 2.6: Allow strategic purchasing opportunities through SmartBuy Program for technology procurements.

Fully achieved - 100% of the initiative was achieved.



In FY2010, in partnership with the Office of Contracts and Procurement (OCP) and the Office of City Administrator (OCA), OCTO conducted a review of IT procurements District-wide to ensure that the District received the best price and value for its purchases. In FY2011, Citywide SmartBuy program reviewed via manual sampling a number of IT requisitions, that had the potential for being optimized resulting in over \$ 2.2 MM cost avoidance in FY2011.

# INITIATIVE 2.7: Partner with Metropolitan Police Department (MPD), Office of the Chief Medical Examiner (OCME) and Department of Health (DOH) to create a Consolidated Forensics Lab (CFL).

Fully achieved - 100% of the initiative was achieved.

OCTO partnered with MPD, OCME and DOH to consolidate their key functions of public safety and health services into a single state-of-the-art facility, the Consolidated Forensics Lab (CFL). In FY2011, OCTO coordinated efforts for workflow analysis and requirements gathering for the solicitation of a new lab information management system, participated in the implementation efforts, and provided technical consultation for this project. A solution was procured, and implemented for providing SDLC methodology and a disciplined approach to requirements management.

# INITIATIVE 2.8: Partner with Metropolitan Police Department (MPD) and the Office of Unified Command (OUC) to improve public safety incident and records management.

Fully achieved - 100% of the initiative was achieved.

OCTO is partnering with MPD to improve the collection, management and sharing of incident and reporting data. In FY2010, the District issued a solicitation for an integrated Police Records Management System (RMS) and completed the vendor evaluation and selection process. In FY2011, OCTO provided program management support to manage the resources for the implementation of the RMS and field-based reporting capabilities to support MPD's law enforcement and record-keeping operations and will continue to do so since the training and roll-out is delayed until FY2012.

# INITIATIVE 2.9: Partner with the Department of Employment Services (DOES) to improve the unemployment insurance (UI) process.

Partially achieved - 75% to 99.99% of the initiative was achieved.

OCTO is partnering with DOES to improve the manner in which District residents are able to apply for unemployment benefits. Unemployment Insurance (UI) is a federal-state program that provides temporary benefits to workers who become unemployed through no fault of their own, and who are able and available for work. In FY2010, OCTO partnered with DOES to reengineer the process workflow to streamline and simplify the unemployment benefit application process. In FY2011, OCTO upgraded the DOES Call Center to an Avaya solution on DC-Net to address performance challenges. To further address Call Center performance challenges, technology has been implemented to provide visibility and enable data transparency into performance standards. This enables the team to determine precise resource requirements based on demand, and significantly enables forecasting. OCTO direct support to DOES ended in winter 2011 following the change of DOES agency leadership.

### OBJECTIVE 3: Ensure high quality service delivery of technology projects and enforce architectural standards

INITIATIVE 3.1: Host agency-level TechStat sessions for adherence to enterprise standards and ensure timely project delivery.



Not Achieved - Less than 75% of the initiative was achieved.

In winter 2011, when a new CTO was appointment by the new administration the TechStat program was put on hold until the CTO had the opportunity to conduct a program assessment. However, OCTO has used other vehicles to ensure (1) streamlined IT operations (2) efficient project planning, spending, and execution (3) enhanced visibility into project risks and (4) adherence to District enterprise standards. One of the examples was the establishment of the Technology Review Board (TRB), which unifies OCTO systems and techniques in a crossfunctional team that provides process, discipline and centralized oversight of technology projects, processes, platforms, delivery, technology standards and development methods and operational practices.

#### **OBJECTIVE 4:** Bridge the digital divide and enable economic development.

INITIATIVE 4.1: Develop, execute and support the digital divide strategy for the District of Columbia.

Fully achieved - 100% of the initiative was achieved.

The Digital Divide / Technology Inclusion program was reborn at OCTO in FY2011 and has developed a new strategy on how to affect higher broadband adoption and technology inclusion in areas of the District that are known to be low adopters of broadband services. Wards 5, 7, and 8 are environments where our Technology Inclusion efforts can increase opportunity through job skills, new businesses, and increased use of the high-tech solutions that enable a better community to evolve with more economic opportunity. In FY2011, OCTO also held its second DC Community Broadband Summit to convene the community to strategize on actions to help bridge the digital divide, and a Forum with prospective interconnectors to learn about the public middle-mile fiber-optic network. OCTO also has made strides in developing a digital divide public awareness-raising campaign, including the development of a website, campaign branding, and a mobile technology lab that will provide computers for public use and training throughout the District.

#### **Shared Infrastructure Services**

OBJECTIVE 1: Provide and maintain a ubiquitous, reliable, and secure computing environment for the government as well as residents, businesses, and visitors.

INITIATIVE 1.1: Decommission OCTO Data Center 2 (ODC2) and move into a LEED certified facility within the District of Columbia.

Fully achieved - 100% of the initiative was achieved.

Previously, the District had two antiquated data centers that were located within five miles of each other. To mitigate the exposure to the District for operational issues and a loss of data if either or both data centers became non-operational due to natural or man-made catastrophes, OCTO decommissioned Data Center 2 and completely moved out of the space in summer 2011. The strategy of building a new LEED certified data center facility was changed after further evaluation. A state-of-the-art and secured co-location site was set up outside of the District in FY2011 instead and the migration was completed in summer 2011.

• INITIATIVE 1.2 Expand cross-functional proactive application performance monitoring to improve uptime and fault recognition/correction.

Fully achieved - 100% of the initiative was achieved.

Network-based applications and services have become essential tools for District employees and residents. Any network hindrance or outage affects the ability of District agencies to provide



services. In fall 2010, OCTO implemented proactive application performance and fault monitoring technologies to ensure critical application functions and resources are available. Since then, OCTO has been providing proactive monitoring and alerting capabilities to monitor, measure and analyze user experience for agency and public-facing applications. By creating a proactive process, operational support teams can provide corrections and resolutions prior to adverse user impact. In FY2011, OCTO has enhanced an application-monitoring tool, and also implemented a new hardware monitoring to help identify baseline performance and implement proactive application performance to monitor 100% applications and hardware across FY2011.

# OBJECTIVE 2: Lower the cost of government operations and enhance service through innovative technologies.

INITIATIVE 2.1: Roll-out citywide video conferencing services to District agencies to promote collaboration from different worksites.

Fully achieved - 100% of the initiative was achieved.

Completed build-out of the Video Tele-Conferencing infrastructure supporting High Definition and Standard Definition Video Sessions. District agencies are now able to establish Video calls using their personal end-points inside/outside of the District and avoid cost of travel time and expanses. Due to F20Y12 budget cuts agencies adoption rates were lower than anticipated. Only a few agencies have purchased the end-points. However, the infrastructure and the network is fully functional and ready to support Video arraignments, telepresence e-concierge.

# INITIATIVE 2.2: Continue efforts for cost reduction, savings, and optimization of District telecommunications spending.

Fully achieved - 100% of the initiative was achieved.

In FY2010, OCTO saved the District approximately \$10,000 in monthly long distance charges by transitioning to a new contract with improved rates and OCTO achieved \$118,000 in monthly savings by restructuring cell phone plans. In FY2011, OCTO continued telecommunication savings initiatives by disconnecting unnecessary pagers, landlines, and wireless devices as well as identifying billing errors and unused inventory. Other efforts included negotiating free upgrades with vendors and continue to monitor AT&T upgrade from 2G devices to 3G and upgrading Verizon Wireless 3G air cards to the new 4G network. The annual telecom savings for FY2011 was \$4MM. OCTO enabled Session Initiated Protocol (SIP) based services for long distance outbound services in fall 2011, allowing more than 30% reduction, approximately \$5,000 to \$7,000 per month in long distance charges for on-net telephones.

# INITIATIVE 2.3: Explore the use of Software-As-A-Service (SAAS) and cloud-based services for the DC Government workforce.

Fully Achieved - 100% of the initiative was achieved

In FY2011, OCTO began migrating hosted applications into pilot cloud computing environment. This includes hosted applications SharePoint, Content Management System (CMS) supporting DC.Gov, and the District's human resource system. All hosted applications are running within District-owned secure Virtual Machines in a shared compute and storage resource environment. The District's human resources system is operational within the environment, with a user base exceeding 30,000 users. The CMS is also fully operational serving the needs of all DC Government users, as well as DC.GOV constituent-facing content through the public website. Additional operational efficiencies are being estimated following decommissioning of 50 physical servers supporting the District's human resources system into 40 Virtual Machines. The



space, power, and operational costs of decommissioned server equipment will be returned to support additional cloud computing platform expansion. In addition, over 300 cloud-based applications were created in FY2011 using Quickbase across the agencies.

# INITIATIVE 2.4: Migrate multiple alternate carrier landline telephony services to DC-Net platform.

Fully achieved - 100% of the initiative was achieved.

In FY2011, OCTO continued the migration efforts from alternate carrier landline telephony services or upgrade existing ISDN Services to DC-Net's Digital and Voice over Internet Protocol (VoIP) platforms to reduce monthly recurring charges and operational cost. Exceeded the goal of 1,000 phone number per quarter, OCTO has ported over 4,500 phone numbers from alternate carriers or upgrade existing services to DC-Net Digital / VoIP platforms in FY2011.

### OBJECTIVE 3: Ensure high quality service delivery of technology projects and enforce architectural standards

INITIATIVE 3.1: Create a highly scalable and robust virtual and physical server environment to support the District enterprise technology and application services.

Fully achieved - 100% of the initiative was achieved.

OCTO has built infrastructure to support more than 3,000 virtual machines (VMs) at each of the two separate, but interconnected data centers (ODC1 and Co-location site). There are 2,000 virtual machines are currently in service supporting District agencies including the Department of Employment Services (DOES) with 90 plus VMs and OCTO with more than 300 operational VMs.

In addition, the Universal Computing Platform (UCP) has completed installation of 1.6 Petabytes of storage, with 1.1 Petabytes consumed, serving 67 departments and agencies in the shared resource environment. More than 190 SQL databases, and 16 Oracle databases, are using UCP for primary processing and disaster recovery/backup operations taking advantage of both redundant interconnected UCP data centers.

#### **OBJECTIVE 4: Bridge the digital divide and enable economic development.**

INITIATIVE 4.1: Expansion of wireless hotspots throughout the District.

Fully achieved - 100% of the initiative was achieved.

Across FY2010 and FY2011, OCTO continued the implementation of wireless broadband access in government buildings, including schools, public libraries, recreation centers, and through secure connections inside and near government buildings. The city's connection to the global community and marketplace is growing, supporting economic development and social integration. In FY2011, 46 wireless hotspots were added, bringing the total to 276 across the District. OCTO will continue to expand wireless broadband access with a focus on underserved wards (5, 7 and 8) as well as collaborating with other District government agencies and citizen groups to promote usage of the network by media campaign and outreach, expand its reach, and train residents to use computers with internet access to bridge the digital divide.

#### *Information Security*

OBJECTIVE 1: Provide and maintain a ubiquitous, reliable, and secure computing environment for the government as well as residents, businesses, and visitors.

INITIATIVE 1.1: Ensure that the District is compliant with District and applicable federal regulations by performing annual Security Risk Assessments for applicable agencies.

Partially achieved - 75% to 99.99% of the initiative was achieved.



In FY2010, OCTO instituted formal Health Insurance Portability and Accountability Act (HIPAA) security assessments for entities covered by the HIPAA in the District of Columbia. In FY2011, The HIPAA assessments were completed for DC Child and Family Services Agency (CFSA), DC Department of Health Care Finance (DHCF), Fire and Emergency Medical Services (FEMS), Office of the Unified Communications (OUC), and both OCTO data centers. The assessment for DMH and OCTO co-location site has been started as well. For the FISMA assessment effort, the preliminary work such as policy development, review of the network, and gap analysis for security have been completed in FY2011 and assessments will be conducted in FY2012. The Federal Information Security Management Act (FISMA) assessment is used to evaluate District agency compliance with National security regulations and leads to certification and accreditation.

### OBJECTIVE 3: Ensure high quality service delivery of technology projects and enforce architectural standards

INITIATIVE 3.1: Ensure that the District of Columbia's IT assets, resources and personal data are secure by establishment and enforcement of Information Security Policies and Procedures.

Partially achieved - 75% to 99.99% of the initiative was achieved.

In FY2011, over 20 new or revised policies were drafted including IT Remote Access, Information System Access Management Policy, IT Equipment Security, Data Classification Policy, IT Identity Management, and Security Sensitivity Information Policy. There drafts will be finalized upon approval, published, distributed to other District agencies and enforced to ensure the District's IT assets, resources and personal data are secure. In addition, OCTO established the enterprise standard for endpoint encryption technologies. Encryption software was procured, training for the staff was completed, help desk support documentation was created and the deployment of full disk and media encryption to systems began in spring 2011. The deployment will continue in FY2012.

INITIATIVE 3.2: Implement an annual certification and accreditation process.

Not achieved - Less than 75% of the initiative was achieved.

This initiative was to be carried out by the Chief Information Security Officer, but this position was vacant during FY2011. Active recruitment is currently underway to fill this position.

#### **Technology Support Service**

OBJECTIVE 2: Lower the cost of government operations and enhance service through innovative technologies.

INITIATIVE 2.1: Implement cost per incident model to better gauge service usage by customers and enhance service for mobile workforce.

Fully achieved - 100% of the initiative was achieved.

In FY2011, IT ServUs implemented a cost per incident model to enable District agencies that utilize OCTO desktop support services (IT ServUs) to only pay for what they use. OCTO deployed a new dashboard in winter 2011 that shows agencies their support usage broken down by ticket types, cost types, repeated or chronic issues, most expensive issues, current Service Level Agreements (SLAs). The dashboard also has a reporting feature that shows daily/weekly/monthly/fiscal year to date data to the agencies. OCTO also sends out reports on a monthly basis to agencies to inform their metrics as well. The new dashboard and periodic reporting allow the agencies visibility into their type of desktop support service requests,



monitor their usage rate, and analyze service requests to find way to reduce overall cost. In turn, agencies encourage employees to leverage self-service portals and password reset links using this model. In addition, OCTO has developed cost model for remote, onsite, and yearly asset management support, and deployed a new remote control tool that allows technicians to better support the mobile workforce. The overall desktop support cost was reduced from \$ 9.5MM in FY2010 to \$ 7.1MM in FY2011 under this new model.

#### OBJECTIVE 3: Ensure high quality service delivery of technology projects and enforce architectural standards

INITIATIVE 3.1: Encourage agencies to use the online password reset tools to provide faster and instant service.

Fully Achieved – 100% of the initiative was achieved.

Self-service portals allow users to reset their PC and application passwords anytime without placing a call to the call center. This gives the customer instant resolution to their issues and reduce overall call center cost per incident and customer wait times. In FY2011, OCTO has enabled "Forget Password" feature on the internet and external sites of District's human resources system and procurement system, and created self-help instructional videos on how to perform password resets to encourage agencies to use the online password reset tools to reduce the total number of password reset requests at the Call Center. The overall password reset tickets were reduced from approximately 46,000 to approximately 33,000 from FY2010 to FY2011. In addition, OCTO has exceeded its FY2011 goal of 70% of field support tickets resolved within the appropriate service levels: 4 business hours for high priority, 10 business hours for normal priority, and 3 business days for in-warranty PC replacements.



#### Key Performance Indicators – Details

**Performance Assessment Key:** 

Fully achieved

Partially achieved

Not achieved

Data not reported Workload measurement\*

		Measure Name	FY2010 YE Actual	FY2011 YE Target	FY2011 YE Revised Target	FY2011 YE Actual	FY2011 YE Rating	Budget Program	
Appl	Application Solution								
•	1.1	% of trained agencies publishing web content items	30%	40%	N/A	91.43%	228.57%	APPLICATION SOLUTIONS	
•	1.2	% uptime for enterprise applications	99.71%	99.85%	N/A	99.58%	99.73%	APPLICATION SOLUTIONS	
•	2.1	# of new projects using agile methods	3	10	N/A	22	220%	APPLICATION SOLUTIONS	
•	2.2	# of applications deployed using consumer or open source and cloud computing technologies	471	550	N/A	781	142%	APPLICATION SOLUTIONS	
•	2.3	# of datasets added to the Data Catalog, dashboards, reporting environments and applications.	0	10	N/A	12	120%	APPLICATION SOLUTIONS	
•	2.4	# of data downloads from public data catalogs	1.95M	2.00M	N/A	1.93M	96.42%	APPLICATION SOLUTIONS	
•	2.5	# of calls to DC GIS Central Database*	2.18B	2.51B	N/A	2.17B	86.70%	APPLICATION SOLUTIONS	



	1	T	<del>                                     </del>		1	T	T	
		Measure Name	FY2010 YE Actual	FY2011 YE Target	FY2011 YE Revised Target	FY2011 YE Actual	FY2011 YE Rating	Budget Program
•	2.6	# of on time delivery of releases to DMV in support of Performance Plan	4	4	N/A	5	125%	APPLICATION SOLUTIONS
Progr	am Ma	anagement Office	<b>e</b>					
•	2.1	\$ Saved through SMART Buyer program	0	\$3M	\$2M <sup>i</sup>	\$2.24M	112%	PROGRAM MANAGEMENT OFFICE
•	2.2	% of IT Staff Augmentation (ITSA) Spend awarded to District Certified Business Enterprises (CBEs)	97.21%	95%	N/A	98.30%	103.47%	PROGRAM MANAGEMENT OFFICE
Share	ed Infr	astructure Servic	es					
•	1.1	% uptime for all OCTO-supported infrastructure	99.999%	99.999%	N/A	100%	100.01%	SHARED INFRASTRUCTURE SERVICES
•	1.2	# of agencies utilizing OCTO's hosting services	0	25	N/A	65	260%	SHARED INFRASTRUCTURE SERVICES
•	2.1	Wireless Devices Added / Wireless Devices Disconnected	1.86	0.85	N/A	2.53	297.82%	SHARED INFRASTRUCTURE SERVICES
•	4.1	# of public WiFi hotspots	230	300	N/A	276	92%	SHARED INFRASTRUCTURE SERVICES
Infor	Information Security							
•	1.1	# of security audits passed*	0	2	N/A	0	0%	INFORMATION SECURITY
			ı l		1	1	-	1



		Measure Name	FY2010 YE Actual	FY2011 YE Target	FY2011 YE Revised Target	FY2011 YE Actual	FY2011 YE Rating	Budget Program
•	1.2	# of tokenless VPN accounts added	645	1,000	N/A	1,079	107.90%	INFORMATION SECURITY
•	1.3	# of end points with full disk encryption	0	2,500	N/A	152	6.08%	INFORMATION SECURITY
Techr	nology	Support Services						
•	1.1	% of dispatch tickets resolved within SLAs	71%	70%	N/A	72.37%	103.39%	TECHNOLOGY SUPPORT SERVICES
•	1.2	% of calls answered in 30 Seconds	63%	80%	N/A	77.28%	96.60%	TECHNOLOGY SUPPORT SERVICES
•	3.1	% of desktop issue tickets resolved within 4 hours	97%	96%	N/A	92.51%	96.36%	TECHNOLOGY SUPPORT SERVICES

<sup>\*</sup>Workload measure is not weighted on the Agency's Performance.

i Due to resource constraints during FY2011, the FTE that was assigned to administer to the Smart Buyer program was reassigned to assist with portfolio management and budget formulation, therefore the program was not able to meet the original target set prior to the change in administration. A new but still aggressive target of \$2M was set for end of the calendar year 2011.