



Central (Richmond)



Northern (Manassas)



Eastern (Norfolk)



Western (Roanoke)

DEPARTMENT OF FORENSIC SCIENCE UPDATE

Linda C. Jackson, Director

Presented to the Forensic Science Board

October 12, 2023





Central Laboratory Capital Project

- Building updates available online

<https://dfs.virginia.gov/regional-labs/new-central-laboratory-facility/>

Coming Q1 2026



Mobilization
January 2023



Ground
Breaking
03/02/23



Structure
Complete
Q4 2023



Exterior Skin
Complete
Q3 2024



Final
Inspections
Q4 2025

Construction Updates

Check back monthly for new video updates as the Central Laboratory takes shape.


Points of Interest


AUGUST 2023


- CMU installation of stair 5 in progress
- Completion of stair 1
- CMU installation for elevator 1 and 2 in progress
- Concrete pour on northside of building
- Structural steel started on south building on east end
- Site utilities ongoing
- Site grading activities ongoing

2023 2024 2025

Month 1 2 3 4 5 6 **AUG 23** 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35

 **DSG Central Forensics Lab 2023-09-01**
Skanska Creative Services





 Previous Video

Next Video 





CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

**Virginia Department of Forensic Science
Crime Laboratory System**

Fulfills the requirements of

ISO/IEC 17025:2017

Accreditation Requirements for Forensic Testing and Calibration (2023)

FBI Quality Assurance Standards for Forensic DNA Testing Laboratories:2020

FBI Quality Assurance Standards for DNA Databasing Laboratories:2020

In the field of

Forensic Testing & Calibration

This certificate is valid only when accompanied by a current scope of accreditation document.

The current scopes of accreditation can be verified at www.anab.org.


Pamela L. Sale, Vice President, Forensics

Expiry Date: 30 September 2026

Certificate Numbers:

FT-0051

FT-0052

FT-0053

FT-0054

FC-0004



Accreditation

- Surveillance Assessment week of May 20, 2024
- Certificates and Scopes are available on the DFS website:
<https://www.dfs.virginia.gov/about-dfs/accreditation/accreditation-documentation/>
- Current cycle expires September 30, 2026



DNA Training for Attorneys and Judges

- In-person, full-day sessions for DNA:
 - September 29—Central
 - October 6—Western
 - October 20—Eastern
 - November 3—Northern
 - No registration fee or CLE credits



FORENSIC SCIENCE WEEK

SEPTEMBER 17 - 24, 2023

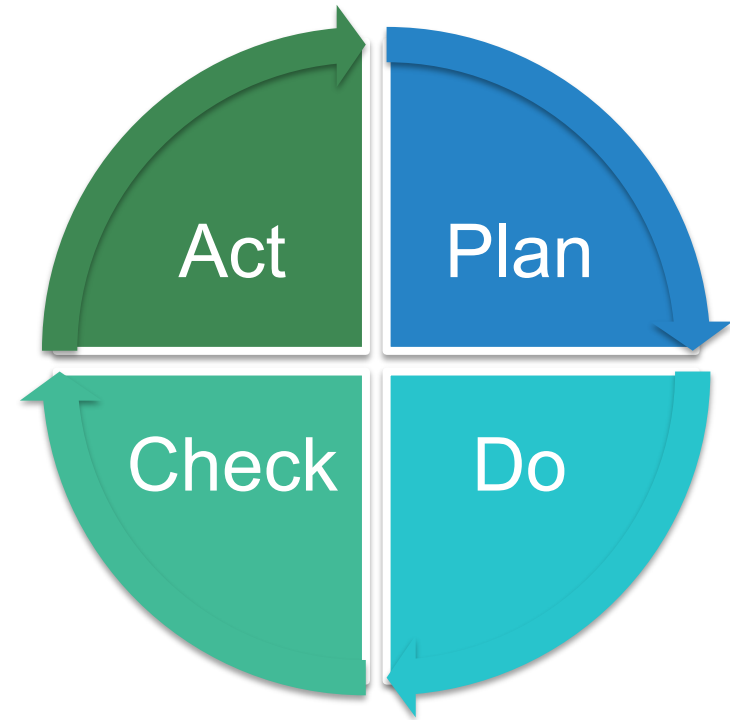


- Service Awards were presented to 54 staff members
- Leadership Retreat in Staunton, VA
- Proclamation from Governor Youngkin



Focus on Quality

- Provided Quality System updates at each laboratory location during July and August
- Formed Quality Team



Forensic Training

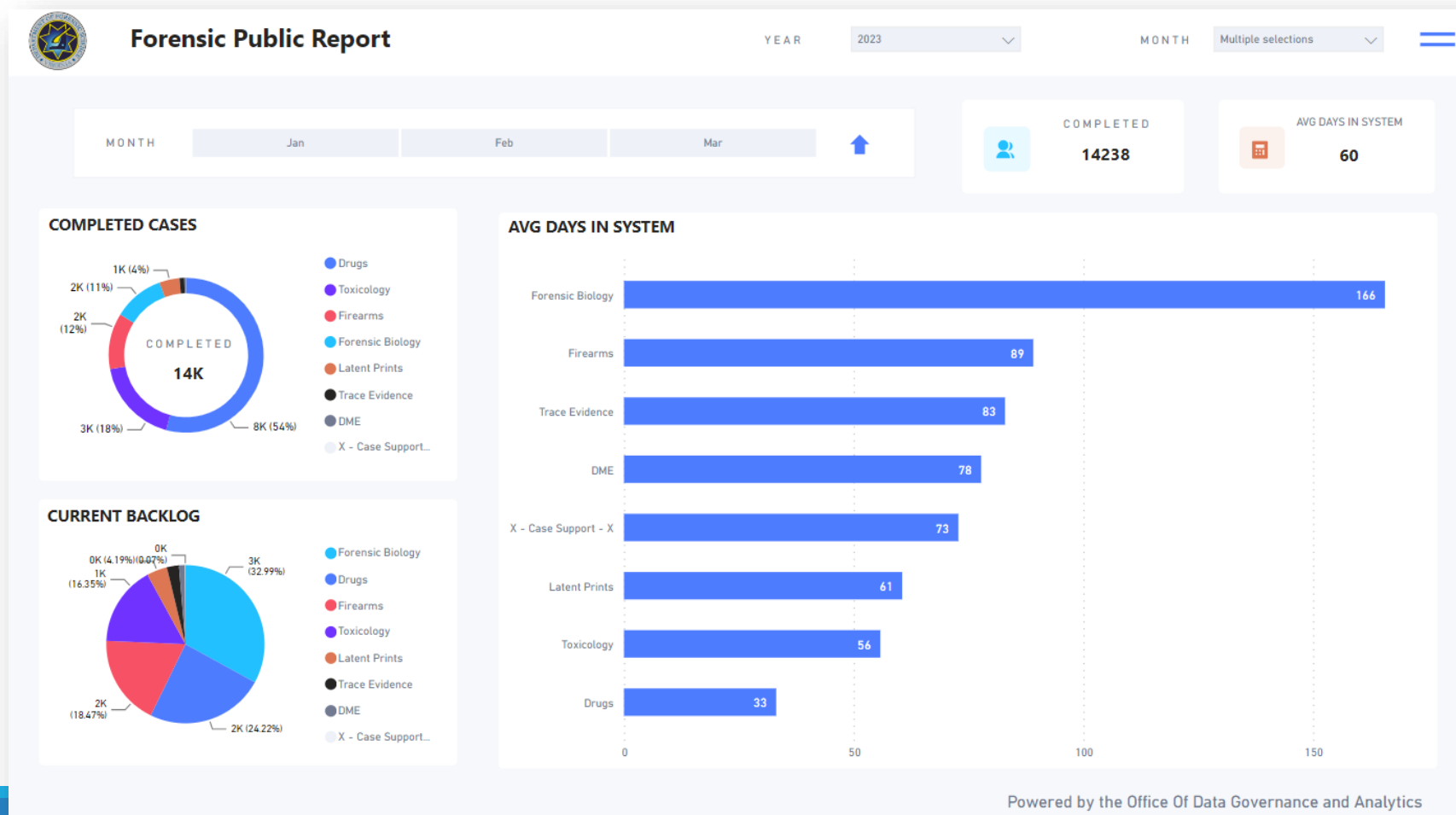
- Annual Forensic Science Academy Retraining – Sept. 6-8, 2023
- Forensic Science Academy – 110th Session began on September 18, 2023
 - Graduation scheduled for November 17th
 - Scheduled speaker - Secretary of Public Safety and Homeland Security Terry Cole





Dashboards for Case Statistics

- Project with the Office of Data Governance and Analytics (ODGA)
- Draft public dashboard provided for interactive performance statistics

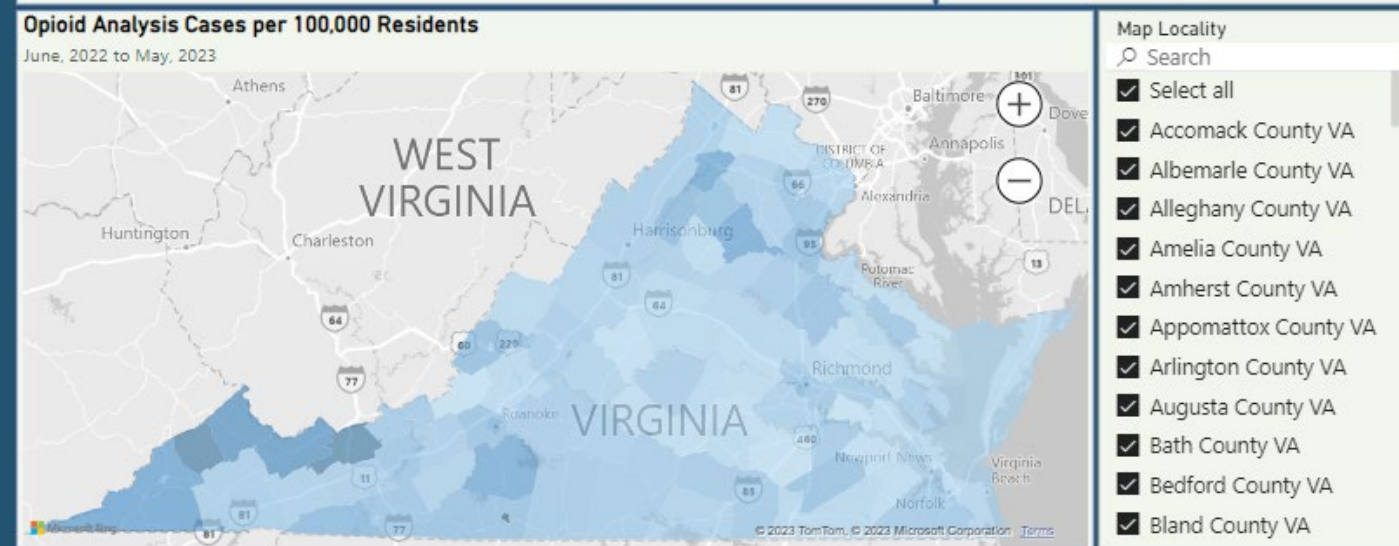
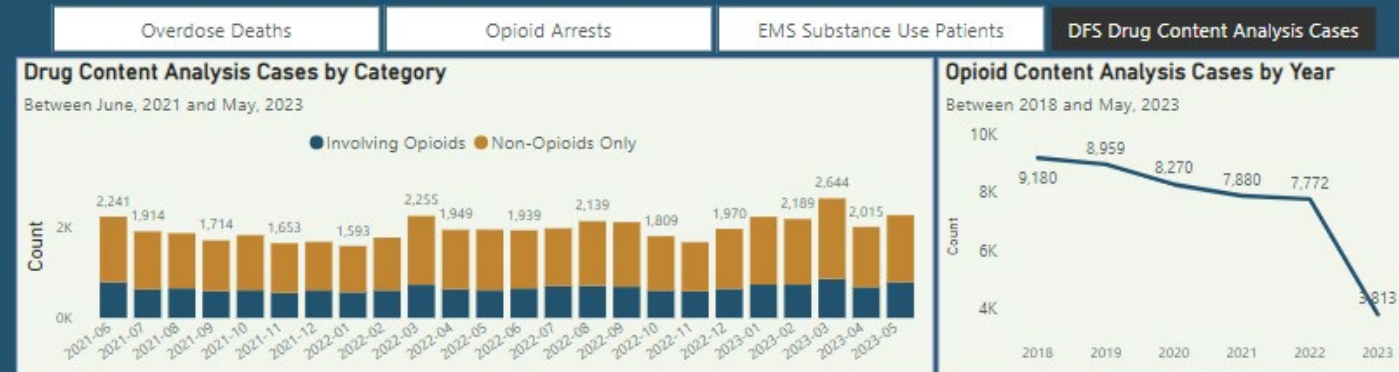


Curb the Crisis

- DFS is sharing aggregate data through DCJS to the Framework for Addiction Analysis and Community Transformation (FAACT) Project

<https://curbthecrisis.com/what-is-the-opioid-crisis/the-crisis-by-the-numbers-in-virginia/>

OCME Fatal Drug Overdoses 2021	Prior Year 2020	EMS Opioid Use Incident Patients October, 2022 to September, 2023	Prior 12 Months October, 2021 to September, 2022
2,669	2,309 ▲ 15.6%	10,667	10,322 ▲ 3.3%
State Police Opioid Arrests July, 2022 to June, 2023	Prior 12 Months July, 2021 to June, 2022	DFS Opioid Content Analysis Cases June, 2022 to May, 2023	Prior 12 Months June, 2021 to May, 2022
3,303	3,038 ▲ 8.7%	8,422	7,620 ▲ 10.5%



Board of Pharmacy Expedited Scheduling



DFS recommended two (2) compounds in July 2023. The compounds were considered at the Board's September 26th meeting and are pending final approval.

Synthetic Opioid:

- N-desethyl Isotonitazene

Cannabimimetic Agent:

- EDMB-4en-PINACA

DFS provided consultation to the Board in August 2023, pursuant to article § 54.1-3443(D), regarding their consideration of placing Tianeptine into Schedule I. This compound was also considered at the Board's September 26th meeting.



Cannabis Edibles Update

- DFS will do initial qualitative testing and report identification of cannabinoids present, then make contact to determine if additional analysis is needed and discuss disposition of the evidence
- If evidence is suitable for testing and THC quantitation is needed, DFS will send to NMS Laboratories for determination of THC concentration
- 2022-2024 biennial budget included one (1) laboratory specialist position to enable agency response to THC legislation





Breath Alcohol Instruments

- Bid for new instrument is being handled by the Department of General Services – Division of Purchases and Supply (DGS-DPS)
- DGS-DPS reassigned this procurement internally in September
- New instruments and training expected in 2024



Toxicology Updates

- Outsourcing
 - Renewed our MOU with OCME to allow for continued outsourcing
 - Currently utilizing in Eastern and Western OCME districts, with plans to reduce usage as staff complete their training
 - Using outsourcing funding in base budget
- DUI/DUID Decentralization
 - Eastern Laboratory will be fully staffed with 3 Forensic Toxicologists
 - Transitioning York County, Cities of Hampton and Newport News from Central to Eastern on January 1, 2023



Toxicology THC Testing

- All DUI/DUID samples are now screened for a tetrahydrocannabinol metabolite and alcohol
- Quantitative: Δ^9 -THC, Δ^9 -carboxy-THC, Δ^9 -hydroxy-THC

NEW:

- Qualitative: Δ^8 -THC, Cannabidiol
- Other isomers and compounds will be in future work including Δ^8 -carboxy-THC, Δ^8 -hydroxy-THC, Δ^{10} -THC/ $\Delta^{6a,10a}$ -THC, HHC

- Through Sept. 2023, ~23% of cases with BAC >0.100 % w/v had a quantifiable THC concentration

CY 2023 (Through Sept 30)		
	Cases with BAC $\geq 0.100\%$ w/v	Cases with BAC $< 0.100\%$ w/v
Average THC Concentration	0.0053 mg/L	0.0086 mg/L
Median THC Concentration	0.0035 mg/L	0.0045 mg/L

Case Statistics

Workload Statistics – FY 22 v. FY 23

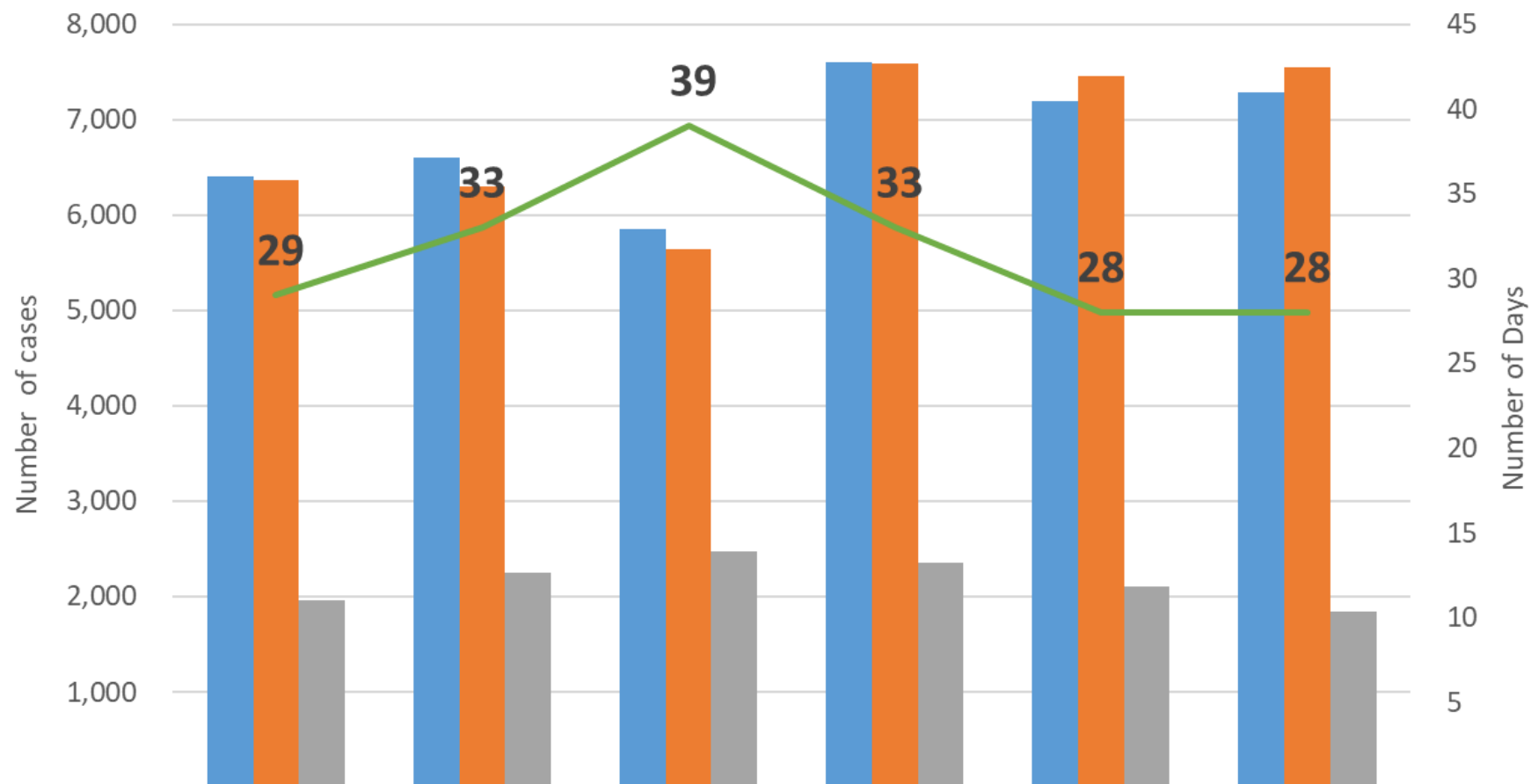


Fiscal Years	Submissions			Backlog (end of June)		
	FY 22	FY 23	% change	FY 22	FY 23	% change
Controlled Substances (CS)	23,997	27,217	+13%	1,986	2,103	+6%
Digital & Multimedia Evidence (DME)	212	254	+20%	46	108	+135%
Firearms & Toolmarks (FT)	6,314	6,450	+2%	1,798	1,573	-13%
Forensic Biology (DNA)	6,450	6,891	+7%	2,252	2,861	+27%
Latent Prints & Impressions (LP)	2,143	2,355	+10%	365	408	+12%
Toxicology (TX)**	9,883	10,642	+8%	1,300	1,694	+30%
Trace Evidence (TE)	702	725	+3%	159	223	+40%
TOTAL	49,701	54,534	+10%	7,906	8,970	+13%

**Samples outsourced directly from Office of Chief Medical Examiner (OCME) not included



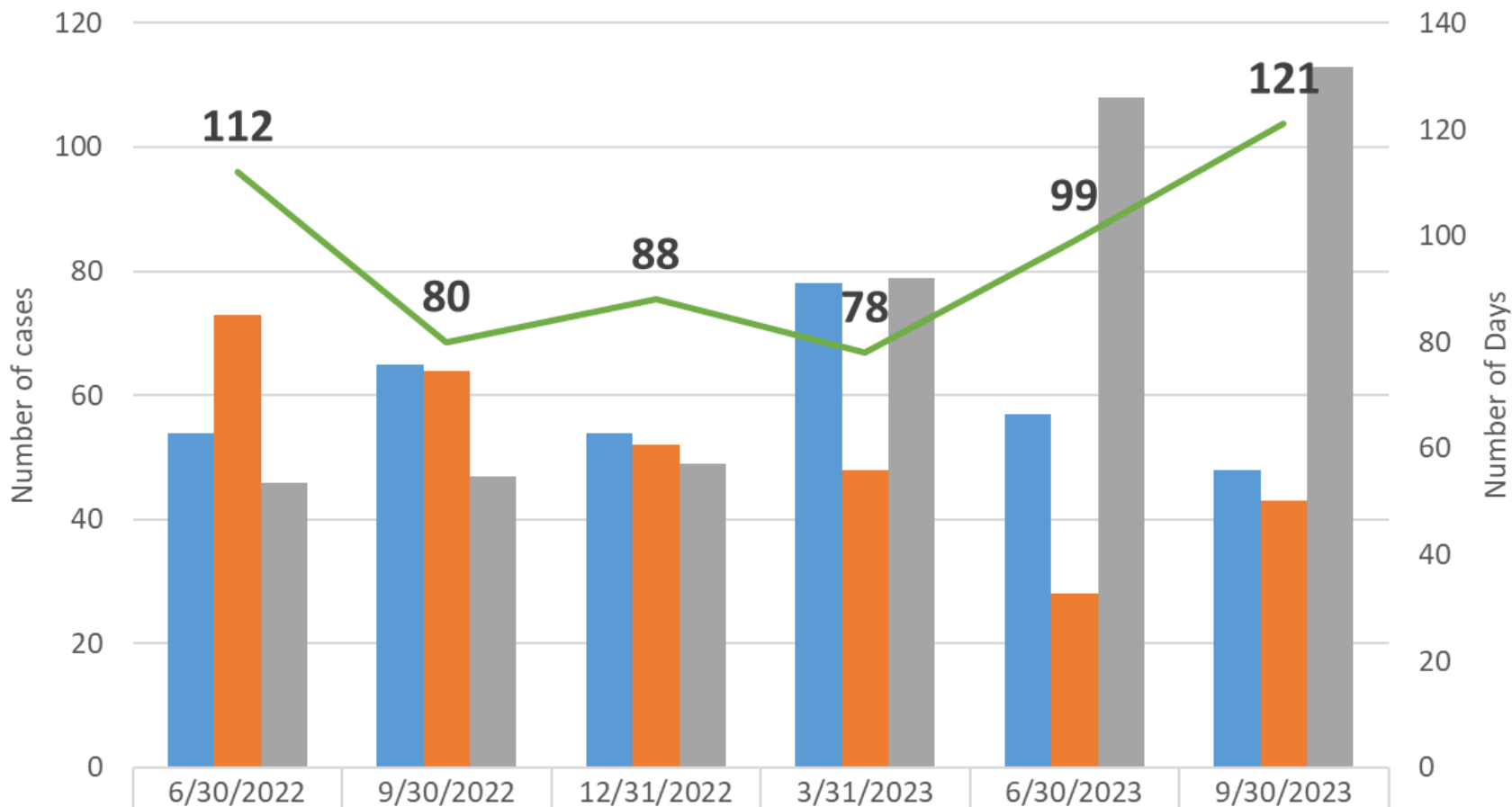
Controlled Substances



	6/30/2022	9/30/2022	12/31/2022	3/31/2023	6/30/2023	9/30/2023
Cases Received*	6,410	6,598	5,852	7,599	7,198	7,289
Cases Completed	6,364	6,304	5,637	7,583	7,454	7,542
Caseload	1,962	2,256	2,471	2,356	2,100	1,847
Average Days in System	29	33	39	33	28	28



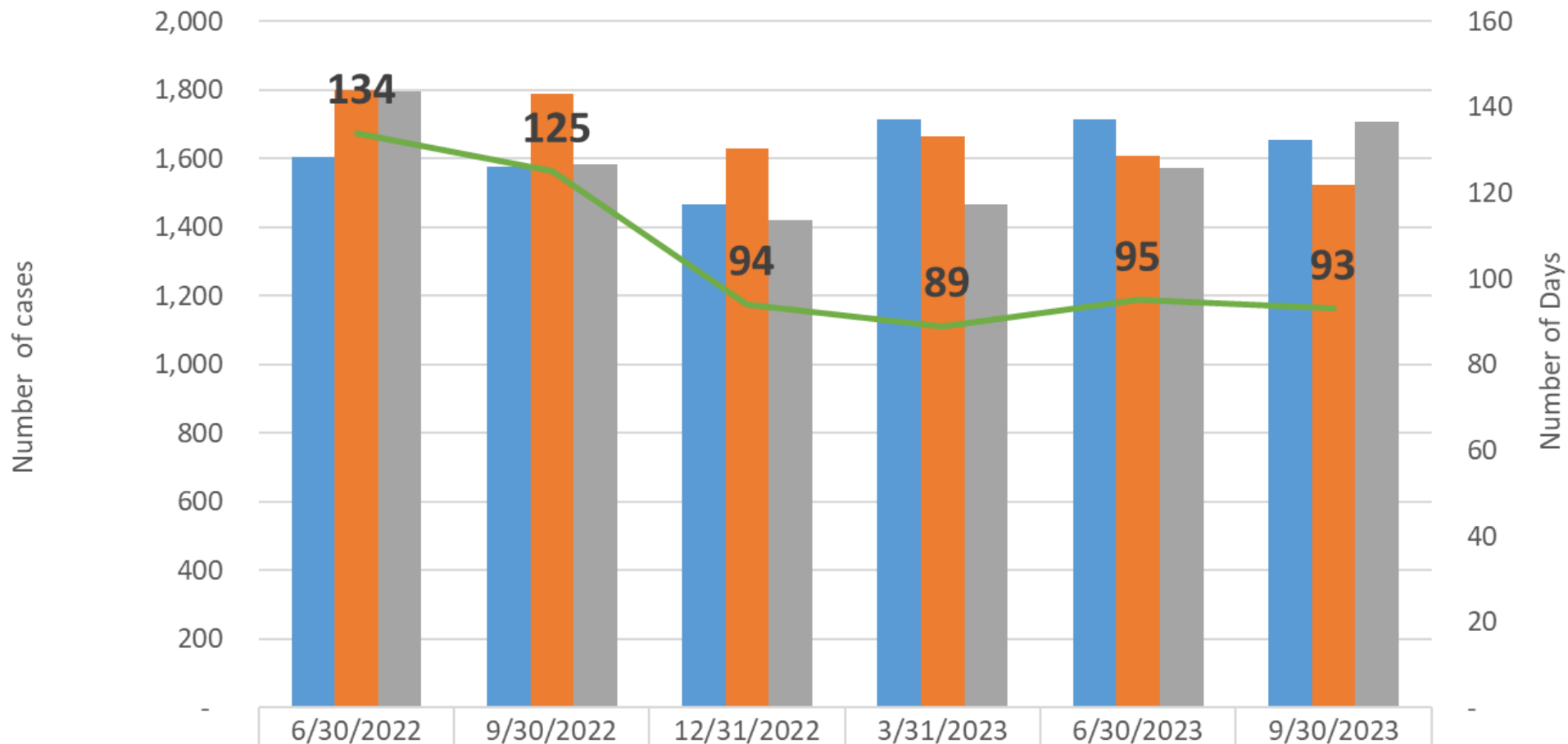
Digital & Multimedia Evidence



	6/30/2022	9/30/2022	12/31/2022	3/31/2023	6/30/2023	9/30/2023
Cases Received*	54	65	54	78	57	48
Cases Completed	73	64	52	48	28	43
Caseload	46	47	49	79	108	113
Average Days in System	112	80	88	78	99	121

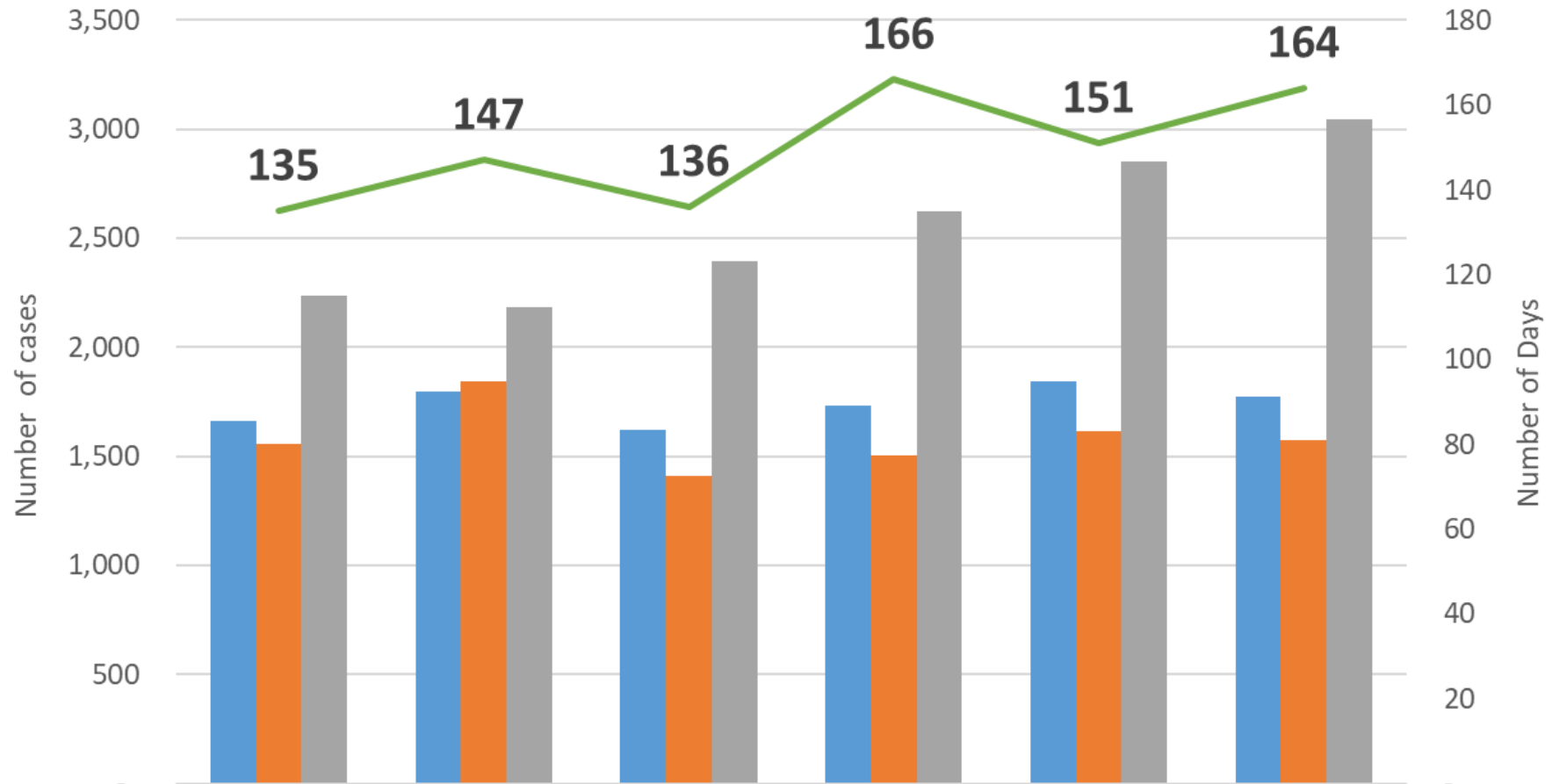


Firearms & Toolmarks



	6/30/2022	9/30/2022	12/31/2022	3/31/2023	6/30/2023	9/30/2023
Cases Received*	1,603	1,575	1,467	1,713	1,715	1,656
Cases Completed	1,799	1,789	1,630	1,666	1,608	1,522
Caseload	1,796	1,582	1,419	1,466	1,573	1,707
Average Days in System	134	125	94	89	95	93

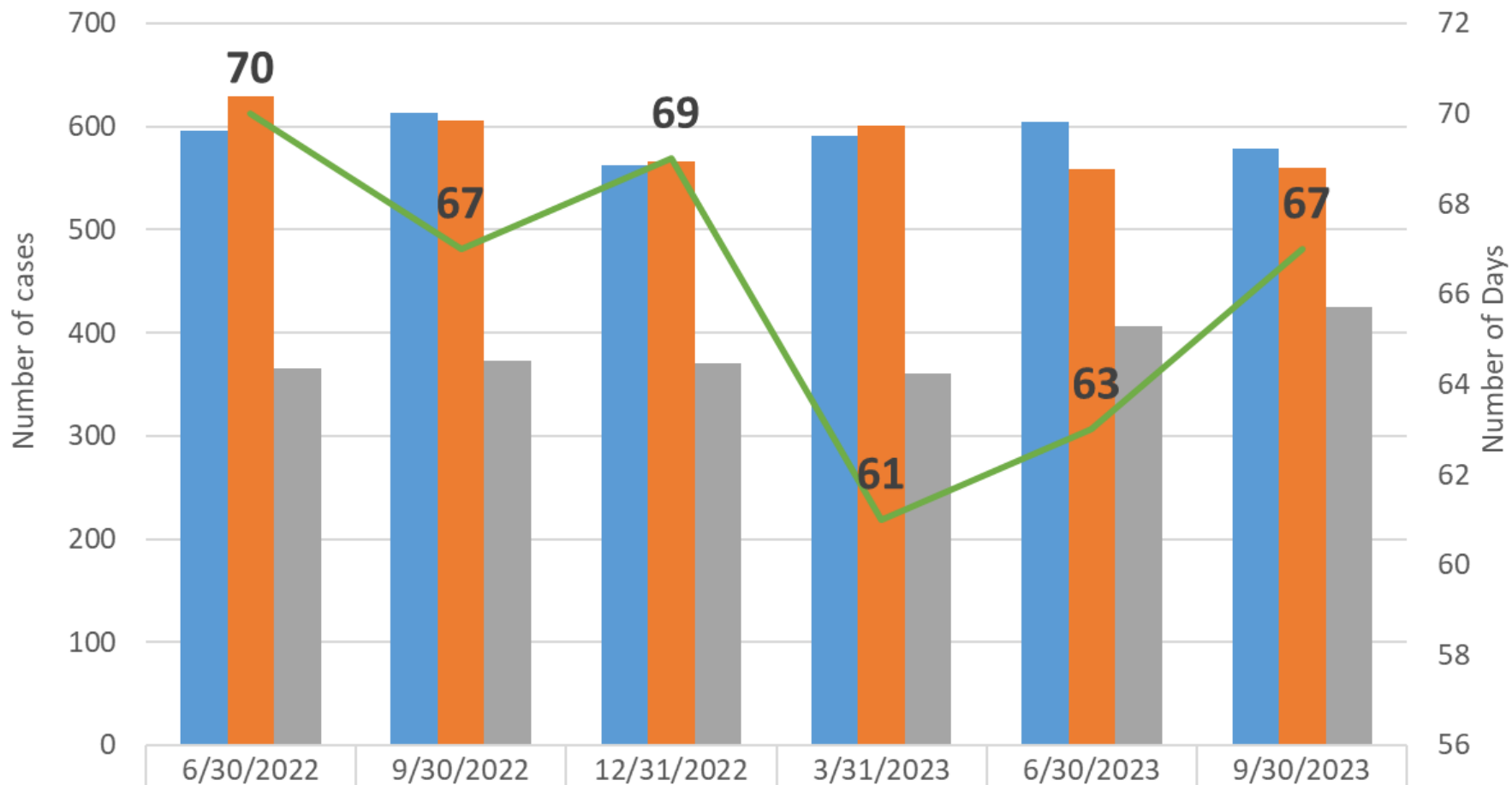
Forensic Biology (DNA)



	6/30/2022	9/30/2022	12/31/2022	3/31/2023	6/30/2023	9/30/2023
Cases Received*	1,664	1,795	1,622	1,733	1,845	1,772
Cases Completed	1,557	1,844	1,411	1,506	1,618	1,575
Caseload	2,234	2,185	2,396	2,623	2,850	3,047
Average Days in System	135	147	136	166	151	164

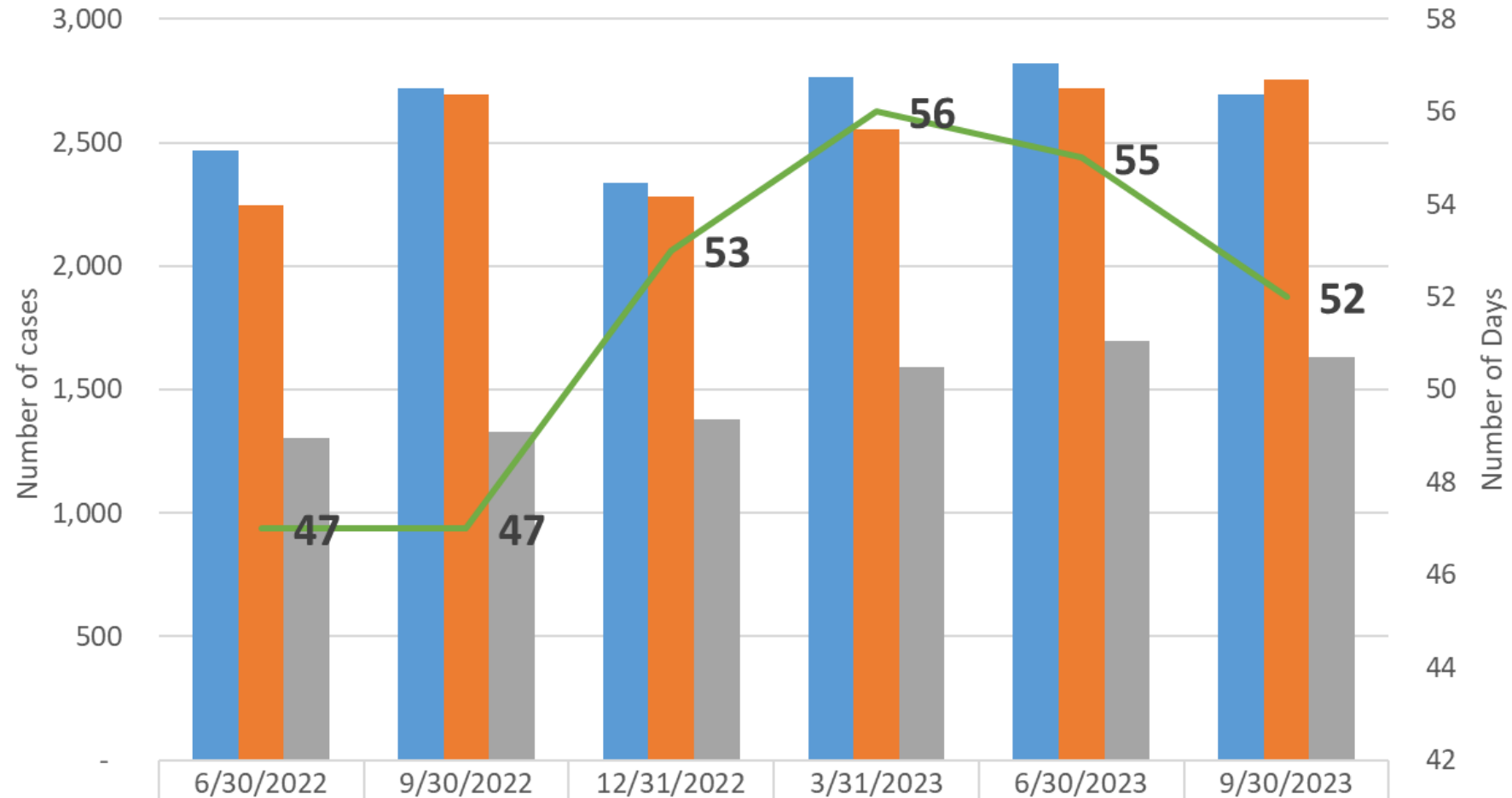


Latent Prints & Impressions



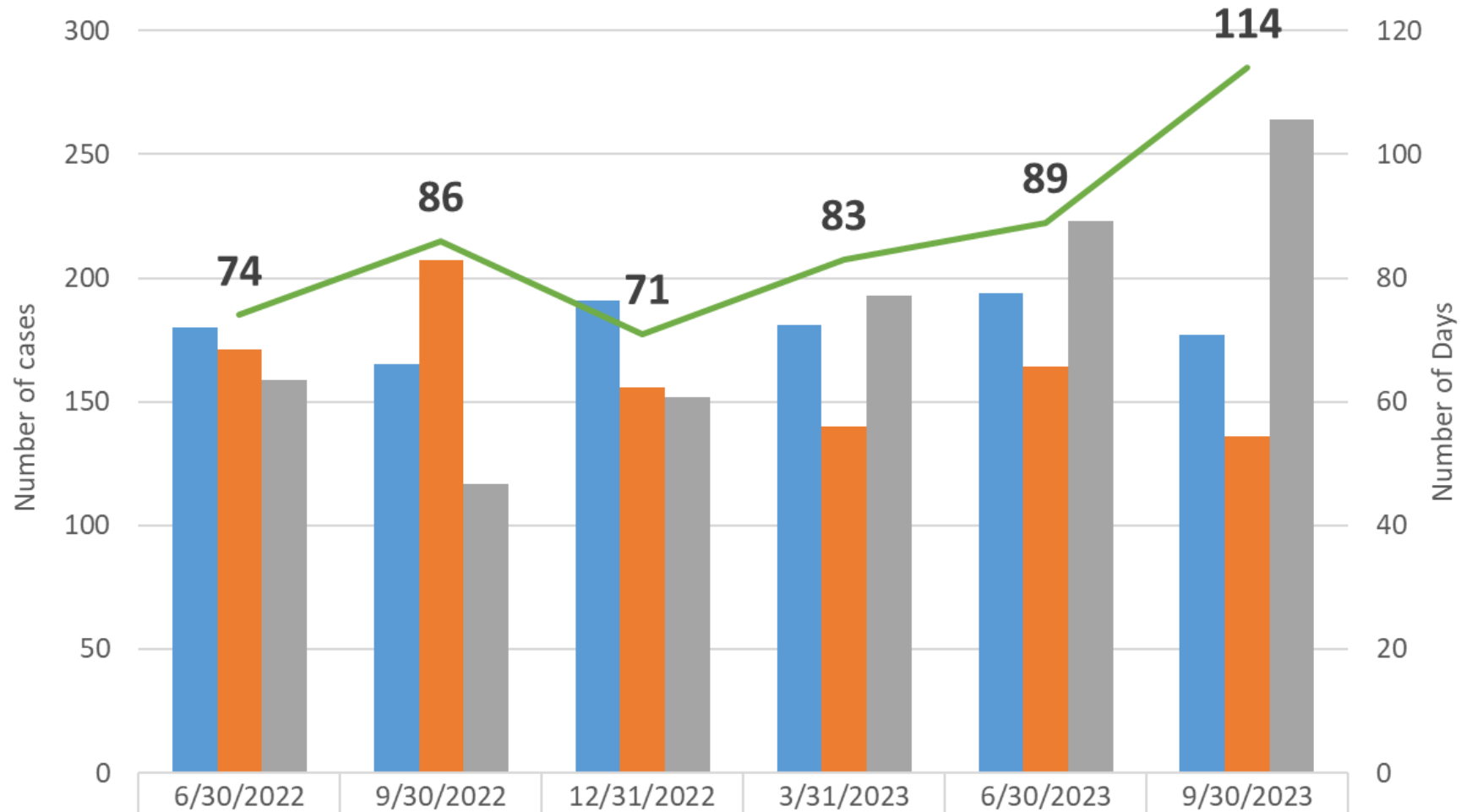
Cases Received*	596	613	563	591	605	579
Cases Completed	629	606	566	601	559	560
Caseload	366	373	370	360	406	425
Average Days in System	70	67	69	61	63	67

Toxicology



	6/30/2022	9/30/2022	12/31/2022	3/31/2023	6/30/2023	9/30/2023
Cases Received*	2,468	2,721	2,336	2,765	2,820	2,695
Cases Completed	2,248	2,694	2,283	2,554	2,717	2,757
Caseload	1,301	1,328	1,381	1,592	1,695	1,633
Average Days in System	47	47	53	56	55	52

Trace Evidence



Cases Received*	180	165	191	181	194	177
Cases Completed	171	207	156	140	164	136
Caseload	159	117	152	193	223	264
Average Days in System	74	86	71	83	89	114



FY23 Court Statistics Summary

FY23 - July 1, 2022 - June 30, 2023

Section	Subpoenas	Court Appearances	Times Testified	Hours out of Lab	Days out of Lab	% Testified, if Appeared
Administration	112	11	9	93	12	82%
Breath Alcohol	79	30	13	144	18	43%
Digital & Multimedia Evidence	67	8	3	17	2	38%
Controlled Substances	5,613	299	134	1,016	127	45%
Firearms & Toolmarks	1,515	214	166	680	85	78%
Forensic Biology (DNA)	1,533	236	185	920	115	78%
Latent Prints & Impressions	233	45	30	161	20	67%
Evidence Receiving	33	6	-	29	4	0%
Toxicology	6,258	3,545	347	3,831	479	10%
Trace Evidence	254	44	32	234	29	73%
Totals:	15,697	4,438	919	7,125	891	21%

Budget and Resources



FY2023 Year End

- DFS ended FY23 with a General Fund balance of \$2,365,142
 - Scientific equipment purchases (\$646,300)
 - Outsourcing funding (\$260,200)
 - Turnover and vacancy (\$856,717)
 - Turnover and vacancy from positions added in FY23 (\$601,925)



FY24 Budget, as Amended

	Item Description		Appropriations (\$)	
	First Year FY2023	Second Year FY2024	First Year FY2023	Second Year FY2024
Total for DFS			\$59,127,378	\$58,320,478 \$58,568,513
• General Fund Positions	341.00	341.00 345.00		
• NGF Positions	14.00	14.00		
• Position Level	355.00	355.00 359.00		
• Fund Sources: General	\$56,446,890	\$55,639,990 \$55,888,025		
• Fund Sources: Federal Trust	\$2,680,488	\$2,680,488		



FY 24 Budget Amendments

- DFS received \$248,035 and 4.00 FTE for the following positions (salaries prorated to begin January 1, 2024):
 - Full-time Technician (transition part-time to full-time Evidence Receiving) = \$58,271 per year
 - Forensic Scientist Biologists (2) = \$194,416 per year
 - PERK Coordinator = \$109,353 per year
 - Laboratory Specialist (THC legislation response) = \$94,705 per year



Not Included in FY24 Budget

- Items that were included in Governors FY24 Introduced Budget but were modified or not included in the signed budget

Provide support for four biologist positions

Funds four biologist positions to address workload issues in the forensic biology section. These positions screen evidence submitted to the Department for the presence of DNA and perform other preliminary analyses and reporting.

	<u>2023</u>	<u>2024</u>
General Fund	\$0	\$314,637
Authorized Positions	0.00	4.00

Fund software subscription fees for cell phone investigative tools

Appropriates funding to cover the cost of software used to unlock cell phones that may contain evidence related to criminal investigations.

	<u>2023</u>	<u>2024</u>
General Fund	\$0	\$107,770



Grant Funds Awarded

Centers for Disease Control, National Center for Injury Prevention and Control - *Overdose Data to Action in States*

The Virginia Department of Health applied for funding under this program as part of a planned coordination effort among the Virginia Department of Health's Offices of Emergency Medical Services (OEMS), Epidemiology (OEpi), the Office of the Chief Medical Examiner (OCME), and DFS for purposes of conducting statewide surveillance of mortality related to overdoses.

Funds, in the amount of **\$376,050** per year for five years, is being provided to DFS as a part of this project to conduct expanded toxicology testing in cases of opioid and stimulant overdose deaths. Funding for this purpose will be utilized for additional personnel, equipment, and supplies. This new funding began on September 1, 2023.

FY 2023 National Sexual Assault Kit Initiative

The Virginia Office of the Attorney General received funding under this grant program that included a portion of funds for DFS for the PERK Tracking System Coordinator position, which can be reallocated for other purposes. The amount of the anticipated subaward has not been determined.



Grant Funds Awarded

FY 2023 BJA DNA Capacity Enhancement and Backlog Reduction Program

Funding, in the amount of **\$1,856,364**, was awarded to DFS from BJA to implement capacity enhancement and backlog reduction activities in the Forensic Biology and DNA Data Bank Sections. Funding will be utilized for personnel, continuing education, equipment, and supplies. The award period is October 1, 2023 – September 30, 2025.

FY 2023 NIJ Research & Evaluation for Publicly Funded Forensic Laboratories

Funding was awarded to DFS for two research projects:

- **Pivoting Headspace Ethanol Analysis to Accommodate Modern Day Scenarios** – Award amount: **\$371,593**. Goal: to develop and validate two methods for the identification and quantitation of ethanol and other volatile compounds in whole blood and additional biological matrices using headspace gas chromatography dual column flame ionization detection. Award period: 1/1/2024 - 12/31/2025.
- **New Age Therapeutics: . Development and Validation of an Analytical Workflow for the Analysis of Psychedelics in Biological Matrices** - Award amount: **\$441,886** Goal: to develop and validate an analytical workflow for the identification and quantitation of psychedelic compounds in whole blood and additional biological matrices using a combination of high-resolution mass spectrometry and LC-MS/MS. Award period: 1/1/2024 - 12/31/2026.



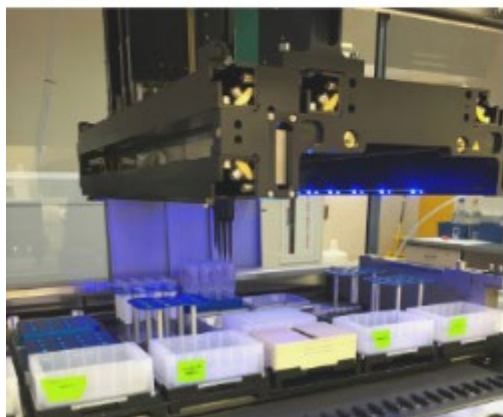
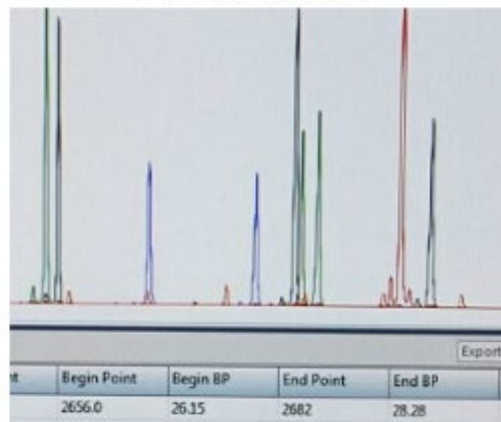
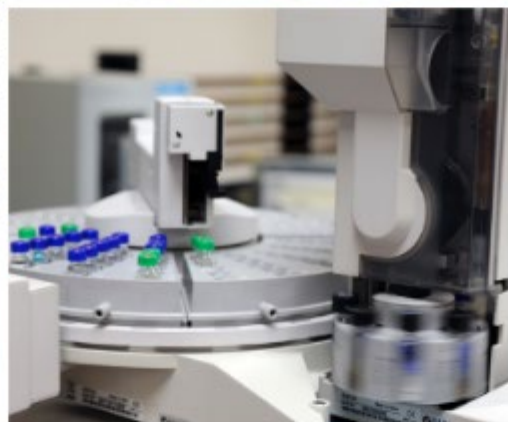
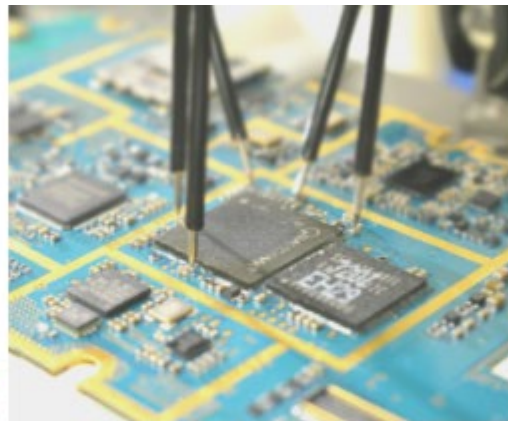
Grant Funds Awarded

FY 2024 DMV Highway Safety Grant – Breath Alcohol Training Project

Funding, in the amount of \$245,084 was awarded to DFS for reimbursement of law enforcement officers' travel for breath alcohol training, continuing education of DFS Breath Alcohol staff, supplies for classroom instruction, and smartphones and related data plans to maintain continuity of operations. Award period: October 1, 2023 – September 30, 2024.

FY 2022 DMV Highway Safety Grant – TREDIS Project

Funding, in the amount of \$469,753 was awarded to DFS for additional support staff in the Toxicology Section statewide with a goal of providing faster results of toxicological analyses in OCME traffic fatality cases. Award period: October 1, 2023 – September 30, 2024.



Thank you!