

Office of the Chief Technology Officer FY2021

Agency Office of the Chief Technology Officer

Agency Code TO0

Fiscal Year 2021

Mission Direct the strategy, deployment, and management of D.C. Government technology with an unwavering commitment to I.T. excellence, efficiency, and value for government, residents, businesses and visitors.

Summary of Services The Office of the Chief Technology Officer (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 residents, businesses, 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 FY2014 are listed by functional division.

2021 Accomplishments

Accomplishment	Impact on Agency	Impact on Residents
Successful delivery of the Data Center Relocation Project.	Allowed OCTO to clean up the legacy environment, resulting in less downtime, and unplanned maintenance.	The District was able to replace outdated infrastructure as well as improve overall system performance and reliability for hosted Digital Services. Relocating the data center paved the way for a redevelopment project in Ward 7 being led by DMPED and DGS.
Improved usability of the Covid19 Vaccine Reservation Portal	These enhancements to the portal reduced the amount of day-to-day operational work OCTO teams needed to do to prepare for the release of vaccination appointments.	Residents no longer had to wait for availability of appointments. Instead, residents could register once, and then receive notification when appointments were available for booking.
Tech Together DC was launched in FY2021 as a city-wide initiative to close the digital divide. Tech Together DC brings together government agencies with community-based organization, university partners and industry to close the digital divide.	N/A	Tech Together and its partners launched Internet for All that provides free internet access to households with children enrolled in DCPS and DC Public Charter Schools, adult charter schools, and students attending the University of the District of Columbia. This internet subsidy along with the FCC's Emergency Broadband Benefit and low-cost internet programs provided by internet service providers support an estimated 60K residents Tech Together DC partners provided devices, training and tech support to senior residents, donated laptops to a community partner for refurbishment and distribution to residents in need of devices, and provided digital literacy training to residents through OSSE, DOES, DCHA, DCPL, and DAFL. We estimate that our Tech Together DC partners have provided roughly 17K devices to adult residents and provided over 30K residents with digital literacy training.

2021 Key Performance Indicators

Measure	Frequency	FY 2019 Actual	FY 2020 Actual	FY 2021 Target	FY 2021 Quarter 1	FY 2021 Quarter 2	FY 2021 Quarter 3	FY 2021 Quarter 4	FY 2021 Actual	Was 2021 KPI Met?	Explanation For Unmet KPI
1 - Enhance the quality, availability, and delivery of information and services to residents, employees, businesses, and government - Better enable agency customers, stakeholders and the public to scrutinize and engage on key IT decisions and performance. (6 Measures)											
Percent of calls answered in 30 seconds	Quarterly	71.2%	71.3%	80%	62.3%	75%	75%	60.5%	61.4%	Unmet	In Q4 the contact center prioritized calls from DCPS students, parents and teachers. The large amount of DCPS calls negatively impacted the response times on the Enterprise side.

Measure	Frequency	FY 2019 Actual	FY 2020 Actual	FY 2021 Target	FY 2021 Quarter 1	FY 2021 Quarter 2	FY 2021 Quarter 3	FY 2021 Quarter 4	FY 2021 Actual	Was 2021 KPI Met?	Explanation For Unmet KPI
Percent of desktop issue tickets resolved within 4 (Four) hours	Quarterly	82.9%	88.9%	90%	72.7%	71%	85.4%	94.3%	88.8%	Nearly Met	We experienced delays in desktide support response times during Q1 and Q2 largely due to staff not being able to easily be deployed to sites due to COVID. Response and resolution times improved during Q3 and Q4 as sites reopened and resources were able to be deployed to sites more quickly.
Percent of IT Helpdesk Tickets resolved within 1 (one) business day	Quarterly	87.8%	60.8%	80%	80.9%	75%	89.6%	78.1%	81.1%	Met	
Percent of calls resolved in call center on first call	Quarterly	77.7%	54.7%	75%	56.6%	55%	58.8%	60%	58.7%	Unmet	This measure needs to be revised. Does not accurately reflect first call resolution rate. The system did not account for Tier 2 resources taking Tier 1 calls during times of extremely high call volume.
Percent of inquires responded to customers within GIS's Standard Service Level of Agreement (SLA)	Quarterly	2501.4%	94.1%	90%	95.2%	95%	96.6%	94.5%	95.3%	Met	
Percent of abandon rate for IT Helddesk calls	Quarterly	9.5%	7.3%	10%	7.8%	4%	4.1%	6.9%	6.4%	Met	
2 - Enable and improve the availability and integration of information - Provide integrated information services across the district and promote the adoption of data, process, and vocabulary standards. (3 Measures)											
Percent of routine agency web update requests fulfilled within 24 hours by Web Maintenance	Quarterly	95.2%	95.7%	90%	94.9%	96.3%	95.8%	95.1%	95.5%	Met	
Percent of Tier 1 tickets resolved within 30 minutes by the Networks Operations Center (NOC)	Quarterly	97%	90.8%	90%	92.2%	96.2%	92.2%	96%	94.2%	Met	

Measure	Frequency	FY 2019 Actual	FY 2020 Actual	FY 2021 Target	FY 2021 Quarter 1	FY 2021 Quarter 2	FY 2021 Quarter 3	FY 2021 Quarter 4	FY 2021 Actual	Was 2021 KPI Met?	Explanation For Unmet KPI
Percent of uptime for all OCTO-supported infrastructure	Quarterly	99.5%	99%	99.9%	99.9%	99%	99%	99%	99.2%	Nearly Met	We will review how the data for this metric is captured and reported. The measure is too broad and needs to be refined to be more meaningful.
4 - Implement an enterprise approach to information technology infrastructure and common administrative systems that will foster innovation and collaboration. Establish a basis for consolidated infrastructure to achieve interoperability and communication among operating divisions. Improve the performance of district Information Technology personnel and enable the unification and simplification of similar IT business processes and services within and across operating divisions and maximize the value of technology investments through enterprise-wide procurement and licensing. (1 Measure)											
Annually add 5 (Five) percent new data-sets to Data Catalog, Dashboards, Reporting Environments and Applications	Annually	5%	5%	5%	Annual Measure	Annual Measure	Annual Measure	Annual Measure	5%	Met	
5 - Achieve excellence in IT management practices - Strengthen districtwide enterprise-wide processes for collaborative IT strategic planning, capital planning, and investment control. Develop an IT human capital plan to guide the recruitment, retention, and skill development of staff. Establish and maintain IT policies and SOPs to ensure compliance with federal regulations and district legislation. Guide citywide IT investments to yield the maximum benefits at the lowest possible costs. (1 Measure)											
Percent of District with access to public Wifi system	Quarterly	13.1%	15.8%	14%	16.4%	16.4%	16.5%	17.1%	16.6%	Met	

2021 Workload Measures

Measure	FY 2019 Actual	FY 2020 Actual	FY 2021 Quarter 1	FY 2021 Quarter 2	FY 2021 Quarter 3	FY 2021 Quarter 4	FY 2021 Actual
1 - Agency Management (1 Measure)							
Number of payments processed by the DC Department of Motor Vehicles (DMV) Destiny System	1,067,283	872,110	197,899	211,667	240,647	289,487	939,700
1 - Data Transparency and Accountability (2 Measures)							
Number of Business Intelligence dashboards and reporting environments developed	18	255	35	48	41	33	157
Number of active dashboard development projects for Citywide Data Warehouse	95	55	22	35	22	23	102
1 - DC Geographic Information Systems - GIS (2 Measures)							
Number of DC government employees who have taken a OCTO's DC Geographic Information System (GIS) led classes via DC Department of Human Resources' (DCHR's) Workforce Development Administration	125	46	0	39	37	9	85
Number of geospatial dataset downloads	81,158	96,958	19,415	20,945	16,018	19,489	75,867
2 - Application Implementation (2 Measures)							
Number of software applications tested	86	97	25	47	27	17	116
Number of software development projects initiated and completed	16	2	4	1	1	0	6
3 - DC Network Operations Center (3 Measures)							
Number of change request managed by Change Advisory Board	356	1424	380	455	520	512	1867

Measure	FY 2019 Actual	FY 2020 Actual	FY 2021 Quarter 1	FY 2021 Quarter 2	FY 2021 Quarter 3	FY 2021 Quarter 4	FY 2021 Actual
Number of critical data, wireless and voice network components, server and web application being monitored by the Network Operations Center (NOC)	80,411	84,577	21,728	21,847	21,934	22,036	87,545
Number of support calls received by the NOC to ensure government operations and continuity	12,000	10,183	1417	1307	1324	1363	5411
3 - DC-NET (1 Measure)							
Number of public WiFi hotspots	634	2599	672	667	665	705	2709
4 - Applications Solutions - DMV (2 Measures)							
Number of on-time delivery of releases to Department of Motor Vehicles (DMV)	4	5	1	1	1	1	4
Number of transactions processed by the DMV Destiny System	1,112,163	942,669	197,899	212,703	251,037	316,293	977,932
4 - Email (citywide messaging) (2 Measures)							
Number of email messages transacted to District electronic mailboxes	111,750,000	83,250,000	20,250,000	21,750,000	20,500,000	21,150,000	83,650,000
Number of email messages transacted within Citywide messaging Infrastructure	588,000,000	590,500,000	148,000,000	150,500,000	148,250,000	149,450,000	596,200,000
4 - Human Resource Application Services (5 Measures)							
Number of employees supported by PeopleSoft Human Capital Management System	153,029	153,437	38,091	38,006	38,253	37,979	152,329
Number of federal annuitants supported by PeopleSoft Human Capital Management System	14,561	14,400	3577	3562	3544	3534	14,217
Number of District residents supported by PeopleSoft Human Capital Management System	7882	9942	1779	1866	2032	806	6483
Number of timesheets processed by PeopleSoft Human Capital Management System	10,738,544	11,053,179	2,864,456	2,840,677	2,779,791	2,651,615	11,136,539
Number of transactions processed by PeopleSoft Human Capital Management System	12,693,578	12,815,564	3,379,425	3,206,819	3,133,956	3,069,968	12,790,168
4 - OCTO Helps (1 Measure)							
Number of help desk support incidents received	117,265	79,642	24,787	21,569	18,524	22,819	87,699
4 - Procurement Application Services (2 Measures)							
Number of requisitions processed by the District Procurement System	27,902	24,194	6104	4764	4437	8186	23,491
Number of transactions processed by the District Procurement System	351,852	320,734	66,657	61,136	71,511	90,297	289,601
4 - Web Maintenance (1 Measure)							
Number of after-hours support request of web content and maintenance activities	573	816	224	158	118	131	631

2021 Operations

Operations Title	Operations Description	Type of Operations
1 - Enhance the quality, availability, and delivery of information and services to residents, employees, businesses, and government - Better enable agency customers, stakeholders and the public to scrutinize and engage on key IT decisions and performance. (5 Activities)		
Agency Management	Responsible for critical business issues, organizational development and workforce management.	Daily Service
Data Transparency and Accountability	Collects, analyzes, and publishes government data for easy consumption for both the government and general public.	Daily Service
DC Geographic Information Systems - GIS	Provides critical geospatial data to District government agency staff within public safety, economic development, education, transportation, city planning and operations areas.	Daily Service
DMV Application Solutions	DMV Application Solution - Provides system development, maintenance and new functional enhancements for Department of Motor Vehicles' (DMV) business applications, which support vehicle registration, driver's license/identification cards, dealer tags, residential parking permits, insurance verification, adjudication, law enforcement services with on-site and back-office services, the DMV web portal, and mobile application development.	Daily Service

Operations Title	Operations Description	Type of Operations
Electronic Document Management - Filenet	Centralizes IT infrastructure support for the various electronic and paper records throughout the District. It provides system administration, maintenance, and application support for agencies using Filenet and Kofax applications. It is a repository for electronic content.	Daily Service
2 - Enable and improve the availability and integration of information - Provide integrated information services across the district and promote the adoption of data, process, and vocabulary standards. (1 Activity)		
Application Implementation	Provide project management, application development, application implementation, technical consultations and application maintenance and support for District agencies to enhance information flow and responsiveness to residents and to make government more efficient.	Daily Service
3 - Provide a secure and trusted IT environment - Secure critical data and infrastructure using methods consistent with best practices of leading and public and private organizations. Enhance confidentiality, integrity, and availability of IT resources through: Protecting IT assets and resources from unauthorized access or misuse. Enhancing security awareness district-wide. Ensuring that IT security is incorporated into the lifecycle of every IT investment. (6 Activities)		
DC Network Operations Center	Provides around-the-clock monitoring of critical data, wireless and voice network components, along with server and web applications; also provide after-hours and weekend call center services that support multiple agencies.	Daily Service
DC-NET	Supplies a fiber-optic telecommunications platform serving as the core foundation and primary backbone conduit of all technology and telecommunications services used by District employees and manages secure voice, video and data services.	Daily Service
Information Security	Manages and maintains an information security architecture that mitigates security vulnerabilities with the DC Government's technology infrastructure; provides a secure application and network environment for all District government agency systems.	Daily Service
Mainframe Operations	Provides reliable, secure and efficient computing environments with sufficient resource capacity to meet the information processing requirements of the mainframe applications in OCTO's data centers.	Daily Service
Data Center Facilities	Maintains the premises for OCTO's data center sites, including facilities operations and upgrade, resource allocation and access control, power management and site security.	Daily Service
Identify Management Systems	Manages the District's identity and access management systems used in support employees and District residents, provides PIV-1 (Personal Identity Verification Interoperability) solutions for DC government agencies seeking to issue and use highly security PIV-1 credentials, and operates the DC One Card (DC1C) centers that provide identity cards for citizens.	Daily Service
4 - Implement an enterprise approach to information technology infrastructure and common administrative systems that will foster innovation and collaboration. Establish a basis for consolidated infrastructure to achieve interoperability and communication among operating divisions. Improve the performance of district Information Technology personnel and enable the unification and simplification of similar IT business processes and services within and across operating divisions and maximize the value of technology investments through enterprise-wide procurement and licensing. (6 Activities)		
Applications Solutions - DMV	Provides systems development, maintenance and new functional enhancement for Department of Motor Vehicles' (DMV) business application.	Daily Service
Human Resource Application Services	Operates the Human Capital Management technology used by all District employment and DCHR.	Daily Service
Procurement Application Services	Supports the Office of Contracting and Procurement by maintaining and enhancing the Procurement Automated Support System (PASS) which enables purchasing, receiving of goods, and contract compliance for all District agencies; delivers a centralized workflow for the procurement function of the District government.	Daily Service
Web Maintenance	Establishes, maintains, and implements standards, guidelines, policies and procedures for maintaining DC.GOV web portal, which has over 100 District agency websites and is visited over 25 million times a year by District residents, businesses and visitors.	Daily Service
Email (citywide messaging)	Provides collaborative email services engineering, operations management and modernization for entirety of the District government; manages mobile messaging systems engineering and operations.	Daily Service
OCTO Helps	Provides around-the-clock support of desktop products and services for District agencies with certified technicians who apply industry best practices with industry-level software tools, combined with service-level agreements to provide solutions for all end-user computer needs.	Daily Service
5 - Achieve excellence in IT management practices - Strengthen districtwide enterprise-wide processes for collaborative IT strategic planning, capital planning, and investment control. Develop an IT human capital plan to guide the recruitment, retention, and skill development of staff. Establish and maintain IT policies and SOPs to ensure compliance with federal regulations and district legislation. Guide citywide IT investments to yield the maximum benefits at the lowest possible costs. (4 Activities)		
Digital Inclusion Initiative	Leads OCTO efforts to foster technology inclusion through outreach and coordination by developing specialized services, public events, and engagement campaigns to empower District residents and small businesses to embrace an expanding digital landscape.	Daily Service
Enterprise Cloud and Infrastructure Services	Delivers a cost-effective, highly available and scalable cloud computing platform capable of meeting the District's current and future demands.	Daily Service
Telecommunications Governance	Manages a portfolio of approved vendors and contract vehicles to purchase telecommunications products and services, complying with procurement guidelines and works with all District agencies to monitor and certify telecommunications inventories.	Daily Service
Strategic Investment Services	Provides program budget coordination and identifies and monitors the agency's ongoing priorities and critical new capital investments.	Daily Service
6 - Create and maintain a highly efficient, transparent, and responsive District government. (1 Activity)		

Operations Title	Operations Description	Type of Operations
Application Quality Assurance	implements industry best practices for independent software and system testing for DC Government agencies. The team utilizes various testing tools and provides a wide range of testing services including functional testing, regression testing, integration testing, and performance and load testing to ensure application software and systems conform to the required specifications and business requirements for high quality functionality and performance.	Daily Service

2021 Strategic Initiatives

Strategic Initiative Title	Strategic Initiative Description	Completion to Date	Status Update	Explanation for Incomplete Initiative
DC-NET (1 Strategic Initiative)				
Data Center Migration	<p>In FY2021 Office of the Chief Technology Officer (OCTO) will complete migrating to the new Data Center (ODC1). The new data center architecture is being designed as an agile infrastructure that incorporates next generation computer storage, core data center networks and application technologies, that will enable the OCTO to support changing business processes and requirements.</p> <p>OCTO will measure and track the following milestones in FY2021 to ensure successful migration:</p> <ul style="list-style-type: none"> - Network Equipment Configuration - Application Migration - Application Testing - Decommissioning the old legacy data center 	Complete	The new Data Center, DC1 at 1099 14th Street NW, Washington, DC 20005 is fully operational. The old Data Center at 3919, Benning Road NE, Washington, DC is shut down. All tasks outlined for FY21 have been completed.	
Digital Inclusion Initiative (1 Strategic Initiative)				
Bridge Digital Divide and help prepare for digitally-enabled jobs in the economic recovery	<p>In FY2021 Office of the Chief Technology Officer (OCTO) received \$1M as a council enhancement for a WiFi Improvement Pilot. The scope of the project is to install public WiFi in DCHA Potomac Gardens and Hopkins Apartments.</p> <p>FY2021 Milestone:</p> <ul style="list-style-type: none"> - Develop detailed project scope with customer in Quarter One - OCTO will install public WiFi in DCHA Potomac Gardens and Hopkins Apartments based on finalized scope. 	50-74%	Memorandum of Agreement for terms of deployment fully signed. Project plan established to for installation of Wi-Fi at Potomac Gardens at end of Q1 FY22 and Hopkins Apartments in first month of Q2 FY22. Design is 100% complete.	Delays in getting MOA signed led to delays in installation.
Email (citywide messaging) (1 Strategic Initiative)				
Directory Services Modernization	<p>The goal of the multi-year Directory Services Modernization project is to implement a modernized consolidated Active Directory (AD) infrastructure that enables user mobility, common user provisioning processes, consolidated reporting, and unified management of machines as well as Single Sign-On (SSO) for all DC Government users. A robust, scalable and highly efficient consolidated Active Directory architecture and identity management system architecture will minimize District's exposure to crippling cyberattacks.</p> <p>In FY2021, OCTO will undertake the following initiatives to enhance the DC government email security footprint:</p> <ul style="list-style-type: none"> • Conduct market research and alternative analysis for Domain-based Message Authentication, Reporting, and Conformance (DMARC) solution. • Procure and define implementation approach for the selected DMARC solution. <p>OCTO will start implementation and deployment of the selected DMARC solution in FY2022.</p>	Complete	All FY21 work has been completed.	
Enterprise Cloud and Infrastructure Services (1 Strategic Initiative)				

Strategic Initiative Title	Strategic Initiative Description	Completion to Date	Status Update	Explanation for Incomplete Initiative
Disaster Recovery & COOP Implementation	<p>The OCTO Disaster Recovery (DR) and Continuity of Operations (COOP) project is a multi-year project to establish failover and high-availability options for all public safety agencies. The primary goal of the project is to ensure uninterrupted services or reduced mean time to recover from outages.</p> <p>In FY2021 OCTO plans to continue with assessing, migrating, and testing the Public Safety cluster's critical applications. The plan is to deploy dedicated server virtualization platforms to run critical applications for each agency.</p> <p>This multi-year initiative will include the following public safety agencies; EOM, FEMS, DFS, MPD, HSEMA, DOC, OCME, and OUC.</p> <p>FY2021 Milestones:</p> <ul style="list-style-type: none"> - Complete the final Phase 3 testing of OUC and HSEMA critical applications by end of Quarter 2. - Complete scoping Disaster Strategies and begin testing with FEMS by end of Quarter 3. - Begin Phase 1 assessment of MPD critical application in Quarter 4. 	Complete	All FY21 milestones have been completed.	
Human Resource Application Services (1 Strategic Initiative)				
Human Capital Management Enterprise Application Modernization	<p>The main objective of this project is to migrate the entire Human Capital Management Enterprise System, known as PeopleSoft from a very specialized and costly infrastructure to a lower-cost commodity hardware, lowering operating costs for all District employees.</p> <p>FY2021 Milestones:</p> <p>OCTO will complete migration the system to the new hardware and decommission the current hardware by the end of Quarter 4.</p>	Complete	With the agency focused on decommissioning the Benning Road datacenter (ODC1,) the Oracle Engineered Systems (Exadata/Exalogic) supporting both Development and Disaster Recovery instances of PeopleSoft were successfully migrated to Dell commodity hardware at the new DC1 datacenter. By the beginning of Q3, FY'22, the team will migrate the Production instance at DC2, onto the new Dell PowerStore servers, completing the modernization effort.	
Information Security (1 Strategic Initiative)				
Prioritize cyber security as a risk management strategy	<p>The Citywide IT Security Program is a multi-year initiative and supports the District's vision for Enterprise Cybersecurity services. In FY2021 as part of the initiative OCTO will launch and complete Vulnerability Assessments targeting Public Safety and Health and Human Services clusters to help with identifying security gaps.</p> <ul style="list-style-type: none"> - The Risk and Vulnerability Assessments will explore the risks associated with the organization's information systems. - Once the assessments are conducted the participating agencies and their heads will be provided with Dashboards and Scorecards highlighting overall risks and their status of enterprise cybersecurity posture. - Rollout of Multi-Factor Authentication In FY21, OCTO will configure 2100 District servers with secondary authentication factor 	Complete	<p>Roll-out of Multi-Factor Authentication to servers is still in progress, this activity was paused due to the Datacenter migration project. This effort will continue into FY2022</p> <p>Risk Management Framework strategy has been drafted. The program will continue to develop detailed implementation plan and identify pilot groups.</p> <p>Password assessment has been performed on 9 Active Domains. Remediation of the finding are in progress.</p>	
Strategic Investment Services (1 Strategic Initiative)				

Strategic Initiative Title	Strategic Initiative Description	Completion to Date	Status Update	Explanation for Incomplete Initiative
Automate request and delivery of traditional IT services	<p>IT Service Management (ITSM) is a functional approach to manage the digital transformation of OCTO's Enterprise IT Operations and Services. Utilizing a multi phased implementation, that was kicked off in FY2020, OCTO will design, plan, develop, operate and maintain a platform that will centralize models for Finance Management (ITFM), Project Management (PPM), Service Delivery and IT Operations (ITSM) that will optimize the District's capabilities for critical enterprise data, platforms, infrastructure and services.</p> <p>In FY2021 OCTO will build out and refine the scope of the global processes to support this initiative.</p> <p>FY2021 Project Milestones:</p> <ul style="list-style-type: none"> - ITFM Initial Deployment - PPM Initial Deployment <p>OCTO will initiate the ITSM Planning phase in FY2021 and complete Citywide Implementation in FY2022.</p>	Complete	Project goals for FY2021 completed successfully	