

# Department of Forensic Sciences FY2018

**Agency** Department of Forensic Sciences

**Agency Code** FR0

**Fiscal Year** 2018

**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.

## 2018 Strategic Objectives

Objective Number	Strategic Objective	# of Measures	# 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.	6	4
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.	4	3
3	Create and maintain a highly efficient, transparent and responsive District government.**	9	5
<b>TOT</b>		<b>19</b>	<b>12</b>

## 2018 Key Performance Indicators

Measure	New Measure/ Benchmark Year	FY 2014 Actual	FY 2015 Target	FY 2015 Actual	FY 2016 Target	FY 2016 Actual	FY 2017 Target	FY 2017 Actual	FY 2018 Target
<b>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)</b>									
Percentage of requested homicide cases completed within 60 days from the date the analyst was assigned the case	<input type="checkbox"/>	Not available	Not available	Not Available	Not Available	82%	50%	94.3%	90%
Percent of Biological Terrorism and Chemical Terrorism samples analyzed within 24 hours	<input type="checkbox"/>	Not available	Not available	Not Available	Not Available	Not Available	90%	100%	90%
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	<input type="checkbox"/>	Not available	Not available	Not Available	Not Available	74%	50%	89.8%	90%

The ratio of new assays/tests in comparison of total tests offered at the Public Health Laboratory	✓	Not available	Not available	Not Available	Not Available	New Measure	New Measure	New Measure	New Measure
Percent of Crime Scene Reports completed within 14 calendar days.	✓	Not available	Not available	Not Available	Not Available	New Measure	New Measure	New Measure	95%
Percent of crime scenes responded to within 30 minutes	✓	Not available	Not available	Not Available	Not Available	New Measure	New Measure	New Measure	90%
<b>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. (4 Measures)</b>									
Percent of action steps in a Quality Corrective Action Report that are completed by the action step date	<input type="checkbox"/>	Not available	Not available	Not Available	Not Available	77%	90%	91.3%	90%
Percent of scientists meeting technical competency requirements	<input type="checkbox"/>	Not available	Not available	Not Available	Not Available	97%	90%	99.5%	90%
Percent of safety incident reports submitted to DFS Safety Officer within 48 hours	<input type="checkbox"/>	Not available	Not available	Not Available	Not Available	98%	90%	92.3%	90%
Percent of discovery requests completed within 21 days.	✓	Not available	Not available	Not Available	Not Available	New Measure	New Measure	New Measure	90%

\*\*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.

## 2018 Operations

Operations Header	Operations Title	Operations Description	Type of Operations	# of Measures	# of Strategic Initiatives
<b>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)</b>					
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	3	1
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	0	2
FORENSIC SCIENCE LAB	Conduct timely forensic analysis	The Forensic Science Laboratory division will conduct coordinated and timely forensic analysis in accordance with	Daily Service	8	3

UNIT		industry standards and accreditation guidelines.			
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	2

TOT				13	8
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**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	1	0
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	1	1
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	2

TOT				5	3
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**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	1	0
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	1	1
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	1	0

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	1	1
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	5	0
TOT				9	2
<b>TOT</b>				<b>27</b>	<b>13</b>

## 2018 Workload Measures

Measure	New Measure/ Benchmark Year	FY 2014 Actual	FY 2015 Actual	FY2016 Actual	FY 2017 Actual
<b>1 - Conduct professional and expedient crime scene responses, collection, and storage of evidence. and evidence collection (2 Measures)</b>					
Number of evidence items received	<input type="checkbox"/>	Not available	Not Available	Not Available	88,683
Number of crime scenes processed	<input type="checkbox"/>	Not available	Not Available	Not Available	7196
<b>1 - Conduct timely forensic analysis (8 Measures)</b>					
Number of service requests from stakeholders	<input type="checkbox"/>	Not available	Not Available	Not Available	9649
Number of CODIS database hits	<input type="checkbox"/>	Not available	Not Available	Not Available	156
Number of NIBIN database hits	<input type="checkbox"/>	Not available	Not Available	349	385
Number of AFIS database entries	<input type="checkbox"/>	Not available	Not Available	Not Available	9035
Number of CODIS database entries	<input type="checkbox"/>	Not available	Not Available	Not Available	433
Number of NIBIN database entries	<input type="checkbox"/>	Not available	Not Available	Not Available	7231
Number of AFIS database hits	<input type="checkbox"/>	Not available	Not Available	Not Available	1516
Number of firearms processed for test fire	<input type="checkbox"/>	Not available	Not Available	1717	2226

<b>1 - Provide timely testing of pathogens of public health significance (3 Measures)</b>					
Number of tests performed for each recieved public health sample	<input type="checkbox"/>	Not available	Not Available	Not Available	3505
Number of validation efforts performed	<input type="checkbox"/>	Not available	Not Available	Not Available	31
Number of Proficiency Tests performed	<input type="checkbox"/>	Not available	Not Available	Not Available	79
<b>2 - Monitor quality compliance with certification requirements (3 Measures)</b>					
Number of Quality Corrective Action Requests opened	<input type="checkbox"/>	Not available	Not Available	129	109
Number of stakeholder complaints received	<input type="checkbox"/>	Not available	Not Available	20	4
Number of internal audits	<input type="checkbox"/>	Not available	Not Available	Not Available	4
<b>2 - Offer training curriculum for professional development (1 Measure)</b>					
Number of training hours completed by employees	<input type="checkbox"/>	Not available	Not Available	Not Available	2220
<b>2 - Oversee the laboratory environment is both safe and healthy for staff. (1 Measure)</b>					
Number of safety incidents reported	<input type="checkbox"/>	Not available	Not Available	91	41
<b>3 - Efficiently procure vital services and resources. (1 Measure)</b>					
Number of requisitions submitted into PASS	<input type="checkbox"/>	Not available	Not Available	Not Available	364
<b>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)</b>					
Number of IT service requests received	<input type="checkbox"/>	Not available	Not Available	4667	3921
<b>3 - Provide legal advice to the agency and facilitate stakeholder engagement. (5 Measures)</b>					
Number of discovery requests	<input type="checkbox"/>	Not available	Not Available	Not Available	936
Number of Subpoenas received and uploaded to LIMS	✓	Not available	Not Available	New Measure	New Measure
Number of discovery requests received	✓	Not available	Not Available	New Measure	New Measure
Number of FOIA Requests	✓	Not available	Not Available	New Measure	New Measure

Number of MOA/MOUs the agency enters into with other agencies	<input checked="" type="checkbox"/>	Not available	Not Available	New Measure	New Measure
<b>3 - Responsible for human capital management and recruitment for DFS and serves as liaison to external entities. (1 Measure)</b>					
Number of employees on-boarded	<input type="checkbox"/>	Not available	Not Available	Not Available	72
<b>3 - Strategically forecast, analyze, and present agency data to determine levels of resource efficiency and goal attainment. (1 Measure)</b>					
Number of unique statistical reports generated	<input type="checkbox"/>	Not available	Not Available	Not Available	14

## Initiatives

Strategic Initiative Title	Strategic Initiative Description	Proposed Completion Date
Implement a strategy to increase the digital and laboratory data storage capacity at the Department of Forensic Sciences	In FY18, DFS will launch the Forensic Digital Storage System to support storage of analytical data, clinical data, and digital evidence for the Forensic Science Laboratory, Public Health Laboratory, and Crime Scene Science Division. The system will support the exponential growth in data storage needs from 1 to 3 Terabytes of data a day due to the implementation of several advanced scientific and information technology systems.	09-30-2018
Develop an Employee Retention Plan for the employees in the Firearms Examination Unit	In FY18, DFS will develop an employee retention plan specific to the Firearms Examination Unit (FEU) to increase the unit's personnel retention rate. Due to the national shortage of qualified individuals, FEU examiners are difficult to hire and retain. In Q1, DFS will research initiatives and identify existing incentives programs within District Government that could be utilized to retain FEU examiners. In addition, DFS will work with professional associations for Firearms Examiners to identify successful retention programs in other jurisdictions in order to improve retention. In Q2, DFS will also work with The Department of Human Resources to obtain feedback and provide retention plan recommendations to the Office of the Deputy Mayor for Public Safety and City Administrator.	09-30-2018
Provide professional development to emerging leaders within DFS	In FY18, DFS will develop a training program for emerging leaders (non-managers and new managers) within the agency with a focus on core values, basics of management, emotional intelligence, and communicating effectively to advance DFS personnel professional contributions to the agency. This training program will supplement and enhance existing training curriculum provided by DCHR for non-managers who are interested in getting into management, and for new managers who need additional management skills. The plan will be finalized by end of FY18-Q2 for implementation throughout the remaining fiscal year.	09-30-2018
Prepare the Forensic Chemistry Unit for ISO 17025 Laboratory Accreditation	Over FY18, DFS will incrementally take over the testing responsibilities for the District's illicit substance cases from the US Drug Enforcement Agency (DEA). By start of FY18-Q1, DFS Forensic Chemistry Unit (FCU) will have completed an internal desk audit by DFS Quality, and by ending of FY18-Q1, the FCU will undergo an external audit by ANSI-ASQ National Accreditation Board (ANAB), with accreditation to ISO/IEC 17025 by start of FY18-Q2.	09-30-2018
Prepare the Digital Evidence Unit for	In FY18, DFS Digital Evidence Unit (DEU) will finalize policies, standard operating procedures and quality assurance and control documents to demonstrate compliance with international accreditation standards and achieve accreditation of ISO	09-30-2018

ISO 17025 Laboratory Accreditation	17025 for FY18.	
Increase In-House DNA Testing at the Department of Forensic Sciences (DFS)	In FY18, the Forensic Biology Unit (FBU) will decrease systemic DNA outsource testing of its current volume of cases and conduct validated DNA testing in house. FBU will focus on training personnel, completing and streamlining work flow efficiencies with a goal of working 50% of cases in house by FY18 Q3 and 75% by FY18 Q4.	09-30-2018
Implementation of Mideo Technology in the Latent Fingerprint and Firearms Examination Units	In FY18, DFS will continue to implement Mideo technology in the Latent Fingerprint Unit and Firearms Examination Unit. This technology will improve forensic case management and quality enhancements to ensure the accuracy and transparency of testing examinations in both units. Both units will address work flow, develop written policies and procedures, and competency measures in accordance with accreditation guidelines. Mideo will be fully implemented in both units by FY18-Q4.	09-30-2018
Examine the Impact of Forensic Intelligence Reports in the Criminal Justice Process	In FY18, the Forensic Intelligence Unit (FIU) will develop methods to analyze data from stakeholders and Forensic Science Laboratory units. This will help determine the overall criminal justice impact from DFS fingerprint, firearms, digital and DNA evidence examinations. In addition, FIU will determine overall utility and outcomes to investigations from hits/and or associations from forensic intelligence computer systems such as the Automated Fingerprint Identification System (AFIS), Combined DNA Index System (CODIS), and National Integrated Ballistic Information Network (NIBIN). FIU will produce a unit specific review each quarter (FBU -FY18-Q1, LFU-FY18-Q2, DEU-FY18-Q3 and FEU-FY18-Q4)	09-30-2018
Implement Next Generation Sequence (NGS) Typing of microbial and human DNA	In FY18, DFS will implement the use of Next Generation Sequencing (NGS) technologies for both the Forensic Science Laboratory and the Public Health Laboratory (PHL) Division for the use of evidentiary samples and microbial samples of interest. The use of NGS will provide additional DNA information for investigators and allow PHL to participate in the PulseNet program to help identify food borne illness outbreaks within the District. By FY18 Q2, the PHL will be certified by the Centers for Disease Control and Prevention (CDC) PulseNet program for Salmonella. By FY18 Q4, the PHL will also have NGS implemented for Carbapenem Resistant Enterobacteriaceae determination.	09-30-2018
Review and implement a more effective approach for the processing of evidence in the Chemical Laboratory (CL) for the Crime Scene Sciences Division.	In FY18, the Crime Scene Sciences Division will increase the use of new technology, such as the Reflective Ultraviolet Imaging System (RUVIS), in order to develop a strong workforce. The new technology will improve DFS personnel process in collecting latent prints, support the collection of DNA and trace materials from recovered items such as firearms, and increase the identification of offenders within DC and to other states. In addition, DFS will establish the best sequence to collect from visual examinations through to physical and chemical applications developing latent prints. Quarterly reviews will be supported to reflect quantitative and qualitative metrics and milestones in the process.	09-30-2018
Create DFS CSS outreach/training program on evidence handling procedures for DFS customers.	In FY18, the Crime Scene Sciences Division will develop an outreach and training program for critical stakeholders, customers, and other District agencies to increase their knowledge on basic evidence handling, storage, and packaging. This will establish standardization throughout the evidence collection and preservation process. In addition, this will improve the seamless exchange of evidence among District agencies responsible for the preservation and safe storage of evidence. Quarterly reviews will be supported to reflect quantitative and qualitative metrics and milestones in the process.	09-30-2018
Explore a replacement for	The District government currently uses two systems to manage evidence within the District. The Department of Forensic Sciences (DFS) uses JUSTICTRAX Laboratory Information Management System (LIMS) which maintains detailed data sets	09-30-2018

<p>File on Q and JUSTICTRAX LIMS, to support a unified system to track evidence and property for the District.</p>	<p>for evidence, from the scene to the court. The Metropolitan Police Department (MPD) uses File on Q (FoQ) which help in tracking items for storage and location that is limited in granularity and not suitable as a LIMS. DFS must use both systems to ensure stakeholder's needs are met which increases labor costs and turnaround time for the District. In FY18, DFS will explore new LIMS systems to replace both JUSTICTRAX LIMS and FoQ. DFS will develop a work group with MPD and OCTO that will review current system in order to establish requirements for the new LIMS system, evaluate various COTS products for suitability, and determine approximate costs to replace systems to help maintain the integrity of the District.</p>	
<p>Re-establish sexually transmitted disease testing into the Public Health Lab</p>	<p>In FY18, DFS Public Health Laboratory (PHL) will re-establish STD testing capabilities for the District to identify chlamydia, gonorrhea, and syphilis from samples received from District hospitals and health care facilities. This will help reduce the cost of outsourcing and improve the quality in services. PHL will follow current CDC recommendations for testing to ensure accurate and prompt results for appropriate diagnosis and surveillance. By FY18 Q2, the PHL will implement a pilot program for testing chlamydia and gonorrhea by molecular methods to provide robust data and information for the Department of Health (DOH). By FY18 Q4, syphilis testing will be implemented in an effort to support the DOH HIV/AIDS, STD, Hepatitis, and TB Administration of the DOH.</p>	<p>09-30-2018</p>