

# 2014-16 Strategic Plan

## Department of Forensic Science [778]

### Mission

The Department of Forensic Science's mission is to provide laboratory services in criminal matters in the Commonwealth of Virginia, support the criminal justice system with quality and timely services, and advance the understanding of forensic science in order to promote public safety.

### Vision

Recognized leader in the field of forensic science

### Values

Commitment to:

- Quality
- Integrity
- Impartiality

### Finance

#### Financial Overview

Approximately 95% of DFS operating expenses are paid with general fund dollars. The remaining 5% are paid from federal grants to support overlapping federal and state initiatives for which state funding is not available. Overall, the DFS budget is allocated in the following manner:

67% Personnel expenses – salaries and fringe benefit costs for all Department employees;

12% Laboratory expenses – all items, other than personnel, directly related to performing scientific analysis such as scientific equipment, gases, chemicals, and other supplies;

13% Facilities expenses – direct costs such as utilities, repairs, service contracts, equipment and supplies for operating and maintaining the laboratory buildings;

6% Administrative expenses – costs such as information technology, office supplies, postage, and other necessary items that are not directly related to scientific analysis; and

2% Travel expenses – primarily costs related to court travel and some mandatory training.

#### Biennial Budget

	2015 General Fund	2015 Nongeneral Fund	2016 General Fund	2016 Nongeneral Fund
Initial Appropriation for the Biennium	38,276,833	2,506,996	38,511,247	2,506,996
Changes to Initial Appropriation	181,415	224,313	-546,234	0

*(Changes to Initial Appropriation will be 0 when the plan is created. They will change when the plan is updated mid-biennium.)*

### Customers

#### Anticipated Changes to Customer Base

DFS does not anticipate any changes to its customer base.

#### Current Customer List

Predefined Group	User Defined Group	Number Served Annually	Potential Number of Annual Customers	Projected Customer Trend
State Agency(s),	State law enforcement agencies	13	13	Stable
State Agency(s),	Office of the Chief Medical Examiner	4	4	Stable
Local or Regional Government Authorities	Sheriff's offices and local police departments	310	310	Stable

Organization	Other law enforcement agencies (e.g. private police departments)	50	50	Stable
Federal Agency	Federal law enforcement agencies	15	15	Stable
Local or Regional Government Authorities	Offices of Commonwealth's Attorneys	120	120	Stable
Local or Regional Government Authorities	General District, Juvenile & Domestic Relations District, and Combined District Courts (32 districts)	209	209	Stable
Local or Regional Government Authorities	Circuit Courts (31 circuits)	120	120	Stable

## Partners

Name	Description
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## Agency Goals

### • Provide accurate and timely forensic services

#### Summary and Alignment

This goal addresses the scientific analysis and examination of evidentiary materials submitted by law enforcement agencies and others that can result in valuable investigative information. The results of the analysis may also be used as evidence in court proceedings. The timeliness of analysis is important to avoid delayed investigations, continuances of court cases, or even dismissed cases if the speedy trial provisions in §19.2-243 of the Code of Virginia are not met.

#### Associated State Goal

Public Safety: Protect the public's safety and security, ensuring a fair and effective system of justice and providing a prepared response to emergencies and disasters of all kinds.

#### Associated Societal Indicator

Crime

#### Objectives

##### » Provide analyses of controlled substances evidence

#### Description

This objective addresses the timely and accurate scientific analyses and examination of evidentiary materials, submitted by law enforcement and other authorized agencies, to determine the presence or absence of: 1) substances classified as "controlled" by the Commonwealth of Virginia, 2) substances specifically defined in the Code of Virginia as prohibited although not "controlled" (e.g. marijuana), and 3) certain substances which are immediate precursors to controlled substances.

#### Objective Strategies

- Retain and recruit qualified forensic scientists
- Investigate for efficacy, develop, validate, and implement new technologies
- Provide professional development opportunities

#### Measures

- ◆ Average turnaround time for controlled substances cases that are analyzed and the results reported to the requesting authority (Certificate of Analysis issued)

##### » Provide body fluid identification and DNA analyses

#### Description

This objective addresses the timely and accurate scientific analyses and examination of evidentiary materials, submitted by law enforcement and other authorized agencies, to determine the presence or absence of body fluids and conduct DNA analysis. The results of the analysis are compared to reference samples from victims and suspects or searched against a database of DNA profiles from convicted offenders, arrestees and unsolved cases in order to provide investigative information.

#### Objective Strategies

- Retain and recruit qualified forensic scientists
- Investigate for efficacy, develop, validate and implement new technologies

- Provide professional development opportunities

Measures

- ◆ Average Data Bank operational cost per DNA offender sample
- ◆ Average turnaround time for DNA cases that are analyzed and the results reported to the requesting authority (Certificate of Analysis issued)

» **Provide latent print and impression examinations**

*Description*

This objective addresses the timely and accurate scientific analyses and examination of latent print and impression evidence submitted by law enforcement and other authorized agencies. Prints are compared to any submitted known prints of victims and suspects or searched through the Automated Fingerprint Identification System (AFIS) in order to provide investigative information.

*Objective Strategies*

- Retain and recruit qualified forensic scientists
- Investigate for efficacy, develop, validate and implement new technologies
- Provide professional development opportunities

Measures

- ◆ Average turnaround time for latent prints and impressions cases that are analyzed and the results reported to the requesting authority (Certificate of Analysis issued)

» **Provide firearm and toolmark examinations**

*Description*

This objective addresses the timely and accurate scientific analyses and examination of firearm and toolmark evidence submitted by law enforcement and other authorized agencies. Fired ammunition components are compared to any submitted firearms and/or are searched through the National Integrated Ballistic Information Network (NIBIN) in order to provide investigative information and associations between separate criminal investigations.

*Objective Strategies*

- Retain and recruit qualified forensic scientists
- Investigate for efficacy, develop, validate and implement new technologies
- Provide professional development opportunities

Measures

- ◆ Average turnaround time for firearms and toolmarks cases that are analyzed and the results reported to the requesting authority (Certificate of Analysis issued)

» **Provide toxicological analysis**

*Description*

This objective addresses the timely and accurate scientific analysis of evidentiary materials, submitted by law enforcement and other authorized agencies, to determine: 1) if a substance submitted contains alcohol, 2) the presence or absence of alcohol or other substances that would impair a person's ability to operate a motor vehicle, 3) the presence or absence of substances in a person's system to assist in police investigations, and 4) the presence or absence of substances in post mortem evidence that may have contributed to a person's death.

*Objective Strategies*

- Retain and recruit qualified forensic scientists and toxicologists
- Investigate for efficacy, develop, validate and implement new technologies
- Provide professional development opportunities

Measures

- ◆ Average turnaround time for toxicology cases that are analyzed and results reported to the requesting authority (Certificate of Analysis issued)

- **Provide unbiased testimony in court proceedings**

- Summary and Alignment**

- This goal addresses DFS examiners and technical personnel conveying the results of analyses and examinations through clear, objective, balanced, and easily understood reports, consultations and testimony. This goal directly supports the DFS mission of supporting the criminal justice system.

- Associated State Goal**

- Public Safety: Protect the public's safety and security, ensuring a fair and effective system of justice and providing a prepared response to emergencies and disasters of all kinds.

- Associated Societal Indicator**

- Crime

- Objectives**

- **Advance the understanding of forensic science**

- Summary and Alignment**

- This goal addresses the training provided by DFS to law enforcement officers, attorneys, judges, first responders, sexual assault nurse examiners, forensic nurse examiners, medical examiners, and students of forensic science. The training provided by DFS facilitates the ability of law enforcement to properly locate, recognize, document, collect, preserve, package, and submit physical evidence for analysis, as well as, conduct breath alcohol testing. DFS training also facilitates the ability of first responders and medical personnel to properly recognize, collect, and preserve biological evidence. By facilitating this knowledge, the quality of objective evidence from which to determine guilt or innocence of criminal suspects is enhanced. This goal directly aligns with the DFS mission of advancing the understanding of forensic science.

- Associated State Goal**

- Public Safety: Protect the public's safety and security, ensuring a fair and effective system of justice and providing a prepared response to emergencies and disasters of all kinds.

- Associated Societal Indicator**

- Crime

- Objectives**

- » **Provide crime scene processing and evidence handling training to law enforcement personnel**

- Description*

- This objective addresses the Forensic Training Section's training of law enforcement personnel as crime scene investigators, which includes the Forensic Science Academy. Consistent approach by state and local law enforcement agencies to the collection and preservation of physical evidence enhances the ability of the Department of Forensic Science to provide optimal scientific support services to the criminal justice system.

- Objective Strategies*

- Evaluate and prioritize training courses when developing the annual training plan
        - Select students for upcoming Academy sessions six to nine months in advance whenever possible
        - Survey law enforcement agencies on their training needs

- Measures*

- ◆ Percentage of agencies with active, eligible Forensic Science Academy applicants served during the year

- **Recruit, train, develop and retain qualified scientific staff**

- Summary and Alignment**

- This goal addresses the recruitment, training, development and retention of qualified scientific staff. The Department supports continuing education to maintain skills and expertise of personnel by providing training and access to literature, and encouraging personnel to continually develop and enhance relevant knowledge, skills and abilities.

- Associated State Goal**

- Public Safety: Protect the public's safety and security, ensuring a fair and effective system of justice and providing a prepared response to emergencies and disasters of all kinds.

- Objectives**

- » **Recruit and train scientific staff**

- Description*

- This objective addresses the ability of the Department to attract, hire and train scientific staff members to be qualified examiners in their

respective disciplines. Forensic Scientist Trainee programs in Forensic Biology, Controlled Substances, and Toxicology Sections average 10 to 12 months for completion. At the conclusion of a training program, trainees will have demonstrated their ability to perform quality analysis and will be promoted from a trainee to a qualified forensic scientist. When an examiner previously qualified by another laboratory comes to DFS, the training period is reduced based on the knowledge of that individual. At a minimum, they are trained in DFS' protocols and practices and must demonstrate their ability to perform quality analysis in compliance with Department protocols and to provide expert testimony on the results of their analysis before they become a DFS qualified forensic scientist and are allowed to perform casework.

#### *Objective Strategies*

- Investigate and develop recruitment and training program management and tracking mechanisms

#### Measures

- ◆ Average time to train new forensic scientists in the Forensic Biology, Controlled Substances, and Toxicology Sections

### • **Provide exemplary fiscal accountability and transparency of financial data and transactions**

#### **Summary and Alignment**

This goal directly supports meeting the agency's fiduciary responsibility when using state and federal funds and resources, as well as ensuring DFS is able to fulfill its mission. The goal deals with developing and maintaining appropriate human resources, following responsible procurement and sound financial management practices, and using technology prudently, all in support of the specific processes for carrying out the Department's mission.

#### **Associated State Goal**

Government and Citizens: Be recognized as the best-managed state in the nation.

#### **Associated Societal Indicator**

Government Operations

#### **Objectives**

### • **Provide criminal justice support for enforcement of traffic safety laws, specifically Driving Under the Influence (DUI) cases**

#### **Summary and Alignment**

This goal addresses the training of law enforcement personnel to operate evidential breath alcohol instruments. The availability of licensed operators is important for the enforcement of traffic safety laws. Sufficient licensed operators are necessary to avoid delayed investigations in DUI cases, continuances of those court cases, or even dismissed cases if licensed operators are not available.

#### **Associated State Goal**

Public Safety: Protect the public's safety and security, ensuring a fair and effective system of justice and providing a prepared response to emergencies and disasters of all kinds.

#### **Associated Societal Indicator**

Traffic Fatalities

#### **Objectives**

- » **Provide training on the operation of evidential breath alcohol instruments to law enforcement**

#### *Description*

This objective addresses the Breath Alcohol Section's training of law enforcement personnel in the operation of evidential breath alcohol instruments.

#### *Objective Strategies*

- Retain and recruit qualified forensic scientists to maintain breath alcohol instruments and train law enforcement
- Provide sufficient training opportunities for new and licensed breath alcohol operators
- Investigate new strategies to provide training

#### Measures

- ◆ Number of new and renewing breath alcohol operators trained and licensed

## Major Products and Services

Many DFS products and services are specifically required by the Code of Virginia. This list offers a general description of those products and services and also includes some items not specifically required by Code.

- \* Perform accurate, relevant, reliable, thorough and timely analyses and examinations of evidence.
- \* Convey the results of analyses and examinations through clear, objective, balanced, and easily understood reports, consultations and testimony.
- \* Maintain a DNA testing program and a Data Bank of DNA profiles.
- \* Provide training to law enforcement and medical personnel in the recognition, collection and preservation of evidence during the investigation of crimes.
- \* Provide kits to law enforcement and medical personnel for the collection and submission of evidence to DFS for laboratory examination.
- \* Train and license all law enforcement personnel who administer breath tests. Calibrate and certify instruments and provide related supplies to law enforcement for breath testing to determine blood alcohol content.
- \* Provide facilities to the Office of the Chief Medical Examiner within each DFS laboratory.

## Performance Highlights

An important measure of how DFS is meeting its obligations to the criminal justice system and the Commonwealth's citizens is the turnaround time (TAT) from receipt of evidence to issuance of the case examination report (Certificate of Analysis). When Certificates of Analysis are not available in a timely manner, investigations may be delayed; court cases may have to be continued; and cases may even be dismissed if the speedy trial provisions in §19.2-243 of the Code of Virginia are not met.

DFS has implemented a number of strategies to optimize its ability to process cases in a timely fashion. Some of these strategies have included:

- \* Testing a limited number of specimens submitted in each controlled substances case;
- \* Creating a specialized team of scientists to focus solely on clandestine methamphetamine laboratory cases (these cases take an average of 12 times longer to process than other controlled substances cases, and assigning them to a dedicated group has increased overall productivity and case throughput);
- \* Requiring Controlled Substances scientists to work extensive overtime;
- \* Strategically implementing the use of new laboratory instrumentation that has proven to increase case productivity; and
- \* Working on the implementation of a new, efficient Laboratory Information Management System (LIMS) that, when fully implemented, should reduce the amount of time scientists spend on report writing and other administrative tasks, thereby freeing up more of their time for analytical work.

Despite implementation of the above strategies, the increases in caseload now exceed the Department's ability to complete forensic analyses within current turnaround time (TAT) goals.

## Staffing

Authorized Maximum Employment Level (MEL)	310
Salaried Employees	269
Wage Employees	11
Contracted Employees	0

## Key Risk Factors

The primary risk factor that could prevent the Department from fulfilling its mission is the ability to maintain a sufficient number of scientific personnel.

In September 2007, DFS reached its peak employment level of 301 classified employees. However, in October 2007, DFS submitted the first of several budget reduction strategies that would be implemented over the next four years, which included holding open vacant scientist positions. As additional budget reductions were implemented, the number of classified employees continued to drop until a low point of 264 classified employees was reached in March 2010 (a 12% reduction in staff over 2.5 years). Although most of the decline has been the result of budget reductions, some of the decline is the result of the length of time it takes to fill a vacant position, which can range from months to years. DFS received additional funds to fill vacant scientific positions in the current biennium; however, due to revenue shortfalls, most of this money is no longer available for use in FY15 and some has been permanently eliminated.

As of September 2014, approximately 7% of DFS' funded positions are vacant and in the process of being filled. Also, approximately 16% of current employees are either eligible now or will be eligible to retire within five years.

In an effort to maintain the appropriate level of scientific personnel in each of its disciplines, DFS has implemented multiple strategies, including

(1) hiring and training individuals with the necessary educational credentials but without the practical experience; (2) transferring scientific personnel with appropriate skill sets to related disciplines that are understaffed; (3) using overtime; and (4) utilizing a compensation plan developed in conjunction with the Department of Human Resource Management in order to develop and retain scientific personnel.

## Management Discussion

### General Information About Ongoing Status of Agency

DFS strives to maintain its status as a nationally-recognized leader in the field while supporting the criminal justice system and improving the public's understanding of forensic science. DFS continues to pursue new technologies that can provide cost beneficial advances in case processing time and new types of analysis needed by the criminal justice system.

The value provided by DFS is enhanced when law enforcement officers are able to properly locate, recognize, collect, preserve and submit crime scene evidence that has probative value. In order to facilitate this ability, DFS' Forensic Training Section operates the Virginia Forensic Science Academy (Academy). The Academy is a nine-week school of crime scene technology that provides classroom instruction by qualified forensic experts, evidence collection demonstrations, and numerous practical exercises in simulated crime scenes. The Academy is a rigorous academic program, and the students are evaluated on their class performance, tests, application of recovery techniques, and homework assignments. The Forensic Training Section also offers and facilitates numerous short courses that allow DFS to reach a greater number of law enforcement officers and jurisdictions.

In addition to the Forensic Science Academy, DFS has made an effort to reach out to law enforcement, attorneys, judges, and the public to provide information about the Department and to address questions or concerns raised by these groups. DFS continues to see positive results in the awareness of the use and understanding of forensic science in supporting the criminal justice system from this outreach effort.

### Information Technology

DFS has made significant investments in various information technology products which are specific to the individual scientific discipline where they are deployed. DFS has also made a significant investment in the transformation to the Commonwealth of Virginia (COV) Information Technology Infrastructure managed services contract (VITA/NG Partnership), which was completed in FY13.

DFS currently has two IT initiatives underway that will facilitate more efficient and effective operations.

- Implementation of a new Laboratory Information Management System (LIMS) in order to take advantage of the operational efficiencies including, but not limited to: integration between scientific instruments and MS Office productivity tools; electronic vs. paper storage of scientific documents; improved efficiency in the capture of examination documentation; partial system generation of the Certificate of Analysis and the ability to electronically deliver the Certificate to investigating agencies and Commonwealth's Attorneys. This project is currently in the configuration and data migration phases and the anticipated deployment of the system is Spring 2015.
- Providing certain Breath test records on the DFS website. In June 2014, records pertaining to instrument certification and maintenance from August 2013 forward became available on the DFS website. New records are posted as they become available. DFS is currently working to expand the available records that will be provided via the website.

### Estimate of Technology Funding Needs

#### Workforce Development

DFS has utilized a comprehensive workforce development plan for its scientific personnel that was initially implemented a number of years ago and continues to be modified as necessary. The plan has defined knowledge, skills and abilities that must be demonstrated in order to advance. Every scientist is evaluated annually against the criteria in this plan.

Beginning in 2013, DFS implemented a department goal to provide eight hours of technical continuing education annually for each scientist. Beginning in 2014, DFS implemented a department goal to provide four hours of continuing education to all non-scientist employees. The Department has also implemented mandatory training annually for all supervisors to help provide its managers with the knowledge and skills they need to effectively manage their employees.

#### Physical Plant

DFS owns, operates and maintains four facilities throughout the Commonwealth that are shared with the Department of Health's Office of the Chief Medical Examiner (OCME). The Northern Laboratory in Manassas, opened in 2009, is the newest laboratory. The other three labs are between 14 and 17 years old.

The Eastern Laboratory in Norfolk has space that was vacated several years ago and a multi-phased renovation was completed in the summer of 2014 in order to expand the capacity of its operations.

The Western Laboratory in Roanoke is in the construction phase of a capital expansion-renovation project that will approximately double the square footage of space available to both DFS and OCME. Given a 24 month construction schedule, the project should be substantially complete in mid-2016.

DFS has exceeded capacity for the Central Laboratory in Richmond for several years, resulting in the need to rent space to house several DFS functions until building expansion can provide more cost effective space. A capital budget request for expanding the current facility was submitted and DFS has received funding for detailed planning of this project. The detailed planning process is anticipated to take approximately

two years to complete and the subsequent construction process an additional four years.

Laboratory facilities are significant consumers of energy. In order to reduce energy consumption, DFS entered into an \$11 million Energy Performance Contract with Trane in December 2009 to make certain improvements in DFS' three oldest facilities. Final project improvements were completed in December 2012. The contract and associated financing costs are funded entirely with the savings achieved through reduced energy consumption. An added benefit to this project is the extended useful lifetime of some major building heating and cooling systems components. DFS has begun a second Energy Performance Contract with Trane for \$3 million that will reduce energy consumption in the Northern facility and further reduce energy consumption in the Eastern facility.

## Supporting Documents

Title	File Type
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**Biological Analysis Services [30901]**

**Description of this Program / Service Area**

This service area provides body fluid identification and DNA analysis of evidence for state and local law enforcement agencies, medical examiners, prosecutors, and defense attorneys. This includes laboratory examination, reporting the results, and, as required, providing testimony in courts of law.

**Mission Alignment**

This service area directly supports the Department's mission of providing laboratory services, supporting the criminal justice system, and advancing the understanding of forensic science through its products and services.

**Products and Services**

**Description of Major Products and Services**

Scientific analysis and examination of submitted evidence in Forensic Biology:

- evidence screening for biological fluids or tissue
- short tandem repeat (STR) DNA analysis
- specialized DNA testing (Y-STR and Mitochondrial)

Issue Certificates of Analysis (the results of examination and scientific analysis) and provide explanation of the examinations/analyses and the results when requested

Provide expert witness testimony in courts of law in addition to pre-trial consultations with attorneys for the Commonwealth and the defense

Train medical personnel, law enforcement, attorneys, etc. in the recognition, collection and preservation of biological evidence and the use of forensic results in investigations and trials

Develop, maintain, and provide evidence collection resources (e.g. victim physical evidence recovery kits (PERKs), suspect PERKs, and buccal DNA collection kits)

Maintain a DNA Data Bank as required by the Code of Virginia

Store biological evidence as ordered by the court

**Anticipated Changes**

Since 2011, annual case submissions in this service area have increased approximately 4%, with requests relating to non-person crimes (e.g., burglary) increasing faster than those relating to person crimes. The analyses relating to non-person crimes often involve "touch" evidence, which have a high incidence of complex mixtures of DNA that require more time-consuming statistical calculations. DFS anticipates that demand for this type of testing will continue to increase as technology becomes even more sensitive.

The Forensic Biology Section is evaluating new DNA typing chemistries. This will increase the number of areas of DNA that are tested per case, which typically allows for greater discrimination for sample comparisons. Additionally, computer programs that calculate statistics for DNA mixtures will continue to be evaluated. These statistical calculations will be required on more samples giving the customers an indication of how common or rare a DNA profile would be expected to be found in the population.

**Factors Impacting**

Although the Biological Analysis Service Area has been fortunate to receive the bulk of DFS' federal grant funding, continuing federal funding is less certain after federal FY2015. As there is an offset between the federal grant cycle and the Commonwealth's budget cycle, DFS anticipates that there will be some time for planning if federal grant funds are significantly reduced.

**Financial Overview**

This service area receives the majority of the federal funds obtained by the agency. Therefore, only 80 to 85 percent of the operating expenses for this service area are paid with general fund dollars. The remaining expenses are funded with federal grants that support overlapping federal and state initiatives for which state funding is not available.

Biennial Budget

	2015 General Fund	2015 Nongeneral Fund	2016 General Fund	2016 Nongeneral Fund

Initial Appropriation for the Biennium	9,476,370	2,106,996	9,495,006	2,106,996
Changes to Initial Appropriation	279,135	165,700	135,213	0

**Supporting Documents**

**Title** **File Type**

## Chemical Analysis Services [30902]

### Description of this Program / Service Area

This service area provides chemical analyses of controlled substances, toxicology, and trace evidence for state and local law enforcement agencies, medical examiners, prosecutors, and defense attorneys. This includes laboratory examination, reporting the results, and, as required, providing testimony in courts of law.

### Mission Alignment

This service area directly supports the Department's mission of providing laboratory services, supporting the criminal justice system, and advancing the understanding of forensic science through its products and services.

### Products and Services

#### Description of Major Products and Services

Scientific analysis and examination of submitted evidence in Controlled Substances:

- drug analysis

Scientific analysis and examination of submitted evidence in Toxicology:

- alcohol
- DUI / DUID
- other police investigations (e.g., drug facilitated sexual assaults)
- post-mortem

Scientific analysis and examination of submitted evidence in Trace Evidence:

- explosives (bottle bombs)
- fire debris
- fracture match
- general chemical
- glass
- hair screening
- paint
- primer residue
- synthetic fibers

Issue Certificates of Analysis (the results of scientific analysis and examination) and provide explanation of analyses/examinations and the results when requested

Provide expert witness testimony in courts of law in addition to pre-trial consultations with attorneys for the Commonwealth and defense

Train law enforcement, attorneys, etc., in the recognition, collection, preservation, and handling of evidence and the use of forensic results in their investigations, and trials

Develop, maintain, and provide evidence collection resources (e.g. primer residue kit, and blood collection kit)

#### Anticipated Changes

DFS anticipates that the growth in clandestine methamphetamine lab cases and its impact to the Controlled Substances and Trace Evidence sections will continue.

#### Factors Impacting

Clandestine methamphetamine lab case submissions have increased from approximately 2 cases per month in CY 2009 to 31 cases per month in CY 2013. Each such case takes approximately three days to process.

Since 2011, there has also been a surge in the development of new drug chemicals such as "cannabimimetic agents" and "research chemicals." These new drugs have increased the amount of time that is required to process a sample due to the complexity of differentiating closely related compounds. As such, additional testing is often required to fully identify a compound.

Finally, DFS has obtained a one-time settlement award, which will be used to increase efficiency in all three Chemistry disciplines through the purchase and/or upgrade of instrumentation.

**Financial Overview**

This service area is funded almost entirely through the general fund. A limited amount of federal funding has been obtained by the agency to use for continuing education in all of the service areas.

Biennial Budget

	<b>2015 General Fund</b>	<b>2015 Nongeneral Fund</b>	<b>2016 General Fund</b>	<b>2016 Nongeneral Fund</b>
Initial Appropriation for the Biennium	11,539,163	100,000	11,601,323	100,000
Changes to Initial Appropriation	1,006,180	-68,000	782,906	0

**Supporting Documents**

**Title** **File Type**

## Physical Evidence Services [30904]

### Description of this Program / Service Area

This service area provides scientific analysis and examination of latent print, impression, digital, multi-media, firearm, toolmark, and questioned document evidence for state and local law enforcement agencies, medical examiners, prosecutors, and defense attorneys. This includes laboratory examination, reporting the results, and, as required, providing testimony in courts of law.

### Mission Alignment

This service area directly supports the Department's mission of providing laboratory services, supporting the criminal justice system, and advancing the understanding of forensic science through its products and services.

### Products and Services

#### Description of Major Products and Services

Scientific analysis and examination of submitted evidence in Digital and Multimedia Evidence:

- computer analysis
- mobile device analysis

Scientific analysis and examination of submitted evidence in Firearms and Toolmarks:

- firearms
- ammunition
- ammunition components
- tools/toolmarks
- fracture match
- distance determination
- National Integrated Ballistics Information Network (NIBIN) entry
- serial number restoration

Scientific analysis and examination of submitted evidence in Latent Prints and Impressions:

- impressions
- latent prints

Scientific analysis and examination of submitted evidence in Questioned Documents:

- questioned documents

Issue Certificates of Analysis (the results of examination and scientific analysis) and provide explanation of the examinations/analyses and the results when requested

Provide expert witness testimony in courts of law in addition to pre-trial consultations with attorneys for the Commonwealth and the defense

Train law enforcement, attorneys, etc., in the recognition, collection, preservation, and handling of evidence and the use of forensic results in their investigations and trials

### Anticipated Changes

DFS anticipates the evidence submitted to the Digital and Multimedia Evidence section will continue to change and advance rapidly resulting in continuous upgrades to the tools and technology used in this section along with significant continuing education and training being required of the examiners working in this section.

### Factors Impacting

This service area relies extensively on databases administered by other entities. The Latent Prints and Impressions Section relies on the Virginia Automated Fingerprint Identification System (AFIS), which is administered by the Virginia State Police and the federal Next Generation Identification (NGI), which is administered by the FBI. AFIS and the equipment for using both AFIS and NGI are provided and maintained by the State Police at no cost to DFS.

The Firearms and Toolmarks Section relies on the National Integrated Ballistics Information Network (NIBIN) administered by the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF). The NIBIN software and equipment is supplied by the ATF. DFS has full service systems in the Central Laboratory and the Eastern Laboratory. The Northern lab has a limited system, which allows an examiner to check NIBIN search results; however, all evidence requiring a NIBIN search must be transported to the Central Laboratory for entry into the system. The Western Laboratory does not have a NIBIN system; therefore, all evidence requiring a NIBIN search must be transported to the Central laboratory for both entry and

checking of the results. A "hit" to the NIBIN database can provide an investigative lead to link multiple crime scenes through the firearm or can link evidence from a crime scene to a recovered firearm. Transport of evidence from the Northern and Western laboratories for NIBIN searches results in additional time before any investigative leads can be provided to the submitting agency.

**Financial Overview**

This service area is funded almost entirely through the general fund. A limited amount of federal funding has been obtained by the agency to use for continuing education of staff in each of the disciplines covered by this service area.

Biennial Budget

	<b>2015 General Fund</b>	<b>2015 Nongeneral Fund</b>	<b>2016 General Fund</b>	<b>2016 Nongeneral Fund</b>
Initial Appropriation for the Biennium	7,449,843	25,000	7,537,843	25,000
Changes to Initial Appropriation	447,628	45,552	258,204	0

**Supporting Documents**

**Title** **File Type**

**Training Services [30905]****Description of this Program / Service Area**

This service area provides training for customers and stakeholders, as well as, technical support of law enforcement for Driving Under the Influence (DUI) analysis, and it consists of the Forensic Training and Breath Alcohol Sections.

The Forensic Training Section is responsible for operating the Forensic Science Academy and providing other technical instruction to law enforcement. The Breath Alcohol Section maintains and certifies evidential breath test instruments, provides for the training and licensing of breath test instrument operators, and responds to requests for records and documentation related to breath alcohol analysis.

**Mission Alignment**

This service area directly supports the Department's mission of providing laboratory services, supporting the criminal justice system, and advancing the understanding of forensic science through its products and services.

**Products and Services****Description of Major Products and Services**

The Department's Breath Alcohol Section ensures that statewide quality assurance and operational standards are followed by the Commonwealth's law enforcement agencies when administering breath alcohol tests. This section provides the following products and services:

- Breath test instruments including maintenance, repair, supplies, and certification for accuracy
- Training and licensing of breath test instrument operators for the evidential breath analysis to determine alcohol content of blood
- Expert witness testimony in courts of law in addition to pre-trial consultations with attorneys for the Commonwealth and the defense
- Processing Subpoenas *Duces Tecum* and Freedom of Information Act (FOIA) requests for records of breath test instrumentation
- Web access to breath test instrument records
- Training attorneys and law enforcement personnel in the proper use of breath alcohol instruments and the use of breath alcohol test results in trials

The Forensic Training Section provides on-going training to law enforcement personnel that is essential to the quality of analysis performed by the various disciplines within the Department. This Section also provides training to attorneys and other stakeholders in evidence handling. Law enforcement personnel receive training in the recognition, collection, preservation, and handling of evidence through:

- The Forensic Science Academy (FSA), a nine-week program providing classroom instruction by forensic experts, evidence collection demonstrations, and numerous practical exercises in simulated crime scenes
- Continuing education for the FSA alumni
- Short courses and workshops addressing current trends, as well as, providing basic and advanced technical instruction

**Anticipated Changes**

Web-based training opportunities will be investigated for a limited number of breath alcohol operator and forensic training short courses that require minimal hands on exercises for effective teaching.

**Factors Impacting**

This service area relies extensively on outside agencies to provide classroom facilities when training occurs outside of the Central and Northern Laboratories. The Eastern and Western Laboratories do not have adequate space and/or parking available. Due to extended travel distances for law enforcement, the Breath Alcohol Section also conducts training in additional areas outside of the Laboratories.

Financial assistance is given to law enforcement agencies for Breath Alcohol training through grant funded reimbursements. This grant funding is contingent upon yearly availability and approval of funds by the Virginia Department of Motor Vehicles (DMV). No financial assistance is available for Forensic Academy students, which rely upon their agencies to fund the nine weeks of travel, lodging, and per diem expenses.

**Financial Overview**

This service area is funded almost entirely through the general fund. Grant funding through DMV has been obtained to reimburse lodging and per diem expenses for law enforcement personnel to attend breath alcohol operator classes. Also, a limited amount of federal funding has been obtained by the agency to use for continuing education of staff in this service area.

**Biennial Budget**

	2015 General Fund	2015 Nongeneral Fund	2016 General Fund	2016 Nongeneral Fund
Initial Appropriation for the Biennium	1,564,380	275,000	1,564,380	275,000

Changes to Initial Appropriation	147,464	81,061	125,480	0
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**Supporting Documents**

**Title** **File Type**

## **Administrative Services [30906]**

### **Description of this Program / Service Area**

This service area provides the overall direction and management of the agency. It also provides all support services to the agency such as lab safety, facility operation and maintenance, information technology, legal resources, human resources, grant administration, purchasing, accounts payable, financial reporting and budgeting.

### **Mission Alignment**

This service area directly aligns with DFS' mission by providing overall management and direction of the Department and the support necessary to accomplish its objectives.

### **Products and Services**

#### **Description of Major Products and Services**

Agency Management and Direction - responsible for strategic planning, continuity of operations planning, agency funding, budgeting / resource allocation, and policy alignment; coordinate and process responses to subpoenas duces tecum, discovery motions, and FOIA requests; provide legal advice to the agency, as well as, training and guidance to agency staff, attorneys, judges, medical examiners, legislators, and law enforcement; and provide administrative support and resources for the Forensic Science Board and the Scientific Advisory Committee.

Facility Management – responsible for the operation, maintenance, and security of the four laboratory buildings which house DFS operations, Office of the Chief Medical Examiner operations, and certain other programs of the Department of Health; work with Department of Mines Minerals and Energy (DMME) to ensure agency compliance with the Governor's Executive Order on energy efficiency and usage; oversee and manage all construction or renovation performed within a DFS facility, including working with the Department of General Services (DGS) to obtain all necessary permits and approvals; and maintain building information in the state's Virginia Asset Property System (VAPS).

Human Resources – ensure agency compliance with Federal and State employment laws; ensure agency compliance with State policies issued by the Department of Human Resource Management (DHRM); assist agency personnel in the areas of: recruitment, employee benefits, employee relations, performance management training and administration.

Procurement Services – ensure agency compliance with applicable procurement and related regulations issued by the Department of General Services (DGS), the Virginia Information Technology Agency (VITA), and the Department of Accounts (DOA); administer the Small Purchase Charge Card (SPCC) program; develop & administer the agency's SWaM Plan and report results as required by the Governor to maximize usage of Small, Women, and Minority vendors; purchase goods and services that cannot be purchased via the normal SPCC program; develop and renew purchasing contracts in accordance with State best practices in order to obtain the best pricing possible in addition to maximizing the use of SWaM vendors and making the process of obtaining necessary scientific supplies as efficient as possible; serve as Agency Security Officer for the State's Procurement System (eVA) and train agency personnel on the proper and efficient use of eVA; oversee surplus property disposal for the agency; and perform Transportation Officer duties in accordance with Fleet Management guidelines.

Information Technology – ensure agency compliance with all state, federal, and agency specific information technology laws and regulations and related policies and procedures; serve as agency liaison with the Virginia Information Technology Agency (VITA) and the IT Partnership; provide application support for agency specific applications; provide hardware, software, and firmware support for assets specifically used for scientific analysis and examination; and manage computer security.

Financial Management – ensure agency compliance with financial and related policies and procedures issued by the Department of Accounts (DOA), the Department of Planning and Budget (DPB), the Department of General Services (DGS), the Department of Treasury (TRS), the Department of Human Resource Management (DHRM), the Virginia Information Technology Agency (VITA), and the Virginia Retirement System (VRS); process payments to vendors for goods and services and process payments to employees for reimbursement of travel expenses; ensure all payments are properly documented and coded; certify payroll each pay period; perform Security Officer duties for central agency systems; develop and monitor internal agency budgets; receive and deposit checks; ensure proper internal controls are in place and documented in order to protect Commonwealth assets; properly record assets in the state's Fixed Asset Accounting Control System (FAACS) and leases in the state's Lease Accounting System (LAS); prepare and submit monthly and annual financial reports; prepare and submit decision packages to DPB; monitor and report capital outlay expenses and prepare necessary capital outlay progress forms and reports for DGS; and prepare and submit the Maintenance Reserve plan.

### **Anticipated Changes**

The Commonwealth is implementing a new accounting system, which will replace the Commonwealth Accounting and Reporting System (CARS) that has been in use for the last three decades. Although training has been provided on the new CARDINAL accounting system, it will be challenging for current staff to implement and begin utilizing it in Q2 FY15.

### **Factors Impacting**

There are numerous state and federal entities that promulgate laws, regulations, policies, procedures, and reporting requirements that DFS must

adhere to. There are also numerous entities that perform audits or reviews of our operations to ensure that we are complying with each of these mandates.

**Financial Overview**

This service area is funded almost entirely through the general fund.

Biennial Budget

	<b>2015 General Fund</b>	<b>2015 Nongeneral Fund</b>	<b>2016 General Fund</b>	<b>2016 Nongeneral Fund</b>
Initial Appropriation for the Biennium	8,247,077	0	8,312,695	0
Changes to Initial Appropriation	-1,698,992	0	-1,848,704	0

**Supporting Documents**

**Title** **File Type**