

**GOVERNMENT OF THE DISTRICT OF COLUMBIA
Office of the Chief Technology Officer**



Fiscal Year 2025 & 2026 Performance Oversight Hearing

Testimony of
Stephen N. Miller, Chief Technology Officer
Office of the Chief Technology Officer

Before the
Committee on Public Works and Operations
The Honorable Brianne Nadeau, Chairperson
Council of the District of Columbia

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Room 500
John A. Wilson Building
1350 Pennsylvania Avenue, NW Washington, DC 20004

Good afternoon, Chairperson Nadeau, members of the Committee on Public Works and Operations, and staff. I am Stephen N. Miller, the Chief Technology Officer for the Government of the District of Columbia and the Director of the Office of the Chief Technology Officer, or OCTO. I am honored to testify today on behalf of Mayor Muriel Bowser and her administration regarding the performance of OCTO during Fiscal Years 2025 and 2026 to date.

Over the past sixteen months, OCTO has delivered technology infrastructure that kept DC Government running 24/7 for our residents and workforce. When a parent enrolls their child in school online, when a small business owner files for a license, when a teacher receives their paycheck on time, that's OCTO's work. Our mission isn't just coordinating technology. It's building trust through systems that work. This testimony will demonstrate how we're fulfilling that mission and where we're pushing DC Government to lead nationally in responsible technology innovation. None of this work is possible without the exceptional team at OCTO. Their expertise, commitment, and public service ethic are the foundation upon which everything described in this testimony is built. I am deeply proud of this team and grateful for everything they do in service to the District.

OCTO AS THE DISTRICT'S TRUSTED PARTNER

OCTO's role as a trusted technology partner is best exemplified by the My-Outside-School-Time DC (MOST) Portal. Working with the Office of Out of School Time Grants and Youth Outcomes, the Department of Parks and Recreation, and the Deputy Mayor for Education, we built a unified platform where families can search, compare, and register for after-school and summer programs across multiple agencies. Before MOST, a parent had to navigate separate websites, forms, and processes for each program. Now? One portal, one search, one registration process. Since launch, MOST has served thousands of families, with particularly strong adoption in Wards 7 and 8, exactly where access barriers were highest. That's coordination with purpose: breaking down agency silos so residents experience government as one unified service.

DC-NET: THE TECHNOLOGICAL BACKBONE

Before discussing specific programs and metrics, it's essential to understand the foundation that makes everything else possible: DC-Net. Our fiber-optic telecommunications platform serves as the technological backbone of DC Government, providing internet, VoIP, wireless, data center, and data transport services to more than 90 District agencies, over 100 nonprofits, and federal partners.

When a police officer's radio works reliably during an emergency, when a teacher accesses online curriculum without delay, when a resident calls 311 and reaches an operator with functioning systems, DC-Net is the infrastructure making those connections possible. This network isn't just technology for technology's sake. It's the foundation of government operations that residents depend on every single day.

In FY 25 and FY 26, we've continued critical infrastructure investments to ensure DC-Net remains reliable, secure, and capable of supporting the District's growing needs. Through our Enterprise Cybersecurity Infrastructure Upgrades project, we're maintaining and modernizing our aging network and end of life equipment following industry best practices for hardware lifecycle management.

TELECOMMUNICATIONS & CONNECTIVITY: ENSURING RELIABLE COMMUNICATIONS

Telecommunications infrastructure is often invisible to residents, but it's what enables government to function. In FY25, OCTO advanced our Distributed Antenna System (DAS) project, upgrading cellular and radio communications to meet priorities for public safety and health and human services partners.

Why does this investment matter? When a first responder enters a building during an emergency, their radio must work. When building occupants need to make a 911 call, they must be able to connect. Our DAS investments ensure reliable communications that keep people safe.

Beyond emergency response, these telecommunications upgrades support the daily work of thousands of District employees serving residents. These aren't luxuries, they're basic operational requirements that OCTO ensures are met.

NETWORK OPERATIONS CENTER: 24/7 VIGILANCE

Our Network Operations Center (NOC) serves as the heartbeat of DC Government's technology infrastructure, monitoring systems 24 hours a day, 7 days a week, 365 days a year. The NOC's vigilance ensures that when issues arise, we identify and resolve them quickly, often before agencies or residents even notice a problem.

In FY 25, the NOC delivered exceptional performance:

- **92% of Tier 1 tickets resolved within 30 minutes**
- **99.8% system uptime**
- **92,267 critical components monitored**
- **822 public WiFi hotspots maintained across the District**

What does 99.8% uptime mean in practice? It means when a 311 operator takes a call from a resident, the system is there. When the Department of Human Services processes benefits applications, the network doesn't fail. Every tenth of a percentage point of downtime translates to residents unable to access services they need at the time they need them.

The NOC also serves as our first line of defense for cybersecurity incidents and network disruptions. In FY25, the NOC managed 4,119 incidents and responded to 2,132 support calls, ensuring government operations continued without interruptions.

DATA AS A STRATEGIC ASSET

Data is one of the District's most valuable assets, and OCTO's Data teams help agencies capture that value through stewardship, analysis, and sharing. In FY25, our Data team delivered measurable results:

Business Intelligence & Analytics:

We developed over **200 Business Intelligence dashboards and reporting environments**, up from 150 in FY24. These aren't just pretty visualizations, they're decision-making tools that empower agencies to understand their operations, identify trends, and allocate resources effectively. An agency director can now see real-time performance metrics, service demand patterns, and program outcomes without requiring specialized data science expertise.

Geographic Information Systems (GIS):

Our GIS team exceeded our 92% target by maintaining a 97.63% responsiveness to inquiries within our Service Level Agreement. GIS provides critical geospatial data to agency staff across public safety, economic development, education, transportation, and city planning. When the Metropolitan Police Department analyzes crime data, when the Department of Transportation plans infrastructure improvements, when the Office of Planning evaluates development proposals, they're using GIS data and services that OCTO provides.

Cloud Data Exchange:

Our Cloud Data Exchange platform is now operational and delivering value. In FY25, we completed Phase 1 of the Fire and Emergency Medical Services (FEMS) Integration, migrating the legacy Situational Awareness Dashboard to production on a modern platform. This accomplishment demonstrates that we are enabling efficient, secure data integrations between District agencies and their IT systems while reducing duplicative data storage and technical overhead.

Open Data & Transparency:

Beyond internal use, OCTO makes data freely and publicly available through Open Data DC, with nearly 1,500 datasets accessible to anyone with access to the internet. This transparency enables oversight, drives innovation, and empowers residents to understand their government. When a community organization analyzes school performance trends, when a researcher studies housing patterns, when a journalist investigates government spending, they're using open data that OCTO curates and publishes.

INNOVATION THROUGH TECHNOLOGY

Innovation at OCTO isn't about flashy tools for their own sake, it's about using technology to solve real problems for residents and employees. Our innovation approach operates on multiple levels:

Human-Centered Design Through the i-Team at OCTO

Mayor Bowser's Bloomberg Philanthropies-funded Innovation Team (i-Team) at OCTO brings human-centered design methodology to government challenges that technology alone can't solve. The i-Team's work recognizes a fundamental truth: the best technology in the world fails if it doesn't account for how people work, what motivates them, and what barriers they face.

In FY25, the i-Team partnered with the Department of Employment Services and DC Human Resources to place 12 graduates in apprenticeship roles across multiple agencies, creating pathways to public service careers while addressing agencies' talent needs. OCTO hired two of these apprentices as full-time employees in our Security Division, investing in DC residents while building our own workforce capacity. This is how we close the digital divide and the opportunity divide simultaneously.

Artificial Intelligence (AI): Responsible Innovation Guided by Values

No discussion of government technology in 2026 would be complete without addressing AI. OCTO's approach to AI is guided by the values established in Mayor Bowser's order and reflects our broader commitment to responsible, equitable technology deployment.

The six AI values articulated in Mayor Bowser's order are not abstract principles, they guide every decision we make about artificial intelligence tools: **Value Creation, Fairness, Transparency, Accountability, Sustainability, and Privacy.**

Two weeks ago, we launched the **InnovateUS Public Sector AI training program**, providing all DC Government employees and contractors with foundational AI literacy training. This investment recognizes that AI will change how government work is performed, and we have a responsibility to prepare our workforce thoughtfully. The training emphasizes the understanding of AI's core capabilities and its limitations, making sure we recognize the bias in AI systems, developing effective prompting skills, all while maintaining critical thinking and human judgment.

In 2025, DC's AI Task Force received the **inaugural AI 50 Award from the Center for Public Sector AI**, recognizing our ethical, resident-focused approach to AI governance. This national recognition validates that doing AI responsibly and doing it innovatively aren't competing goals, they reinforce each other.

We're not making AI decisions in a vacuum. In partnership with **MIT GOV/LAB and Stanford's Digital Economy Lab** we utilized **Deliberation.io**, a first-of-its-kind platform enabling structured, deliberative public input on AI policy. Residents deserve voices in these decisions, and we've created infrastructure to ensure they have it.

ENTERPRISE INFRASTRUCTURE & APPLICATIONS

Behind every government service is infrastructure that must work reliably. OCTO's Enterprise Cloud and Infrastructure Services division delivers a cost-effective, highly available, and scalable cloud computing platform capable of meeting the District's current and future demands.

Enterprise Applications:

Our Applications division supports critical systems that touch every aspect of the District's operations:

- **PeopleSoft Human Capital Management System:** In FY25, we processed 12,903,011 transactions
- **DMV Destiny System:** Processed 1,050,017 transactions in FY25, supporting vehicle registration, driver's licenses, residential parking permits, and more
- **District Procurement System:** Processed 186,864 transactions in FY25, enabling efficient purchasing, receiving of goods, and contract compliance across all District agencies

ENTERPRISE LICENSING & COST MANAGEMENT: STEWARDSHIP OF TAXPAYER DOLLARS

One of OCTO's most consequential but least visible responsibilities is managing technology costs on behalf of the entire District Government. Through strategic enterprise licensing, system consolidation, and disciplined lifecycle management, OCTO ensures that our technology spend delivers genuine value for agencies and residents alike. This work reflects a core principle we have here at OCTO: responsible stewardship of taxpayer resources.

Enterprise Licensing: The Power of Consolidated Purchasing

In partnership with OCP, OCTO manages enterprise licensing agreements on behalf of all District agencies, achieving cost reductions through consolidated purchasing power that no individual agency could attain independently. This supports OCTO's statutory role in ensuring that District Government spends technology dollars in the most efficient and effective manner while meeting the digital needs of employees, residents, businesses, and visitors.

Licensing Audits: Finding Savings Through Vigilance

OCTO conducts comprehensive audits and assessments of technology and services across District agencies to identify unused licenses, redundant subscriptions, and optimization opportunities. Through a systematic licensing audits process we are able to recapture and reallocate funds towards smarter technology investments.

CYBERSECURITY: PROTECTING WHAT MATTERS MOST

DC Government operates with a target on our back. As the nation's capital, we face cyber threats from nation-state actors, organized criminal enterprises, and opportunistic attackers. In FY25 alone, our systems successfully defended against more than 1 billion breach attempts. Every single day, adversaries probe our networks, test our defenses, and attempt to compromise systems that residents trust us to protect. Our multi-layered cybersecurity approach ensures those attacks fail.

FY25 Cybersecurity Performance:

In FY25, we conducted almost 12,000 vulnerability assessments, proactively identifying and fixing security weaknesses before attackers could exploit them. We implemented continuous monitoring across all enterprise systems with automated alerting for potential security incidents, ensuring our Security Operations Center can respond within minutes.

We continued mandatory security awareness training for all District employees, achieving 79.83% completion in FY25 as we worked toward our 100% target. We conduct simulated

phishing campaigns throughout the year to test and improve employee vigilance. Why? Because 95% of cybersecurity incidents start with human error. The most sophisticated firewall in the world will not stop an employee from clicking a convincing phishing email. Our training ensures employees recognize threats and become our first line of defense, not our weakest link.

We continued implementation of **zero trust security principles**, a “never trust, always verify” approach that assumes breach and requires continuous authentication. We continue deploying Single Sign-On functionality, with multi-factor authentication, across DC Government, ensuring that even if credentials are compromised, attackers can’t gain access to critical DC Government systems.

WORKFORCE DEVELOPMENT: BUILDING PATHWAYS TO TECHNOLOGY CAREERS

OCTO’s workforce development programs create pathways to technology careers for DC residents. For the **15th consecutive year**, OCTO hosted Marion Barry Summer Youth Employment Program interns, providing hands-on IT training to over 40 young people in summer 2025. Many participants return year after year, building progressively more advanced skills.

Many of these young people come from Wards 7 and 8, where access to technology careers has historically been limited. For some, this is their first exposure to cybersecurity, network engineering, or software development as viable career paths. This pipeline from classroom to career is how we ensure DC’s technology workforce reflects DC’s values.

We hosted a dozen DC Infrastructure Academy graduates in apprenticeship programs focused on networking and helpdesk support. These 16-week intensive trainings prepared participants for immediate employment, with **OCTO hiring 3 of these graduates into full-time positions in FY 25**. That’s the pathway model working exactly as designed. We’re building a modern technology workforce of DC residents for DC residents.

STRATEGIC INITIATIVES: TECH PLAN & MAJOR PROJECTS

OCTO's approach to technology is guided by clear values that reflect our commitment to serving DC residents with integrity, transparency, and excellence. Our DC Tech Plan for FY 23 through FY 26, which you can review at techplan.dc.gov, articulates our vision for enhancing collaboration across District Government.

CONCLUSION

The performance I've outlined today demonstrates what disciplined execution delivers. The 99.8% network uptime means systems are available whether the demand is at 10 AM or 10 PM. OCTO-powered Business Intelligence dashboards empower agencies to make data-driven decisions without requiring specialized expertise. Almost 12,000 vulnerability assessments protect residents' personal information from the billion-plus annual breach attempts they never know about.

Over the next year, you'll see us continue this work: completing the DC.gov redesign to provide a genuinely resident-first experience, expanding Cloud Data Exchange capabilities so agencies can share data securely and ship services faster, scaling responsible AI deployments that make government more accessible, closing the digital divide through connectivity and digital literacy programs, and maintaining the infrastructure backbone that makes all of this possible.

I'm proud of what OCTO has accomplished, grateful for this Committee's support and oversight, and confident that our best work, work that builds trust through delivery, is still ahead of us.

Thank you for the opportunity to testify today. I'm happy to answer your questions and expand on any aspect of OCTO's performance.