# (FR0) DEPARTMENT OF FORENSIC SCIENCES

#### 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.

## **SCOPE**

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 charges, including DNA, fingerprints, firearms and digital technologies. 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 collects analyzes, processes, and preserves 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.

#### CAPITAL PROGRAM OBJECTIVES

- Provide the infrastructure to retain data from high resolution cameras for crime scene photography, high resolution 3D Laser (LIDAR) Scanners for Crime Scene Mapping.
- Provide the infrastructure to facilitate a digital repository, called Mideo, to enhance the digital analysis of firearms and latent fingerprints.
- Provide the digital storage to utilize next generation sequencing equipment for DNA analysis and the analysis of public health samples.
- Support DNA mixture interpretation software, called STRMix, to accurately determine suspicious DNA on crime scene evidence.
- Invest in the digital infrastructure to market services provided by the Digital Evidence Unit to increase evidence intake.
- Maintain digital storage capacity for an operation that creates digital evidence at an average rate of 2-4 terabytes per day.

#### HIGHLIGHTS OF RECENT ACCOMPLISHMENTS

## New software application investments:

Mideo - For digital workflow analysis in Fingerprints and Firearms as well as Digital Image Management.

STRMix – to accurately determine suspicious DNA on crime scene evidence.

MiSeq – Next Generation DNA Sequencing.

Leica 3D Imaging Solution – For constructing accurate 3D models of Crime Scenes.

## Elements on this page of the Agency Summary include:

- Funding Tables: Past budget allotments show the allotment balance, calculated as allotments received to date less all obligations (the sum of expenditures, encumbrances, intra-District advances and pre-encumbrances). Agencies are allowed to encumber and pre-encumber funds up to the limit of a capital project's budget authority, which might be higher than allotments received to date. For this reason, a negative balance on a project sheet does not necessarily indicate overspending or an anti-deficiency violation. A negative balance is permitted in this calculation of remaining allotment authority.
- Additional Appropriations Data (\$000): Provides a summary of the budget authority over the life of the project. The table can be read as follows:
  - Original 6-Year Budget Authority: Represents the authority from the fiscal year in which budget was first appropriated through the next 5 years.
  - Budget Authority Through FY 2028: Represents the lifetime budget authority, including the 6-year budget authority for FY 2023 through FY 2028.
  - FY 2023 Budget Authority Revisions: Represents the changes to the budget authority as a result of reprogramming, redirections and rescissions (also reflected in Appendix F) for the current fiscal year.
  - 6-Year Budget Authority Through FY 2028: This is the total 6-year authority for FY 2023 through FY 2028 including changes from the current fiscal year.
  - Budget Authority Request Through FY 2029: Represents the 6-year budget authority for FY 2024 through FY 2029.
  - Increase (Decrease): This is the change in 6-year budget requested for FY 2024 FY 2029 (change in budget authority is shown in Appendix A).
- Estimated Operating Impact: If a project has operating impacts that the agency has quantified, the effects are summarized in the respective year of impact.
- FTE Data (Total budget in FTE Table might differ from actual budget due to rounding): Provides the number for Full-Time Equivalent (FTE) employees approved as eligible to be charged to capital projects by, or on behalf of, the agency. Additionally, it provides the total budget for these employees (Personal Services), the non personnel portion of the budget in the agency's capital plan, and the percentage of the agency CIP budget from either expense category.
- Facility Location Map: For those agencies with facilities projects, a map reflecting projects and their geographic location within the District of Columbia.

Funding By Phase - Prior Funding						Approved Funding						
Phase	Allotments	Spent	Enc/ID-Adv	Pre-Enc	Balance	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	6 Yr Total
(03) Project Management	11,069	6,741	2,633	503	1,192	500	500	1,000	1,000	1,000	1,000	5,000
(04) Construction	1,871	457	8	65	1,341	0	0	0	0	0	0	0
(05) Equipment	6,899	3,313	641	1,358	1,587	905	980	982	1,085	1,183	1,190	6,324
(06) IT Requirements												
Development/Systems	994	972	22	0	0	0	0	0	0	0	0	0
Design												
TOTALS	20,833	11,484	3,304	1,926	4,120	1,405	1,480	1,982	2,085	2,183	2,190	11,324

	Funding By Sou	urce - Pric	or Funding		A	pproved Fu	nding					
Source	Allotments	Spent	Enc/ID-Adv	Pre-Enc	Balance	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	6 Yr Total
GO Bonds - New (0300)	2,348	1,950	13	50	334	0	0	0	0	0	0	0
Pay Go (0301)	240	218	22	0	0	0	0	0	0	0	0	0
Short-Term Bonds – (0304)	18,245	9,315	3,268	1,876	3,786	1,405	1,480	1,982	2,085	2,183	2,190	11,324
TOTALS	20,833	11,484	3,304	1,926	4,120	1,405	1,480	1,982	2,085	2,183	2,190	11,324

Additional Appropriation Data	
First Appropriation FY	2013
Original 6-Year Budget Authority	22,907
Budget Authority Through FY 2028	20,833
FY 2023 Budget Authority Changes	-12,572
6-Year Budget Authority Through FY 2028	30,712
Budget Authority Request Through FY 2029	32,157
Increase (Decrease)	1 445

Expenditure (+) or Cost Reduction (-) F	Y 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	6 Y
No estimated operating impact							
Full Time Equivalent Data							

# FR0-FLE19-CRIME SCENE SPECIALIZATION VEHICLES

Agency:DEPARTMENT OF FORENSIC SCIENCES (FR0)Implementing Agency:DEPARTMENT OF FORENSIC SCIENCES (FR0)

Project No: FLE19

Ward:

Location: DISTRICT-WIDE
Facility Name or Identifier: VEHICLES
Status: In multiple phases

**Useful Life of the Project:** 5

**Estimated Full Funding Cost:** \$963,000

### **Description:**

The Department of Forensic Sciences (DFS) is to replace crime scene specialize vehicles using the Office of the Chief Financial Officer's guidance for the ideal vehicle life cycle. The replacement of these vehicles is essential to maintain scene integrity while safeguarding evidence in the care of the crime scene scientists.

#### Justification:

The Crime Scene Specialization (CSS) vehicle replacement is critical to the effectiveness of our agency's response time to crime scenes within the District. In FY20, CSS responded to more than 6,194 crime scenes within the District of Columbia. This is significant and speaks to the wear and tear CSS specialized vehicles endure because they are used to respond to various scenes. Since DFS processes crime scenes now, these vehicles are mission critical to the agency. The goal of DFS is to replace its vehicles at the optimal time to achieve greater productivity and lowered costs. Because the vehicles are utilized 24 hours each day, this can greatly impact the useful life of each vehicle. The capital project will meet the District's Mayor's "Safer, Stronger DC" plan by strengthening tools and resources needed to investigate crimes in the District.

FAV01C-Motorcycles, Scooters & Trailers - MPD, FAV02C-Wrecker & Trailers - MPD, FAV03C-Unmarked Vehicles - MPD, FAV04C-Marked Cruisers - MPD, FAV05C-Other Marked Vehicles - MPD

#### **Progress Assessment:**

Currently, the Department of Forensic Sciences was allotted \$92,000 in FY21. This amount was used to procure and replace a few of the crime scene specialized vehicles purchased in 2013. The department plans to procure the following:

☐ Two Chevy Express 3500 Vans

#### **Related Projects:**

FAV01C-Motorcycles, Scooters & Trailers - MPD, FAV02C-Wrecker & Trailers - MPD, FAV03C-Unmarked Vehicles - MPD, FAV04C-Marked Cruisers - MPD, FAV05C-Other Marked Vehicles - MPD

	Funding By Phase - Prior Funding					Approved Funding						
Phase	Allotments	Spent	Enc/ID-Adv	Pre-Enc	Balance	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	6 Yr Total
(05) Equipment	540	284	0	180	75	0	80	82	85	87	90	423
TOTALS	540	284	0	180	75	0	80	82	85	87	90	423
Funding By Source - Prior Funding						Approved Funding						
Source	Allotments	Spent	Enc/ID-Adv	Pre-Enc	Balance	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	6 Yr Total
Short-Term Bonds - (0304)	540	284	0	180	75	0	80	82	85	87	90	423

Additional Appropriation Data	
First Appropriation FY	2019
Original 6-Year Budget Authority	375
Budget Authority Through FY 2028	540
FY 2023 Budget Authority Changes	-182
6-Year Budget Authority Through FY 2028	618
Budget Authority Request Through FY 2029	963
Increase (Decrease)	345

<b>Estimated Operating Impact Summary</b>							
Expenditure (+) or Cost Reduction (-)	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	6 Yr Total
No estimated operating impact							

moreace (Beereace)		0.0
Milestone Data	Projected	Actual
Environmental Approvals		
Design Start (FY)		
Design Complete (FY)		
Construction Start (FY)		
Construction Complete (FY)		
Closeout (FY)		

Full Time Equivalent Data			
Object	FTE	FY 2024 Budget	% of Project
Personal Services	0.0	0	0.0
Non Personal Services	0.0	0	0.0



# FR0-DIG19-FORENSIC EVIDENCE DIGITAL STORAGE

 Agency:
 DEPARTMENT OF FORENSIC SCIENCES (FR0)

 Implementing Agency:
 DEPARTMENT OF FORENSIC SCIENCES (FR0)

Project No: DIG19
Ward: 6

**Location:** 401 E STREET SW

Facility Name or Identifier: CONSOLIDATED FORENSIC LABORATORY

Status: In multiple phases

**Useful Life of the Project:** 7

**Estimated Full Funding Cost:** \$9,803,000

#### **Description:**

DFS will use \$1 million in FY 2023, to meet the continually expanding needs of DFS data storage. The new storage capacity will need to be compatible with DFS' current storage system (for DFS and DEU). Specific functional systems have been employed for each of these capabilities to ensure the security of the housed data.

#### Justification:

Without expanding DFS's digital storage capacity, the agency cannot fulfill its mission to stakeholders and DC residents. Records have moved from file boxes to network shares and DFS is continuing the trend in providing cutting edge technology to assist with public safety. Without the expanded storage, the DFS cannot continue to provide the services to stakeholders and the community.

#### **Progress Assessment:**

In FY21, DFS procured switches and tiers of storage to continue digitization.

#### **Related Projects:**

As new technologies have been recently introduced, such as next generation sequencing in forensic DNA analysis, Mideo for the management and examination of images in latent fingerprint and firearms examination, and the continually improving resolution of images captured as evidence, such as at crime scenes, latent fingerprints etc, the amount of data captured grows exponentially. These developments in technology have led to the current trend growth in case related, forensic evidence data of 2-4 terabytes per day. This solution will address the storage needs generated from these systems.

(=)	unding By Phase -											
F	Α	Approved Funding										
Phase	Allotments	Spent	Enc/ID-Adv	Pre-Enc	Balance	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	6 Yr Total
(03) Project Management	4,803	2,056	1,519	453	774	500	500	1,000	1,000	1,000	1,000	5,000
TOTALS	4,803	2,056	1,519	453	774	500	500	1,000	1,000	1,000	1,000	5,000
	unding By Source -	Drior Eur	ading		Δ	pproved F	unding					
Source	Allotments	Spent	Enc/ID-Adv	Pre-Enc	Balance	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	6 Yr Total
Short-Term Bonds – (0304)	4,803	2,056	1,519	453	774	500	500	1,000	1,000	1,000	1,000	5,000
TOTALS	4.803	2.056	1.519	453	774	500	500	1.000	1.000	1.000	1.000	5.000

Additional Appropriation Data	
First Appropriation FY	2019
Original 6-Year Budget Authority	803
Budget Authority Through FY 2028	4,803
FY 2023 Budget Authority Changes	-4,000
6-Year Budget Authority Through FY 2028	9,803
Budget Authority Request Through FY 2029	9,803
Increase (Decrease)	0

Estimated Operating Impact Summary							
Expenditure (+) or Cost Reduction (-)	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	6 Yr Total
No estimated operating impact							

Milestone Data	Projected	Actual
Environmental Approvals		
Design Start (FY)		
Design Complete (FY)		
Construction Start (FY)		
Construction Complete (FY)		
Closeout (FY)		

Full Time Equivalent Data			
Object	FTE	FY 2024 Budget	% of Project
Personal Services	0.0	- 0	0.0
Non Personal Services	0.0	500	100.0

# FR0-HDW02-LABORATORY & HOSPITAL EQUIPMENT - DFS

Agency:DEPARTMENT OF FORENSIC SCIENCES (FR0)Implementing Agency:DEPARTMENT OF FORENSIC SCIENCES (FR0)

Project No: HDW02

Ward: 6

**Location:** 401 E STREET SW

Facility Name or Identifier: CONSOLIDATED FORENSIC LABORATORY

Status: In multiple phases

Useful Life of the Project: 10

Estimated Full Funding Cost: \$11,050,000

## **Description:**

This project will fund the replacement and upgrade of equipment critical to the success of the agency. The funding replacement schedule is based upon the output from the CARSS system.

#### Justification:

This project is needed to fund the replacement of mission-critical instruments that have become outdated and that have been with the agency since its inception. The District of Columbia's Comprehensive Plan includes policy themes that "ensure that infrastructure upgrades are carefully scheduled and coordinated with development and redeveloped plans." DFS continues to ensure that infrastructure upgrades are carefully scheduled and coordinated by utilizing OCFO's CARSS. This system ensures that we are remaining at the top of industry standards and that our replacement purchasing is carefully scheduled and coordinated.

#### **Progress Assessment:**

DFS procured drying cabinets, DCS5/Kit, Gas Chromatography Mass Spectrometer (GCMS), Gerstel Liquid Handler, Various types of Microscopes in FY21.

# **Related Projects:**

N/A

(Bonard III Thousand)												
F	unding By Phase -	Prior Fu	nding		Α	pproved F	unding					
Phase	Allotments	Spent	Enc/ID-Adv	Pre-Enc	Balance	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	6 Yr Total
(05) Equipment	5,149	1,822	638	1,178	1,510	905	900	900	1,000	1,096	1,100	5,901
TOTALS	5,149	1,822	638	1,178	1,510	905	900	900	1,000	1,096	1,100	5,901
Fu	unding By Source -	Prior Fu	ınding		Α	pproved F	unding					
Source	Allotments	Spent	Enc/ID-Adv	Pre-Enc	Balance	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	6 Yr Total
GO Bonds - New (0300)	220	206	3	0	11	0	0	0	0	0	0	0
Short-Term Bonds – (0304)	4,929	1,617	635	1,178	1,499	905	900	900	1,000	1,096	1,100	5,901
TOTALS	5.149	1.822	638	1.178	1.510	905	900	900	1.000	1.096	1,100	5.901

Additional Appropriation Data	
First Appropriation FY	2019
Original 6-Year Budget Authority	8,509
Budget Authority Through FY 2028	5,149
FY 2023 Budget Authority Changes	-4,801
6-Year Budget Authority Through FY 2028	9,950
Budget Authority Request Through FY 2029	11,050
Increase (Decrease)	1,100

<b>Estimated Operating Impact Summary</b>							
Expenditure (+) or Cost Reduction (-)	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	6 Yr Total
No estimated operating impact							

Milestone Data	Projected	Actual	6
Environmental Approvals			Π
Design Start (FY)			Р
Design Complete (FY)			N
Construction Start (FY)			
Construction Complete (FY)			
Closeout (FY)			

Full Time Equivalent Data			
Object	FTE	FY 2024 Budget	% of Project
Personal Services	0.0	0	0.0
Non Personal Services	0.0	905	100.0