



COMMONWEALTH of VIRGINIA

FORENSIC SCIENCE BOARD

Vince S. Donoghue, Chair

October 31, 2016

The Honorable S. Chris Jones
Chair, House Committee on Appropriations
P.O. Box 5059
Suffolk, Virginia 23435-0059

The Honorable Thomas K. Norment, Jr.
Co-Chair, Senate Committee on Finance
P.O. Box 6205
Williamsburg, Virginia 23188

The Honorable Emmett W. Hanger
Co-Chair, Senate Committee on Finance
P.O. Box 2
Mount Solon, Virginia 22843-0002

The Honorable Robert B. Bell
Chair, Virginia State Crime Commission
2309 Finch Court
Charlottesville, Virginia 22911

Re: Annual Forensic Science Board Report

Dear Delegate Jones, Senator Norment, Senator Hanger and Delegate Bell:

Pursuant to the provisions of Subsection B of § 9.1-1110 of the *Code of Virginia*, the Forensic Science Board shall, by November 1 of each year, review and make recommendations concerning the following matters:

1. New major programs and plans for activities of the Department of Forensic Science and elimination of programs no longer needed;
2. Policy and priorities in response to agency needs;
3. General fiscal year operational budget and any major changes in appropriated funds;
4. Actions to foster and promote coordination and cooperation between the Department of Forensic Science and the user programs which are served;

5. Rules and Regulations necessary to carry out the purposes and intent of this chapter;
and
6. Any recommendations submitted to the Board or the Director by the Scientific Advisory Committee.

The 2016 Report of the Forensic Science Board concerning these matters is attached.

Please do not hesitate to contact me through the Department of Forensic Science Director's Office if you have any questions or would like additional information.

Sincerely,



Vince S. Donoghue
Chair, Forensic Science Board

Enclosure

cc: The Honorable Brian J. Moran, Secretary of Public Safety and Homeland Security
Victoria H. Cochran, Deputy Secretary of Public Safety and Homeland Security
Members, Forensic Science Board
Linda C. Jackson, Director, Department of Forensic Science
Division of Legislative Automated Systems

FORENSIC SCIENCE BOARD 2016 ANNUAL REPORT

Virginia Code § 9.1-1110(B) requires the Forensic Science Board (FSB) to review and make recommendations by November 1 of each year concerning the following:

1. New major programs and plans for activities of the Department of Forensic Science (DFS) and elimination of programs no longer needed;
2. Policy and priorities in response to agency needs;
3. General fiscal year operational budget and any major changes in appropriated funds;
4. Actions to foster and promote coordination and cooperation between the Department of Forensic Science and the user programs which are served;
5. Rules and regulations necessary to carry out the purposes and intent of this chapter; and
6. Any recommendations submitted to the Board or the Director by the Scientific Advisory Committee.

The Forensic Science Board met at the Department of Forensic Science's Central Laboratory in Richmond on January 6, 2016, May 11, 2016, August 10, 2016, and October 13, 2016. A list of members of the Board is included as Attachment A. Pursuant to Code § 9.1-1110(B), the Board makes the following report.

1. NEW MAJOR PROGRAMS AND PLANS FOR THE ACTIVITIES OF DFS AND THE ELIMINATION OF PROGRAMS NO LONGER NEEDED

Post-Conviction DNA Testing Program and Notification Project

In 2001, swabs and cuttings from evidence that had been affixed to a worksheet by a DFS serologist were discovered in an old case file. Post-conviction DNA testing on the evidence exonerated an individual who had been convicted of a rape in the case. After two additional individuals were exonerated of rapes based on post-conviction DNA testing conducted on evidence found in their case files, a random review of 10% of the Department's serology case files was undertaken in 2004 to identify cases where post-conviction DNA testing could provide probative evidence of the defendant's guilt or innocence. Post-conviction DNA testing conducted on the evidence from the thirty-one case files identified by the 10% random review resulted in three additional defendants being exonerated of rapes. In December 2005, based on the results of the random review, a full-scale review was initiated to identify retained evidence in DFS serology case files and to conduct DNA testing when appropriate. Information regarding this Post-Conviction DNA Testing Program and Notification Project has been included in the Forensic Science Board Annual Reports since the first report in 2006. This report provides updates on various aspects of the project, but it does not provide a detailed history; such a history can be found in the Forensic Science Board 2014 Annual Report, which is available online at:

[http://leg2.state.va.us/dls/h&sdocs.nsf/By+Year/RD3562014/\\$file/RD356.PDF](http://leg2.state.va.us/dls/h&sdocs.nsf/By+Year/RD3562014/$file/RD356.PDF)

Retesting of Cases with “Inconclusive” Results

In September 2014, the Virginia State Crime Commission (VSCC) recommended that retesting be conducted in each case where the initial post-conviction DNA testing results were “inconclusive.” A result of “inconclusive” means there was insufficient data upon which to draw conclusions or there were no DNA profiles obtained from the evidence. DFS identified 421 case files (involving 490 suspects) that contained evidence that yielded “inconclusive” results.

The experience of the Mid-Atlantic Innocence Project (MAIP) in handling cases from the Post-Conviction DNA Testing Program was that, in more than half of the cases, the DNA testing that was conducted was not probative of guilt or innocence. As a result, the Forensic Science Board adopted a process to screen the “inconclusive” cases to determine whether additional testing would be probative of the defendant’s guilt or innocence, and to only send for testing those cases where it could be probative of guilt or innocence. The process involved: 1) a legal case file review by representatives from the MAIP, the Indigent Defense Commission (IDC), and VSCC staff to determine whether retesting the retained evidence in the case file could be probative of the defendant’s guilt or innocence; and 2) a scientific review by DFS DNA staff of those files recommended for retesting during the legal review. Through this review process, 33 “inconclusive” cases were recommended for additional testing.

DFS received \$150,000 in its budget to outsource the retesting of the “inconclusive” cases using mini-STR or Y-STR testing because DFS does not conduct mini-STR testing and would not have the resources to conduct Y-STR testing in the “inconclusive” cases without delay to its pending cases. Because the screening of the “inconclusive” cases resulted in fewer cases than anticipated being sent for testing, DFS returned \$75,000 of the budgeted amount to offset its potential budget reductions for FY17.

Bode Cellmark Forensics, a private laboratory, was awarded the contract to conduct the additional testing in the 33 “inconclusive” cases where testing could be probative of the defendant’s guilt or innocence. The results of the testing in the 33 cases are as follows:

- 25 cases – inconclusive (no results from evidence or insufficient data upon which to draw conclusions)
- 1 case – the defendant was not eliminated
- 6 cases – a known sample is needed from the defendant
- 1 case – a known sample is needed from the victim

In each of the 33 cases, a copy of the Bode report was sent to the Chief of Police or Sheriff for the original investigating law enforcement agency, with a copy to the Commonwealth’s Attorney. Letters were sent to all incarcerated defendants, advising that DFS had received funding to outsource testing in their cases because the original results were inconclusive, that they were entitled to a copy of the results, and how to request a copy. Letters were also sent to defendants who previously had confirmed notification at

their last known address. The VSCC staff obtained updated address information with the assistance of the Attorney General's Office so that additional letters can be sent to those defendants who did not previously confirm notification or who did and may have since moved. DFS will be sending additional letters to these defendants.

“Need Known” Cases

“Need known” cases are those where a DNA profile was obtained from the evidence retained in the case file; however, a reference or “known” sample (typically, from the victim or the suspect) is needed to compare to the DNA profile obtained from the evidence. In June 2016, DFS completed additional DNA testing in a “need known” case where a profile had been obtained from the evidence, but a “known” sample had been needed from the individual convicted of the offense. The individual's “known” sample was submitted for analysis, and DNA testing excluded him as a contributor of the DNA profiles obtained from the evidence in a rape case. He has filed a petition for writ of actual innocence with the Supreme Court of Virginia, which is pending.

In light of the additional testing conducted in this “need known” case, DFS is looking at other, similar cases where the defendants have confirmed notification. The VSCC staff has received updated address information for these defendants with the assistance of the Attorney General's Office, and DFS will be sending additional letters to the defendants regarding the need for their “known” samples in appropriate cases.

Next of Kin Notifications

In the fall of 2014, the Crime Commission directed its staff to notify the “next of kin” for any deceased “eliminated” defendant from the Post-Conviction Testing Program and Notification Project. An “eliminated” defendant is an individual whose DNA profile was eliminated as being a contributor to the known DNA profile obtained from the evidence in a case. In late 2015, VSCC staff identified 19 deceased, eliminated individuals. One of these individuals was exonerated before his death and awarded a writ of actual innocence by the Supreme Court of Virginia. VSCC and DFS staff reviewed the remaining 18 cases and recommended that next of kin for five not receive notification as the results of the DNA testing conducted was not probative of the defendant's guilt or innocence. Information for the remaining 13 individuals was sent to both the Attorney General's Office and the Department of Corrections to attempt to locate next of kin information from people-finder databases and existing presentencing investigation reports. After thorough examination, VSCC staff decided to send next of kin letters to the relatives of 11 deceased, eliminated individuals. As a result of these efforts, VSCC staff was able to successfully notify seven of the 11 defendants' next of kin.

VSCC Review of Case Files

VSCC staff has been manually reviewing the case files from the Post-Conviction DNA Testing Program and Notification Project to confirm the testing and notification status of each individual eligible for notification. Two VSCC staff members are conducting a review of each case file to cross-validate the information they collect. This cross-validation has

been completed for the 83 “eliminated” cases by both VSCC staff, and the review of the 421 “inconclusive” cases is near completion. The 135 “need known” cases will be reviewed next. All of the information from the case file review is being entered into a spreadsheet containing the status of each individual requiring notification, as well as all notification efforts made. It is anticipated that the case file review will be completed in calendar year 2017.

Physical Evidence Recovery Kit Legislation from 2016 General Assembly Session

During the 2016 General Assembly Session, two bills¹ passed that created a comprehensive process for the consistent handling of physical evidence recovery kits (PERKs) collected from victims of sexual assault. The bills were the result of recommendations from the PERK Work Group, which was created by Governor McAuliffe, chaired by Secretary of Public Safety and Homeland Security Brian Moran, and included as members First Lady Dorothy McAuliffe and representative of victim advocate groups, Commonwealth’s Attorneys, the criminal defense bar, law enforcement, forensic nurses, and the Department of Forensic Science. The PERK legislation, which was effective on July 1, 2016, and is codified at Virginia Code §§ 19.2-11.5 through 19.2-11.11, mandates the following:

- All anonymous PERKs (those collected from victims who elect not to report the offense to law enforcement) must be forwarded by the health care provider who collected the kit to the Division of Consolidated Laboratory Services (DCLS) and be stored by DCLS for a minimum of two years;
- For kits where the victim has elected to report the offense, law enforcement must take possession of the PERK “forthwith” upon being notified by the health care provider that it has been collected;
- A PERK must be submitted to DFS for analysis within 60 days of its receipt by law enforcement, unless: (1) it is an anonymous kit that is being forwarded to DCLS for storage; (2) the PERK was collected by the Office of the Chief Medical Examiner during a routine death investigation, and the medical examiner and law enforcement agree that testing is not warranted; (3) the PERK is connected to an offense that occurred outside Virginia; or (4) the law enforcement agency determines the PERK is not connected to a criminal offense;
- After analysis, the PERK will be returned by DFS to the submitting law enforcement agency and must be stored by the law enforcement agency for a minimum of ten years or until two years after the victim has reached the age of majority, whichever is longer;
- DNA profiles will only be uploaded into the DNA Data Bank if they are eligible under DFS procedures and in accordance with state and federal law;
- DFS will expunge from the Data Bank the DNA profile developed from a submitted PERK on written confirmation from law enforcement or the Commonwealth’s Attorney that the DNA profile is not “connected to a criminal case” or that the “DNA profile is of an individual who is not the putative perpetrator”; and

¹ Senate Bill 291 was carried by Senator Richard H. Black, and House Bill 1160 was carried by Delegate Robert B. Bell.

- Upon request, the law enforcement agency is required to notify the victim (which includes the parent or guardian of a minor victim or the relative of a deceased victim) of the submission of the PERK for forensic analysis, the status of the analysis, and the results of any analysis, unless the law enforcement agency determines that disclosing the information would interfere with the investigation or prosecution of the matter. The victim is required to keep the law enforcement agency and the Commonwealth's Attorney informed of his or her current contact information.

A person accused or convicted of committing a crime against a sexual assault victim has no standing to object to a failure to comply with any provision in the legislation, and a lack of compliance with the provisions is not grounds for a defendant to challenge the admissibility of the evidence or set aside a conviction.

DFS estimated that the number of PERKs it receives for analysis annually would double from 700 to 1,400 as a result of the mandatory submission provisions in the legislation. As a result, the Department was given six additional DNA examiners to implement the provisions of the legislation. DFS was also provided funding to outsource the testing of DNA cases to a private laboratory during FY17 as training new DNA examiners typically takes between nine and twelve months, and the Department would not have the additional capacity to analyze the increased PERK submissions during the training period without outsourcing cases.

Laboratory Information Management System

The Department has implemented an updated version of its laboratory information management system (LIMS). The updated LIMS was implemented in March 2016, three months prior to the server end of life for the Department's legacy system. The updated LIMS includes functionality that, in the future, will increase customer accessibility by allowing law enforcement to remotely submit Requests for Laboratory Examinations (RFLEs) and permit DFS to electronically disseminate Certificates of Analysis. These features are expected to be implemented for testing in FY17. The updated LIMS will also eventually be configured to allow the import of legacy case file information that is being collected through the Department's Historical (Archived) Case File project so that all of DFS's searchable electronic case file information will be available in one system.

Facility Expansion and Renovation

Central Laboratory

The Central Laboratory expansion and renovation project will allow the DFS operations currently housed across the street in the Biotech 8 Building to be moved back into the expanded facility. This includes the Breath Alcohol and Forensic Training Sections, the Director's Office, Human Resources, and the Division of Administration and Finance. Additionally, the Office of the Chief Medical Examiner (OCME), which is co-located in the Central Laboratory and the Biotech 8 Building with DFS, will also return all of its operations to the Central Laboratory after the expansion.

The planning and design phase of the Central Laboratory expansion and renovation commenced with the selection of SFCS as the architecture and engineering firm for the project. Numerous meetings have occurred with staff members from both DFS and the OCME in order to appropriately allocate space and establish critical requirements for the project. Concurrently, SFCS and their consultants began a parking study to develop the most economical and least disruptive plan to ongoing operations that would accommodate both current and future parking requirements. Virginia government construction projects of this type (large and complicated) are generally managed through the Construction Management at Risk process where the construction management company is contracted with early in the design process to work collaboratively with the architect to assess the “buildability” of proposed designs. The selection of the construction management company for preconstruction services will occur in the fourth quarter of 2016.

Western Laboratory

The expansion and renovation of the Western Laboratory in Roanoke began in March of 2014, and an official Groundbreaking Ceremony was held on July 28, 2014. The Western Laboratory building houses both DFS and the OCME Western District. The DFS Western Laboratory provides forensic services in the disciplines of controlled substances, firearms & toolmarks, forensic biology, latent prints & impressions, questioned documents², toxicology, and trace evidence. The Ribbon Cutting Ceremony celebrating the completion of the project and the official opening of the expanded and renovated Western Laboratory was held on September 26, 2016.

The original 54,000 square foot laboratory building opened in 1995; by 2005, it had reached its maximum capacity for DFS. The needs of the OCME, which performs autopsies for cases in the western region, had also expanded beyond the building’s capacity. The expansion, which adds 62,000 square feet of space to the facility, houses the Controlled Substances, Toxicology, Trace Evidence, Evidence Receiving and Administrative Sections of DFS, along with waiting areas and meeting rooms for the OCME. Additionally, the expanded facility has 4,000 square feet on the ground floor designated for three large classrooms and breakout rooms for training. Approximately half of the original 54,000 square foot facility was renovated to increase the space for both the OCME and DFS.

Service Area Activities

Restructuring of Two DFS Program Areas

Following the resignation of the Calibration & Training Program Manager in December 2015, DFS restructured its Division of Technical Services to revise two of the four program areas. The original four program areas, Biology, Calibration & Training, Chemistry, and Physical Evidence, were created in FY2009, each with a Program Manager, as a result of budget cuts that eliminated the then eight individual section chief positions

² As a result of FY17 budget savings strategies announced on October 13, 2016, DFS ceased accepting evidence for questioned document examinations effective October 14, 2016. As a result of the FY17 budget reductions, the DFS Questioned Documents Section is being eliminated.

that each oversaw a specific discipline. The recent restructuring impacted the Chemistry and Calibration & Training Program Areas.

Prior to this restructuring, the Chemistry Program Area included the Controlled Substances, Trace Evidence and Toxicology Sections, and the Calibration & Training Program Area included the Breath Alcohol and Forensic Training Sections. The Forensic Training Section, which is not a scientific discipline, has been moved directly under the DFS Director of Technical Services. The Breath Alcohol and Toxicology Sections, which fit together scientifically, are now in the new Toxicology Program Area and are led by a Ph.D. Toxicologist as the program manager. This change follows national recommendations, which may one day become mandatory, that propose similar educational and training requirements for the Breath Alcohol and Toxicology Technical Leaders. The Chemistry Program Area now consists of the Controlled Substances and Trace Evidence Sections. The two remaining program areas, Biology (Nuclear DNA, Mitochondrial DNA, and DNA Data Bank) and Physical Evidence (Digital & Multimedia Evidence, Firearms & Toolmarks, Latent Prints & Impressions, and Questioned Documents) remain intact.

DUI/DUID Testing Protocol for Blood Samples in Implied Consent Cases

A Notice of DFS Policy Change was issued on May 27, 2016, advising DFS user agencies that, effective May 31, 2016, the Department's Toxicology Section would be implementing a new protocol for testing blood samples in implied consent driving under the influence of alcohol (DUI) and driving under the influence of drugs (DUID) cases. The new DUI/DUID protocol is designed to identify alcohol and drugs that can impair driving using two levels of testing. The first level analyzes samples for ethanol. If ethanol is identified at a 0.100% or more by weight by volume, testing is discontinued, and the results are reported with no additional analyses being performed. If the ethanol results are less than 0.100% by weight by volume, the ethanol results are included in the Certificate of Analysis, and the analysis would move to the second level. The second level involves drug screening, confirmation and quantitation. If no drugs or drug classes are detected, the results are reported. If any drug or drug class is tentatively present, the sample undergoes confirmatory analysis for drug identification and quantitation, as necessary. Additional testing may be conducted if specifically requested or at the discretion of a DFS toxicologist. The expanded immunoassay screening panel in the new testing protocol streamlines the process by eliminating a second screening for drugs that was previously required.

Restoration of Trace Evidence Services in Primer Residue and Explosives

On June 10, 2016, DFS issued a service restoration notice advising submitting agencies that, effective July 1, 2016, the Trace Evidence Section would resume accepting requests for primer residue examinations of samples obtained from living persons suspected of firing a weapon. The notice also advised that the Trace Evidence Section would resume examinations of Improvised Explosive Devices (I.E.D.s), low explosives, and high explosives effective July 1, 2016. DFS began restricting the evidence it received for Trace Evidence examinations on November 5, 2014, as a result of FY15 budget reductions that eliminated three positions in the Trace Evidence Section. Although the three positions

were restored in the FY16 budget, two of the individuals had left the agency, and the third had transferred into a vacancy in another section and elected to remain in the new position. Given the extended time it takes to train individuals to become qualified examiners, DFS was unable to restore these services until new examiners could be hired, trained and qualified, which resulted in it taking 19 months before these services could be restored.

Revised Reporting Practices for Previously Unidentified Latent Prints with Subsequent Potential Identification through AFIS

On June 10, 2016, DFS distributed a policy notice to its user agencies advising that changes to its reporting practices for previously unidentified latent prints with subsequent potential identification through the Automated Fingerprint Identification System (AFIS) would be implemented effective June 15, 2016. Once entered into AFIS, unidentified latent prints are continuously searched. When a new exemplar is added to the AFIS database that provides a potential identification for a previously unidentified latent print through an automated search, a potential identification is presented to the examiner. DFS latent print examiners had been contacting submitting agencies via phone or email requesting that the evidence be resubmitted for confirmation of the potential identification and subsequent result reporting. However, this practice created delay and would often require the examiner to reach out to the agency multiple times. To allow DFS to better serve its customers by more efficiently allocating its resources in the Latent Prints Section, effective June 15, 2016, DFS began issuing a Certificate of Analysis to the agency informing them that a potential identification may be possible for the previously unidentified latent print. If a confirmation examination is essential to the agency's investigation, the original latent print image will need to be resubmitted to DFS.

Multiplex Kits for DNA Casework

The Forensic Biology Section is completing the validation process and training of examiners to move to the new Powerplex Fusion (Multiplex) chemistries and instrumentation for DNA casework. The new protocol will allow DFS to report on 24 areas of DNA or loci, instead of the current 16 loci. TrueAllele, a computer system used by DFS to calculate statistics for complicated mixture profiles, will undergo additional validation to include the 24 areas of DNA contained in the Multiplex Kit. The software algorithm used for familial searching will also require additional validation. Including 24 instead of 16 DNA loci will increase the discrimination power, particularly for unidentified human remains cases. The testing process will also be quicker, copying the DNA in two hours rather than five hours. The Multiplex Kit profiles will be compatible with DNA profiles currently stored and searched in the DNA Data Bank.

Revisions to Collection Time Periods for PERK Samples

On September 16, 2016, DFS disseminated a policy notice advising its user agencies that, effective immediately, DFS was extending its recommended collection time periods for certain samples in the physical evidence recovery kit (PERK). Some of the more significant changes include allowing vaginal samples for rape allegations to be collected within 120

hours and for saliva samples on skin to be collected within 96 hours. The Notice, which was forwarded to law enforcement, Commonwealth's Attorneys, the defense bar, forensic nurses and hospitals, is also posted on the DFS website and can be found here:

<http://www.dfs.virginia.gov/wp-content/uploads/2016/09/PERK-Policy-Notice.pdf>

Historical (Archived) Case File Review Project

DFS began its Historical or Archived Case File Review Project in FY16 after receiving funding to support the review of its archived case files from 1973 through 1994 to assist in identifying cases where microscopic hair examinations were conducted. DFS implemented its Laboratory Information Management System (LIMS) in 1995 so DFS is able to electronically search cases from 1995 forward. Because this project will require DFS to conduct another manual review of archived case files housed at the Library of Virginia, DFS decided the best approach to the review would include the creation of an electronic database of these historical files. An electronic database of archived case file information was created that will include scanned copies of all Certificates of Analysis and additional case information, including the jurisdiction of the offense, investigating agency, victim and suspect names, date evidence received, type of examination, and examiner names. Five wage employees have been hired and are each working up to 29 hours per week on the project. As of October 31, 2016, nearly 31,000 of the estimated 1,000,000 archived case files covering the relevant period have been entered into the database. This searchable database of case information and scanned documentation ultimately will be integrated with the current LIMS.

Microscopic Hair Comparison Case Review

At the Board's meeting on January 6, 2016, Lynn Robitaille Garcia, who serves as General Counsel to the Texas Forensic Science Commission, gave a presentation via phone on the Texas Hair Microscopy Review Project. After a discussion of the Texas and FBI hair review projects, the Board created a Microscopic Hair Comparison Case Review Subcommittee to recommend a process for reviewing DFS's microscopic hair comparison cases. The Subcommittee, which includes as members Vince Donoghue (Chair), David Long and Lt. Colonel Tracy Russillo³, met on March 27, 2016, April 19, 2016, June 16, 2016, July 18, 2016, and October 13, 2016.

To assist in identifying cases eligible for the Microscopic Hair Comparison Case Review, a letter from Forensic Science Board Chair Vince Donoghue, seeking assistance in identifying applicable cases for the review, was disseminated to Commonwealth's Attorneys, the defense bar, judges and law enforcement. The Subcommittee developed a process for the initial screening of cases and for the review of transcripts, which the Subcommittee recommended be conducted by a team of two attorneys and one DFS

³ Lt. Colonel Russillo replaced Lt. Colonel Robert Northern as a member of the Subcommittee after Lt. Col. Northern retired from the Virginia State Police in August 2016. Lt. Col. Northern attended all of the Subcommittee meetings prior to his retirement.

scientist with experience as a hair examiner. In conducting its reviews, the Subcommittee recommended that the Review Team consider the following three questions:

1. Did the examiner state that an evidentiary hair could be associated with a specific individual to the exclusion of all others?
2. Did the examiner assign a statistical weight or probability or provide a likelihood that the questioned hair originated from a particular source?
3. Does the testimony contain any other potentially misleading statements or inferences?

The Subcommittee also conducted a detailed review of twelve transcripts of testimony from DFS hair examiners to identify testimony of concern and assist it in determining the criteria for the transcript review. A guidance document was developed as a result of the Subcommittee's transcript review to assist the Review Team in conducting its reviews. At the Subcommittee's recommendation, the Board agreed that language should be added to the guidance document that permits the Review Team to consider context in conducting its transcript reviews.

The Review Team, which includes as members Linda Czyzyk from the Staunton Public Defender's Office, Earl Wheeler from the Newport News Public Defender's Office, and Robert Scanlon, a Principal Forensic Scientist with the Department's Forensic Biology Section, held its first meeting on October 27, 2016, at the Department's Central Laboratory. At its initial meeting, the Review Team reviewed transcripts of testimony for ten cases and made recommendations regarding notification. The notification recommendations will be reviewed by the Forensic Science Board's Microscopic Hair Comparison Case Review Subcommittee at its meeting scheduled for November 15, 2016.

The Department has been able to utilize its work on the Historical Case File Review project to identify cases with microscopic hair examinations. Of the nearly 31,000 cases reviewed thus far and entered into the database, 651 of the cases involved hair examinations. One of the wage employees working on the project has been trained to help review and screen the cases involving hair examinations into three categories: no comparison, comparison (not probative), and positive (probative) association. Quality assurance reviews of the screened cases are being conducted. Of the 651 cases involving hair examinations, 98 cases were identified as having positive, probative associations. Those 98 cases are ready for the next step in the process.

The next step will be to confirm conviction information for the 98 cases and to locate transcripts or transcript substitutes, where appropriate. DFS does not have the staff or resources for this. DFS reached out to Mary Kelly Tate, who is Director of the Institute for Actual Innocence at the University of Richmond, T.C. Williams School of Law, to request assistance in identifying students who may be interested in working on the project. Ms. Tate offered the assistance of her students from the Actual Innocence Clinic that starts in January 2017. With the assistance of the students, DFS anticipates that the Review Team should have additional cases to review by March 2017.

Serology Case Review

At the Board's May 11, 2016 meeting, the Department advised the Board that it would be initiating a Serology Case Review in response to allegations made in a petition for a writ of actual innocence filed with the Supreme Court of Virginia. DFS indicated that this review of a random sample of serology cases was being undertaken to determine whether a more in depth review would be needed. The Department presented its proposal for the review to the Board in May, which includes a review of 200 cases, 100 each from the Eastern and Northern Laboratories covering the years 1982, 1986 and 1990. The review will also include serology cases where individuals have been exonerated as a result of DNA testing. All 200+ cases will be reviewed by two DFS scientists with experience in serology. An outside serologist will conduct an independent external review of a percentage⁴ of the cases reviewed by the DFS scientists. The Board approved the Department's Serology Case Review proposal, and requested that DFS provide updates on the review.

DFS has identified the 200 case files from the Eastern and Northern Laboratories that will be involved in the review, and several of its scientists with experience in serology cases have begun reviewing the files. Jami St. Clair, a member of the Department's Scientific Advisory Committee who has experience as a serologist, volunteered to assist as the independent external reviewer who would randomly review twenty percent of the 200 files. Ms. St. Clair began her independent review of cases in October 2016.

2. POLICY AND PRIORITIES IN RESPONSE TO AGENCY NEEDS

Board of Pharmacy Expedited Regulations

In 2014, the General Assembly amended Virginia Code § 54.1-3443 by adding Subsection D, which permits the Board of Pharmacy to amend its regulations via an expedited regulatory process to temporarily place substances into Schedule I or II. Use of this process is permitted in instances where the Board of Pharmacy has determined, in consultation with DFS, that the substances should be so scheduled. The Board must conduct a public hearing, giving at least 30 days' notice that provides a list of substances it intends to schedule. The Board of Pharmacy must notify the House and Senate Courts of Justice Committees of any new substance added to Schedule I or II by this expedited regulatory process. Any substances added by this process will remain in Schedule I or II for 18 months and then be de-scheduled unless a general law is enacted adding such substance to Schedule I or II in the Code of Virginia.

DFS recommends compounds to the Board of Pharmacy for this process on a quarterly basis. DFS monitors evidence submissions to its Controlled Substances Section and tracks new compounds that are submitted statewide. DFS recommended 18 compounds to the Board of Pharmacy in calendar year 2015, 12 of which were initially

⁴ DFS had originally proposed having the outside serologist review all 200 cases, but the Scientific Advisory Committee expressed concern about DFS finding an outside serologist willing to commit to volunteer the time necessary to review all 200 cases and recommended that the outside serologist review only a percentage of the 200 cases being reviewed.

added to Schedule I via the expedited regulatory process in 2015 and then subsequently added to the Code of Virginia by the General Assembly effective July 1, 2016. The remaining six compounds recommended by DFS in 2015 were added to Schedule I by the Board of Pharmacy via the expedited regulatory process on June 16, 2016. DFS recommended 36 compounds to the Board of Pharmacy between January and October of 2016; however, only 28 have been scheduled via the expedited process. The remaining eight compounds were recommended by DFS in October 2016 and have not yet been acted upon by the Board of Pharmacy.

Improving Timeliness

Caseload Data

The caseload data reported in the chart below reflects, for FY15 and FY16, the total number of cases received statewide by each DFS section, the total number of cases completed by each section, and the average case turnaround time (number of days from receipt of evidence in a case by DFS to the release of a Certificate of Analysis) for each section. The chart also specifies the ending backlog (total number of cases on hand) in each section as of the end of the respective fiscal years.

Section	Cases Received FY15	Cases Received FY16	Cases Completed FY15	Cases Completed FY16	Average Case Turnaround Time FY15	Average Case Turnaround Time FY16	Ending Backlog 6/30/15	Ending Backlog 6/30/16
Controlled Substances	28,508	29,078	30,218	28,406	71	59	4734	5419
Firearms	5,850	6,773	5,801	5,480	41	59	660	1982
Forensic Biology (DNA)	4,290	4,273	4,220	4,140	94	132	918	1148
Latent Prints (includes DME)	2,822	2,763	2,834	2,862	70	91	552	492
Questioned Documents	238	318	258	286	28	32	9	41
Toxicology	9,337	8,814	9,438	8,377	54	63	1155	1609
Trace Evidence	860	767	930	790	68	92	120	166
Total	51,905	52,786	53,699	50,341	67	68	8,148	10,857

The number of cases received by the Controlled Substances Section increased from FY15 to FY16 despite the continued use of the revised marijuana submission policy, which requires a court order for analysis of plant material in simple possession of marijuana cases. From July 1, 2015, through January 31, 2016, the DFS Controlled Substances Section

received an average of approximately 2,235 cases per month statewide. Beginning in February 2016 and remaining steady through September 2016, there was an average of 2,575 cases submitted to the Controlled Substances Section, an increase of approximately 330 cases per month. Although turnaround times are down for the Controlled Substances Section from FY16 over FY15, they are expected to increase as a result of the higher case submissions that appear to be continuing. In addition, the analysis process has become more complicated with the increase in the variety of drugs that are received. In 2005, 83% of items contained cocaine, marijuana, heroin or prescription opioids. A case distribution with so few drugs lends itself to sample batching and economies of scale. In 2015, only 60% of items contained those drugs, with the other 40% consisting of methamphetamine, cannabimimetic agents, research chemicals, and other compounds requiring more complex analyses.

The volume of cases received by the Firearms Section grew by over 15% from FY15 to FY16, which comes on top of a 10% increase in submissions from FY14 to FY15. These increases stem from the U.S. Bureau of Alcohol, Tobacco, Firearms and Explosives encouraging Virginia law enforcement agencies to submit all firearms to DFS for analysis and entry into the National Integrated Ballistics Information Network (NIBIN) database. To assist DFS in responding to these increases, funding was provided to DFS beginning in FY17 for additional Firearms positions, as well as additional NIBIN equipment for the Northern and Western Laboratories.

Turnaround times for the Forensic Biology Section have continued to increase, largely due to the additional requirements for reporting statistics. DFS also anticipates receiving an estimated 700 additional PERKS for analysis annually as a result of the mandatory submission provisions of the PERK legislation that went into effect on July 1, 2016. The additional six DNA positions provided to DFS as part of the PERK legislation will assist in minimizing the impact of this increase.

The Latent Prints Section saw an increase in turnaround times for FY16; however, it is anticipated that these times will decrease as six Latent Forensic Scientists that had been in training are now qualified examiners.

Case submissions for the Toxicology Section were down in FY16, but this is likely due in part to the OCME trying to limit what is sent for analysis given the extended toxicology turnaround times. The delay in providing toxicology results to the OCME makes it difficult for law enforcement, Commonwealth's Attorneys, and other protective agencies to conduct thorough death investigations in a timely manner, delays the ability of Virginia families to resolve their loved ones' affairs, and is jeopardizing the OCME's ability to meet accreditation standards issued by the National Association of Medical Examiners. To assist DFS in decreasing turnaround times, funding was provided to DFS beginning in FY17 for six forensic scientists in the Toxicology Section. The additional staff will also assist in reducing the turnaround times for analysis in DUI/DUID cases.

The Trace Evidence Section saw a decrease in case submissions from FY15 to FY16. However, this is likely due to the service reductions that were implemented as a result of

budget reductions in FY15. DFS restored these services effective July 1, 2016. Case turnaround times increased in FY16 over FY15. This is likely due to the three Trace Evidence scientist positions that were initially eliminated through the FY15 budget cuts, but were restored in FY16. One of the new examiners is now a qualified examiner, and the other two should become qualified examiners by the beginning of 2017.

Factors Affecting DFS Workloads and Backlogs

Melendez-Diaz v. Massachusetts

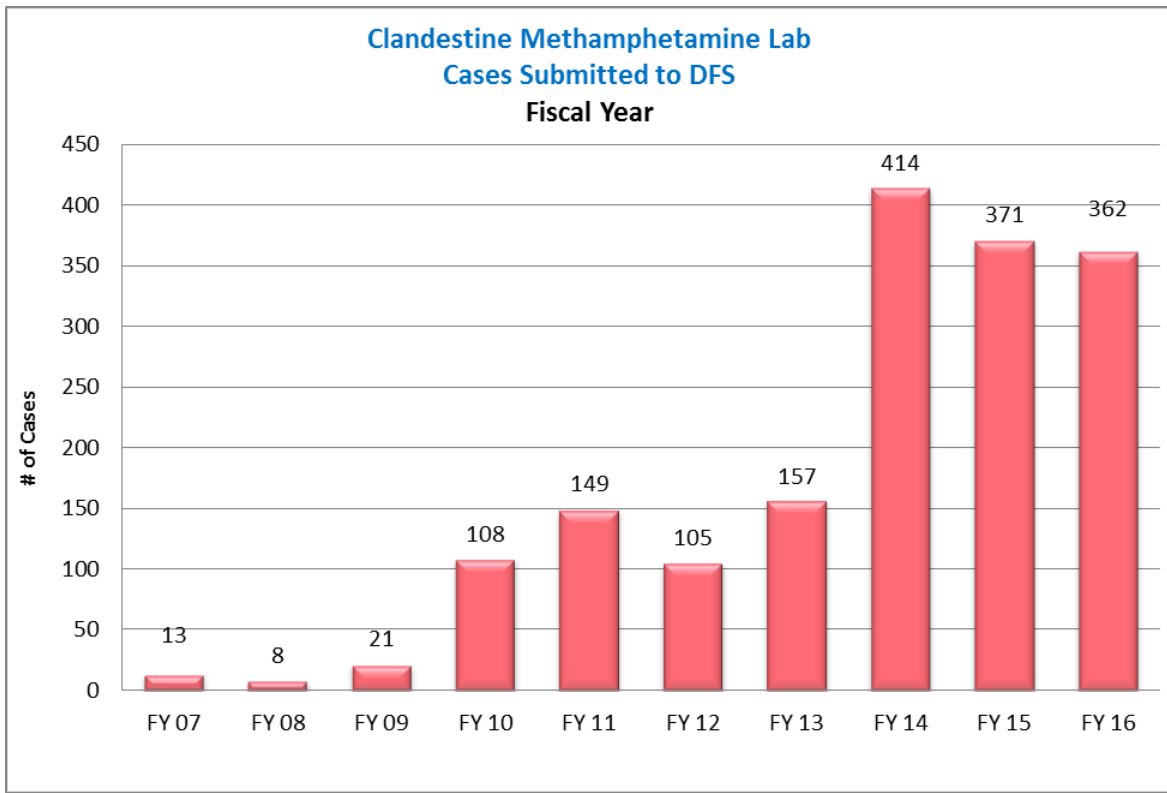
The United States Supreme Court's *Melendez-Diaz v. Massachusetts* decision in 2009 significantly increased the number of witness subpoenas DFS staff received, as well as the amount of time examiners were spending out of the laboratory for court travel and appearances. In *Melendez-Diaz*, the Court held that the defendant's Sixth Amendment right to confront witnesses against him is violated if the laboratory report is offered into evidence without the testimony of the forensic scientist who performed the analysis. As reported in prior Forensic Science Board Annual Reports, the volume of witness subpoenas received and the time examiners are spending out of the laboratory have remained dramatically elevated compared to pre-*Melendez-Diaz* levels. When examiners are out of the laboratory for extended periods of time, they have fewer hours available in the laboratory to perform forensic analyses. The Controlled Substances Section continues to be most directly affected by this decision.

Birchfield v. North Dakota

On June 23, 2016, the U.S. Supreme Court issued its decision in *Birchfield v. North Dakota*, holding that the Fourth Amendment does not permit warrantless blood tests incident to arrests in DUI cases and that a motorist may not be criminally punished for refusing to submit to a blood test based on implied consent. As a result of *Birchfield*, DFS anticipates an increase in DUI/DUID submissions where blood samples are obtained pursuant to search warrants. Additionally, because the statutory rebuttable presumptions for blood alcohol content do not apply to search warrant blood draws, DFS anticipates that its toxicologists will see an increase in subpoenas for their testimony in order to establish impairment in these cases. DFS disseminated information to law enforcement reminding them of the differences in how non-implied consent (e.g., search warrant) blood samples in DUI/DUID cases need to be submitted and how they are handled by DFS as opposed to implied consent blood samples. DFS will continue to monitor the submissions and subpoenas received by the Toxicology Section in an attempt to identify and quantify the impact from the *Birchfield* decision.

Clandestine Methamphetamine Labs

The increased submissions related to investigations of clandestine methamphetamine laboratories directly impacts turnaround times as these cases are time consuming because they require more complex analyses to identify the substances present. As illustrated in the chart below, the significant increase in cases submitted that began in FY 2014 has persisted.



Ability to Train Qualified Examiners

The extended time periods that are required to recruit, hire, and train qualified scientific staff are the reason that staff turnover results in increased case turnaround times. The table below reflects the average length of the training for new trainees hired in each discipline.

Section	Average Examiner Training Period
Breath Alcohol	12 months
Controlled Substances	10 months
Digital & Multimedia Evidence	12 months
Firearms & Toolmarks	6 months (NIBIN forensic scientists) 24 months (forensic scientists)
Forensic Biology (DNA)	12 months
Latent Prints & Impressions	12 months (latent prints) 12 months (impressions)
Questioned Documents	24 months
Toxicology	12 months (forensic scientists) 18 months (toxicologists)
Trace Evidence	12 months

Current examiners conduct the training for new hires and must dedicate significant time to working with the trainees, which results in decreased case output for these examiners while they are training new examiners.

3. GENERAL FISCAL YEAR OPERATIONAL BUDGET AND ANY MAJOR CHANGES IN APPROPRIATED FUNDS

Budget Overview

The Department's annual budget for FY 2017 is:

General Fund Base Budget	38,950,797
Adjustments to Base Budget	5,090,477
Non-General Funds	2,078,101
<hr/>	
TOTAL	46,119,375
Less Budget Reductions	(1,107,164)
<hr/>	
TOTAL OPERATING BUDGET	44,199,149

The adjustments to the Department's Base Budget include \$2,221,883 to cover centrally funded changes to items such as health insurance costs and internal service charges. The remaining \$2,868,644 in adjustments addressed changes to DFS operations, including both increased operating costs (e.g., the expanded Western Laboratory and the Laboratory Information Management System) and increased service capabilities (e.g., additional positions in the Forensic Biology, Firearms and Toxicology Sections).

In light of the budget shortfall, DFS was requested, along with other state agencies, to prepare savings strategies for FY2017 equal to five percent of the DFS annual budget, which would have required savings of approximately \$2 million. Governor McAuliffe's FY17 Savings Plan, which was released on October 13, 2016, accepted savings strategies from DFS totaling \$1,107,164; this includes \$1,087,393 in DFS General Fund appropriations, and \$19,771 in DFS General Fund Resources. These strategies realize savings from a combination of efficiency measures, reducing discretionary spending, and capturing vacancy savings. A listing of the accepted strategies is below.

Strategy	Amount
Eliminate vacant Questioned Documents (QD) examiner position (unfilled)	-\$100,000
Eliminate Questioned Documents (QD) services (2 layoffs)	-\$91,720
Eliminate IRS rate for Travel Mileage Reimbursement	-\$5,000
Eliminate one (1) DGS fleet vehicle in Central	-\$500
Delay replacement of evidence transfer van	-\$18,000
Reduce hours for wage budget analyst position	-\$10,000
Discontinue use of overtime except for court or mandatory activity	-\$100,000
Return revenue from surplus property sales	-\$19,771

Reduce Archived Case File (ACF) project funding	-\$47,088
Delay acquisition of interface between LIMS and ACF Database	-\$25,000
Defer payment of service contracts for scientific instruments	-\$149,713
Recognize future turnover and vacancy savings	-\$100,000
Delay funding examiner Professional Achievement (PA) Plan	-\$27,000
Delay funding new examiner 7% increases	-\$68,689
Defer annual statewide supervisory continuing education	-\$10,000
Eliminate Ridefinders/Hampton Roads Transit funding	-\$1,250
Reduce HVAC chiller inspections	-\$10,000
Perform emergency generator/boilers fuel polishing in-house	-\$3,000
Realize savings from vacant Facilities Maintenance positions in Northern	-\$100,000
Reclassify an examiner position to a FS NIBIN position (already in recruit)	-\$30,000
Temporarily convert a Northern full-time DNA examiner position to wage position	-\$66,750
Discontinue provision of marijuana field test kits to law enforcement	-\$25,000
Modifying current process for distribution of Controlled Substances reports	-\$2,975
Temporarily freeze one Breath Alcohol forensic scientist position (unfilled)	-\$84,708
Miscellaneous savings	-\$11,000
Total	-\$1,107,164

The most significant reduction is the elimination of the Questioned Documents Section at DFS. A notice advising user agencies that, effective immediately, DFS would no longer be accepting evidence for questioned document examinations was disseminated on October 14, 2016. The same day, DFS sent a second notice to user agencies, advising that, effective immediately, DFS would no longer be supplying marijuana field test kits to law enforcement.

Grants

Since the 2015 Annual Report, funding has been available or awarded to DFS under the following grant programs:

FY 14 DNA Capacity Enhancement and Backlog Reduction Grant Program - \$906,457 awarded from the National Institute of Justice (NIJ) to enhance capacity in the Forensic Biology Section. The funds supports personnel, training, and equipment. The grant period was October 1, 2014 - September 30, 2016.

FY 14 Paul Coverdell Forensic Science Improvement Program - \$184,994 awarded by NIJ to Virginia (DCJS) for DFS and the OCME. The DFS portion (~\$92,496) is to be used for scientific training of personnel in the Chemistry, Physical Evidence, and Calibration & Training program areas. The grant period was October 1, 2014 to September 30, 2015, but has been extended through June 30, 2016.

Asset Forfeiture One-Time Transfer – \$2,943,000 from the Office of the Attorney General for enhancement of service capacity in the Chemistry program area. The funds are to be used for purchases of equipment and maintenance/service agreements. The grant period was May 2014 to April 2016, but has been extended to November 8, 2016.

FY 15 Paul Coverdell Forensic Science Improvement Program – \$197,409 awarded by NIJ to Virginia (DCJS) for DFS and the OCME. The DFS portion (\$98,704) is to be used for training and continuing education of scientific staff in the Chemistry, Physical Evidence, and Calibration & Training program areas. The grant period was October 1, 2015 to September 30, 2016, but has been extended through June 30, 2017.

FY 15 DNA Capacity Enhancement and Backlog Reduction Grant - \$913,390 awarded by NIJ to enhance capacity in the Forensic Biology Section. The funds are to be used to support personnel, training, and equipment. The grant period is January 1, 2016 – December 31, 2017.

FY 15 NIJ Research and Development for Publicly Funded Forensic Science Laboratories - \$149,504 awarded by NIJ to develop and validate two innovative quantitative liquid chromatography mass spectrometry methods for forensic toxicology analyses. The grant period is January 1, 2016 – December 31, 2017.

2016 Highway Safety Grant Program – \$220,763 awarded by DMV for Breath Alcohol training and travel costs for law enforcement officers and continuing education for DFS Breath Alcohol personnel. Includes funds for one forensic administrative specialist and one forensic scientist, and to expand the capabilities of the online database for public access to breath alcohol instrument records, instrument certification information and statistical reports. The grant period was October 1, 2015 – September 30, 2016.

FY 16 Byrne Justice Assistance Grant (JAG) - \$50,000 awarded by DCJS to increase the capacity in the Forensic Training Section. Funds will be used to hire staff and add equipment. The total amount of the grant includes a required match of \$5,000. The grant period is October 1, 2016 – September 30, 2017.

New York County District Attorney's Office (DANY) Sexual Assault Kit Backlog Elimination Project – \$1,399,989 awarded to the Office of the Attorney General and DFS (co-applicants in the project) to outsource the testing of previously untested sexual assault kits. The DFS portion of the award (\$123,226) will be used for overtime hours for DFS scientists to conduct reviews on DNA profiles received from the contract laboratory, upload all eligible profiles into CODIS, perform DNA testing needed for Data Bank hit confirmations, and prepare all necessary reports. The grant period is October 1, 2015 to September 30, 2017.

2017 Highway Safety Grant Program - \$228,104 awarded by DMV for Breath Alcohol training and travel costs for law enforcement officers and continuing

education for DFS Breath Alcohol personnel. Includes funds for one forensic scientist and to further expand the capabilities of the online database for public access to breath alcohol instrument records, instrument certification information and statistical reports. The grant period is October 1, 2016 – September 30, 2017.

2017 Highway Safety Grant Program (TREDS Project) - \$90,290 awarded to DFS as a sub-recipient of DMV under its TREDS (Traffic Records Electronic Data System) Program. The project goal is to decrease the turnaround time of data from the OCME to DMV in cases involving motor vehicle accident fatalities. This project will involve the OCME, DFS and DMV. DFS will receive funds in the amount of \$84,290 to hire four part-time Forensic Laboratory Specialists to assist in the Toxicology Sections statewide to increase capacity. DFS will also receive \$6,000 to contract with its Laboratory Information Management System provider to create a mechanism that will allow for the electronic distribution of drug and alcohol testing results to the OCME. The grant period is October 1, 2016 to September 30, 2017.

4. ACTIONS TO FOSTER AND PROMOTE COORDINATION AND COOPERATION BETWEEN DFS AND THE USER PROGRAMS WHICH ARE SERVED

Conferences, Presentations, and Training

The Department encourages its staff to attend meetings and conferences of its user agencies to give presentations on relevant forensic science issues and to be available for feedback and comment on the services that the Department is providing. In 2016, DFS representatives attended statewide conferences for the Virginia Association of Commonwealth's Attorneys, the Indigent Defense Commission, the Virginia Association of Criminal Defense Lawyers, the Virginia Association of Chiefs of Police, the Virginia Sheriffs' Association, the Virginia Court Clerks' Association (Clerks of Circuit Court), and the Judicial Conference of Virginia.

The Department's Forensic Training Section offered the Forensic Science Academy (FSA) to law enforcement personnel across Virginia twice in 2016. Each nine-week Academy session provides in-depth training to twelve selected students in the recognition, collection, preservation, and handling of evidence through classroom instruction by forensic experts, evidence collection demonstrations, and numerous practical exercises in simulated crime scenes. The Forensic Training Section also presented numerous short courses throughout the year on various crime scene investigation subjects, including Basic Crime Scene Investigation, Basic Digital Crime Scene Photography, and Impression Evidence Documentation and Collection. Law enforcement training updates were also conducted at each of the four DFS Regional Laboratories. These programs, entitled "Laboratory Capabilities and Update," allow DFS personnel to communicate evidence receiving guidelines and changes to laboratory services to, as well as receive feedback directly from, the larger law enforcement community. The Virginia Forensic Science Academy 2016 Annual Retraining Seminar was held August 31 – September 2, 2016. Numerous DFS staff gave presentations at this seminar, which was coordinated by the Forensic Training Section and attended by nearly 200 Forensic Science Academy alumni.

The Department's Breath Alcohol Section provides maintenance of evidential breath alcohol instruments, responses to legal requests for information, testimony, and training for law enforcement personnel. From November 1, 2015 through October 31, 2016, the Breath Alcohol Section conducted 40 initial breath alcohol operator (3 day) classes and licensed 715 new operators. The Section also conducted 90 relicensing (1/2 day) sessions and subsequently relicensed 2,868 operators.

Publications

The updated report "Drug Cases Submitted to the Virginia Department of Forensic Science CY 2015" was released on September 20, 2016. DFS receives tens of thousands of drug samples every year, submitted by law enforcement agencies across the state. This report, a joint effort by DFS and the Virginia Department of Criminal Justice Services (DCJS), highlights the frequency with which various selected drugs are submitted, broken out by the seven Virginia State Police divisions. The report can be accessed on the DFS website here:

<http://www.dfs.virginia.gov/wp-content/uploads/2016/09/CY15DfsDataReportSlides.pdf>

Survey of User Agencies

On November 1, 2015, the Department distributed a customer satisfaction survey to its user agencies using SurveyMonkey®. The survey, which was open from November 1 – 24, 2015, was sent to law enforcement agencies and Commonwealth's Attorneys. The survey included questions about the overall utilization of services and satisfaction, National Integrated Ballistic Information Network (NIBIN) search needs, and Toxicology and Controlled Substances report needs. A total of 391 responses were received. Overall responses were positive, but a few concerns were expressed regarding turnaround times for analyses, and the types of examinations offered. Laboratory Directors contacted these respondents to provide education on examination services and to clarify any concerns.

Availability of Breath Alcohol Records Online

Beginning June 2014, the Department's Breath Alcohol Section began offering Breath Alcohol Instrument records on the DFS website. The records initially available on the website included Certificates of Instrument Accuracy, instrument maintenance history, and quality assurance worksheets with the associated documentation. In August 2015, the Breath Alcohol Section improved website access to Breath Alcohol records and expanded the available records to include Subject Test Records. The Subject Test Records are searchable via instrument serial number with all personally identifiable information redacted. The Breath Alcohol Section currently receives approximately 50 requests for records (both Freedom of Information Act, as well as Subpoenas Duces Tecum) per week for this information. The DFS website also provides reports of aggregate data such as "Test Results by Age," and the reports "Test Results by Gender" and "Test Results by Instrument Site" were added in June 2016. This project was made possible through a grant administered by the Virginia Department of Motor Vehicles Highway Safety Office.

Physical Evidence Recovery Kit Updated Inventory Report

Chapter 642 of the 2014 Acts of Assembly directed all state and local law enforcement agencies to inventory all physical evidence recovery kits (PERKs) in their custody that may contain biological evidence that were collected but not submitted to DFS for analysis prior to July 1, 2014. The legislation directed the Department to "receive the reports from such law-enforcement agencies and report the results of such inventory to the General Assembly on or before July 1, 2015." The Department submitted a report on the inventory on July 1, 2015. Subsequent to submitting this report, an agency provided DFS with an updated inventory and pointed out that the instructions for completing the inventory form may have been unclear with regard to which PERKs were required to be counted for the inventory. When DFS staff looked back at the materials, they concluded that, if the instructions for completing the form were read in isolation without any of the other information that was disseminated, they could have been misinterpreted as only seeking PERKs for calendar year 2013.

In light of the issue regarding the inventory form instructions, DFS staff reviewed all of the inventories and directly contacted every agency that only reported kits for CY2013 to see if they were under the misperception that they were only to count kits for CY2013. DFS also directly contacted a number of the 247 agencies that reported no kits on their inventories to confirm they had no untested kits at all in their custody and were not just reporting that they had no kits for CY2013. After identifying several additional agencies that indicated they needed to update their inventories, DFS sent an email out to the agency contacts listed on the inventory for the remaining reporting agencies that had not been directly contacted. In the email, DFS advised agencies of the potential confusion with the instructions and asked that they review their inventory, revise it, if needed, and return any updates to DFS by Monday, October 5, 2015.

DFS received updated inventories from 18 agencies and submitted a revised inventory report to the General Assembly on December 14, 2015. In its December 14, 2015 PERK Inventory Report, DFS reported that, of the 383 agencies that submitted inventories, 242 reported no kits, and 141 agencies reported a total of 2,902 PERKs in their custody that met the criteria specified in Chapter 642 of the 2014 Acts of Assembly. The full updated inventory report is available on Virginia's Legislative Information System website here:

[http://leg2.state.va.us/dls/h&sdocs.nsf/By+Year/SD132015/\\$file/SD13.pdf](http://leg2.state.va.us/dls/h&sdocs.nsf/By+Year/SD132015/$file/SD13.pdf)

5. RULES AND REGULATIONS NECESSARY TO CARRY OUT THE PURPOSES AND INTENT OF CHAPTER 11 OF TITLE 9.1 OF THE CODE OF VIRGINIA (DFS)

Regulations

A periodic review of the Department's non-exempt regulations was initiated at the Forensic Science Board's meeting on October 13, 2016. The periodic review is required every four years pursuant to Executive Order 17 (2014) and Virginia Code §§ 2.2-4007.1 and 2.2-4017. The purpose of a periodic review is to consider the continued need for the regulation, any overlap with other state or federal regulations, and the minimization of the

regulation's economic impact on small businesses. The periodic review will include notice to the public and a public comment period of at least 21 days. The Board will consider any submitted public comments and any suggested amendments to the regulations at its January 2017 meeting. The results of the periodic review will be announced after the Board's January meeting and no later than 60 days after the close of the public comment period.

6. ANY RECOMMENDATIONS SUBMITTED TO THE FORENSIC SCIENCE BOARD OR THE DIRECTOR BY THE SCIENTIFIC ADVISORY COMMITTEE

The Scientific Advisory Committee met at the DFS Central Laboratory in Richmond on May 10, 2016 and October 14, 2016. A list of members of the Scientific Advisory Committee is included as Attachment B.

Scientific Advisory Committee (SAC) Recommendations/Actions in 2016

- At its May 2016 meeting, the Trace Evidence Subcommittee advised that it had reviewed the Department's Qualitative Analysis of Clandestine Methamphetamine Laboratory Evidence using Laser Induced Breakdown Spectroscopy (LIBS) validation study. The Subcommittee provided comments and made suggestions to DFS staff, which will be incorporated into the validation study. The Subcommittee will be provided a copy of the draft procedures resulting from the validation study once they are developed. The procedures will address the analysis of lithium in clandestine methamphetamine laboratory cases.
- The SAC also reviewed the Department's serology case review proposal, which would include a random review of 200 of its serology cases (from 1982, 1986, and 1990 from the Eastern and Northern Laboratories) by two DFS scientists who conducted serology examinations and an outside serologist. The Committee discussed the Department's proposal and expressed concern over the Department's ability to find an outside serologist willing to volunteer the time necessary to review all 200 cases. The SAC adopted a motion for the Department to amend the proposal to have the two DFS scientists conduct the serology review as proposed, and then to have the outside serologist review a random sample of the 200 cases, as opposed to all 200 cases. The motion also expressly referenced that DFS retain the ability to change the process, if necessary, to carry out the review.

Attachment A

FORENSIC SCIENCE BOARD MEMBERS

(as of October 31, 2016)

- **Colonel W. Steven Flaherty** – Term: period in office or employment
Superintendent of the Virginia State Police
- **Francine C. Ecker** – Term: period in office or employment
Director of the Department of Criminal Justice Services
- **William T. Gormley, M.D.** – Term: period in office or employment
Chief Medical Examiner
- **Caroline D. Juran** – Term: period in office or employment
Executive Director of the Virginia Board of Pharmacy
- **James F. Entas, Esq.** – Term: period in office or employment
Designee of Attorney General Mark R. Herring
- **Karl R. Hade** – Term: period in office or employment
Executive Secretary of the Supreme Court of Virginia
- **Kristen J. Howard** – Term: period in office or employment
Designee of the Chair of the Virginia State Crime Commission
- **Denise M. Toney, Ph.D.** – Term: period in office or employment
Director of the Division of Consolidated Laboratory Services
- **The Honorable Vince Donoghue (Chair)** – Term: period in office or employment
Designee of the Co-Chairs of the Senate Committee for Courts of Justice
- **Delegate Rick Morris** – Term: period in office or employment
Designee of the Chair of the House Committee for Courts of Justice
- **Leslie Edinboro, Ph.D.** – Term: designated by Scientific Advisory Committee Chair
Member of the Scientific Advisory Committee
- **Jo Ann Given** – Term: designated by Scientific Advisory Committee Chair
Member of the Scientific Advisory Committee
- **Sheriff A. A. Lipppa, Jr.** – Term: ending 6/30/2017
Governor Appointee – Member of Law Enforcement
- **Colette W. McEachin** – Term: ending 6/30/2017
Governor Appointee – Member of the Virginia Commonwealth’s Attorneys Association
- **David A.C. Long, Esq. (Vice-Chair)** – Term: ending 6/30/2017
Governor Appointee – Criminal defense attorney with special knowledge in the area of forensic sciences

Attachment B

SCIENTIFIC ADVISORY COMMITTEE MEMBERS

(as of October 31, 2016)

- **Linda C. Jackson** – Term: period in office or employment
Director of the Department of Forensic Science
- **Les Edinboro, Ph.D. (Chair)**– Term: ending 6/30/2019
Governor Appointee – Director of a private or federal forensic laboratory located in the Commonwealth
- **Jami St. Clair** – Term: ending 6/30/2019
Governor Appointee – Scientist or other person with education, training or experience in laboratory standards or quality assurance regulation and monitoring
- **Robin W. Cotton, Ph.D.** – Term: ending 6/30/2017
Governor Appointee – Molecular Biologist
- **George C. Maha, Ph.D.** – Term: ending 6/30/2019
Governor Appointee – Population Geneticist
- **Richard P. Meyers** – Term: ending 6/30/2018
Governor Appointee – Forensic Chemist
- **Carl Sobieralski** – Term: ending 6/30/2019
Governor Appointee – Forensic Biologist
- **Maureen C. Bottrell** – Term: ending 6/30/2018
Governor Appointee – Trace Evidence Scientist
- **Vacant*** – Term: ending 6/30/2018
Governor Appointee – Toxicologist certified by the American Board of Forensic Toxicologists
- **Kenneth Zercie (Vice-Chair)**– Term: ending 6/30/2019
Governor Appointee – Member of the Board of the International Association for Identification
- **Travis Spinder** – Term: ending 6/30/2017
Governor Appointee – Member of the Board of the Association of Firearms and Toolmark Examiners
- **Randall E. Beaty** – Term: ending 6/30/2018
Governor Appointee – Member of the International Association for Chemical Testing
- **Jo Ann Given** – Term: ending 6/30/2017
Governor Appointee – Member of the American Society Crime Laboratory Directors

* Alphonse Poklis, Ph.D., a Toxicologist certified by the American Board of Forensic Toxicologists who had served on the Scientific Advisory Committee since its inception in 2005, passed away on September 3, 2016.