

**GOVERNMENT OF THE DISTRICT OF COLUMBIA**  
**Department of Forensic Sciences**



Fiscal Year 2019 Budget Oversight Hearing

Testimony of  
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Before the  
Committee on the Judiciary and Public Safety  
The Honorable Charles Allen, Chairman  
Council of the District of Columbia

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Room 120  
John A. Wilson Building  
1350 Pennsylvania Avenue, NW  
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Good Afternoon, Chairperson Allen, members of the Committee, and Committee staff. I am Dr. Jenifer Smith, the Director of the Department of Forensic Sciences (DFS). I am pleased to testify before you today. Recently, Mayor Bowser presented “A Fair Shot,” the Fiscal Year 2019 (FY2019) Budget and Financial Plan, the District’s 23<sup>rd</sup> consecutive balanced budget. This budget does more to make Washington, DC a place where people of all backgrounds and in all stages of life are able to live and thrive by making key investments in infrastructure, education, affordable housing, health and human services, economic opportunity, seniors, and public safety. These investments reflect the key priorities identified by District residents at Budget Engagement Forums and telephone town halls held during the budget formulation process.

Today, I am pleased to share that Mayor Bowser’s FY19 Budget submission for the Department of Forensic Sciences includes additional resources that will help achieve a safer, stronger DC. This budget will allow me to:

- Appropriately address the multiple statutory mandates, within the legislation that established the Department of Forensic Sciences;
- Provide high-quality, timely, accurate and reliable forensic science services with the use of best practices and best available technology;
- Maintain continued accreditation;
- Ensure a qualified workforce through efficient hiring and continual training;
- Provide discovery documentation to critical stakeholders for court procedures; and
- Conduct crime scene investigations with a majority civilian work force supplemented with experienced MPD officers who possess crime scene experience.

Specifically, the Mayor’s FY19 budget for DFS is \$28,040,766, and funds 218.25 Full Time Employees (FTEs). The budget has three components: local, intra-district, and federal grant

funds. The local budget represents \$26,100,719 and funds 207 FTEs. The intra-district budget represents \$1,480,262, and funds 6.25 FTEs. The federal grant budget represents \$459,784, and funds 5 FTEs. The budget supports the following organizational components:

- Forensic Science Laboratory Division (FSL), representing a total of 63.25 FTEs, including the Forensic Biology Unit, Latent Fingerprints Unit, Firearms Examination Unit, Forensic Intelligence Unit, and the Digital Evidence Unit;
- Public Health Laboratory Division (PHL), representing a total of 25 FTEs, including the Microbiology Unit, Biomonitoring and Analytical Chemistry Unit, Virology Unit, Molecular Diagnostics Unit and the new Forensic Chemistry Unit;
- Crime Scene Sciences Division (CSS), representing a total of 94 FTEs, including the Crime Scene Sciences Unit, and the Central Evidence Unit; and
- Agency Operations (OPS), representing a total of 36 FTEs – consisting of quality assurance, training and development, legal affairs, performance management, human resources, resource allocation, health and safety, and information technology support.

Similar to our current budget, the DFS FY19 budget is structured to allow streamlined distribution, management, and oversight of spending. Within the three major operational divisions, “unit activities” are combined into three activities: maintaining custody of evidence from collection to storage; conducting coordinated and timely forensic analysis in accordance with industry standards and accreditation guidelines; and public health laboratory diagnostic, analytical, and emergency response testing.

The Mayor’s FY19 budget, remaining at FY18 levels, will continue to support productivity within all units of the FSL. FY18 funding for contract analysts embedded within both the Latent Fingerprint (LFU), and the Firearms Examination (FEU) units helped reduce case backlogs and

increased entries and verifications associated with intelligence databases. The FEU and LFU strategically utilized funding for contractors to ensure efficient turn-around times in both units. Currently, LFU is reporting out 98 percent of their homicide cases and 100 percent of their priority cases within 60 days. FEU is reporting out 95 percent of their homicide cases and 100 percent of their priority cases within 60 days. FY18 funding supported the addition of new technology, and funding for DNA outsourcing enabled the Forensic Biology Unit (FBU) to increase the amount of DNA testing, decrease backlogs, and provide timely results. Currently, the FBU has no backlog of sexual assault kits. Unlike other cities such as New York, Detroit, Memphis, or Cleveland, who currently report DNA backlogs in the thousands, the FBU at DFS has eliminated the District's backlog. FBU's current turnaround time (TAT) to process these sexual assault kits is 42 days, well below the SAVRAA requirement using local, federal, and intra-district funds. All of the FSL units have dramatically improved participation in three critical national intelligence databases: National Integrated Ballistic Information Network (NIBIN), Automated Fingerprint Identification System (AFIS), and Combined DNA Index System (CODIS). Their results have provided invaluable leads to stakeholders. This fiscal year there have been 4,950 AFIS entries resulting in 1,159 hits; 321 CODIS entries resulting in 106 hits; and 1,781 NIBIN entries resulting in 329 hits. Under the FY19 budget, funding for personnel, critical equipment, reagents, contract analysts, and DNA outsourcing will ensure that DFS continues to play its vital role in driving down violent crime in the District, as demonstrated this past year.

FY18 budget enhancements provided resources and supplies to CSS to support the civilianization of crime scene response in the District following the Mayor's decision in August of 2016 to return Metropolitan Police Department (MPD) officers to street operations. To date, in

FY18, DFS CSS personnel, with the assistance of a reduced MPD officer cohort, have responded to 2,951 scenes. Their average response time to the scene is 25 minutes and they are providing 76 percent of their reports in fewer than 14 days, a dramatic improvement from previous years. To date in FY18, CSS personnel responsible for the secure intake, storage, and maintenance of evidence and property submitted to DFS took custody of 37,745 items of evidence. Under the Mayor's FY19 budget, funding for CSS personnel and equipment will continue at levels sufficient to support crime scene response.

The Mayor's FY19 budget will continue to support critical information technology upgrades. FY18 budget enhancements provided critical infrastructure and software to increase digital storage capacity for several new cutting edge technologies that create large amounts of digital information. DFS crime scene teams use high resolution cameras for crime scene photography and high resolution 3D Laser (LIDAR) scanners for crime scene mapping. The agency has implemented special software for digital analysis of firearms in order to streamline evidence examination workflows and allow for a complete electronic case jacket approach. This software also improves forensic latent analyses and verification of work product quality. Additionally, federal stakeholders required implementation of next generation DNA sequencing within the PHL and of STRmix within the FBU. These systems generate high volumes of digital data. DFS estimates, at minimum, two (2) to four (4) terabytes of additional storage is needed per day to provide active storage during analysis. The Mayor's FY19 budget provides enhanced funding to continue to build additional digital information storage capacity.

FY18 budget enhancements have funded expansion of services, specifically establishment of the Forensic Chemistry Unit (FCU) within PHL. As you are aware, the US Drug Enforcement Administration (DEA) previously analyzed all suspected illegal narcotics collected within the

District. In 2016, the DEA, citing unprecedented backlogs (nearly 37,000 exhibits awaiting analysis) at their laboratories and insufficient resources to keep up with demand, informed the Mayor that they would no longer support analysis of the District's samples beginning in calendar year 2018. In FY18, the Mayor allocated resources to expand DFS chemistry capability to support transition of analysis of DC's controlled substances from the DEA to DFS utilizing DFS chemists within the PHL's Biomonitoring and Analytical Chemistry Unit (PHL/BACU). This unit provides clinical diagnostic testing, emergency response support, applied research, laboratory training, and other essential services, and is a critical player in the CDC's Chemical Terrorism Laboratory Response Network (CT-LRN).

On February 18, 2018 the FCU was fully established when DFS gained accreditation for the analysis of controlled substances following a successful external audit by the ANSI-ASQ National Accreditation Board. DFS took responsibility for analysis of controlled substances for the District on April 2, 2018, completing a commitment I made to Mayor Bowser when I took over the helm of DFS nearly three years ago. With this capability, DFS will expand analysis of controlled substances seized in the District in order to support critical decisions and policies for both law enforcement and public health stakeholders. Under the FY19 budget, funding for personnel, critical equipment, and reagents will continue to support expanded analysis of the District's controlled substances.

The Mayor's FY19 budget fully funds programs that ensure quality driven results and that the DFS workforce is highly trained and skilled in delivering appropriate forensic and public health programs. This year, our training program has delivered over 648 hours of instruction, covering issues such as cognitive bias and quality assurance, as well as discipline-specific topics for DNA, firearms, fingerprint examiners, and public health lab scientists. The Mayor's budget

ensures that our Quality Team will lead the Department through internal inspections and external audits needed to maintain ISO/IEC 17025:2005 accreditation in critical forensic disciplines and compliance with the Centers for Medicare & Medicaid Services' Clinical Laboratory Improvement Amendments (CLIA) regulatory guidelines as well as CDC's Division of Select Agents and Toxins (DSAT) within our PHL.

The Mayor's FY19 budget ensures continuation of critical employee health and safety programs, such as our medical surveillance program, which systematically assesses employees that may have been exposed to biological pathogens while performing work duties. This assessment monitors individuals for adverse health effects and determines the effectiveness of biosafety and exposure prevention strategies. Additionally, DFS will continue the Vicarious Trauma program for employees dealing with post-traumatic stress disorder (PTSD).

The Mayor's FY19 budget also continues to support PHL testing of public health significance such as influenza subtyping, norovirus, and rabies testing. PHL tests bacterial isolates submitted from hospitals, and samples from suspected outbreaks of foodborne pathogens. Teaming with DOH epidemiologists, DFS applied for an Enhanced Laboratory Capacity for Infectious Diseases grant and received an award of \$653,349, representing the highest award to date for DFS. This funding allows DFS to pay for laboratory supplies for the Advanced Molecular Detection project and fund three contractors to support expanding our current laboratory arbovirus testing and influenza surveillance and diagnostics. PHL is a member of the National Laboratory Response Network (LRN) for the detection of bio and chemical terrorism. As a Tier I Laboratory, PHL has both the competency and capacity to test for Category A biological terrorism (BT) agents, as well as detection of any emerging diseases. We have cross-trained three scientists to perform testing for select agents and we are the single point of

testing for suspected BT agents in our region. This team has also analyzed clinical samples to rule out the presence of select agents, testing that cannot be done at local hospitals.

The FY19 budget reflects a 42 percent reduction of \$235,758 in federal grant awards for the DNA Capacity Enhancement and Backlog Reduction Program. The grant award for FY19 is \$326,092. The purpose of the federal grant award is to reduce the backlog of forensic biology cases and improving laboratory efficiency by increasing laboratory capacity and reducing bottlenecks. In the previous grant period, DFS received a grant award of \$561,860. The federal award assisted DFS in eliminating the DNA sexual assault kit backlog and exceeding SAVRAA requirements of 60 days turnaround time for sexual assault kit processing.

The Mayor's FY19 – FY 2024 Capital Improvements Plan (CIP) provides funding for significant projects needed to improve critical laboratory space. Capital funding will be utilized for the renovation of the PHL Biological Safety Level 3 (BSL-3) laboratory for the Bioterrorism & Molecular Diagnostic Unit. This unit is in charge of testing samples from a wide variety of materials for toxins, infectious organisms, and other threats to public health. Analyses of potentially lethal microbes that cause diseases such as Yellow Fever, Tuberculosis, Ebola, Plague, and Rabies are conducted within the BSL-3 laboratory. Additionally, this unique laboratory space is utilized to analyze suspicious white powders from the Federal Bureau of Investigations (FBI) submitted to DFS as evidence in bioterrorism investigations. Interestingly, this year, PHL has processed more suspicious white powder samples than previously processed since opening in 2012. As a Tier 1 facility within the federal Laboratory Response Network, PHL serves as the National Capital Region's primary testing facility for hospitals, clinics, and the FBI. In order to remain compliant with this Tier One designation, DFS PHL must comply with numerous biosafety and biosecurity measures that will ensure safe keeping of these



extremely dangerous organisms. Upgraded security measures are needed for the BSL-3 to ensure continued compliance with requirements established by the US Centers for Disease Control and Prevention (CDC), which include, but are not limited to, secured badge access, biometric entry systems, glass break and unauthorized door entry alarms, motion detection devices, and a robust camera system. A risk assessment conducted by the DFS Health and Safety Program identified that improvements were needed to ensure maximum biosafety and biosecurity measures are in place.

The Mayor's FY19 – 24 CIP provides our CSS with \$222,000 to replace specialized crime scene vehicles. In previous years, MPD had the responsibility in evidence collection but has now transferred this responsibility to the civilian Crime Scene Sciences Division at DFS. Crime Scene Sciences utilizes DFS specialized vehicles to help preserve and prevent contamination of evidence while in the custody of the Crime Scene Scientist. With the OCFO guidance, DFS has identified vehicles that are up for replacement in FY19. The replacement of vehicles in CSS is critical to the success of DFS due to the fact that this division utilizes these vehicles up to 24 hours per day. In addition, the replacement of these vehicles is essential to maintain scene integrity and to safeguard evidence while in the care of DFS. This will strengthen tools and resources needed to investigate crimes in the District.

The Mayor's FY19 – 24 CIP budget provides \$803,000 to support the Digital Forensic Evidence Storage Project. Currently, DFS is in Phase I, has purchased a Flash based Storage Solution and is in the process of upgrading the Switch in the CFL Server Room. This storage system allows DFS to minimize disruption and downtime during installation as it requires no alteration to the existing server room due to its low power consumption and cooling capabilities while still meeting the DFS need for high performance storage. The funding will cover Phase II

of the project, which is mostly focused on data protection and disaster recovery to complete the Digital Forensic Evidence Storage Project. DFS will expand the Storage Solution to provide for future expansion and redundancy. Based on recommendations made by DC.NET, DFS will purchase a second switch to be installed for high availability and redundancy, and DFS plans to install an in-rack fire suppression system to protect the data. The current fire suppression system is sprinkler based and inadequate for data protection at the volume required for flash based storage.

The Mayor's FY19 – 24 CIP budget also provides capital funding for new critical laboratory equipment and equipment replacement. With this funding, DFS will be able to complete the purchase and replacement of the specialized laboratory equipment identified by the Office of the Chief Financial Officer's (OCFO) replacement schedule in the Capital Assets Replacement Scheduling System (CARSS). The FSL collects and examines physical evidence submitted in criminal cases that occur within the District. Specialized equipment is needed to ensure evidence is presented correctly and help limit any uncertainties in cases. For example, FSL needs a Leads Comparison Microscope for high profile and complex cases, such as Homicides and Assaults which typically result in courtroom testimony. This microscope produces digital images that are normally used during direct and cross examinations of Firearms expert witnesses. In addition, FSL will need a Dell PS6610 with Equilogic that provides critical data storage for the entire digital evidence unit's data, to include copies of all digital evidence and all case files. This device is essential to ensure that all DFS digital services continue with a secure place to host the data once it is collected. Additionally, this will help meet stakeholders' requests. The PHL is in need for new and replacement equipment as well. PHL needs a Direct Analysis in Real Time Mass Spectrometry device which helps in confirming the identity of new

drugs that are missed by traditional GC-MS screening and decrease turn-around-time in controlled substance testing.

In closing, I would like to thank the Mayor and her staff for the generous support given to the Department. The resources allocated to DFS will play a critical role in supporting residents' efforts to reach and remain on the pathway to the middle class. I would like to recognize and thank all of the DFS employees for their support in ensuring the Department is run efficiently and effectively and for their untiring efforts to make the District a safer city. Finally, The Council and this Committee, led by you, Chairperson Allen, have been key allies, and I appreciate your continued efforts to ensure our agency is appropriately staffed and adequately funded to support our mission to provide high-quality, timely, accurate, and reliable forensic science services with the use of best practices and best available technology.

Thank you for the opportunity to testify today. I look forward to answering your questions at this time.