

FY2017 Performance Accountability Report

The Performance Accountability Report (PAR) measures each agency's performance for the fiscal year against the agency's performance plan and includes major accomplishments, updates on initiatives, and key performance indicators (KPIs).

Mission

The mission of the Department of Forensic Sciences (DFS) is to produce high quality, timely, accurate, and reliable forensic science with the use of the best available technology and practices, unbiased science, and transparency with the overall goal of enhancing public health and safety.

Summary of Services

DFS provides independent analysis of evidence and samples submitted by agencies within the District of Columbia and its federal neighbors. The Forensic Science Laboratory Division analyzes evidence submitted from criminal cases, including DNA, fingerprints, firearms, materials, and digital evidence. The DFS also provides expert witness testimony in defense of their analytical reports in the District's courts of law. The Public Health Laboratory Division provides diagnostic and analytical testing for biological pathogens and chemical agents from clinical, environmental, or food sources and provides emergency response testing. The Crime Scene Sciences Division provides the collection, analysis, processing, and preservation of evidence found at crime scenes in the District. The DFS Directorate supports the work of the entire agency through strategic direction, training, quality assurance, research, recruitment and hiring of personnel, information technology, data management, fleet management, procurement, and other administrative support services. The Scientific Advisory Board provides guidance by providing peer review to ensure that scientifically valid protocols are developed, followed, and updated.

FY17 Top Accomplishments

Accomplishment	Impact on Agency	Impact on Residents
Established the Forensic Chemistry Unit	The Forensic Chemistry Unit (FCU) received both a federal DEA schedule 1-5 permit and passed DC inspection for a Schedule 1-5 drug permit. Using assistance from visiting DEA scientists, FCU validated and implemented numerous new procedures and established the capability to test for synthetic opioids and cannabinoids as well as other illegal narcotics such as heroin and cocaine. FCU plans to undergo an external audit for ISO17025 accreditation by the end of calendar year 2017.	In November, 2016 DEA advised that they would not be able to support analysis of evidentiary controlled substances for the District of Columbia beginning in calendar year 2018. In FY 2017, the Department of Forensic Sciences (DFS) established the Forensic Chemistry Unit (FCU) to process and track forensic requests for examination of drug evidence in submitted samples. In 2017, the FCU has performed analyses on over a hundred samples for critical stakeholders such as the OCME, DOC, MPD and ABRA.
Establishment of Digital Evidence Unit	In 2017, the Digital Evidence Unit (DEU) increased their caseload by 800% and worked 321 cases with an average turnaround time of 5 days and have no backlog. This year, DEU introduced two new capabilities: the ability to extract and analyze data from computers found within motor vehicles, and the ability to extract and read data from the hardware of cell phones using the 'chip-off' technique.	In FY17, the Department of Forensic Sciences (DFS) established the Digital Evidence Unit (DEU) to increase the District's investigation testing capabilities concerning a wide variety of cybercrimes and fraud. DEU conducts advanced and highly specialized computer forensic investigations and analyses, data recovery, and electronic discovery from digital media to include a wide variety of mobile computer devices, cell phones, and more recently, "skimmers" used on ATM machines.
Elimination of the DNA Sexual Assault Kit backlog in the District of Columbia	The Department of Forensic Sciences (DFS) Forensic Biology Unit (FBU) reduced the backlog of forensic biology cases by increasing laboratory capacity.	In FY17, DFS was able to completely eliminate the District's sexual assault kit backlog.

2017 Strategic Objectives

Objective Number	Strategic Objective
1	Provide high-quality forensic science and public health laboratory analysis to stakeholders so they can execute their own core services to the public in a timely manner. Our three overarching core services are: crime scene evidence collection, forensic science analysis, and public health laboratory diagnostic, analytical and emergency response testing.
2	Provide administrative support, training and risk management oversight to our laboratory and technical units by ensuring compliance with the legal mandate to make analysis documents available. The science lab units will each have administrative support services to maintain operational capacity in the form of training, continuing education, safety, risk management, quality and legal support.
3	Create and maintain a highly efficient, transparent and responsive District government.**

2017 Key Performance Indicators

Measure	Freq	Target	Q1	Q2	Q3	Q4	FY 2017	KPI Status	Explanation
1 - Provide high-quality forensic science and public health laboratory analysis to stakeholders so they can execute their own core services to the public in a timely manner. Our three overarching core services are: crime scene evidence collection, forensic science analysis, and public health laboratory diagnostic, analytical and emergency response testing. (6 Measures)									
Percentage of priority cases as designated by the contributor and marked in LIMS completed within 60 days from the date the analyst was assigned the case	Quarterly	50%	91%	85%	86%	97%	89.8%	Met	
Percentage of requested homicide cases completed within 60 days from the date the analyst was assigned the case	Quarterly	50%	98%	95%	88%	96%	94.3%	Met	
Average turnaround time for Crime Scene Reports	Quarterly	10	56	54	20	21	151	Met	
Average turnaround time for crime scene response	Quarterly	30	29	29	27	25	27.5	Met	
Percent of Emergency Response Outbreak samples analyzed within 6 days	Quarterly	75%	100%	100%	100%	100%	100%	Met	
Percent of Biological Terrorism and Chemical Terrorism samples analyzed within 24 hours	Quarterly	90%	100%	100%	100%	100%	100%	Met	
2 - Provide administrative support, training and risk management oversight to our laboratory and technical units by ensuring compliance with the legal mandate to make analysis documents available. The science lab units will each have administrative support services to maintain operational capacity in the form of training, continuing education, safety, risk management, quality and legal support. (3 Measures)									
Percent of safety incident reports submitted to DFS Safety Officer within 48 hours	Quarterly	90%	84%	100%	100%	100%	92.3%	Met	
Percent of action steps in a Quality Corrective Action Report that are									

completed by the action step date	Quarterly	90%	90%	100%	82%	93%	91.3%	Met	
Percent of scientists meeting technical competency requirements	Quarterly	90%	99%	99%	100%	100%	99.5%	Met	

We've revisited a project to standardize District wide measures for the Objective "Create and maintain a highly efficient, transparent and responsive District government." New measures will be tracked in FY18 and FY19 and published starting in the FY19 Performance Plan.

2017 Workload Measures

Measure	Freq	Q1	Q2	Q3	Q4	FY 2017
1 - Conduct professional and expedient crime scene responses, collection, and storage of evidence. and evidence collection (2 Measures)						
Number of evidence items received	Quarterly	23678	19158	28760	17087	88683
Number of crime scenes processed	Quarterly	1108	1788	2913	1387	7196
1 - Conduct timely forensic analysis (8 Measures)						
Number of AFIS database entries	Quarterly	2256	2238	2068	2473	9035
Number of service requests from stakeholders	Quarterly	6974	1004	876	795	9649
Number of firearms processed for test fire	Quarterly	554	613	517	542	2226
Number of CODIS database entries	Quarterly	89	92	89	163	433
Number of NIBIN database entries	Quarterly	874	1208	1041	4108	7231
Number of AFIS database hits	Quarterly	324	375	342	475	1516
Number of CODIS database hits	Quarterly	37	38	25	56	156
Number of NIBIN database hits	Quarterly	44	34	50	257	385
1 - Provide timely testing of pathogens of public health significance (3 Measures)						
Number of tests performed for each recieved public health sample	Quarterly	1170	582	812	941	3505
Number of Proficiency Tests performed	Quarterly	8	8	50	13	79
Number of validation efforts performed	Annually	Annual Measure	Annual Measure	Annual Measure	Annual Measure	31
2 - Monitor quality compliance with certification requirements (3 Measures)						
Number of Quality Corrective Action Requests opened	Quarterly	55	25	22	7	109
Number of stakeholder complaints received	Quarterly	2	2	0	0	4

Number of internal audits	Quarterly	0	2	1	1	4
2 - Offer training curriculum for professional development (1 Measure)						
Number of training hours completed by employees	Quarterly	167	791	795	467	2220
2 - Oversee the laboratory environment is both safe and healthy for staff. (1 Measure)						
Number of safety incidents reported	Quarterly	19	16	4	2	41
3 - Efficiently procure vital services and resources. (1 Measure)						
Number of requisitions submitted into PASS	Quarterly	75	84	82	123	364
3 - Ensures all IT systems and databases are operational and secure for scientists and agency personnel to deliver reports and services to Stakeholders. (1 Measure)						
Number of IT service requests received	Quarterly	926	927	1074	994	3921
3 - Provide legal advice to the agency and facilitate stakeholder engagement. (1 Measure)						
Number of discovery requests	Quarterly	135	322	251	228	936
3 - Responsible for human capital management and recruitment for DFS and serves as liaison to external entities. (1 Measure)						
Number of employees on-boarded	Quarterly	23	22	12	15	72
3 - Strategically forecast, analyze, and present agency data to determine levels of resource efficiency and goal attainment. (1 Measure)						
Number of unique statistical reports generated	Quarterly	5	2	2	5	14

2017 Strategic Initiatives

Title	Description	Complete to Date	Status Update	Explanation
CRIME SCENE TECHNICAL UNIT (2 Strategic initiatives)				
Implement the use of scanner technology on all serious Part 1 Offenses and where requested by	Crime Scene Sciences will assume street coverage for all Part 1 offenses that occur in the District of Columbia to include but not limited to homicides, death of suspicious nature, fire deaths, all traffic fatalities, police involved shooting where death occurs and all other lesser include Part 1 offenses and all Part 2 Crimes as normal. Scanner technology will be utilized to document the scenes, not relying on hand drawn sketch diagrams. Scanner technology will be utilized to document the scenes.	Complete	LEICA scanners are being used by all shifts, in support of Part 1 offenses.	

stakeholders.				
Support on boarding all new hires and training to proficiency for duty.	<p>Crime Scene Sciences will strategically hire and train a sufficient number of scientists to civilianize the crime scene response duty. The Metropolitan Police Department will be able to return sworn officers to patrol duties once DFS can put civilian scientists on crime scene response.</p>	75-99%	<p>DFS worked diligently to recruit Crime Scene Scientists during FY17. Of the 22 CSS FTEs that were funded in FY17 via one-time MPD funds, DFS was able to fill all but 4 positions. Five FTEs were eliminated due to the FY18 Budget process where Council only made 17 out of the 22 FTEs permanent.</p>	<p>While DFS attempted to recruit at various DCHR hiring events, DFS could not fill the remaining 4 vacant positions due to an inadequate pool of candidates. DFS will be reevaluating the hiring strategy to fill these 4 positions in FY18.</p>
FORENSIC SCIENCE LAB UNIT (3 Strategic initiatives)				
Evaluate application of Next Generation DNA Sequencing for use in the Forensic Biology Unit	<p>The Forensic Biology Unit (FBU) will evaluate the use of commercially available Next Generation Sequencing (NGS) platforms to analyze forensic DNA samples and assess the ability of NGS to produce reliable, accurate and usable results on forensic evidence. The NGS evaluation process conducted by the FBU along with other leading laboratories will provide data as to whether or not this technology will improve forensic DNA intelligence on criminal cases.</p>	Complete	<p>Following the submission of the final report outlining Next Generation Sequencing (NGS) compatibility with NDIS requirements, the FBI confirmed receipt and requested hard copies of the report and data for evaluation.</p>	
Implement the Mideo Case Management System in the Firearms Examination Unit and Latent Fingerprint Unit.	<p>Mideo is a case management system that will interface with the current agency laboratory information management system (LIMS) to streamline evidence examination workflows and allow for a complete electronic case jacket approach. Forensic firearms and latent analyses as well as accreditation related reviews will be recorded and tracked to ensure accuracy, completeness and verify work product quality.</p> <p>In the past DFS relied on paper documentation to track evidence and public health samples. Paper documentation became an issue with quality assurance. Along with implementation of the IT infrastructure, DFS will foster a culture that understands the system's best management practices and we will be able to develop relevant data to measure performance and improve systems.</p>	75-99%	<p>Current Mideo is integrated with Test LIMS so test LFU cases can be entered into the system to ensure Mideo capabilities are functioning and to determine future procedures. As a result of this effort, modifications to the Mideo system have been identified. Specifically, certain field sets and worksheets/reports will need to be changed to conform to the LFU and LIMS workflow and structure. Once these changes have been made, the SOP will be finalized and LFU can start using the Mideo system on casework.</p>	<p>DFS identified several worksheets modifications that are needed to customize the system and ensure Mideo can be implemented into both unit's workflows. The vendor communicated to both units that changes were possible as a part of Phase 1. LFU and FEU are both currently awaiting progress reports from the vendor and will most likely have to perform additional system testing before implementation to ensure requested modifications have been made.</p>
Establish the	<p>The Forensic Intelligence Unit (FIU) will be established initially with</p>			<p>The fourth position within FIU was recently re-advertised with a October</p>

Forensic Intelligence Unit under the Forensic Science Laboratory Division	four (4) employees to receive, process and track forensic request for examination services to ensure seamless transition, communication and reporting within the Forensic Science Laboratory Division (FSL). The FIU will also identify critical impact cases for intelligence tracking and support all FSL forensic intelligence technology and software to ensure transparent information exchange with all DFS Stakeholders	75-99%	Three of four FIU positions have been filled however, two of those individuals were/are on extended absence thru DC government approved PFL.	24, 2017 closing date. Some forensic DNA intelligence impact has been analyzed for calendar year 2016. However, additional forensic intelligence impact will be realized with a full complement of FIU employees
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INFORMATION TECHNOLOGY (3 Strategic initiatives)

Develop and consolidate the LIMS and MIDIO architect infrastructure.	<p>DFS has 4 IT solutions that now require infrastructure to communicate with one another. The IT solutions include the JusticeTrax Laboratory Information Management System (LIMS), MIDEO LIMS, STACSDNA LIMS, Chemware LIMS, and the Digital Information Management System (DIMS). All solutions have the ability to streamline tracking of evidence and medical specimens, but require significant attention to storage capacity, enterprise architecture, and infrastructure consolidation. FTU will provide a development plan tracked on a quarterly basis. By the end of the fiscal year FTU will have mapped and trained all laboratory units how to access the multiple LIMS most relevant to their needs.</p> <p>The infrastructure development will require a year of training to develop a culture of quality assurance. Prior to FY16 all evidence transmissions were documented on paper. DFS will require a year-long initiative to acclimate the agency to a new process.</p>	Complete	The Latent Fingerprint Unit (LFU) and Firearms Examination Unit (FEU) completed Mideo LIMS system training. Chemware Horizon has been upgraded to Version 12 and training has taken place in order to efficiently utilize the new system.	
Assume the responsibility of Audio/Visual Equipment in the DFS floors of the Consolidated Forensic Lab.	FTU will work to assume the responsibility for all audio/visual equipment in the Conference Rooms and Training rooms on floors 1,2,3, and 4 of the Consolidated Forensic Lab from the Department of General Services. By assuming responsibility FTU will get all existing equipment in working order, provide customer service technological support, and oversee a maintenance plan throughout the year. In addition, by the end of the fiscal year FTU will have provided a long-term strategic plan for the Audio/Visual equipment to the Directorate. The long-term strategic plan will include budgetary needs and an equipment replacement schedule.	Complete	All equipment for the shared spaces and DFS Conference rooms has been recieved.	
Create a Digital Evidence Unit (DEU)	FTU will create and implement a business plan for the Digital Evidence Unit of in 2017. The plan will include the mission of the DEU, operational goals and budget, metrics to measure the success of the plan and growth for the next two-five years. The primary goal of the DEU is to assist the following stakeholders with the preservation and analysis of digital devices: The Metropolitan	Complete	The plan has been completed. It includes the mission of the DEU, operational goals and proposed budget, and projected growth. A business relationship has been established with MPD, OAG, USAO, OIG and BEGA. Requests for assistance have been received from all listed	

Business Plan.	Police Department (MPD), the Office of the Attorney General (OAG), U.S. Attorney's Office (USAO), Office of the Inspector General (OIG), and the Board of Ethics and Government Accountability (BEGA).		agencies except OAG. In addition, requests for assistance ave been received from OCTO, DFS, OCME, US Capital Police, US Park Police and Baltimore OCME. Requests for training have also been received.	
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LABORATORY CERTIFICATION (1 Strategic Initiative)

Enhance quality system within Crime Scene Sciences by working toward international accreditation and/or certification for members.	Quality will research international accreditation guidelines to determine most appropriate guideline for CSS. Research possibility of individual certifications and determine number of qualified and/or interested staff. By the end of FY17 Quality will recommend to management an accreditation strategy. We anticipate the research will assist in increasing public confidence by review possible marks of approval, reduce uncertainties associated with decisions that affect the protection of human health and environment, and increase the confidence in data used for key analyses and decisions.	Complete	Seventeen Crime Scene Scientists sat for IAI Certification Test Prep Course from July 17 – July 19 and took certification exams on July 20th. Sixteen out of seventeen passed their certification exam in either Crime Scene Investigator (level 1) or Crime Scene Analyst (level 2).	
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LABORATORY EXPANSION (1 Strategic Initiative)

Establish the Forensic Chemistry Unit.	The Forensic Chemistry Unit (FCU) will be established within DFS to receive, process, and track forensic requests for examination of drug evidence in submitted samples. The FCU will also identify new District clients to provide services, including analysis of pharmaceuticals, nicotine-containing products, and other forensic chemical identifications. Forensic chemistry testing is a new service that the District will provide to stakeholders. We will be able to test synthetic cannabinoids and other street drugs. This will assist stakeholders who relied on federal assistance in the past.	Complete	DEA assisted with validation of one method. The FCU has completed one internal audit and is preparing for an ISO 17025 gap audit. The FCU has performed analyses on 36 samples during Q4-2017. Color tests for screening has been brought online. Hiring positions for three chemists has closed and proceeding through interviews. Final accreditation will be obtained in FY18.	
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LEGAL (1 Strategic Initiative)

Implement a database to perform legal discovery.	Legal will work internally to create a database system to track all discovery to streamline the process. Discovery will move to an all-electronic format that will decrease delays in receiving discovery documents and transmitting to stakeholders. The anticipated reduction in discovery turnaround time will go from 21 business days to 10 business days.	Complete	Legal has created a database system to track all discovery to streamline the process. Discovery has moved to an all electronic system with the exception of two units. Legal anticipates moving the remaining two units to an electronic system	
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by mid-second quarter.

PERFORMANCE STATISTICS (1 Strategic Initiative)

Draft an Equipment Amortization and Replacement Plan.

The District of Columbia invested \$12 million in laboratory equipment when the Consolidated Forensic Lab (CFL) opened in FY2013. By 2018 a portion of the equipment may have reached its lifespan. In 2017, Procurement will identify all equipment inventory, their life cycles, and warranty. The end result will provide cost estimates and recommend how to replace aging equipment within the next five years.

Complete

DFS Operations conducted an agency wide asset/ equipment inventory utilizing the inFlow repository. All asset were identified and later labeled with a numeric barcode for each item. The data within inFlow includes descriptions, purchase price, serial/model number, date of purchase, PO numbers, unique markers, and classification thus allowing the agency to determine the life cycle, which determines that the item/asset is part of the CFL-DFS agency.

PROCUREMENT (1 Strategic Initiative)

Develop a customer service friendly agency-wide inventory and tracking system that will provide a platform to make inventory requests and a schedule to purchase supportive equipment.

Operations is currently responsible for general office supplies, personal protective equipment, IT equipment (cell phones, computers, laptops, and tablets). All agency personnel utilize the aforementioned, but not one platform tracks the assignment of equipment or requests for replenishment of general inventory. In 2017, Operations will have a web-based platform for laboratory units to make inventory requests and track IT equipment assigned their staff.

The impact of this platform will allow DFS the ability to consolidate and account for many, if not all of the products and services, Personal Protective Equipment, modifications and calibration of lab equipment here at DFS. It will serve beneficial for auditing and accountability of computer hardware, software, location. Servicing of equipment would be helpful to outside entities performing asset management with products regularly purchased from outside vendors. Items would be readily available with a description of the product, item/reference number, bar-code and picture and allowing a searchable repository. Ability to provide a legible "Purchase Request Order" form, itemizing the needed products of service. Able to send and received quotes as well. The platform allows the Analyst to track inventory as it enters the building in bulk and/or to an individual or unit.

We hope to have the platform move forward with monitoring other aspect such as gases and bio-hazard removal. There's an on-site Program Analyst, who would oversee the maintenance of the

Complete

inFlow Inventory Management has been implemented by the Operations Team with training provided to all DFS Requisitioners. This centralized repository includes listings of DFS equipment and supplies that is a tracked through a barcode system.

	platform on a day-to-day basis. Working with the DFS Forensic Technology Unit with internal monitoring and backup of the platform.			
PROFESSIONAL DEVELOPMENT (2 Strategic initiatives)				
Increase external training opportunities to include attendance at professional meetings/committees in the respective scientific disciplines.	<p>Training will research training needs by Divisions for FY17.</p> <p>Training will implement training plan/schedule for agency units. Scientific personnel must stay abreast of advancements in their forensic/public health disciplines. By attending technical training/conferences, they can be familiar with industry standards, determine future impacts related to future impacts related to scientific advancements, and become recognized leaders in their industries by employing up to date practices in their field.</p>	Complete	Select members of PHL were trained on topics such as Agents of Bioterrorism; Seasonal Influenza Surveillance Information; Quality Control (QC) Procedures for CDC Zika MAC ELISA; Environmental Laboratory Ethics; Update on Synthetic Opioid Testing and What's new in the World of Synthetic Drugs. Members of the FSL were trained on topics such as Berla iVee Vehicle Forensics Training; Introduction to Photoshop: Level 1; Introduction to the Science of Friction Ridge Examination; iPhone, iPad and Smartphone Apps for CSI.	
Implement training opportunities for DFS management.	<p>Training will create and implement a program for DFS managers by identifying external course to enhance, improve, and develop skills such as team building, budget management, communication, conflict resolution, labor management relations, and building and maintaining staff morale.</p>	Complete	DFS has approximately 60% of millennial employees. To bridge the gap in communication and work style differences, DFS hosted in-house management and staff training on Generations in the Workplace. In addition, select management attended training on Improving Team Results by Focusing on Strengths during this quarter.	
PUBLIC HEALTH LAB UNIT (1 Strategic Initiative)				
Enhance PulseNet laboratory function using next generation sequencing platform	<p>The Public Health Lab participates in the CDC PulseNet Laboratory System that takes DNA sequence information from foodborne illness cases and looks for connections that may indicate a national outbreak. The CDC has released protocols that require DNA sequencing using a next generation sequencing platform developed by Illumina. PHL will validate and implement this system for PulseNet participation. PHL will maintain full capacity of all area outbreak samples and provide timely results to the client and our DOH partners.</p>	75-99%	<p>The PHL has been producing good quality sequence data for the PulseNet organisms and verifying/validating the method. Within the next month, the PHL will be submitting a request for PulseNet certification for NGS from the CDC.</p>	<p>The PulseNet Laboratory System is scheduled to be completed in FY18 Q1. The initiative did not get completed in FY17 due to the understaffed Public Health Laboratory.</p>

RISK MANAGEMENT (1 Strategic Initiative)

<p>Restore the Continuation for Operations Plan (COOP).</p>	<p>Safety and Risk Management will collaborate with the Homeland Security and Emergency Management Agency (HSEMA) to update the DFS COOP Plan by hosting one scenario exercise where the Consolidated Forensic Lab ceases operations. Observations during the scenario exercise will inform Safety and Risk Management which sections of the COOP Plan are outdated and require attention. The exercise will include relevant stakeholders who would support all DFS divisions if the CFL were to cease operations.</p>	<p>Complete</p>	<p>DFS held the COOP Tabletop exercise on August 3rd with the help of key stakeholders. With the information obtained from the exercise during the hotwash, DFS was able to update and finalize the COOP plan. The updated COOP plan is available.</p>	
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