



NORTH CAROLINA  
STATE CRIME LABORATORY  
FY2017 - 2018 Annual Report

North Carolina Criminal Justice Information Network Governing Board

January 16, 2019

Raleigh, NC

# Agenda

Background / Lab Landscape

Director's Comments

Technical Operations Update

Court Coordination

Sexual Assault Evidence Collection Kit Tracking and Inventory  
Management System (STIMS)

Outsourcing Update

Closing Comments / Questions

**North Carolina State Crime Laboratory Mission:**

*Conduct the highest quality, technically proficient forensic analysis in a timely manner and provide impartial expert witness testimony.*

# We are the NC State Crime Lab

**Not** the SBI Crime Lab

(Separated by the Legislature in 2013)

So what?

Independent of Law Enforcement

Neutral to the Courts: Truth through Science

We discuss cases with Prosecutor and Defense

Mail, subpoenas and court orders to the SBI Lab are delayed...

# JOHN A. BYRD

- Appointed June 2, 2014
- 23 + Years—Forensics, Manager in Digital Evidence, Latent Evidence, Forensic Biology (DNA), DNA Database
- Operation Iraqi Freedom Veteran
- Brigadier General (Retired)-North Carolina National Guard



# FORENSIC ANALYSES CONDUCTED:

- **Digital Evidence --computers, cellphones, audio, video, encryption bypass**
- **DNA Database—Process and Upload of Convicted Offender and Arrestee Samples; maintenance of State DNA Database**
- **Drug Chemistry--controlled substances**
- **Firearms--weapons, ammunition**
- **Forensic Biology--body fluids, DNA testing**
- **Latent Evidence--fingerprints, palm prints, footprints, footwear, tire impressions**
- **Toxicology--controlled substances; alcohol/drugs in blood/urine**
- **Trace Evidence--hair, fiber, glass, paint, headlight filaments, gunshot residue, explosives and fire debris**

# Crime Lab Achievements

## Quality Assurance

- Laboratory Director with science background
- ISO/IEC 17025 Accreditation
- Each analyst individually certified
- DNA Quality Assurance Audit
- Forensic Science Advisory Board
- Lab Legal Counsel
- Ombudsman



# Crime Lab Achievements

## Transparency & Awareness

- Forensic Advantage (Lab Information Management System) enhances transparency for users
- Tours of Laboratory Facilities for judicial and defense stakeholders
- Customer Feedback through formalized court reports & annual survey

# Crime Lab Achievements

## Efficiency

- Lean Six Sigma Project
- Identification of resolved cases / analysis to be returned via Forensic Advantage (STOPWORKS)
- Case management guidelines
- Robotic Technology
- Training by outside experts

# Crime Lab Achievements

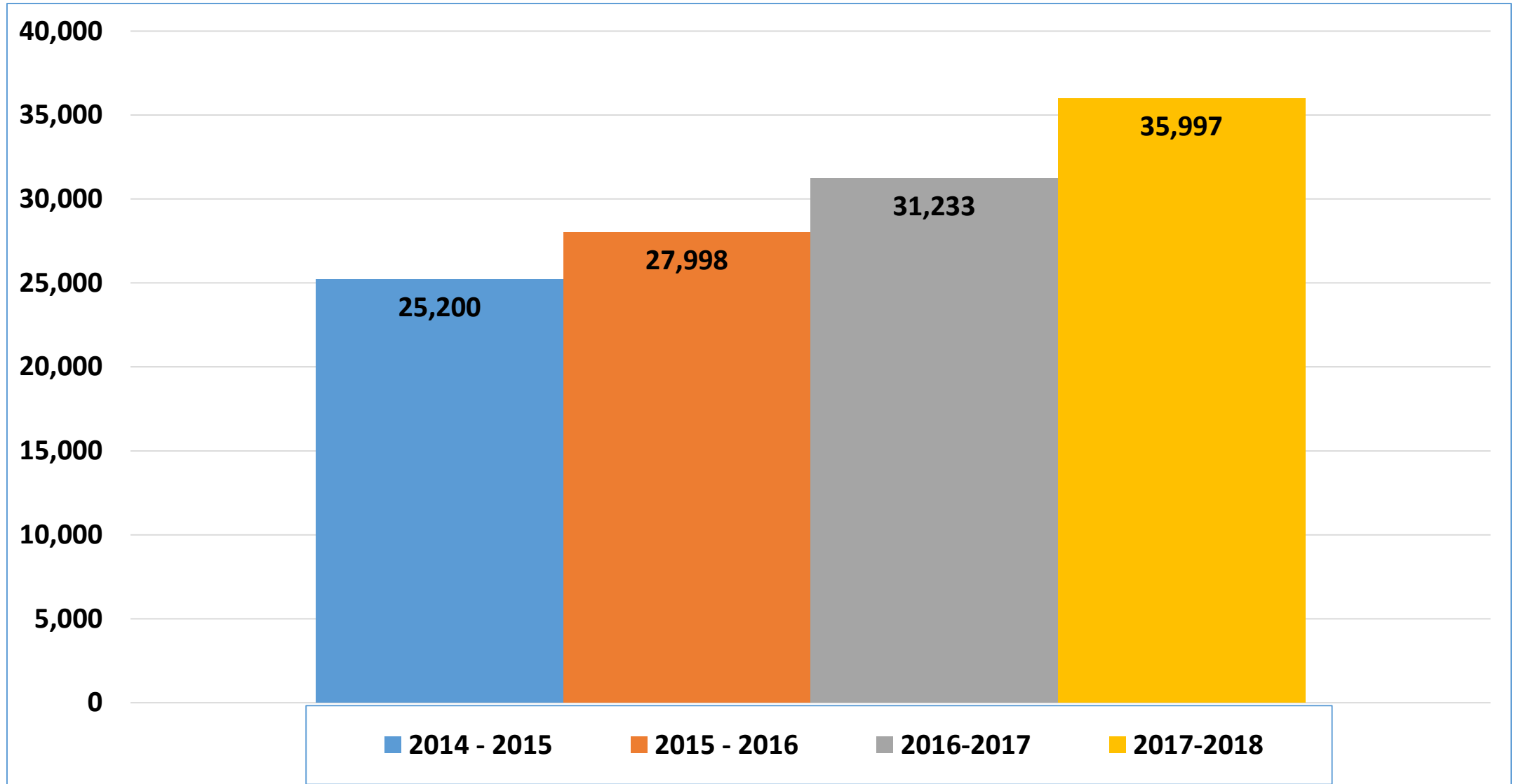
## Collaboration

- Court Scheduling
- School of Government Crime Lab Working Group
  - 17 recommendations
- Training for Conference of District Attorneys & Defense Attorneys
- Local law enforcement / DA evidence submission training
- Judicial Education trainings with School of Government
- IT: GDAC (North Carolina Government Data Analytics Center)

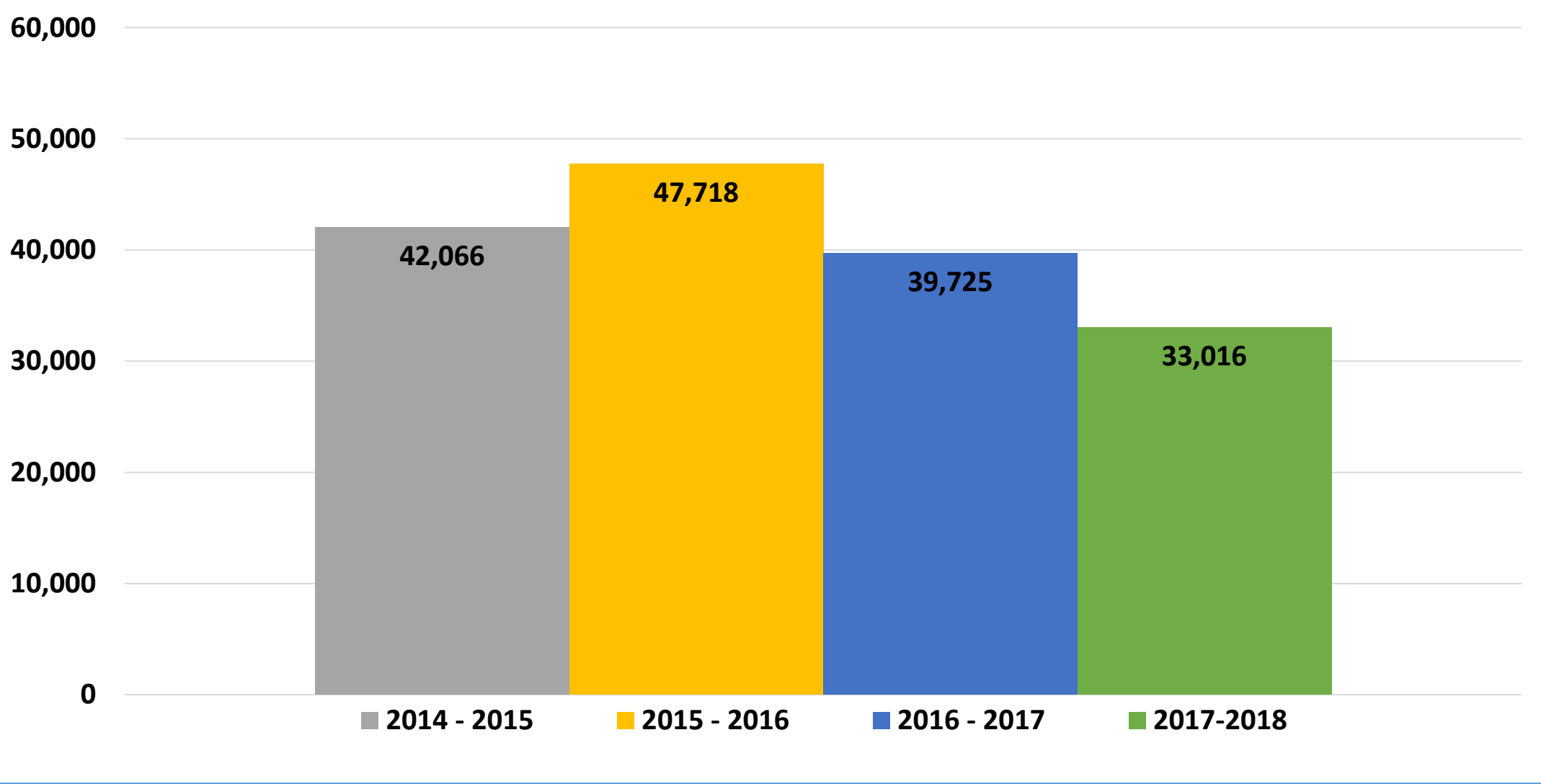
# Technical Operations Update



# Annual Case Submissions

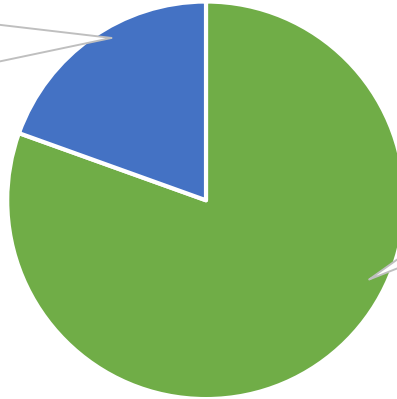


# Annual Case Record Completions



**FY 2017-2018 Scientific Supply Costs  
DNA vs Non-DNA Disciplines  
Total = \$1.78 Million**

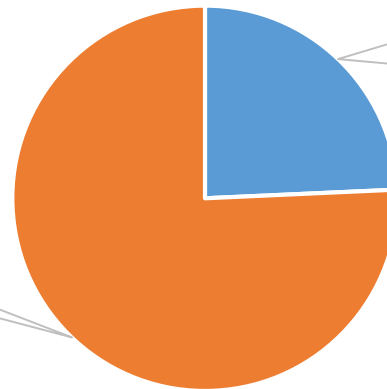
**Scientific Supplies for Non-DNA  
Disciplines, \$348K, 20%**



**Scientific Supplies for DNA,  
\$1.43M, 80%**

**FY 2017-2018 Scientific Supply Funds  
General Appropriations -vs- Grants  
Total = \$1.78 Million**

**Scientific Supplies - Grant  
Funding, \$1.35M, 76%**



**Scientific Supplies - General  
Appropriations, \$433K, 24%**

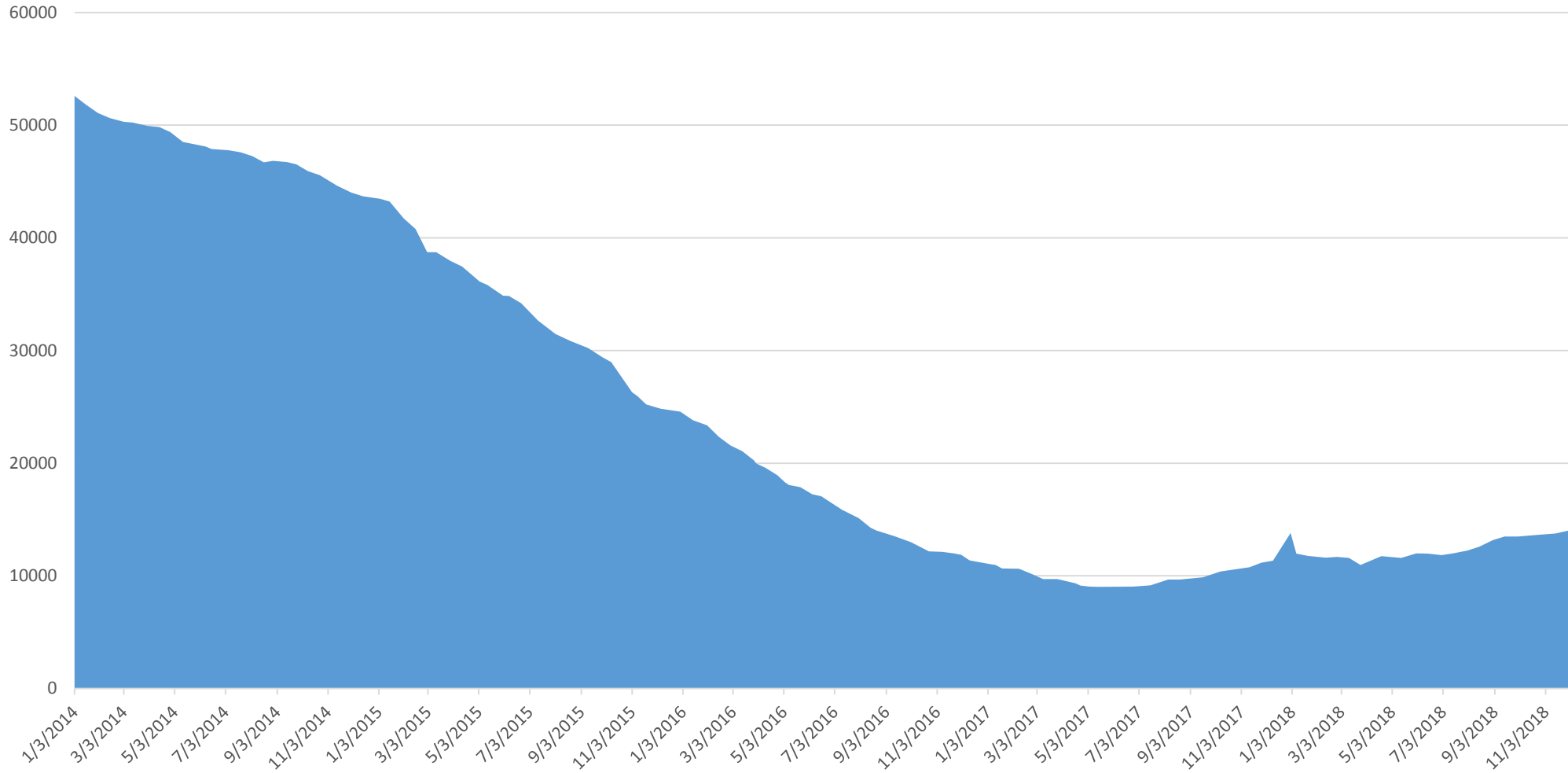
## Project FORESIGHT Annual Report, 2016-2017

### National Percentile for Cost per Case by Investigative Area

Area of Investigation	25th percentile	Median	75th percentile	NC State Crime Lab
Toxicology ante mortem (excluding BAC)	\$583	\$736	\$1,209	\$902
Blood Alcohol	\$110	\$177	\$444	\$71
Digital evidence -Audio & Video	\$896	\$11,978	\$32,934	\$19,417
DNA Casework	\$1,306	\$1,885	\$3,295	\$1,566
DNA Database	\$42	\$103	\$178	\$100
Drugs -Controlled Substances	\$301	\$492	\$671	\$261
Explosives	\$8,378	\$16,064	\$32,736	\$10,553
Fingerprints	\$521	\$884	\$1,468	\$1,907
Fire analysis	\$1,328	\$2,717	\$4,047	\$695
Firearms and Ballistics	\$1,050	\$1,880	\$3,702	\$1,538
Gun Shot Residue (GSR)	\$2,530	\$3,535	\$4,945	\$640
Marks and Impressions	\$4,674	\$7,786	\$13,743	\$2,207
Serology/Biology	\$997	\$1,956	\$3,458	\$1,235
Trace Evidence	\$3,198	\$4,832	\$8,507	\$4,478

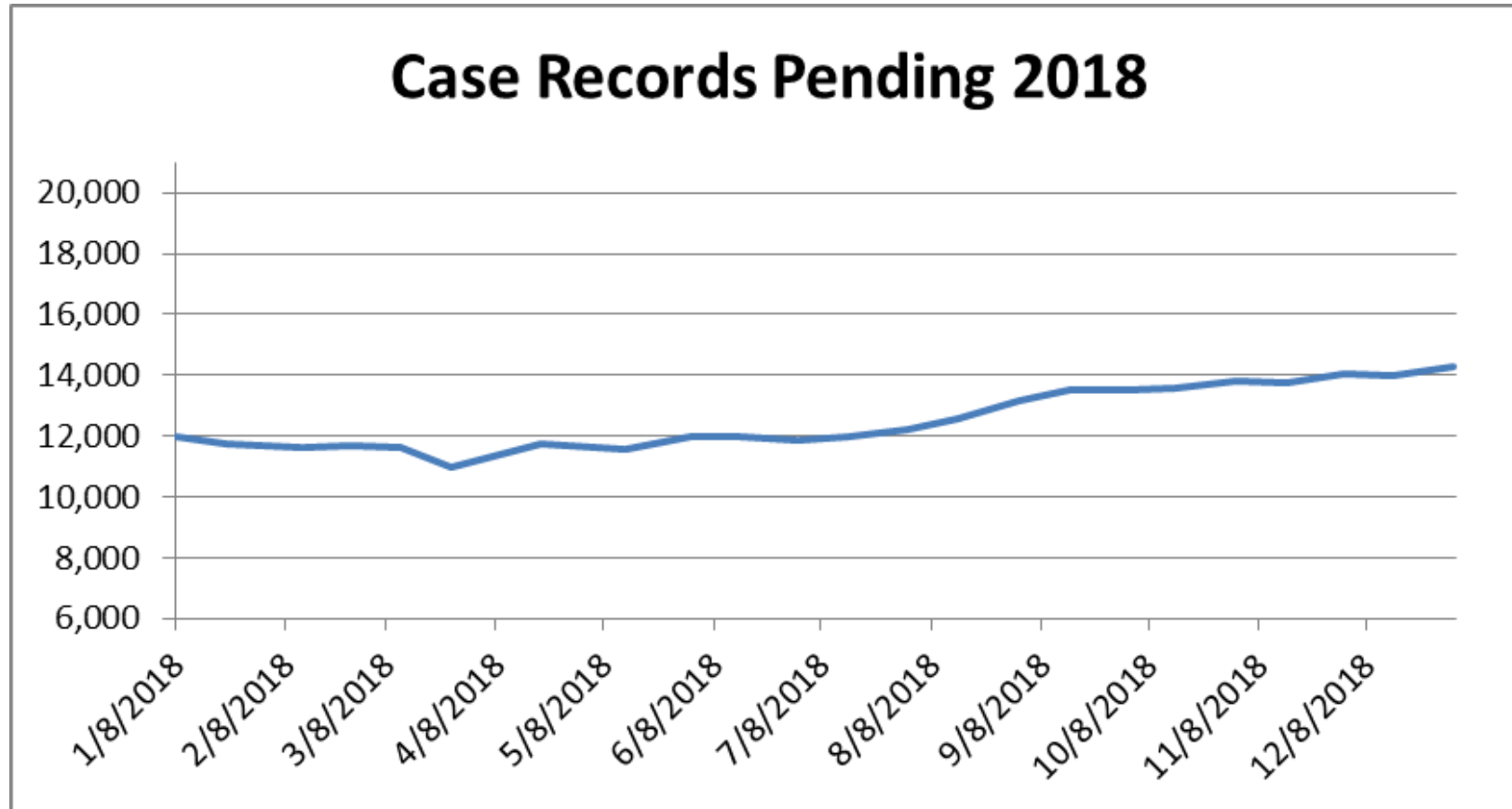


# Jobs Pending: Trends



# Caseload

1/1/2019– 14,275



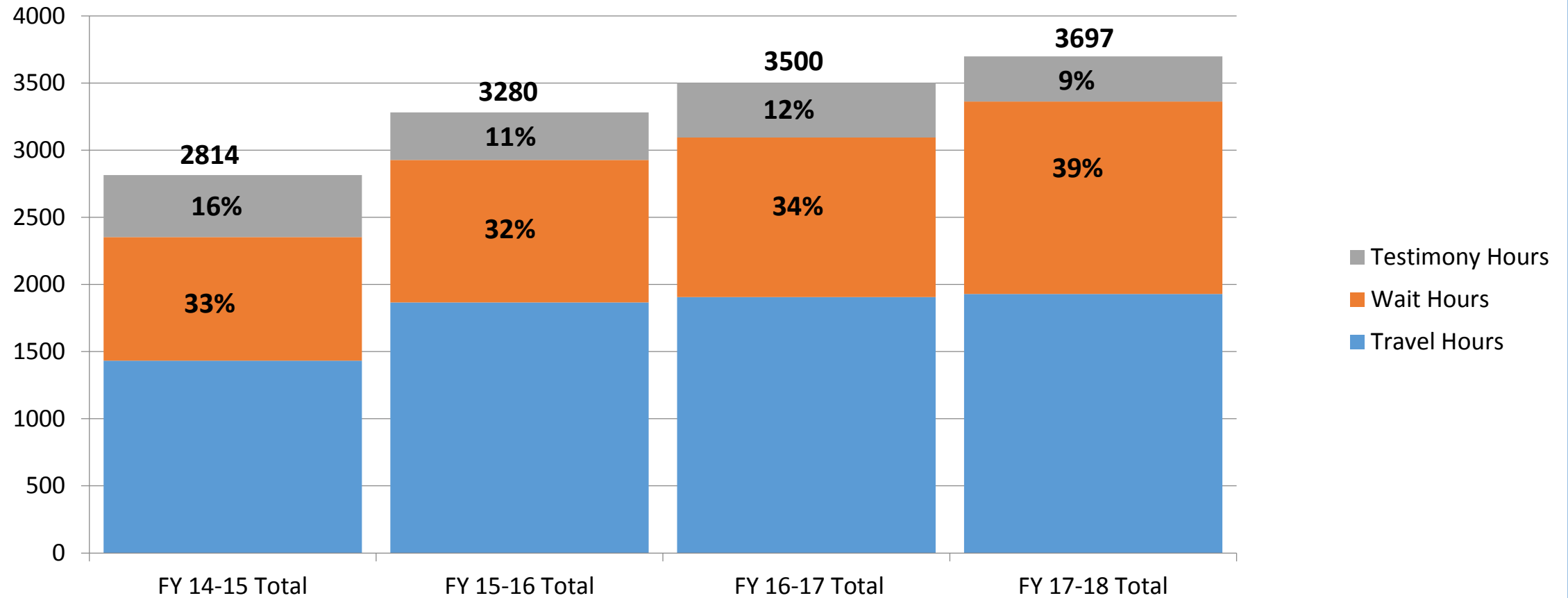
# Technical Operations Snapshot

- Laboratory Totals 14,275 (Inventory as of 1-4-2019)
- Lead Time (the time the customer feels) – Lab average of 176 days
- Rush program that can get most of our disciplines complete within 30 days or less for public safety needs.

# Forensic Biology Updates

- 3,395 case records completed
- 501 CODIS hit notifications issued in 2018
- “Direct-to-DNA” – saving time and resources; creating efficiencies
- DOJ and SCL notified of \$2 million Sexual Assault Kit Initiative grant award from the National Institute of Justice of which 50% is for testing.

# Court Testimony Hours 2014-2018



# Sexual Assault Evidence Collection Kit Tracking and Inventory Management System (STIMS)

Mandated by S.L. 2018-70



# Compliance with S.L. 2018-70

- Created and established SAECK Tracking and Inventory Management System (STIMS)
  - Live on October 1, 2018
- Served on DPS SAECKs Working Group

**North Carolina Department of Public Safety**  
Sexual Assault Evidence Collection Kits Working Group

*Strategic Plan, Findings, and Recommendations*  
To the North Carolina General Assembly Joint Legislative  
Oversight Committee on Justice and Public Safety



Secretary Erik A. Hooks  
December 1, 2018  
Pursuant to N.C. Session Law 2018-70

# STIMS is INVOLUNTARY- (Live on October 1, 2018)

- STIMS <https://www.sexualassaultkittracking.ncdoj.gov/SexualAssaultKitTracking/>
- STIMS Registered Users – 672 Law Enforcement Officers and 453 medical personnel
- 65 kits in custody of SCL in the system. (4-CMPD Lab)
- 577 kits in STIMS with a collection date after 10/1/2018.





## Web Portal

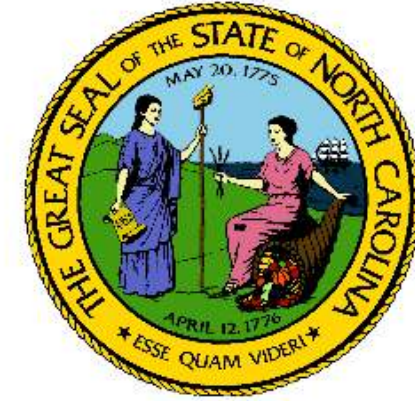
### North Carolina Sexual Assault Evidence Collection Kit Tracking and Information Management System (STIMS)



This website enables tracking of sexual assault evidence collection kits in the State of North Carolina in compliance with [N.C. Gen. Stat. § 114-65](#), which was enacted into law through Session Law 2018-70 (HB 945).

*"Sexual assault evidence collection kit" means a set of materials, such as swabs and tools for collecting blood samples, used to gather forensic evidence from a victim of reported sexual assault and the evidence obtained with such materials.*

[Resources for Survivors and System Users](#)



### Instructions

Victims of sexual assault can view the history and current status of their sexual assault evidence collection kit by entering the sexual assault evidence kit tracking # in the "serial number" box above and clicking the adjacent search button with the magnifying glass icon (🔍)

Authorized medical providers, law enforcement agencies, prosecutors, and lab personnel should select "Login" and enter their unique Username and Password to manage the status of sexual assault evidence kits under the jurisdiction of their agency.

# Outsourcing Update

Outsourcing for previously untested SAECKs identified in the 2017  
Statewide Audit is currently Voluntary  
(SCL is testing current cases)



# Outsourcing is **VOLUNTARY**

- 1018 SAECKs Requested for outsourcing
- 909 SAECKs approved for testing
- 503 completed by the vendor labs
- 291 negative
- 84 CODIS Hits to date

# Agencies Outsourcing through the SCL

- Albemarle PD
- Asheville PD
- Durham PD
- Forsyth County SO
- Greenville PD
- Hickory PD
- High Point PD
- Onslow County SO
- Orange County SO
- Stanly County SO
- Winston Salem PD
- Wilmington PD
- Guilford County SO, Greensboro PD, and Raleigh PD have met with the SCL to initiate outsourcing.

# Expansion Request

***The SCL has worked over four years to gain continuous process improvements using Lean Six Sigma efficiency methodology, advanced computerized systems, increased robotic instruments, streamlined evidence management processes, strategic redistribution of casework and staff and improved coordination with the courts and our partners in the criminal justice system. The SCL has reached a point, however, in which continued progress can only be gained with additional resources.***

- 12 Scientists (R)
- \$3 million per year over the next two years for SAECK Outsourcing (NR)

# Questions?

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