Department of Forensic Sciences FY2019

Agency	Department of Forensic Sciences	**Agency Code**	FR0	**Fiscal Year**	2019

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.

2019 Accomplishments

Accomplishment	Impact on Agency	Impact on Residents
Firearms Examination Unit (FEU) evaluated and explored workflow applications for the Leeds Evo-Finder Automated Ballistic Identification System. This system is a scanning device that generates digital images of bullets and cartridge cases in both 2-dimensional and 3-dimensional formats for examination, comparison, and correlative searches within existing databases. It also provided a means by which analysts can report reliable, repeatable and timely objective conclusions aided by validated instrumentation.	In Q4, FEU hosted two members from the Center for Statistics and Applications in Forensic Evidence (CSAFE) who offered their services to provide FEU with a comprehensive validation plan and statistical process model for FY2020. FEU has taken a progressive step in the right direction for 3D metrology and virtual microscopy. FEU has evaluated and explored all workflow applications for the Leeds Evo-Finder Automated Ballistic Identification System in FY2019. FEU received training and qualified all FEU firearms examiners to use the 3D Evo-Finder system. In addition, FEU members had the opportunity to research and evaluate how several key outside laboratories validated their 3D metrology systems. These laboratories included the Federal Bureau of Investigations, the Royal Canadian Police Laboratory and the National Institute of Standards and Technology. Furthermore, the FEU Unit Manager was chosen to be a panelist and speaker at the 2019 ASCLD Symposium, where he shared the EVO-Finder validation process and how it will be implemented in the near future. The ASCLD conference provided excellent opportunities to network with several laboratory directors and gain more insight on validating 3D Metrology systems. As the agency progresses into virtual microscopy, the DFS Firearms Examination Unit will be one of the trailblazers in the firearms industry for 3D Metrology.	The pattern matching forensic disciplines have been heavily criticized for their subjective microscopic conclusions. In response, DFS purchased the Leeds EVO-Finder Automated Ballistic Identification System that, once validated, has enabled firearms examiners to provide expert testimony based on objective conclusions.
The Forensic Chemistry Unit (FCU) established a controlled substance and opioid surveillance program for the District. FCU worked with the DFS Forensic Technology Unit(FTU) to establish a reporting mechanism to summarize the monthly testing results. Additionally, a report was created that highlights the trends and emerging drugs. Routine monthly results are provided to District Stakeholders for all submitted tests. DFS will collaborate with MPD to undertake drug surveillance on additional samples submitted to the FCU.	The FCU has established a controlled substance and opioid surveillance program for the District and are currently performing testing. They are fully staffed and have purchased new equipment to improve case and workflow management such that turn-around times have been significantly reduced. All data are reported into the laboratory information management system (LIMS), which allows for a real-time view of the metrics through the DFS dashboard.	This accomplishment satisfies a major element of LIVE LONG DC strategy. FCU has developed visual reports that highlight the trends of current opioid use, and emerging drugs in the District. These monthly reports are shared with stakeholders at monthly meetings and via email so that multiple agencies are aware of the current street drug availability in the District. As of FY19 Q4, 100% of all seized heroin is being tested by the FCU and reports are sent back to MPD with monthly aggregate results.
Community outreach is critical to DFS' mission. It is the vehicle by which DFS engages with and educates District residents about the work performed in "The People's Lab." The agency strives to build trust in DFS' services within the community. DFS provides building tours, educational outreach to students in kindergarten through the 12th grade (K-12), mentorship and education to those attending local universities and colleges, and partnerships that foster support for self-sustaining science and safer streets.	National Forensic Science Week activities are designed to educate members of the community – who may become potential jurors – about forensics and help them distinguish between real forensic science versus what is portrayed on television. However, the outreach programs have a dual impact in that they provide educational opportunities for students to learn about the agency, but also a genuine connection to the staff. These connections provide DFS staffers with a window into various communities and the impact that can be achieved through the volunteering of time, patience, and care.	DFS' community outreach and engagement programs have provided opportunities for DC residents and families to have a first-hand look at the services the agency provides to support improving the quality of life of families. The engagement has also allowed students and adults with opportunities to see potential career and employment prospects in the sciences. For example, the agency's Men in S.T.E.M." project is a mentorship program for young men here in D.C., who are considered at risk. The program is designed to introduce young men to the various fields in science, from forensic chemistry and biology, to work in digital evidence and firearms.

2019 Key Performance Indicators

Measure	Frequency	FY 2017 Actual	FY 2018 Actual	FY 2019 Target	FY 2019 Q1	FY 2019 Q2	FY 2019 Q3	FY 2019 Q4	FY 2019 Actual	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. (16 Measures)											
Percent of requested homicide cases completed within 60 days from the date the evidence was received in the unit	Quarterly	94.3%	97.5%	90%	99%	99%	98%	99.5%	98.9%	Met	
Percent of OCME samples ordered in microbiology will be tested and reported within 12 business days of receipt in the laboratory	Quarterly	100%	100%	90%	84%	95%	100%	100%	94.8%	Met	
Percent 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	89.8%	100%	90%	99%	99%	100%	100%	99.5%	Met	
Percent of samples ordered in molecular diagnostics will be tested and reported within 72 hours or 3 business days of receipt in the laboratory	Quarterly	New in 2019	New in 2019	90%	100%	100%	75%	No applicable incidents	91.7%	Met	
Percent of Crime Scene Reports completed within 14 calendar days	Quarterly	Waiting on Data	75.3%	95%	88%	96%	91%	94.1%	93.8%	Nearly Met	CSSU staff have this as a performance goal in their annual performance evaluations and CSSU supervisors meet monthly with their squad members and explain the importance of achieving their performance goals. While CSSU did not achieve the goal of 95% in FY19, 92% does represent a 17% improvement over FY18.

Measure	Frequency	FY 2017 Actual	FY 2018 Actual	FY 2019 Target	FY 2019 Q1	FY 2019 Q2	FY 2019 Q3	FY 2019 Q4	FY 2019 Actual	KPI Status	Explanation
Percent of crime scenes responded to within 30 minutes	Quarterly	Waiting on Data	69%	90%	80%	86%	85%	87%	84.5%	Nearly Met	Time of day (morning and evening rush hours) and geographical locations of assignments (distance from DFS) contributed to CSSU not meeting its goal of 90%. However, 85% in FY19 represents a 16% improvement over FY18.
Percent of all firearms will be transferred to the Evidence Control Branch (ECB) within 21 days after all forensic tests are completed	Quarterly	New in 2019	New in 2019	90%	92%	97%	98%	100%	96.8%	Met	
Percent of all jewelry received will be transferred to Evidence Control Branch (ECB) within 14 days.	Quarterly	New in 2019	New in 2019	90%	100%	100%	100%	100%	100%	Met	
Percent of all drugs will be transferred to Evidence Control Branch (ECB) within 30 days after all forensic testing is completed.	Quarterly	New in 2019	New in 2019	90%	98%	100%	100%	100%	99.5%	Met	
Percent of all rabies STAT specimen with human exposure are tested and reported to the Zoonotic Disease Epidemiologist within 24 hours or 1 business day of receipt i the laboratory	Quarterly	New in 2019	New in 2019	95%	100%	96%	100%	100%	99%	Met	
Percent of cases received in the Forensic Chemistry Unit will be tested and reported within 60 days of receipt in the laboratory.	Quarterly	New in 2019	New in 2019	90%	99%	99%	92%	98%	97%	Met	
Percent of proficiency tests received in the Biomonitoring and Analytical Chemistry Unit (BACU) will be completed and passed.	Quarterly	New in 2019	New in 2019	80%	80%	100%	100%	100%	95%	Met	

Measure	Frequency	FY 2017 Actual	FY 2018 Actual	FY 2019 Target	FY 2019 Q1	FY 2019 Q2	FY 2019 Q3	FY 2019 Q4	FY 2019 Actual	KPI Status	Explanation
Percent of high priority biological terrorism and chemical terrorism samples analyzed and reported within 24 hours	Quarterly	New in 2019	New in 2019	90%	100%	100%	100%	100%	100%	Met	
Percent of Chem Lab cases completed within three (3) business days of receipt by unit.	Quarterly	New in 2019	New in 2019	90%	36.3%	29.7%	55%	70.6%	48.6%	Unmet	This is the first full year that the Evidence Processing was integrated into the LFU. Evidence is submitted from Crime Scene Science Division on a 24 hour basis compared to the Evidence Processing that operate during business hours. The challenge to meeting this KPI was identified in the technical and administrative review phase. It is anticipated that this will be resolved in FY20 through the cross training of staff.
Percent of time eligible cartridge casings are entered into NIBIN within two (2) business days of receipt by agency.	Quarterly	New in 2019	New in 2019	90%	40.7%	52.4%	62%	62%	55.3%	Unmet	The evidence moves through multiple units, each with various priority models. Meetings will be established in FY20 with managers within those units to improve and meet the KPI, and therefore, it is anticipated that this KPI will improve in FY20.
Percent of digital evidence cases completed within five (5) business days of receipt of legal authority and device(s).	Quarterly	New in 2019	New in 2019	90%	87%	93%	94%	92%	91.5%	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. (6 Measures)											
Percent of scientists meeting technical competency requirements	Quarterly	99.5%	100%	95%	100%	100%	100%	98%	99.5%	Met	

Measure	Frequency	FY 2017 Actual	FY 2018 Actual	FY 2019 Target	FY 2019 Q1	FY 2019 Q2	FY 2019 Q3	FY 2019 Q4	FY 2019 Actual	KPI Status	Explanation
Percent of safety incident reports submitted to DFS Safety Officer within two business days	Quarterly	92.3%	100%	100%	100%	100%	100%	100%	100%	Met	
Percent of FOIA responses returned on time (15 business days)	Quarterly	New in 2019	New in 2019	100%	100%	100%	100%	100%	100%	Met	
Percent of overtime events preauthroized	Quarterly	New in 2019	New in 2019	80%	No data available	No data available	No data available	No data available	No data available		
Percent of QCAR situation and root cause analysis sections completed within 30 business days	Quarterly	New in 2019	New in 2019	100%	100%	100%	100%	93%	98.3%	Nearly Met	One (1) QCAR from PHL, out of 14 QCARs opened within DFS for FY19 Q4, did not have the situation and root cause analysis sections completed within 30 days.
Percent of FOIA responses returned early (before 15 business days)	Quarterly	New in 2019	New in 2019	100%	100%	75%	40%	100%	73.3%	Unmet	DFS received three voluminous media requests which took an extended amount of time to process and redact for the requester. That caused the "early return" numbers to decline.
3 - Create and maintain a highly efficient, transparent and responsive District government. (8 Measures)											
HR MANAGEMENT - Percent of eligible employees completing and finalizing a performance plan in PeopleSoft (Updated by OCA)	Annually	New in 2019	New in 2019	Not Available	Annual Measure	Annual Measure	Annual Measure	Annual Measure	100%	No Target Set	
HR MANAGEMENT - Percent of eligible employee performance evaluations completed and finalized in PeopleSoft (Updated by OCA)	Annually	New in 2019	New in 2019	Not Available	Annual Measure	Annual Measure	Annual Measure	Annual Measure	Waiting on Data	No Target Set	
FINANCIAL MANAGEMENT - Quick Payment Act Compliance - Percent of QPA eligible invoices paid within 30 days (Updated by OCA)	Annually	New in 2019	New in 2019	Not Available	Annual Measure	Annual Measure	Annual Measure	Annual Measure	100%	No Target Set	

Measure	Frequency	FY 2017 Actual	FY 2018 Actual	FY 2019 Target	FY 2019 Q1	FY 2019 Q2	FY 2019 Q3	FY 2019 Q4	FY 2019 Actual	KPI Status	Explanation
FINANCIAL MANAGEMENT - Percent of local budget de-obligated to the general fund at the end of year (Updated by OCA)	Annually	New in 2019	New in 2019	Not Available	Annual Measure	Annual Measure	Annual Measure	Annual Measure	Waiting on Data	No Target Set	
CONTRACTS AND PROCUREMENT - Percent of Small Business Enterprise (SBE) annual goal spent (Updated by OCA)	Annually	New in 2019	New in 2019	100%	Annual Measure	Annual Measure	Annual Measure	Annual Measure	Waiting on Data		
IT POLICY AND FOIA COMPLIANCE - Percent of "open" data sets identified by the annual Enterprise Dataset Inventory published on the Open Data Portal - (Updated by OCA)	Annually	New in 2019	New in 2019	Not Available	Annual Measure	Annual Measure	Annual Measure	Annual Measure	Not Available	No Target Set	
IT POLICY AND FOIA COMPLIANCE - Percent of FOIA Requests Processed in more than 25 business days - statute requirements allow 15 business days and a 10 day extension - (Updated by OCA)	Annually	New in 2019	New in 2019	Not Available	Annual Measure	Annual Measure	Annual Measure	Annual Measure	Waiting on Data	No Target Set	
HR MANAGEMENT - Average number of days to fill vacancy from post to offer acceptance (Updated by OCA)	Annually	New in 2019	New in 2019	New in 2019	Annual Measure	Annual Measure	Annual Measure	Annual Measure	Waiting on Data	No Target Set	

*The HR management, financial Management, IT policy and FOIA compliance, and Contracts and Procurement measures were collected for all mayoral agencies in FY 2019. OCA calculates these measure based on summary-level data from various agencies, and cannot verify the accuracy of any calculations that were made to the source data prior to its receipt by OCA. The 2019 DC Enterprise Data Inventory (EDI), which contains data on "open" data sets published on DC's Open Data Portal, is current as of March 9, 2019. Due to data lags, FY 2019 data for the following core business measures will be published in March 2020: Contracts and Procurement - Percent of Small Business Enterprise (SBE) annual goal spent; Financial Management - Percent of local budget de-obligated to the general fund at the end of year; Human Resource Management - Average number of days to fill vacancy from post to offer acceptance; Human Resource Management - Percent of eligible employee performance evaluations completed and finalized in PeopleSoft; and IT Policy and Freedom of Information Act (FOIA) Compliance - Percent of FOIA Requests Processed in more than 25 business days - statute requirements allow 15 business days and a 10 day extension.

2019 Workload Measures

Measure	FY 2017 Actual	FY 2018 Actual	FY 2019 Q1	FY 2019 Q2	FY 2019 Q3	FY 2019 Q4	FY 2019 Actual
1 - Conduct professional and expedient crime scene responses, collection, and storage of evidence. and evidence collection (2 Measures)							
Number of evidence items received	88,683	74,360	17,798	18,178	19,861	21,416	77,253
Number of crime scenes processed	7196	5874	1483	1397	1660	2002	6542

Measure	FY 2017 Actual	FY 2018 Actual	FY 2019 Q1	FY 2019 Q2	FY 2019 Q3	FY 2019 Q4	FY 2019 Actual
1 - Conduct timely forensic analysis (10 Measures)							
Number of service requests from stakeholders	3724	3927	1021	1002	1056	1115	4194
Number of CODIS database hits	156	209	37	53	61	78	229
Number of NIBIN database hits	385	835	187	233	178	177	775
Number of AFIS database entries	9035	9179	1985	1526	1502	2225	7238
Number of CODIS database entries	433	581	138	172	139	203	652
Number of NIBIN database entries	4136	3667	891	1047	1131	1188	4257
Number of AFIS database hits	1516	2097	354	373	356	470	1553
Number of firearms processed for test fire	2226	1995	450	571	589	619	2229
Number of Gigabytes of data processed	New in 2019	New in 2019	14,180	18,936	45,796	35,228	114,140
Number of items Chem Lab processed	New in 2019	New in 2019	2446	5487	6282	5590	19,805
1 - Provide timely testing of pathogens of public health significance (3 Measures)							
Number of tests performed for each recieved public health sample	3505	4133	1485	2950	2210	3036	9681
Number of validation efforts performed	31	38	Annual Measure	Annual Measure	Annual Measure	Annual Measure	28
Number of Proficiency Tests performed	79	167	7	9	17	13	46
2 - Monitor quality compliance with certification requirements (3 Measures)							
Number of Quality Corrective Action Requests opened	109	60	8	11	7	14	40
Number of stakeholder complaints received	4	0	0	0	0	0	0
Number of internal audits	4	5	1	3	4	5	13
2 - Offer training curriculum for professional development (1 Measure)							
Number of training hours completed by employees	2220	3400	116	544	2206	843	3709
2 - Oversee the laboratory environment is both safe and healthy for staff (1 Measure)							
Number of safety incidents reported	41	23	7	7	9	4	27
3 - Efficiently procure vital services and resources (1 Measure)							
Number of requisitions submitted into PASS	364	290	87	89	75	72	323
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	3921	3479	651	808	890	604	2953
3 - Provide legal advice to the agency and facilitate stakeholder engagement (4 Measures)							
Number of Subpoenas received and uploaded to LIMS	Waiting on Data	926	341	433	406	364	1544
Number of discovery requests received	Waiting on Data	1081	319	336	300	271	1226
Number of FOIA Requests received	Waiting on Data	16	1	4	5	5	15
Number of MOA/MOUs the agency enters into with other agencies	Waiting on Data	14	3	5	2	0	10
3 - Responsible for human capital management and recruitment for DFS and serves as liaison to external entities (1 Measure)							
Number of employees on-boarded	72	40	5	11	8	4	28

2019 Operations

Operations Header	Operations Title	Operations Description	Type of Operations
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. (4 Activities)			
PUBLIC HEALTH LAB UNIT	Provide timely testing of pathogens of public health significance	The Public Health Laboratory will provide diagnostic, analytical and emergency response testing for biological pathogens and chemical agents from clinical, environmental, or food sources.	Daily Service
LABORATORY EXPANSION	Improve laboratory efficiency through technological advances	DFS will continue to expand its capabilities as a top tier forensic and public health laboratory by implementing new scientific programs and investing in laboratory equipment infrastructure.	Key Project
FORENSIC SCIENCE LAB UNIT	Conduct timely forensic analysis	The Forensic Science Laboratory division will conduct coordinated and timely forensic analysis in accordance with industry standards and accreditation guidelines.	Daily Service
CRIME SCENE TECHNICAL UNIT	Conduct professional and expedient crime scene responses, collection, and storage of evidence. and evidence collection	The Crime Scene Sciences Division will serve as stewards of evidence by maintaining custody of evidence from collection to storage at DFS.	Daily Service
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 Activities)			
RISK MANAGEMENT	Oversee the laboratory environment is both safe and healthy for staff	Establish, manage and ensure compliance of federal, district, and local regulations and policy; and provide medical surveillance to staff, mandates safety training for all staff members, and audits laboratory facilities to ensure a safe work environment.	Daily Service
PROFESSIONAL DEVELOPMENT	Offer training curriculum for professional development	Provide a training curriculum to DFS employees to ensure they maintain skill sets, meet standards of excellence, and deliver high quality, accurate, and reliable services.	Daily Service
LABORATORY CERTIFICATION	Monitor quality compliance with certification requirements	Assurance that DFS produces products that are fit for stakeholders' purposes by maintaining ISO 17025 accreditation for the agency, maintains Clinical Laboratory Improvement Act (CLIA) certification, as well as, compliance with applicable federal regulations such as the Division of Select Agents and Toxins (DSAT).	Daily Service
3 - Create and maintain a highly efficient, transparent and responsive District government. (5 Activities)			
PERFORMANCE STATISTICS	Strategically forecast, analyze, and present agency data to determine levels of resource efficiency and goal attainment	Analyze raw data and present graphical visuals of real-time workload from data obtained from LIMS, and other databases to better inform strategic leadership decisions to enhance laboratory services.	Key Project
INFORMATION TECHNOLOGY	Ensures all IT systems and databases are operational and secure for scientists and agency personnel to deliver reports and services to stakeholders	Promote and facilitate the effective integration of technology into the DFS divisions by developing, supporting, and maintaining a highly effective, reliable, secure, and innovative information systems to support agency needs.	Daily Service
PROCUREMENT	Efficiently procure vital services and resources	Proactively procure the necessary services, supplies, and equipment for the laboratories to meet the daily needs of scientists and agency personnel.	Daily Service
HUMAN RESOURCES	Responsible for human capital management and recruitment for DFS and serves as liaison to external entities	Supports the hiring of new employees and provides employee data on residency, on-board time, and performance plan completion from data pulled from PeopleSoft.	Daily Service
LEGAL	Provide legal advice to the agency and facilitate stakeholder engagement	Facilitate stakeholder engagement, legally advise director level decision-making, train scientists for court testimony and presentation of scientific expertise, draft contracts and agreements with government and private organizations, and process discovery requests.	Daily Service

2019 Strategic Initiatives

Strategic Initiative Title	Strategic Initiative Description	Completion to Date	Status Update	Explanation for Incomplete Initiative
Conduct professional and expedient crime scene responses, collection, and storage of evidence. and evidence collection (3 Strategic initiatives)				

Strategic Initiative Title	Strategic Initiative Description	Completion to Date	Status Update	Explanation for Incomplete Initiative
Evaluate the Utilization of the LEICA 3D Scanning Capability	The Crime Scene Sciences Unit has assessed the use of the LEICA 3D scanning capability with current stakeholder groups. CSSU will implement an outreach and training program to inform our law enforcement partners of the capabilities of the LEICA 3D Scanning System and to help them better understand the value of the technology. This outreach will highlight the benefits of utilizing the capability and help to inform as to which crime scenes the capability should be requested. Additionally, CSSU will obtain feedback from its partners on the impact that the post production scans have on criminal investigations and prosecutions, along with the successes and challenges of utilizing the capability. DFS will also, implement a post training program survey assessment to measure its effectiveness and post program usage of technology in their investigations/ prosecutions.	Complete	Currently, DFS performs Leica scans on homicide scenes, traffic fatalities, and upon MPD request. DFS spends a significant amount of time both scanning the scenes and in post-production. DFS conducted a training and assessment program with the USAO,OAG, and MPD (Homicide, Major Crash unit and IAD) to identify some of the barriers for integrating the technology . While DFS believes Leica scans are beneficial to investigations and prosecutions, they are under-utilized by our stakeholders at MPD and the US Attorney's Office. DFS will develop a training program and materials to educate stakeholder groups on the benefits of the technology. DFS will also implement a post training program survey assessment to measure its effectiveness and post program usage of technology in their investigations/ prosecutions.	
Digitization of Legacy MPD Crime Scene Records	The Central Evidence Unit (CEU) will research and design a digitization process for the preservation, retention, and retrieval of the original MPD crime scene files stored at DFS. This process will include the scanning of all files and their contents in a newly created secure database. The statute establishing the Department of Forensic Sciences, Chapter 5-1501.08 established the "transfer of personnel, records, functions, and authority' to the department. DFS became the custodian for MPD's records. It is conservatively estimated that there are approximately 8 million documents plus an inestimable number of crime scene film negatives, photographs etc. These records date back several decades and are deteriorating. To support this project, CEU will research multiple scanning software, develop a standard operating procedure, create the workflow process, and calculate the estimated time to complete such an extensive project.	Complete	The Central Evidence Unit (CEU) has conducted the research and design of a digitization process and started the first phase of the digitization process for the MPD crime scene files stored at DFS. CEU has met with three software companies to obtain estimates, timelines, and objectives to develop software for transferring the files. DFS has also met and discussed this project with the DC Archivist, Mr. William Branch. He has provided valuable guidance regarding record retention, record purging, and long-term storage of records. It has been estimated that a scanning application, data base, digital software and the completion of all files will take approximately five years. To date, CEU has inventoried 18,400 files.	
Develop a Quality Assessment System	CSSU will develop a quality assessment system using the DFS Dashboard to gather data on latent fingerprints developed by CSSU scientists. The data will be used to measure the correct application of the procedures being utilized by the scientist and the number of AFIS suitable prints that are obtained. This data would be used to inform management on individual performance and identify possible gaps in training.	Complete	DFS developed a quality assessment system using the DFS Dashboard in later September 2019. The system gathers and pulls the relevant data from LIMS for this initiative. In FY20, DFS will evaluate the latent fingerprint data to determine if there are individual performance issues and/or gaps in training around fingerprint processing techniques.	

Conduct timely forensic analysis (5 Strategic initiatives)

Strategic Initiative Title	Strategic Initiative Description	Completion to Date	Status Update	Explanation for Incomplete Initiative
Establish NGS Capabilities for Missing Persons Identification and Casework	The Forensic Biology Unit (FBU) will establish Next Generation Sequencing (NGS) using a commercially available platform for use in the identification of Missing Persons and selected casework. The FBU will partner with outside contractors to establish and implement NGS in an effort to improve the agency's DNA testing capabilities for the District of Columbia.	75-99%	NGS team does a lot of outreach with both U.S. and international laboratories to help with implementation decision making. During Q4, the NGS validation analysts begun working their mock casework sets. The data generated from the mock casework sets will aid with implementation as it be used to establish laboratory SOPs and technical worksheets to document the casework data. There is an extremely large volume of data generated from these mock casework sets. The NGS validation analyst have weekly conference calls with the vendor to discuss the results, the format in which the results are displayed, and the impact on laboratory procedures. Currently the DNA Technical Leader is reviewing the NGS mixture validation study. This portion of the validation study involves a review of an enormous amount of data. The mixture validation study involves three (3) sub-set validation studies and each sub-set has 6 to 13 excel workbook tabs of data to review.	A large volume of data has been generated as NGS evaluates 231 DNA locations where as traditional DNA testing evaluates 24 DNA locations. These 231 DNA locations are required to be evaluated in a number of different ways through various sub-validation studies. The following validation studies and milestones were completed in FY19: Lab Training (Part 1 & 2), Competency Testing (Lab), wrote and reviewed 1st validation report (which included three (3) sub-validation studies of the 231 DNA locations), wrote and reviewed 2nd validation report (which included four (4) additional sub-validation studies of the 231 DNA locations), drafted SOPs and worksheets, Quality Metrics Study, and Mixture Study (66% completed). The validation of NGS is anticipated to be completed by the end FY20 Q2.
Implementation of Mideo LatentWorks	The Latent Fingerprint Unit (LFU) will restructure the digital imaging workflow in the latent print processing laboratory to implement Mideo LatentWorks. It will become the primary imaging database and latent examination mechanism for violent offenses and include the direct upload of evidentiary images to the Mideo platform. LFU will also transition the latent print examiner training program into the Mideo CaseWorks platform in order to electronically track milestones and progress as new examiners are assessed for competency in preparation to conduct independent case work.	Complete	"LFU evidence processing team is fully using production Mideo for overall and examination quality images. For LFU examinations – Mideo competency tests were issued and all analysts passed them. All independent case-working latent analysts are using Mideo in casework so implementation of Mideo in LFU is complete. The Mideo SOP has been finalized, approved, and published in Qualtrax. FTU has installed high-performance computers for LFU examiners to run Mideo alongside of vital applications such as LIMS and Photoshop. Final customer notification of Mideo implementation was made and a demo/presentation was done at the DFS Stakeholder meeting, and one was also done separately with USAO and PDS. "	
Crash Data Recovery Technology	The Digital Evidence Unit will implement Crash Data Recovery technology. This technology will allow the DEU to extract the event data from vehicles such as the speed during impact, deployment of seatbelts, and navigation, in addition to the existing capabilities of infotainment and telematics information. The DEU will define the work flow, develop written policies and procedures, and competency measures in accordance with accreditation guidelines.	Complete	DEU has crash data capabiltity to add navigation, telematics and infotainment data that can be pulled off a vehicle.	
Develop Firearms Curriculum in Partnership with the University of the District of Columbia	DFS will develop a forensic firearms minor degree curriculum in partnership with the University of the District of Columbia (UDC). This initiative is aligned with the Mayor's policy to encourage DC residents to learn about the unique benefits, education, learning modalities, and various degrees and certificates offered through the university partners. It will be the first forensic degree program offered at the UDC.	Complete	DFS has established a new partnership with Trinity Univeristy and has incorporated some material into an existing forensic science program. DFS has not received any communication with respect to the UDC minor degree program application. In FY20, DFS will be reintroducing this initiative with a new partner, Trinity Washington University.	DFS was unable to finalize an agreement with UDC, however, DFS approached Trinity University in Washington DC and is working with their Forensic Science program, for an anticipated launch of the program in FY20/Q1.

Strategic Initiative Title	Strategic Initiative Description	Completion to Date	Status Update	Explanation for Incomplete Initiative
Evaluation of FSL Leeds Evo-Finder Automated Ballistic Identification System	FEU will evaluate and explore workflow applications for the Leeds Evo-Finder Automated Ballistic Identification System. This system is a scanning device that generates digital images of bullets and cartridge cases in both 2-dimensional and 3-dimensional formats for examination, comparison, and correlative searches within existing databases. It will also provide a means by which analysts can report reliable, repeatable and timely objective conclusions aided by validated instrumentation.	Complete	In Q4, FEU hosted two members from the Center for Statistics and Applications in Forensic Evidence (CSAFE) who offered their services to provide FEU with a comprehensive validation plan and statistical process model for FY2020.	
Ensures all IT systems and databases are operational and secure for scientists and agency personnel to deliver reports and services to stakeholders (2 Strategic initiatives)
Integrate DFS LIMS with MPD EMS to Support a Unified System to Track Evidence and Property	Currently, District of Columbia agencies uses two systems to manage evidence from crime scenes. DFS uses the JusticeTrax Laboratory Information Management System (LIMS) which maintains detailed datasets for evidence subject to testing. The Metropolitan Police Department (MPD) uses FileOnQ (FoQ) as its evidence management system (EMS) to track items for storage and current location, but it is limited in granularity and not suitable for LIMS functionality. There is no data exchange between these two applications. DFS employees and MPD property clerks manually enter data into both systems. The current DFS LIMS is nearing the end of its useful life and will not meet anticipated future requirements. It will require replacement within the next four years. This initiative will focus on gathering requirements, reviewing existing LIMS and developing the plan for selection of the replacement LIMS system to begin any necessary purchase and customization in FY2019 with implementation in FY2020.	75-99%	The SOW was awarded to CornerAlliance and work began in mid-August. The team has mapped all DFS processes, interviewed users, obtained reporting requirements, and met with unit and DFS management. The team has also contacted multiple LIMS vendors to match requirements collected from DFS. An initial draft report is expected the first week of October 2019.	The process for selection of awarding of contract took several months. It was awarded in Aug 2019 and a report is expected early Oct 2019
Forensic Digital Storage System	The Forensic Digital Storage System is a complex system that supports the storage of analytical data, clinical data, and digital evidence from the Forensic Science Laboratory (FSL), Public Health Laboratory (PHL), and Crime Scene Sciences (CSS) Division. DFS will complete a project to increase the capacity of the Forensic Digital Storage System that will effectively manage the anticipated increase in data volume.	0-24%	Each DFS unit is currently determining its storage requirements over the next few years with the deployment of new technology. Some units will be moving into the digital world by the end of FY19 and are going paperless while other units are maintaining their current levels of storage. Once these estimates are received, a plan will be developed for storage augmentation and the purchase of new hardware to support the new capacities.	It is critical to estimate and project for the agency how much digital storage is needed, espcially for new technologies such as Mideo and EvoFinder. These estimates will greatly influence the direction needed for storage capacity. Estimates from projects deployed in FY2019 and the LIMS project will inform project out-years. The LIMS project is still moving forward and estimates will be available for storage in FY20/Q2.
Improve laboratory efficiency through technological advances (1 Strategic Initiative)

Strategic Initiative Title	Strategic Initiative Description	Completion to Date	Status Update	Explanation for Incomplete Initiative
Expanded Sexually Transmitted Disease Testing Capabilities and Capacity	PHL will expand testing beyond gonorrhea susceptibility to include the molecular detection of chlamydia, gonorrhea, and Trichomonas; and the serological testing for syphilis from high-risk individuals in the District. This goal will allow the DC Department of Health (DC Health) to better surveil STD trends in the District. This will also assist in reducing the cost of outsourced testing and improve turn around time for reporting results. PHL will follow the Centers for Disease Control and Prevention (CDC) testing recommendations to ensure accurate, reliable, and prompt results to help improve patient care. By FY19 Q3, PHL will implement chlamydia, gonorrhea, and Trichomonas molecular testing on self-collected samples to provide robust data and information to DC Health to improve STD treatment, prevention, and surveillance activities. By FY19 Q4, syphilis serology will be added to assist DC Health provide a full clinical picture for high-risk individuals.	75-99%	DFS PHL received funding for the Gonococcal Isolate Surveillance Program from the CDC Epidemiological Laboratory Capacity grant and began testing for gonorrhea from the DC Health and Wellness Center. DFS PHL also began a pilot project for testing Chlamydia and Gonorrhea (CT-GC) using a molecular test with improved sensitivity to match what is being offered by private contract laboratories. Verification and implementation of these tests using Aptima Combo 2 assay were completed in the beginning of Q4. In addition to CT-GC testing DFS PHL is looking to add functionality to run molecular testing of laboratory developed tests including gonorrhea susceptibility testing in the future. The DFS PHL and DC Health HAHSTA began monthly meetings to review laboratory data related to the study. This has improved communication between the two groups in addition to ensuring that the clinicians understand the data provided by the laboratory. Addition of another community based clinic for the GISP project is scheduled to begin in October and they will be submitting additional samples for CT-GC testing. Sample collection and submission training was completed in September, 2019.	PHL was not able to offer clinical testing to the DC Health clinics due to the inability to bill patients for Medicaid/Medicare services. The major barrier is gaining permission from the DC Council to form a laboratory fund to directly receive funding from external entities. This funding would support purchasing testing supplies, reagents and equipment needed to perform the anticipated high volume clinical testing for CT-GC, syphilis serology and HIV. Gonorrhea antimicrobial susceptibility (AST) implementation was not able to be offered in FY19 due to being short staffed. In FY20, PHL is fully staffed and plan to implement this testing in Q1.

Monitor quality compliance with certification requirements (1 Strategic Initiative)

Strategic Initiative Title	Strategic Initiative Description	Completion to Date	Status Update	Explanation for Incomplete Initiative
Latent Fingerprint Unit - Accreditation of chemical enhancement procedures for latent fingerprints.	The Latent Fingerprint Unit (LFU), will finalize policies, standard operating procedures, quality assurance and control documents, associated with the chemical enhancement of latent prints, to demonstrate compliance with international accreditation requirements.	Complete	The pre-assessment occurred from August 15-16, 2019. With no findings, the pre-assessment was changed to a scope extension assessment and LFU was granted a scope extension for chemical enhancement on September 25, 2019.	

Offer training curriculum for professional development (1 Strategic Initiative)

Strategic Initiative Title	Strategic Initiative Description	Completion to Date	Status Update	Explanation for Incomplete Initiative
Emerging Leaders Program	DFS will implement the Emerging Leaders (non-managers and new managers) training program, with a focus on core values, fundamentals of management, emotional intelligence and effective communication, to advance personnel professional contributions to the agency.	25-49%	The former Deputy Director departed DFS prior to completing this task. Core leadership curricula will be reviewed by the Office of the Deputy Director next fiscal year.	Project leader left the agency in June 2019.

Provide legal advice to the agency and facilitate stakeholder engagement (2 Strategic initiatives)

Strategic Initiative Title	Strategic Initiative Description	Completion to Date	Status Update	Explanation for Incomplete Initiative
Streamline Giglio	DFS will implement a process to streamline Giglio responses to prosecuting agencies. DFS General Counsel will work with the Office of the United States Attorney (USAO) and the Office of the Attorney General (OAG), to create a more efficient system to respond to Giglio requests. Giglio responses will be provided on a monthly basis by updating records for all employees at the same time and will decrease delays in sending Giglio responses.	Complete	In FY19, DFS Legal has met with USAO Discovery group to discuss the process. The process was stalled due to the federal gov't shutdown. The agency is replacing the existing Giglio streamlining plan in favor of a broader and deeper review of Giglio practices. This has been conducted with the support and consideration of DFS executive leadership, the MOLC, the USAO and emerging involvement from OAG's prosecutorial arms.	DFS will continue to partner with the USAO on this Strategic Initiative. The participation from the USAO is critical to the completion of this project. The DFS Legal Team will also continue to respond to Giglio requests in the same method as before, while also working to enlist the stakeholder's support for this project.
Update Legal Documents on DFS Website	In FY19, the Legal team will initiate a website cleanup and update project to provide a user-friendly and legally compliant method for external users to access information from the DC Department of Forensic Sciences (DFS). The process will consist of planning a layout that corresponds with the website guidance from the Executive Office of the Mayor (EOM), providing all documents required under the DFS enabling statute and further providing the best available information for frequently asked Freedom of Information Act (FOIA) or other information requests.	Complete	DFS Legal is starting to upload regular updates to the website. The Open Government and FOIA tab has been redesigned to be more user-friendly. DFS has also reached out to stakeholder agencies for their input on what they would like to see on the site. DFS's hiring of a Communications Director and soon a PIO will help improve the website at a faster pace.	

Provide timely testing of pathogens of public health significance (2 Strategic initiatives)

Strategic Initiative Title	Strategic Initiative Description	Completion to Date	Status Update	Explanation for Incomplete Initiative
Expand Whole Genome Sequencing (WGS) Capabilities to Assist in Outbreak Investigations.	PHL will expand its Whole Genome Sequencing (WGS) capabilities to transition from targeted viral detection and phylogenetic analysis to a whole genome approach. Furthermore, the PHL will work to expand this capacity to other pathogens. This expansion will allow the use of the maximum data and best technology available to make epidemiological links to outbreaks and disease in the District. In addition, PHL will develop standard operating procedures for additional pathogens.	Complete	Over the course of FY19 the DC PHL has brought online WGS testing, become certified by CDC for bacterial enteric outbreak surveillance, and built capacity for future WGS testing. The DC PHL now performs and maintains weekly WGS runs to support infectious disease outbreak support. Throughout FY19 we have accomplished major capacity building with agency and federal support including the purchase of 3 additional sequencers designed for viral and additional WGS disease testing.At the very end of Q4 we were finally able to purchase and install the sequencing platform for the viral pipeline and will now be able to perform this goal in FY20. We are losing one of our ceritifed WGS staff and will need to re-train an additional staff member before we can expand our current testing.	
Establish a Controlled Substance and Opioid Surveillance Program	The Forensic Chemistry Unit (FCU) will establish a controlled substance and opioid surveillance program for the District. FCU will work with the DFS Forensic Technology Unit(FTU) to establish a reporting mechanism to summarize the monthly testing results. Additionally, a report will be created that highlights the trends and emerging drugs. Routine monthly results will be provided to District Stakeholders for all submitted tests. DFS will collaborate with MPD to undertake drug surveillance on additional samples submitted to the FCU.	Complete	The FCU has established a controlled substance and opioid surveillance program for the District and are currently performing testing. They are fully staffed and have purchased new equipment to improve case and workflow management such that turn-around times have been significantly reduced. All data are reported into the laboratory information management system (LIMS), which allows for a real-time view of the metrics through the DFS dashboard. Additionally, a statistician was hired to develop and create visual reports that highlight the trends of current Opioid use, and emerging drugs in the District. These monthly reports are shared with stakeholders at monthly meetings and via email so that multiple agencies are aware of the current drug use trends in the District. As of Q4 100% of all seized Heroin is being tested by the FCU and reports are sent back to MPD with monthly aggregate results.	
Responsible for human capital management and recruitment for DFS and serves as liaison to external entities (1 Strategic Initiative)				
Firearms Examination Unit Employee Retention Plan Implementation.	DFS will work with the District Government Department of Human Resources (DCHR) to implement a retention program for scientists who are examiners within the Firearms Examination Unit (FEU).	Complete	DFS team successfully staffed strong candidates in these hard-to-fill, highly-specialized roles.	
Strategically forecast, analyze, and present agency data to determine levels of resource efficiency and goal attainment (1 Strategic Initiative)				
Implementation of DFS One-Stop-Shop	DFS will work with the Office of the Chief Technology Officer (OCTO) to implement the new Agency-wide SharePoint One-Stop-Shop to integrate Operations collaborative efforts in support of the agency's mission. DFS will pilot the One-Stop-Shop to include overtime authorization, procurement, grant management, and other related whole-of-agency functions.	75-99%	DFS revamped the overtime authorization system as a part of the One Stop Shop initiative to support the District's overtime laws and internal agency policies. DFS completed a successful legacy data migration into a new Sharepoint platform, improved workflow designs, and added user-friendly features. The revamped system will ensure a better user experience across various divisions.	DFS continues to work on finalizing this initiative, due to staffing, project and technical issues. This project will also need the assistance of the OCTO Sharepoint architect, who manages multiple projects.