NORTH CAROLINA
STATE CRIME LABORATORY
FY2015/2016 Annual Report

North Carolina Criminal Justice Information Network
Governing Board
Thursday, March 30, 2017
Raleigh, NC
Agenda

Quality & Transparency
Case Submissions and Completions
Process Improvements
Expansion Requirements
Fiscal Resource Needs Identification
Video Testimony Pilot Report

Our Mission:
Conduct the highest quality, technically proficient forensic analysis in a timely manner and provide unbiased expert witness testimony for the Criminal Justice Community.

Our Purpose
Truth through Science so Justice is served.
FY 15/16 Highlights

• Case inventory and Turnaround Times (TAT) continues to drop
  – FY 15-16 significant increase in submissions
• Vacancy rate is at or lower than other agencies
• Toxicology Outsourcing contract is meeting expectations; winding down
• New Western Lab on time and under budget
• Transparency and Accountability
• Video testing project mock court case complete
Highest Forensic Science Quality Standards

Laboratory Accreditation

Forensic Scientist Certification
Submissions
Completions
Trends
Turnaround Time (TAT)
Rush Requests
DNA Database
Annual Case Record Submissions

- 2012 - 2013: 35,124
- 2013 - 2014: 28,532
- 2014 - 2015: 25,200
- 2015 - 2016: 27,998
Annual Case Records Completed

- 2012 - 2013: 19650
- 2013 - 2014: 33258
- 2014 - 2015: 42066
- 2015 - 2016: 47718
Technical Operations- Overall Case Trends through 6/30/16

Total Jobs Pending

47.8% decrease from prior FY

32,661
17,060
Exams Completed by Quarter

2014 Quarterly Average: 4,076
2015 Quarterly Average: 6,533
2016 Quarterly Average: 8,475
Total Jobs Pending 03/10/2017

81.5% decrease since 1/3/2014
Lead Time (LT) versus Average Turnaround Time (TAT)

LT = Queue Time + Analysis Time (aka TAT)


<table>
<thead>
<tr>
<th></th>
<th>Lead Time</th>
<th>Average Turnaround</th>
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<tbody>
<tr>
<td>1Q2014</td>
<td>635</td>
<td>533</td>
</tr>
<tr>
<td>2Q2014</td>
<td>640</td>
<td>533</td>
</tr>
<tr>
<td>3Q2014</td>
<td>658</td>
<td>562</td>
</tr>
<tr>
<td>4Q2014</td>
<td>699</td>
<td>574</td>
</tr>
<tr>
<td>1Q2015</td>
<td>768</td>
<td>651</td>
</tr>
<tr>
<td>2Q2015</td>
<td>683</td>
<td>585</td>
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<tr>
<td>3Q2015</td>
<td>636</td>
<td>555</td>
</tr>
<tr>
<td>4Q2015</td>
<td>563</td>
<td>494</td>
</tr>
<tr>
<td>1Q2016</td>
<td>454</td>
<td>390</td>
</tr>
<tr>
<td>2Q2016</td>
<td>369</td>
<td>300</td>
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<tr>
<td>3Q2016</td>
<td>274</td>
<td>220</td>
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<tr>
<td>4Q2016</td>
<td>243</td>
<td>180</td>
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4/7/2017 

NC State Crime Laboratory
DNA Database

• **Record 456 hits** to the DNA Database
• Over 300,000 DNA profiles
• G.S. 15A-266.3A authorized the collection of DNA profiles from those arrested for 35 additional offenses to include all violent felonies.
• Duplicate sample submissions around 20%
• Expungement workload continues to rise
Process Improvements
Court Testimony
Judicial Efficiencies
Toxicology Outsourcing
Stop Works

June 2009 Impact of
Melendez-Diaz v. Massachusetts
Court Testimony Hours 2012-2016

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Testimony Hours</th>
<th>Wait Hours</th>
<th>Travel Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 12-13 Total</td>
<td>2735</td>
<td>9%</td>
<td>39%</td>
</tr>
<tr>
<td>FY 13-14 Total</td>
<td>2576</td>
<td>9%</td>
<td>33%</td>
</tr>
<tr>
<td>FY 14-15 Total</td>
<td>2814</td>
<td>16%</td>
<td>33%</td>
</tr>
<tr>
<td>FY 15-16 Total</td>
<td>3280</td>
<td>11%</td>
<td>32%</td>
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- **Testimony Hours**
- **Wait Hours**
- **Travel Hours**
• Memorandum of Agreement (MOA)
  – 17 recommendations
• 26 Judicial Districts have adopted the MOA or modified MOA (As of 1/4/2016)
• 12 are pending finalization
• 12 have made no indication to adopt

• Stop Work notifications are addressed in 5 of 17 recommendations.
• Goal = Quality and Timely Analysis
Toxicology Outsourcing

• 5,019 cases outsourced; 25 Batches sent.
• Total funds spent to date $1,865,541.03
• AG has approved moving forward with Sexual Assault Kit testing
  – Kits older than one year sitting in LEAs
  – Request for Proposal (RFP) posted 3/21/17
Stop Works

- 43 of 44 DAs either fully or partially participating
- Some DAs have changed internal business processes to help us eliminate inflated caseloads. This efficiency opportunity helps the State have a more accurate workload assessment.
Video Testimony Pilot
Greensboro, NC

May 26, 2016
Chief District Judge H. Thomas Jarrell, Presiding
Expansion

Western Regional Laboratory
Fiscal Resources

Unfunded Mandates

2011 Forensic Science Act
Unfunded Mandates from 2011
Forensic Science Act

• Forensic Science Advisory Board
• Ombudsman
• Laboratory Accreditation
• Scientist Certification
  — Training
  — Recertification

“Continuing external education in the disciplines in which analysis is performed is critical for the professional development of forensic scientists and a requirement for continued certification.”*

*Quote from FSAB letter to NCGA dated 11 February 2016
Scientific Equipment

- $13.5 million scientific equipment inventory
- $64,680 annual replacement budget
- Industry standard - replace scientific equipment every five years
Operational Expenses

• Certified Budget for operating expenses for FY15-16: $3,864,007 ($750k is non-recurring)

• Actual operating expenses for FY15-16: $5,019,021
  • Δ made up in carry forward funding and lapse salary

• Certified Budget for FY 16-17 is $7,393,530 ($3.925M is non-recurring)
Expenditures for Scientific Supplies
FY 11/12 – FY15/16

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Expenditures</th>
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<tbody>
<tr>
<td>FY11/12</td>
<td>$329,578</td>
</tr>
<tr>
<td>FY12/13</td>
<td>$297,309</td>
</tr>
<tr>
<td>FY13/14</td>
<td>$469,630</td>
</tr>
<tr>
<td>FY14/15</td>
<td>$633,524</td>
</tr>
<tr>
<td>FY15/16</td>
<td>$600,645</td>
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DOJ Receipts for $600 Crime Lab Fees

FY 08-09 FY 09-10 FY 10-11 FY 11-12 FY 12-13 FY 13-14 FY 14-15 FY 15-16

Thousands

$1,600.00 $1,400.00 $1,200.00 $1,000.00 $800.00 $600.00 $400.00 $200.00 $\$-$

42% decrease 36% decrease

$1,404
DOJ Budget Requests

- Finance unfunded mandates from the 2011 Forensic Science Act
  - Scientist certification, Laboratory accreditation, and Forensic Science Advisory Board
- Appropriate funding for 6.0 FTE positions
  - 5.0 Forensic Scientists – current court receipt funding source is unreliable
  - 1.0 Ombudsman – another unfunded mandate from the Forensic Sciences Act
- Establish a Special Reserve Fund – No Cost
  - Allows the Lab to lease scientific equipment – a best practice for Crime Labs nationally.
- Fund replacement of Outdated Equipment
  - Industry standard for replacing Lab equipment is 5 years.
Program Updates

- Toxicology Outsourcing – Concluded
- Testing of Untested Sexual Assault Kits older than one year
- CODIS Hit Follow Thru
- Recommend Adopting UNC SOG MOA
  - Reduce wait time for scientists
Skin in the Game

Transparency and Accountability
Recommendation 4:
To improve the scientific bases of forensic science examinations and to maximize independence from or autonomy within the law enforcement community, Congress should authorize and appropriate incentive funds to the National Institute of Forensic Science (NIFS) for allocation to state and local jurisdictions for the purpose of removing all public forensic laboratories and facilities from the administrative control of law enforcement agencies or prosecutors’ offices.
Conclusion

http://ncdoj.gov/crime-lab.aspx

Director John Byrd jbyrd@ncdoj.gov

North Carolina State Crime Laboratory
Back Up Slides
Laboratory Accreditation

- Sustained ISO/IEC 17025 Accreditation
- Audit by ANAB
- Audit by VA State Crime Laboratory
- DNA Quality Assurance Standards (QAS)
- In compliance with all established standards
Scientist Certification
All eligible scientists independently certified

*International Association for Identification (IAI)*

*American Board of Criminalistics (ABC)*

*Association of Firearm and Tool Mark Examiners (AFTE)*

*American Board of Forensic Toxicologists (ABFT)*

*EnCase Certified Examiner (EnCE)*

*International Association for Property and Evidence (IAPE)*