



FY 2015 Performance Accountability Report Department of Forensic Sciences

INTRODUCTION

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' progress 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.

OVERVIEW – AGENCY PERFORMANCE

The following section provides a summary of DFS performance in FY 2015 by listing the agency's top three accomplishments, a summary of the progress made to achieve initiatives, and progress made on key performance indicators.

TOP THREE ACCOMPLISHMENTS

The top three accomplishments of DFS in FY 2015 are as follows:

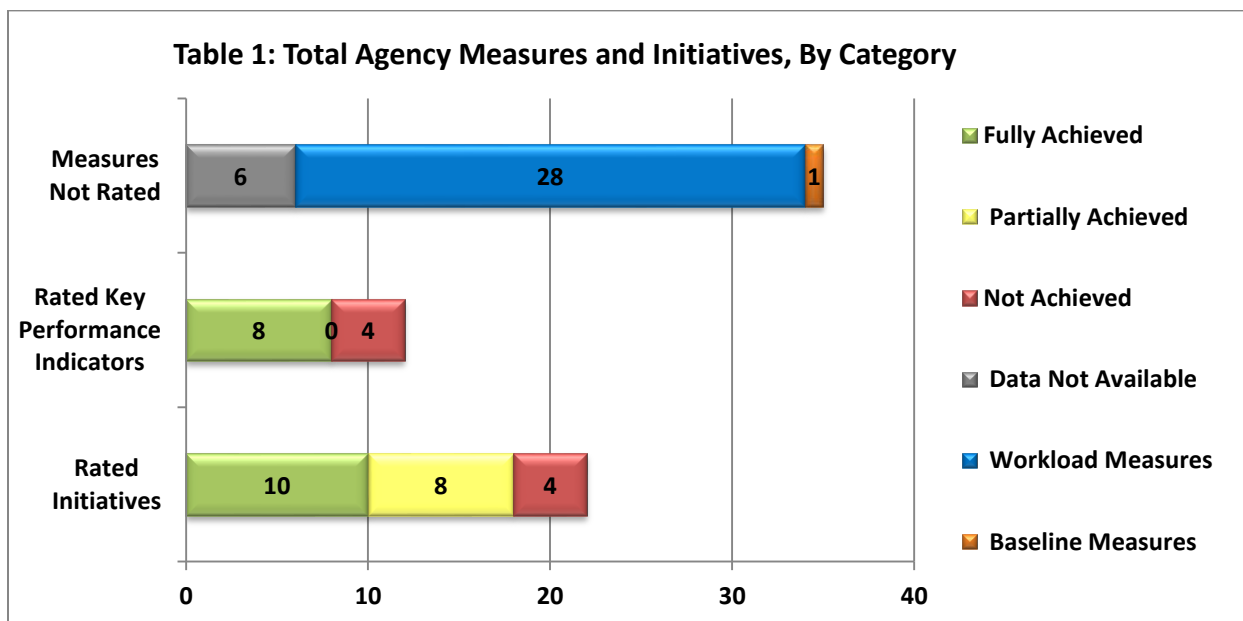
- ✓ **DFS established an agency policy and procedures for complaints and inquiries.**
A complaint/inquiry procedure was created and an electronic tracking system was implemented for the electronic submission of such inquiries and complaints.

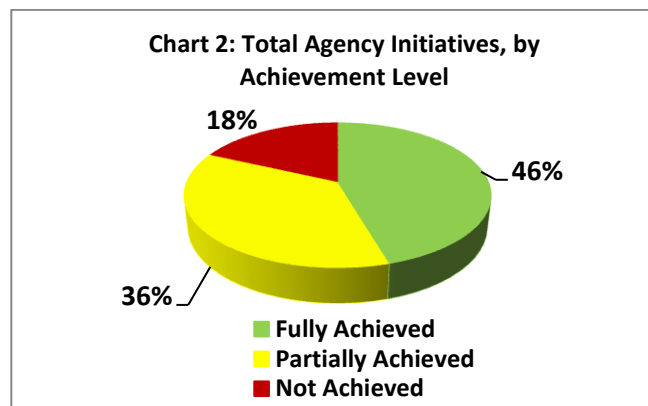
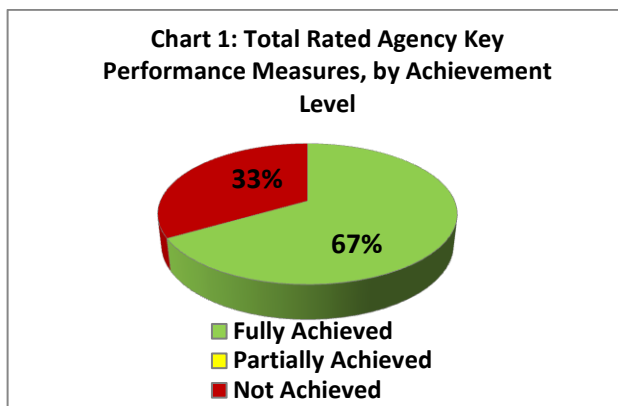


- ✓ **DFS launched the Department-wide Laboratory Information Management System (LIMS).** This is an essential centralized IT solution used to track laboratory submissions, chain of custody, casework, milestone completion and provides meaningful metrics concerning laboratory efficiency and effectiveness.
- ✓ **The DFS-PHL identified the initial Salmonella outbreak from the Fig & Olive restaurant chain.** In cooperation with DC Department of Health, DFS-PHL led numerous national conference calls with the Centers for Disease Control and Prevention and the U.S. Food and Drug Administration to discuss the outbreak that occurred in multiple states (i.e. California, Illinois and New York).

SUMMARY OF PROGRESS TOWARD COMPLETING FY 2015 INITIATIVES AND PROGRESS ON KEY PERFORMANCE INDICATORS

Table 1 (see below) shows the overall progress the DFS made on completing its initiatives, and how overall progress is being made on achieving the agency’s objectives, as measured by their key performance indicators.





Default KPI Rating:	
$\geq 100\%$	Fully Achieved
75 - 99.99%	Partially Achieved
$< 75\%$	Not Achieved

In FY 2015, DFS fully achieved almost 50 percent of its initiatives and two-thirds of its rated key performance measures. **Table 1** provides a breakdown of the total number of performance metrics DFS uses, including key performance indicators and workload measures, initiatives, and whether or not some of those items were achieved, partially achieved or not achieved. **Chart 1** displays the overall progress made on achieving DFS objectives, as measured by their rated key performance indicators. Please note that chart 2 contains only rated performance measures. Rated performance measures do not include measures where data is not available, workload measures or baseline measures. **Chart 2** displays the overall progress DFS made on completing its initiatives, by level of achievement.

The next sections provide greater detail on the specific metrics and initiatives for DFS in FY 2015.

PERFORMANCE INITIATIVES – ASSESSMENT DETAILS

Forensic Sciences Laboratory Division

OBJECTIVE 1: Improve forensic laboratory services to stakeholders.

INITIATIVE 1.1: Improve the effectiveness and efficiency of the Division.

Effectiveness is the attainment of a desired outcome; efficiency is the time and effort used to produce that outcome. Several KPIs are calculated for each Unit within the FSL Division:

- Turnaround time (in days)
- Reports per FTE (full-time employee)



- Number of quality-based corrective actions (QCARs)
- Number of preventative corrective actions (PCARs)

These KPIs will be improved through reduction of waste (time, materials, effort, re-work), adjustments to processes to streamline steps taken to completion, and adoption of new methods, processes, or concepts to increase efficiency of forensic laboratory services. Effectiveness will be improved because, as waste is reduced, more cases, items, and samples can be processed and analyzed by the same number of staff using set resources. Target values are shown in the table below and, unless otherwise specified, are the average FORESIGHT values for that measure. **Completion date: September 30, 2015.**

● **Performance Assessment Key: Partially Achieved.**

During the reporting period, the operating business units of the FSL, the Firearms Examination Unit and Latent Fingerprint Unit have focused considerable attention on business process re-engineering in order to deliver useful work product to stakeholders, particularly MPD and USAO. New processes continue to be refined and implemented and additional products developed for the stakeholders.

During the same period, the Forensic Biology Unit completed an intensive training and work process revision that will deliver a leading edge forensic biology capability, all that remains are final competency testing and accreditation authority to resume testing. The Digital Evidence Unit came on line during the reporting period. Its deliberately small caseload allowed the less experienced staff to continue their training and perform analysis of evidence very carefully. Its work flow was specifically designed to work in the most efficient and effective manner possible. A few cases were received that will identify potential opportunities for further efficiency gains. Late in the reporting period, the DEU staff were redirected to some critical systems implementation in support of broader DFS objectives such as the Laboratory Information Management System.

The FSL had 29 quality corrective action reports (QCARS) and 9 quality preventative action reports (QPAR) for fiscal year 2015. These figures underscore a transparent and open quality culture developing in FSL resulting in an active pursuit of quality through the identification of existent, emerging and potential issues.

INITIATIVE 1.2: Develop an automated workflow to process all known DNA samples.

Validate and operationalize current instrumentation and equipment to allow for the unattended analysis of an estimated 2,000 to 3,000 known samples of DNA per year in casework. **Completion date: September 30, 2015.**

● **Performance Assessment Key: Not Achieved.**



Casework in the Forensic Biology Unit was suspended while the staff members undergo intensive training in DNA analysis. While casework was suspended and staff underwent intensive training, they concurrently reviewed several aspects of FBU work. This included review and workflow design for casework that will be subject to the new technologies that are being deployed. Once casework is recommenced using the new technologies, it may become apparent that this initiative is no longer required as it might not represent the most efficient use of resources.

INITIATIVE 1.3: Implement Sexual Assault Kit Project.

Funded by the DC Office of Victims Services to hire two dedicated DNA analysts to focus on processing all sexual assault kits for DNA analysis, and support staff to provide research and required internal reports. Implementation includes full staffing, developed process flow, and entering eligible results into the Combined DNA Index System (CODIS). **Completion date: September 30, 2015.**

● **Performance Assessment Key: Partially Achieved.**

The two staff-members have been recruited and are undergoing intensive training in DNA analysis. This initiative could not be progressed once casework had been suspended in FBU. Similarly to all work in FBU, the process flow is being reviewed and will be finalized and implemented once casework is recommenced. Eligible results generated by third party laboratories are being entered into CODIS.

OBJECTIVE 2: Develop new forensic services to improve scientific information for public safety.

INITIATIVE 2.1: Staff the Materials Analysis Unit to its full complement.

DFS is shifting the focus from the historical concept of “trace evidence” to that of “materials analysis” and renaming the Trace Evidence Unit as the Materials Analysis Unit (MAU). The emphasis will be on those manufactured materials that have a significant industrial basis to them, such as coatings and paints, glass, textiles, and composite materials (plastics and duct tape, for example). This will provide DFS scientists with a foundation and support for the analysis of these materials, leveraging the forensic methods on the groundwork laid by the industry that made the goods being analyzed. *This is a conceptual shift that has not been undertaken by any forensic laboratory elsewhere in the world* and is in keeping with DFS’ intended leadership as a “science first” organization. This includes staffing the unit, writing standard operating procedures for materials to be analyzed, and the instrumentation required. Once the SOPs have been validated on known samples and mock cases for accuracy and precision, the SOPs will be vetted through the DFS quality system. Notification to DFS stakeholders that the Materials Analysis Unit is operational will commence once SOPs have been vetted. Once cases are submitted, the same measures for effectiveness and efficiency as the other Units will be applied. **Completion date: September 30, 2015.**



● **Performance Assessment Key: Not Achieved.**

The MAU has been discontinued and the resources were redistributed to assist with other areas. Initiation of the MAU commenced not long before the change in leadership at DFS. The agency was realigned to focus on forensic biology, firearms examination, latent fingerprints and crime scenes. As MAU was in the initial phase of establishing the unit for which considerable effort remained and was not yet operational, the strategic decision was taken to delay the establishment of MAU in order to focus on other disciplines. The decision to establish MAU as a DFS capability will be revisited at an appropriate time in the future.

INITIATIVE 2.2: Identify and provide topical training to Stakeholders.

Topical training will be identified and offered to stakeholders to limit and mitigate the disruption of new and improved services offered by DFS. **Completion date: September 30, 2015.**

● **Performance Assessment Key: Fully Achieved.**

The DFS provided training to stakeholders on new and improved services offered by the agency. Throughout the year, training events showcasing the Forensic Science Laboratory were held for the DC Forensic Nurses on DNA practices in sexual assault cases; Office of Attorney General training on the newly developed FSL Digital Evidence Unit; Professional Development Training sessions for Metropolitan Police Department (MPD) specialty divisions to include Crime Scene Investigation Division, Internal Affairs Department, Criminal Investigations Division, and Basic Investigator Training. The DFS also conducted a week long technical training for the MPD Narcotics Special Investigations Division Gun Recovery Unit on photography and latent print processing techniques.

INITIATIVE 2.3: Operationalize the Digital Evidence Unit.

The ubiquity of digital devices in everyday life leads naturally to their use in and as an object of criminal activity. Digital evidence is becoming a commonplace type of analysis and key to criminal investigations and forensic analysis. The DFS has created a Digital Evidence Unit (DEU) to process, analyze, and report on information and evidence from digital devices, such as cell phones, tablet computers, personal computers, and other digital computers or storage devices involved in criminal activity. *This is a new service start-up for DFS' stakeholders and the District.* This includes staffing the unit, writing standard operating procedures for materials to be analyzed, and the instrumentation required. Once the SOPs have been validated on known samples and mock cases for accuracy and precision, the SOPs will be vetted through the DFS quality system. Upon completion, the Unit will accept new cases. **Completion date: September 30, 2015.**

● **Performance Assessment Key: Partially Achieved.**



All equipment has been purchased and installed; the laboratory build-out is complete. All positions, except one, have been filled. The SOPs have been submitted to the DFS quality system and a pre-assessment audit conducted by ANAB. Casework has been accepted and reported. The strategic decision was taken to integrate DEU with IT to form an entity called the Forensic Technology Unit (FTU). Staff will cross train and assist in the build of IT infrastructure for DFS while also training in digital evidence and undertaking casework as required. The casework will focus on unmet needs within District agencies including geolocation, technically complex mobile device examinations, and casework exceeding the capacity of existing providers.

KEY PERFORMANCE INDICATORS- Forensic Sciences Laboratory Division

	KPI	Measure	FY 2014 YE Actual	FY 2015 YE Target	FY 2015 YE Revised Target	FY 2015 YE Actual	FY 2015 YE Rating	Budget Program
	1.1	Digital Evidence Turnaround Time	Not Available	Not Available	0	0	No Data ⁱ¹	Investigative Forensic Services
	1.2	DNA Turnaround Time	91	68	0	0	No Data ²	Investigative Forensic Services
	1.3	Fingerprints Turnaround Time	136	40	0	74	121.62%	Investigative Forensic Services
	1.4	Firearms Turnaround Time	168	60	0	60	100%	Investigative Forensic Services
	1.5	Test Fires Turnaround Time	5.6	1	0	4	25%	Investigative Forensic Services

¹ Digital Evidence Unit (DEU) merged with the Operational-IT Unit to preserve resources and increase workforce efficiency. Former DEU staff were majority trainees, incoming leadership preferred the trainees gain case work experience as opposed to reporting turnaround time. One individual was qualified to work all 15 cases, and due to no LIMS turnaround time was not recorded.

² Forensic Biology Unit was suspended from case work in FY15. The turnaround time was dependent on contracts with private labs, not workforce efficiency.



●	1.6	Digital Evidence Reports per FTE	Not Available	0	60	15	No Data ³	Investigative Forensic Services
●	1.7	DNA Reports per FTE	Not Available	132	145	0	No Data ⁴	Investigative Forensic Services
●	1.8	Fingerprints Reports per FTE	106	116	0	130	112.07%	Investigative Forensic Services
●	1.9	Firearms Reports per FTE	190	209	0	75	35.89%	Investigative Forensic Services
●	1.10	Materials Analysis Turnaround Time	0	90	0	0	No Data ⁵	Investigative Forensic Services
●	1.11	Test Fires Reports per FTE	8	20	0	265	1325%	Investigative Forensic Services
●	1.12	Materials Analysis Reports per FTE	Not Available	40	0	0	No Data ⁶	Investigative Forensic Services

Public Health Laboratory Division

OBJECTIVE 1: Improve the effectiveness and efficiency of public health laboratory services.

INITIATIVE 1.1: Develop and apply FORESIGHT-like measures to the PHL.

Much of the testing done in PHL is similar to that done in FSL; therefore, the FORESIGHT process used for FSL should translate well to the PHL platform. DFS is working with the Association of Public Health Laboratories (APHL) and the Centers for Disease Control (CDC) to establish FORESIGHT measures for PHL with the ultimate goal of establishing these as national standards for comparative metrics. This is an on-going process. **Completion date: September 30, 2015.**

Performance Assessment Key: Partially Achieved.

● During FY15 PHL developed a tracking mechanism for capturing data following FORESIGHT

³ Digital Evidence Unit (DEU) merged with the Operational-IT Unit to preserve resources and increase workforce efficiency. One individual worked 15 digital cases in FY5 prior to the merger.

⁴ Forensic Biology Unit was suspended from case work in FY15. No reports were issued by DFS personnel.

⁵ Material Analysis Unit was the strategic vision of previous leadership. Incoming leadership determined material analysis will not move forward without a proper business analysis. At this point, no FTEs are assigned to MAU.

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guidelines. FORESIGHT did not improve operational analysis of PHL performance; however, PHL does have a mechanism to capture data. The PHL will continue to refine a method of collection that enhances operational indicators and projections.

INITIATIVE 1.2: Outreach to District hospitals for awareness of PHL services.

This initiative is a communication and marketing effort to expand awareness of the PHL testing and service capabilities available to District hospitals. Many, if not all, of the hospitals have slowly moved to private testing vendors outside the District; the PHL can replicate all necessary testing in the District, either at no fee or through a revenue-generating structure (to be determined). PHL is a central component to the health of the District's citizens and should be utilized routinely by our hospitals. The initiative will consist of informal meetings, formal presentations, distribution of information, social media, and other forums to educate hospital staff and leadership about PHL's capabilities. The goal is to estimate the amount of testing required by the hospitals and to capture at least 25% of it in PHL. **Completion date: September 30, 2015.**

● **Performance Assessment Plan: Fully Achieved.**

The PHL provided packaging and shipping training to all District hospitals. In addition, PHL hosted training on handling highly infectious organisms such as Ebola (i.e. Category A agents). PHL partnered with the DC Hospital Association and the Department of Health to collaborate with all DC hospitals to conduct a city-wide study on multi-drug resistant hospital acquired infections.

PHL has successfully reached out to District hospitals and other District agencies making them aware of services and will continue to do so in the next fiscal year.

INITIATIVE 1.3: Special Projects to Develop New Services.

PHL is poised to strategically provide services previously not offered to stakeholders. These services include newborn screening of babies, HIV/AIDS testing, sexually transmitted disease testing, new and emerging infectious diseases (like MERS), among others. These projects will require research to provide the operational plan, capital budgets, ongoing costs, and potential funding streams for transitioning developed projects to actual services offered by PHL. This is an on-going process. **Completion date: September 30, 2015.**

● **Performance Assessment Key: Partially Achieved.**

PHL conducted research to provide operational plans, capital budgets, ongoing costs, and potential funding streams for transitioning developed projects to actual services that could be offered by PHL. The Analytical Chemistry Unit of the PHL has performed emergency water testing for DDOE. The objective is to eventually develop an MOU to perform routine testing for DDOE.



PHL is in the process of continuing to establish relationships for future special projects to better serve the citizens of the District.

OBJECTIVE 2: Shift operational aspects to conform to agency-wide systems.

INITIATIVE 2.1: Shift from current laboratory information management system to agency-wide system.

The PHL currently uses a limited system for laboratory information management (LIMS) that only handles PHL's information and does not connect to any other system in DFS. PHL is coordinating through the DFS Deputy Director for Information Technology (DD-IT) to transition from its current platform to the DFS agency-wide system; the transition will need to occur in a way that does not impede PHL's current performance or information needs. Workflow diagrams, category definitions, process maps, and future needs will be clarified and communicated to the DD-IT and the other Division Directors to begin to integrate the PHL process into the larger DFS effort. This is an on-going effort. **Completion date: September 30, 2015.**

Performance Assessment Key: Partially Achieved.

PHL has a LIMS system designed for clinical specimen and reporting designed by Chemware. The rest of DFS, minus the Forensic Biology Unit, will utilize a LIMS created by JusticeTracks. In an effort to integrate multiple LIMS, DFS is building a performance management dashboard, known as Applied Integrated System (AIS). The customized AIS will serve as the agency-wide system that can integrate both PHL and FSL derived data. AIS will have the capacity to analyze data from the LIMS, no matter the source, and provide analytical visuals for Leadership to make data driven strategic decisions.

INITIATIVE 2.2: Integrate all PHL testing into DFS quality program.

PHL and FSL seek accreditation through two different processes; the PHL work conforms to its own profession's quality standards. PHL will continue to integrate all of its testing procedures into the DFS quality program by identifying common testing across divisions, simplifying paperwork and reporting, and aligning its practices to international quality standards (ISO 17025). Successful completion is measured by an application submission by the deadline. **Completion date: September 30, 2015.**

Performance Assessment Key: Not Achieved.

PHL took the initial steps towards ISO 17025 accreditation. To begin alignment with the DFS quality program, PHL revised all standard operating procedures (SOPs) and the laboratory operating manual (LOM), as well as began to utilize DFS document control system, Qualtrax. In addition, the PHL has completed internal audits in preparation for the next phase of accreditation. Since there was no successful external audit obtained, PHL could not submit an application for accreditation.



INITIATIVE 2.3: Integrate PHL accessions (sample intake) into CSS evidence intake processes.

PHL currently accepts samples for testing (“accessions” in public health laboratory parlance) through its own personnel and processes. As the DFS transitions to the responsibilities of crime scene response and evidence intake, PHL will work with the DFS Central Evidence Unit (CEU) to integrate PHL’s intake process and merge it with CEU’s, providing a single intake process and location for all material to be analyzed at DFS. This will assist with INITIATIVE 2.2 by simplifying paperwork, reducing the number of active forms, and enhancing the evidence handling (“chain of custody”) procedures for the entire agency. Accessions will occur at the Central Evidence Unit (CEU) by the deadline. **Completion date: September 30, 2015.**

 **Performance Assessment Key: Fully Achieved.**

A Standard Operating Procedure (SOP) was developed to outline details, roles and responsibilities of all staff who play a role in sample intake. Upon finalizing the SOP into Qualtrax, the DFS document management system, all parties began implementing the transition of sample intake.






INITIATIVE 2.4: Develop a Cooperative Agreement with BioWatch Program.

PHL will continue to work with the Department of Homeland Security’s BioWatch program, providing facilities and support as appropriate and available, and negotiate a cooperative agreement. A successful cooperative agreement will allow the DFS to directly manage the program for the Department of Homeland Security. This is an on-going effort. **Completion date: September 30, 2015.**

 **Performance Assessment Key: Not Achieved.**

The BioWatch program currently operates within the PHL. Their specific type of testing is captured in the data of the Bioterrorism unit. PHL is in the process of establishing a new Cooperative Agreement in FY16.

KEY PERFORMANCE INDICATORS- Public Health Laboratory Division

   	KPI	Measure	FY 2014 YE Actual	FY 2015 YE Target	FY 2015 YE Revised Target	FY 2015 YE Actual	FY 2015 YE Rating	Budget Program
	1.1	PHL Tests per FTE	3994	4100	0	2,579	62.9%	Public Health Laboratory Services



	1.2	PHL Successful competency tests	100%	100%	0	92%	328.57%	Public Health Laboratory Services
	1.3	PHL Hospital Tests Performed	16,829	16,829	0	34856	Not Applicable	Public Health Laboratory Services
	1.4	Samples Analyzed within TAT	95%	95%	0	95%	633.33%	Public Health Laboratory Services

Crime Scene Sciences Division

OBJECTIVE 1: Improve evidence handling and processing at crime scenes and in the Consolidated Forensic Laboratory.

INITIATIVE 1.1: Simplify and unify intake of items for analysis.

This initiative involves the reduction of paperwork—both in terms of amount and repetitive or redundant forms—and simplification of workflow to take in items for analysis by the DFS. The emphasis will be on facilitating the intake experience for submitters with the goal of it being as easy or easier than a normal retail transaction, integrating documentation into the process for ease of completion, retention, and retrieval, and unification of processes so that the intake experience is the same regardless of agency, items, or other parameters. The Central Evidence Unit process will be mapped, edited, and operationalized to provide seamless transfers and documentation. **Completion date: September 30, 2015.**

Performance Assessment Key: Partially Achieved.

DFS has implemented the first phase roll out of the Laboratory Information Management System (LIMS). LIMS is an electronic tracking system designed to create streamlined tracking processes throughout the laboratory. The Crime Scene Sciences Unit and Central Evidence Unit have undergone evaluation and process mapping for all processes. New electronic processes have replaced the previously used paperwork/forms for evidence and testing requests.

INITIATIVE 1.2: Enhance evidence processing.

Develop and deploy an appropriate palette of evidence processing methods for the range of submitted items from crime scenes based on the testing done in FSL. These methods are scientifically based, recognized standards, and validated using known materials. The number and types of methods will be determined by stakeholder needs, evidence types, and intended testing. **Completion date: September 30, 2015.**



Performance Assessment Key: Fully Achieved.

The following evidence processing equipment and methods were implemented in FY15:

- Presumptive Blood Testing is used to evaluate stains as presumptively positive for the presence of blood to make a determination regarding the collection or interpretation of a blood stain pattern. Laboratory and field test capabilities include:
 - Phenolphthalein and Leucomalachite Green (LMG) – colorimetric catalytic presumptive tests for the presence of blood.
 - Hexagon OBTI- immunochromatographic presumptive test for the presence of human blood.
- Crime-Lite Blue, UV, IR-VIS Search Kit provides a multi-spectral light source search tool with an IR sensitive camera attachment with a live video displayed on a PC monitor. The UV and IR band emissions are outside of the visible light spectrum and are beneficial in searching for blood stains, body fluids, bone fragments, fiber evidence, and explosive residues.
- Cyanoacrylate Fuming Chamber upgrade with UV sterilization capabilities was completed. This will provide for the post-processing recovery of touch DNA evidence.
- Dust Electrostatic Lift Kits (DELK) have been put in service. These are devices that electrostatically charge particles within dust or light soil, which are then attracted and bonded to a lifting film. This method is best for collecting dry or dusty residue footwear impressions on surfaces.
- Footwear/Tire Tread Evidence Plaster Kits have been deployed for the collection of 3D footwear and tire tread evidence. The plaster material in these kits, Traxtone™, is a material that will acquire and retain the characteristics that were left in the impression by the footwear or tire tread that made the impression.
- Toolmark/Impression Evidence Accu-Trans™ (polyvinylsiloxane) Kit provides an extruder gun that delivers a casting silicone to surfaces that retain toolmarks and other 3D impression evidence to replicate the class and/or individual details that are inherent in the impression.
- Inked Finger/Palm Print Elimination Kits are used to collect inked finger and palm prints of individuals with normal or explainable access to a crime scene or evidence. These known fingerprints records are used for comparisons with unknown origin latent fingerprints recovered from the crime scene or evidence to eliminate further analyses/comparisons involving suspects or database queries.
- Footwear Elimination Kits are used to make test impressions of the shoes of first responders for the purpose of discerning these impressions from the unknown crime scene impressions.
- Linear Light Alternate Light Sources (Foster-Freeman 82L™) are available to provide a linear beam of white light to search crime scenes and evidence with oblique lighting for trace evidence and 2D footwear impression evidence.

KEY PERFORMANCE INDICATORS- Crime Scene Sciences Division



	KPI	Measure	FY 2014 YE Actual	FY 2015 YE Target	FY 2015 YE Revised Target	FY 2015 YE Actual	FY 2015 YE Rating	Budget Program
	1.1	CSS Response time	Not Available	Not Available	Not available	60	Not Applicable	Crime Scene Sciences
	1.2	CSS Turnaround time	Not Available	Not Available	Not Available	92	Not Applicable	Crime Scene Sciences
	1.3	CSS Reports per FTE	Not Available	Not Available	Not Available	0	Baseline	Crime Scene Sciences

Directorate Operations & Agency Management

OBJECTIVE 1: Achieve and Maintain Accreditation under International Standards of Operation (ISO) 17025.

INITIATIVE 1.1: Maintain accreditations for FSL and PHL.

Currently, FSL is accredited under ISO/IEC 17025; PHL is accredited via a number of agencies, including Centers for Disease Control, Association of Public Health Laboratories, Clinical Laboratory Improvement Act, and DSAT. This is an on-going effort. **Completion date: September 30, 2015.**

Performance Assessment Key: Partially Achieved.

This is an ongoing effort. DFS Forensic Science Laboratory (FSL) is currently accredited under ISO/IEC 17025 by ANSI-ASQ National Accreditation Board (ANAB). Pursuant to the Mayor's initiative to conduct an independent review of the FSL Forensic Biology Unit, DNA activities were suspended. A corrective action plan to restore FSL FBU DNA activities in alignment with accepted practices was approved by ANAB and the FSL accreditation certificate remains active.

The DFS Public Health Laboratory (PHL) remains certified under Clinical Laboratory Improvement Act (CLIA) by Centers for Medicare & Medicaid Services (CMS), and the Division of Select Agents and Toxins (DSAT) by the Animal and Plant Health Inspection Service (APHIS).

INITIATIVE 1.2: Prepare Units and Divisions for accreditation as they become operational.



This includes identifying units and divisions for accreditation, developing a timeline and plan for achieving accreditation. For FSL, this will include the Digital Evidence Unit and the Materials Analysis Unit. For the remainder of the agency, both PHL and CSS divisions will be brought under ISO 17025. External recognition is conducted by one or more ISO approved vendors. **Completion date: September 30, 2015.**

● **Performance Assessment Key: Fully Achieved.**

This is an ongoing effort. The FSL Digital Evidence underwent a pre-assessment by ANAB on September 28, 2015, to provide a gap analysis in preparation of accreditation. PHL held weekly meetings to prepare for ISO/IEC 17025 accreditation, to include completion of an annual internal audit in accordance with ISO/IEC 17025 requirements. A pre-assessment quote from ANAB and American Association for Laboratory Accreditation (A2LA) were obtained to get a general idea of costs to conduct a gap analysis. The CSS division is in the process of formulating and finalizing quality/laboratory manuals, policies and procedures in accordance with ISO/IEC 17025 standards to include preparation for annual internal audits and an annual management review. The FSL Material Analysis Unit is not currently operational.

INITIATIVE 1.3: DFS Customer Service.

In FY15, DFS will enhance the agency customer service by collecting feedback from stakeholders and customers and analyzing the information to improve the DFS management system, testing activities, and customer service. Paper and electronic forms have been created to assist in the collection of data. Two Stakeholder Advisory Council meetings and four Science Advisory Board meetings are held annually. **Completion date: September 30, 2015.**



● **Performance Assessment Key: Fully Achieved.**

DFS met regularly with its stakeholders and external customer to ascertain expectations to meet customer expectations and enhance DFS management systems, testing activities, and customer service. Two (2) Stakeholder and four (4) Science Advisory Board meetings were held by the end of the fiscal year. A complaint/inquiry procedure was created and an electronic complaint/inquiry system was implemented for electronic submission of inquiries and complaints. The meetings occurred as follows:

FY15 Science Advisory Board Meetings

- Tuesday, October 7, 2014
- Friday, January 9, 2015 (WebEx Meeting)
- Friday, April 24, 2015
- Tuesday, June 16, 2015

FY15 Stakeholder Council Meetings

- Tuesday, February 24, 2015
- Tuesday, May 12, 2015

OBJECTIVE 2: Provide positive workplace environment for employees.

INITIATIVE 2.1: Expand medical surveillance program.

This program, which employees may opt out of, provides medical oversight for health and safety issues related to specific job duties in the laboratories. This initiative will focus on increasing participation in the program. **Completion date: September 30, 2015.**

● **Performance Assessment Key: Fully Achieved.**

The objective has been to increase participation in the medical surveillance program agency wide. All laboratory staff are encouraged to participate as they are the highest risk. Some administrative staff have requested to be a part of the program because aspects of their jobs require they enter into laboratory space. The DFS medical surveillance program offers services for bloodborne pathogen testing (new and annual), hepatitis B vaccination, tetanus vaccination, respiratory protection program evaluation, fit test and pulmonary function test (new and annual), baseline serum sample for BSL3, lead testing, audiology testing, visual acuity, physical and mental evaluation for BSL3 (new and annual), rabies vaccination (BSL3), and TB test.

To highlight the program, initial contact is made upon hiring. The program is explained in detail during onboarding as well as in Safety Level 1 training. Those who opt-out are recorded as well. In FY15, ten (10) new employees entered the program and seven (7) declined. Reasons for declination include not interested, not working in a laboratory, or personal



reasons not disclosed. To date, 68% of agency personnel is actively a part of the medical surveillance program.

INITIATIVE 2.2: Safety Level 1 and 2 training programs.

Employees working in the CFL must complete safety Level 1 training and annual training; those working with biohazards or other hazardous materials must complete Level 2 training each year. Additional safety training opportunities are offered as available and as necessary. **Completion date: September 30, 2015.**

● **Performance Assessment Key: Fully Achieved.**

DFS has a very robust safety program. New hires are required to complete Safety Level 1 and 2 training prior to work in their respective laboratories. Trainings are offered on a monthly basis to include Safety Level 1 (General Safety Awareness), Safety Level 2 (Bloodborne Pathogen and Chemical Hygiene/Lab Safety), Powered Industrial Vehicle Program (specific groups), BSL3 gowning requirements (specific groups), and Autoclave training (specific groups).

In FY15, 129 employees and contractors were trained. The curriculum was revised this fiscal year to include Power Industrial Vehicle training, and is updated annually with new changes from OSHA/DOT/EPA/CDC. All personnel are required to retrain annually.

INITIATIVE 2.3: Provide training curriculum to DFS employees to ensure professional development.

In FY15, DFS will continue to offer beginning and master classes for basic skills, including communication, scientific writing, and management of science. This initiative focuses on developing employee skill sets to help foster a positive work environment. This is an on-going effort. **Completion date: September 30, 2015.**

● **Performance Assessment Key: Fully Achieved.**

In 2015, DFS provided a variety of trainings to its employees ranging from communication, scientific writing to technical training. The trainings offered to the units were based on available resources as well as employee requests and recommendations from the annual training survey. The Firearms Examination Unit received training on testimony trials, cartridge case comparisons, Photoshop training and armorer's courses from the National Rifle Association. The Latent Fingerprint Unit witnessed trainings in areas such as Photoshop, witness stand testimony, and curriculum vitae. Trainings such as Fire scene training, OUC radio training, Driver training, and ERT Evidence Training were provided to the Crime Scene Sciences Unit. In addition, the Forensic Biology Unit was continuously trained on deconvolution and mixture interpretation. The Training and Development team has far exceeded its required number of training hours in 2015 totaling 648 hours.



OBJECTIVE 3: Implementation of a laboratory information management system (LIMS) to provide seamless accountability and tracking of evidence from receipt to return for all DFS services.

INITIATIVE 3.1: Develop agency LIMS architecture and concept of operations.





This includes developing evidence receiving and digital evidence lab requirement and process flow, review and refine agency lab requirements and process flows, deployed test environment for LIMS development, deploy evidence receiving module, and develop beta DNA LIMS capability. This is a multi-year effort. **Completion date: September 30, 2015.**

 **Performance Assessment Key: Fully Achieved.**

The LIMS system was implemented on the September 30, 2015 providing DFS with a centralized electronic chain of custody, case, requests for testing and milestone management system. Evidence submitted to DFS through either CSS, MPD or other external agencies are tracked in LIMS from submission to completion of testing, while the evidence is in the custody of the DFS.

LIMS provides management with metrics relating to evidence submissions, cases, turnaround times for testing and staff/unit workloads, all in real-time. LIMS is a critical system for efficient and transparent evidence and case management.

KEY PERFORMANCE INDICATORS- Directorate Operations & Agency Management

	KPI	Measure	FY 2014 YE Actual	FY 2015 YE Target	FY 2015 YE Revised Target	FY 2015 YE Actual	FY 2015 YE Rating	Budget Program
	1.1	DFS Quality corrective action reports	19	21	0	51	700%	Agency Management Program
	1.2	DFS Quality preventative action reports	0	3	0	9	242.86%	Agency Management Program
	1.3	DFS Number of complaints	1	1	0	7	300%	Agency Management Program



WORKLOAD MEASURES – APPENDIX

WORKLOAD MEASURES ●

Measure Name	FY 2013 YE Actual	FY 2014 YE Actual	FY 2015 YE Actual	Budget Program
FSL Cases submitted	6130	2638	1014	Investigative Forensic Services
Digital Evidence	Not Available	Not Available	15	Investigative Forensic Services
DNA	655	261	686	Investigative Forensic Services
Fingerprints	3218	1252	2221	Investigative Forensic Services
Firearms	1137	297	1727	Investigative Forensic Services
Test fires	1775	828	1137	Investigative Forensic Services
Materials Analysis	Not Available	Not Available	Not Available	Investigative Forensic Services
FSL Database entries	Not Available	Not Available	Not Available	Investigative Forensic Services
DNA	74	48	128	Investigative Forensic Services
Fingerprints	215	325	1098	Investigative Forensic Services
Firearms	138	1205	2076	Investigative Forensic Services
FSL Database hits	Not Available	Not Available	Not Available	Investigative Forensic Services
DNA	60	110	121	Investigative Forensic Services
Fingerprints	97	122	576	Investigative Forensic Services
Firearms	16	60	49	Investigative Forensic Services
PHL Samples submitted	2775	4177	2573	Public Health Laboratory Services
PHL Tests conducted	2887	3593	34856	Public Health Laboratory Services
Immunology/Virology	1524	844	18679	Public Health Laboratory Services



Clinical chemistry	0	1	0	Public Health Laboratory Services
Microbiology	711	1423	14630	Public Health Laboratory Services
Molecular biology	652	1325	1547	Public Health Laboratory Services
CSS Scenes processed	Not Available	215	1444	Crime Scene Sciences
CSS Items processed	Not Available	1016	2095	Crime Scene Sciences
CSS Autopsies processed	Not Available	185	294	Crime Scene Sciences
CSS Vehicles processed	Not Available	117	559	Crime Scene Sciences
DFS Requests for information (FOIA)	1	3	0	Agency Management Program