



Forensic Technology Center of Excellence

STATE FORENSIC SCIENCE COMMISSIONS

Final Report



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Information provided herein is intended to be objective and is based on data collected during primary and secondary research efforts available at the time this report was written. The information provided herein is intended to provide an overview and guide; it is not intended as an exhaustive summary. NIJ Award Number 2011-DN-BX-K564.



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The Forensic Technology Center of Excellence (FTCoE)

The FTCoE is a collaboration of RTI International and the following academic institutions, which are accredited by the Forensic Science Education Programs Accreditation Commission (FEPAC): Duquesne University, Virginia Commonwealth University, and the University of North Texas Health Science Center. In addition to supporting NIJ's research and development (R&D) programs, the FTCoE provides testing, evaluation and technology assistance to forensic laboratories and practitioners in the criminal justice community. NIJ supports the FTCoE to transition forensic science and technology to practice (award number 2011-DN-BX-K564).



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LIST OF ACRONYMS

A2LA	American Association for Laboratory Accreditation
AAFS	American Academy of Forensic Sciences
AAG	assistant attorney general
ANAB	ANSI-ASQ National Accreditation Board
ANSI	American National Standards Institute
ASCLD	American Society of Crime Lab Directors
ASQ	American Society for Quality
CFSO	Consortium for Forensic Science Organizations
CSI	crime scene investigation
DCDFS	District of Columbia Department of Forensic Science
DCJS	New York Division of Criminal Justice Services
DFS	Virginia Department of Forensic Science
DHMH	Maryland Department of Health and Mental Hygiene
DOJ	Department of Justice
FLAB	Maryland Forensic Licensing Advisory Board
FOP	Fraternal Order of Police
FSDR	Federal Science Discipline Review
IAI	International Association for Identification
IAAI	International Association for Arson Investigators
IEC	International Electrotechnical Commission
IG	Inspector General
ISO	International Organization for Standardization
LAB	Laboratory Accreditation Board
NamUs	National Missing and Unidentified Persons System
NAS	National Academy of Sciences
NCFS	National Commission on Forensic Science
NCSC	North Carolina State Crime Laboratory
NIJ	National Institute of Justice
NIST	National Institute of Standards and Technology
NYCLAC	New York Crime Lab Advisory Committee
OSAC	Organization for Scientific Area Committee
SWG	Scientific Working Group
SWGDM	Scientific Working Group on DNA Analysis and Methods
TCJIU	Texas Criminal Justice Integrity Unit
TFSC	Texas Forensic Science Commission

EXECUTIVE SUMMARY

State forensic science commissions may contribute to forensic improvement through oversight and coordination of forensic science resources. This report provides a review for states wishing to create and maintain a state forensic science commission. Recognizing the substantial differences that exist among the states regarding governance, culture, statutes and crime laboratory systems¹, this report provides an overview of considerations in planning for and developing a state-level forensic science commission.

State commissions focus on communication and collaboration among laboratories and stakeholders, allocation of resources, laboratory improvements, promulgation of accreditation and certification standards, investigations into misconduct or professional negligence in crime laboratories, and other implementation and oversight issues.

A state forensic science commission may play a positive role in forensic improvement. State commissions may help to:

- ❖ prevent or mitigate problems in forensic science laboratories or systems in a role as the investigator of misconduct or professional negligence;
- ❖ ensure that national standards are implemented in practice, especially regarding accreditation activities;
- ❖ coordinate state or grant funding to address areas of need or opportunities to implement technological or operational innovations; and
- ❖ improve cooperation among forensic science laboratories and stakeholders.

Although only 10 states (and the District of Columbia) currently have statutorily created forensic science commissions, many more states have DNA commissions or informal advisory boards or are considering forming commissions. Existing state commissions vary considerably with respect to which of these functions they fulfill. A planning process can determine which elements should be considered, including issues relating to the sustainment of a commission, such as the allocation of staff and funding, membership, and policies and procedures.

Although this report is largely descriptive, detailing the experience of current and past commission activities from various states, it also presents “lessons learned” based on the experience of states who have established a commission or other type of advisory board to address forensic science. Following the report, Appendices 1 and 2 provide specific details for each of the 11 commissions currently in existence in the United States.

¹ Some state forensic science crime commissions (e.g., New York) provide oversight to medicolegal death investigation forensic laboratories (i.e., medical examiner/coroner offices) as well.

Methodology

This report is based on a review of state forensic science commissions, as well as similar groups such as DNA review boards, task forces or advisory boards. Numerous interviews were conducted with staff or commission members from each existing state commission, the Director of the District of Columbia Department of Forensic Science² (DCDFS) who, by statute, works with two different commissions, members of the U.S. National Commission on Forensic Science (NCFS), and staff from the Office of the Forensic Science for the United Kingdom, which oversees forensic laboratories in the U.K.

There are many documents and journal articles on the subject, which have been cited where appropriate, as well as statutes, annual reports and other published documents from state commissions. Further documentation was gathered by in-person and online attendance of meetings of several existing state forensic science commissions, as well as the NCFS.

Context of Forensic Science Improvement

The National Institute of Justice (NIJ) is the research, development and evaluation agency of the U.S. Department of Justice, dedicated to improving knowledge and understanding of crime and justice issues through science³. NIJ's Forensic Technology Center of Excellence (FTCoE) was established to support NIJ's research, development, testing and evaluation (RDT&E) process in all areas of forensic science, including technology transition and knowledge transfer for the forensic science and criminal justice communities⁴. State forensic science commissions may play a key role in promoting innovations developed by NIJ's research program and identified by the FTCoE as promising for adoption into practice⁵.

State forensic science commissions exist in a broader context of organizations that are designed to promote forensic improvement. Many professional organizations promote training, accreditation, and other activities for practitioners and leaders in the crime laboratory. For example, forensic professional organizations provide scientific and training conferences, publish journals, and contribute to the professional development of the forensic disciplines. Federal organizations include the Organization of Scientific Area Committees⁶ and the Scientific Working Group on DNA Analysis and Methods (SWGDM)⁷, which are national efforts to develop and promulgate scientific standards. In general, these organizations promote standards but lack the ability to implement specific changes in laboratory practice.

² Dr. Jennifer Smith, Director of the DCDFS.

³ To learn about this organization's history, visit their website at <https://www.nij.gov/about/pages/history.aspx>

⁴ NIJ's 2016 grant solicitation for the FTCoE: <https://nij.gov/funding/Documents/solicitations/NIJ-2016-9087.pdf>.

⁵ Forensic Technology Center of Excellence (2016). [Federal Investment in Forensic Science Research and Development](#). U.S. Department of Justice, National Institute of Justice, Office of Investigative and Forensic Sciences.

⁶ [Organization of Scientific Area Committees for Forensic Science](#). National Institute of Standards and Technology.

⁷ Scientific Working Group on DNA Analysis and Methods. Federal Bureau of Investigation. www.swgdam.org

Impetus for Strengthening Forensic Sciences

There have been efforts at the national level to address these issues. Notably, the National Academy of Sciences (NAS) published a report in 2009, “Strengthening Forensic Science, A Path Forward,”⁸ which recommended a range of reforms, including changes in terminology, standards, administration, and scientific support. Other academic papers⁹ and government reports (e.g., the Executive Office of the President’s Subcommittee on Forensic Science report, Strengthening Forensic Science: A Progress Report in February 2014 and The President’s Council of Advisors on Science and Technology’s 2016 report, *Report on Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods*). In partnership with DOJ, NIST has created 35 Organization for Scientific Area Committees (OSAC) to develop standards, guidelines and best practices intended to improve quality and consistency within the forensic science community. The 2014 Census of Publicly Funded Forensic Crime Laboratories found that the clear majority of laboratories are now accredited (88%), conduct proficiency testing (98%), and maintain a written code of ethics (94%) and written standards for employee performance (75%).¹⁰

The Role of a State Forensic Science Commission

Although national-level efforts can contribute to forensic improvement, state and local engagement is required because over 93% of forensic laboratory services are requested and provided by state and local laboratories.¹¹ Several states have chosen to address the challenges faced by the forensic science community through the creation of a state forensic science commission. As of 2016, 10 states have legislatively created forensic science commissions that are currently active. Functioning on a smaller scale, state commissions can quickly identify and respond directly to issues. Further, the working relationships among stakeholders fostered by state commissions allow them to be proactive in addressing problems.

Although most state forensic laboratories are now accredited and have solid quality assurance programs in place, those are not always an absolute protection against problems and crises. Through customer engagement with the laboratory or by acting as a direct oversight body, commissions have served to augment the accreditation of laboratories in a way that they feel best suits the cultures and resources of their states.¹² Many commissions permit citizens to register complaints about potential

⁸ Id. See also, Melson, Kenneth. “Embracing the Path Forward: The Journey to Justice Continues,” *New England Journal on Criminal and Civil Confinement* 36 (2010): 197-232.

⁹ Giannelli, Paul C. “Wrongful Convictions and Forensic Science: The Need to Regulate Crime Labs,” *North Carolina Law Review* 86 (January 2008):163. See also, Neufeld, Peter J. “The “Near” Irrelevance of Daubert to Criminal Justice and Some Suggestions for Reform,” *American Journal of Public Health* 95(S1) (July 2005): S107-S113.

¹⁰ Burch, Andrea M., Durose, Matthew R., Walsh, Kelly A., and Tiry, Emily. [Census of Publicly Funded Forensic Crime Laboratories: Resources and Services](#), 2014, Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, November 2016, NCJ 250152.

¹¹ Burch, Andrea M., Durose, Matthew R., Walsh, Kelly A., and Tiry, Emily. [Census of Publicly Funded Forensic Crime Laboratories: Resources and Services](#), 2014, Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, November 2016, NCJ 250152.

¹² See FBI. (2004). *The FBI DNA laboratory report: A review of protocol and practice vulnerabilities*. Retrieved from <https://archives.fbi.gov/archives/news/pressrel/press-releases/the-fbi-dna-laboratory-report-a-review-of-protocol-and-practice-vulnerabilities>. (A 2004 FBI press release announcing the implementation of additional improvements

forensic misconduct or other issues within the crime laboratory system. These commissions, working with other government entities and stakeholders, can conduct thorough, independent reviews to identify the sources of problems and make comprehensive recommendations that address laboratory management or policy shortfalls. Such reviews have played a positive role in building public confidence in forensic science and the criminal justice community. Appendix 1 summarizes the responsibilities of each state commission as developed.

The value of a state forensic science commission is closely related to the importance of sound forensic practice to police, prosecutors, policy-makers, and other stakeholders. Many state commissions were created in response to forensic errors that arose from laboratory negligence or misconduct.¹³ In these cases, policy-makers have seen the formation of a state forensic science commission to mitigate potential future problems, including costs associated with settlements and damages from civil suits, which can be substantial.¹⁴ States have also used commissions to conduct retroactive case reviews, such as in the case of hair microscopy.¹⁵

Using a Commission to Engage Stakeholders

A state forensic science commission provides a forum for robust discussions between forensic science stakeholders to improve communication and coordination. Thus, membership typically includes most customers in the criminal justice system.¹⁶ State forensic science commissions may work directly with formal or informal organizations of crime laboratory directors, which can serve in an advisory capacity. For example, the New York crime laboratory directors' group is the NY Crime Lab Advisory Committee (NYCLAC). NYCLAC reports to the Commission on Forensic Science as needed, and the Chair of NYCLAC is a member of the Commission. If these relationships work well, issues directly relating to science (as opposed to issues that impact the delivery system of forensic services) can be specifically directed to scientists.¹⁷

following the Office of Inspector General (IG)'s release of a comprehensive assessment of the misconduct of a former DNA technician and FBI DNA Laboratory's protocols and practices. The FBI Laboratory has been accredited since 1998.)

¹³ One early proponent and sponsor of the Texas legislation that created their commission, State Senator Juan Hinojosa, said:

“One of the ways to lose faith in the criminal justice system is to convict innocent people of crimes they did not commit using evidence that is unreliable, unscientific and pure junk science. In creating our commission, we wanted to ensure it was not politicized and that all stakeholders needed to buy in and share the same goals. We needed to focus on credible evidence based on valid and reliable scientific research to avoid wrongful convictions.”

¹⁴ For a review of wrongful convictions and information on settlements and awards, see Cooley, Craig M., and Oberfield, Gabriel S. “Increasing Forensic Evidence’s Reliability and Minimizing Wrongful Convictions: Applying Daubert Isn’t the Only Problem,” *Tulsa Law Review* 43 (2007): 285.

¹⁵ FBI/DOJ Microscopic Hair Comparison Analysis Review. (2016). <https://www.fbi.gov/services/laboratory/scientific-analysis/fbidoj-microscopic-hair-comparison-analysis-review>

¹⁶ When serving as President of the American Academy of Forensic Sciences (AAFS), Joseph P. Bono wrote the following article: Bono, Joseph P. “The Blame Game Has Run Its Course, Strengthening Forensic Science Investigation,” *Texas Bar Journal* 74(7) (July 2011): 592-596. “The best way to maximize the probability for success in strengthening the forensic sciences is for interested parties across the scientific, legal, and academic communities to find common ground and build upon it.”

¹⁷ Peter Marone, who served as the Chairman of CFSO in 2008, testified before the U.S. House Subcommittee on Crime, Terrorism, and Homeland Security. In his comments discussing the mixture of scientists and stakeholders serving on state oversight commissions, he stated: “The key to appropriate and proper oversight is to have individuals

Several jurisdictions have two commissions: one involving stakeholders, including lawyers (both prosecution and defense) and another working group comprising scientists.¹⁸ Technical issues are discussed and resolved by the scientific group, whereas issues affecting the criminal justice system are discussed and resolved by the broader customer group. Additionally, several states have broadened their knowledge base by including technical experts from other states.¹⁹ Often, commissions include the agency heads who oversee forensic services. As one crime laboratory manager said: “This gives me at least a couple of hours every quarter to discuss my lab – I wouldn’t have this opportunity without his [agency head] being on the commission.” In another case, a law enforcement stakeholder learned a great deal by reviewing materials in preparation for commission meetings.

Using a Commission to Coordinate Resources within a State

State commissions may promote cooperation and coordination across multiple forensic providers with varying jurisdiction. These activities may encompass the promotion of training, certification, and accreditation to establish a foundation for a consistent level of forensic work. A commission may be used to coordinate resource allocation and eliminate duplication of services or provide a mechanism to allocate resources within a discipline that requires expensive equipment or specialized experts. These efforts may incorporate broader resource considerations, such as cooperation to address backlogs or incorporate new methods.

This role may extend to allocation of grant funding and conformance with federal grant requirements. For example, Coverdell requires an entity in each state to provide independent investigations of laboratory problems. State commissions are familiar with and knowledgeable about crime laboratory management and practice and can take on an investigative role using this previously established body of knowledge.²⁰

Using a Commission for Outreach from the Forensic Science Community

The development of closer working relationships among interested parties is valuable to members of commissions, laboratory directors and other professionals who routinely work with them. Particularly noteworthy is the ability of the defense bar to have a comfortable relationship with crime laboratory managers. If professionals who usually engage in relatively adversarial relationships

representing the stakeholders, but that these individuals must be there for the right reason, to provide the best possible scientific analysis. There cannot be any room for preconceived positions and agenda-driven positions.” *Supra* note 4 at 28.

¹⁸ Another example of this is the DCDFS. D.C. Law § 5-1501.01 et seq. provides for the Department’s Director to work with two boards. The Science Advisory Board, which consists of nine voting members, must include five scientists with experience in scientific research and methodology, including a statistician and a member with quality assurance experience. Four other members must be forensic scientists. This Board reviews all reports of allegations of professional negligence and misconduct, program standards and protocols, the quality and timeliness of services and future programs. The Stakeholder Council includes the Deputy Mayor for Public Safety and Justice, public safety and health officials, prosecution and defense attorneys. This Council focuses on the effectiveness and delivery of services and advises the Mayor and City Council.

¹⁹ North Carolina and Virginia.

²⁰ For a discussion of policy considerations regarding oversight and the role of a state entity suitable to satisfy the Coverdell requirement, see Laurin, Jennifer E. “Remapping the Path Forward: Toward a Systemic View of Forensic Science Reform and Oversight,” *Texas Law Review* 91 (2013): 1051-1118.

work together to develop standards and protocols, some issues that might have been litigated can be resolved through commission discussions.²¹

Having a forensic science commission can elevate the visibility and understanding of crime laboratory work within the criminal justice community. Additionally, if a commission functions at a high level of transparency, the public and other associated organizations working with the criminal justice system will also gain a better understanding. In most cases, these efforts extend to engagement with policy-makers and other decision-makers who have an interest in forensic science practice in their state. Through educational activities, the state commission can play a positive role to improve the understanding of key issues.

North Carolina has an annual Forensic Science Week during which it conducts events to increase the community's understanding of forensic work. These activities are intended to produce a realistic view of forensic work among colleagues and the public, in contrast to media portrayals.²²

Using a Commission to Improve Public Confidence

- ❖ The state commission may improve public confidence by establishing risk prevention and mitigation strategies for laboratory operations. The commission's oversight role may include the establishment of standards or best practices within the state laboratory system. Relevant strategies have been identified by forensic science manager associations at both the federal (ASCLD) and state levels. These factors include the following:
- ❖ Hiring practices and background investigations;
- ❖ Competency testing and evaluation;
- ❖ Periodic internal and external proficiency testing;
- ❖ Discipline certification;
- ❖ Clear and specific policies and protocols that are periodically reviewed;
- ❖ Rigorous quality assurance programs with dedicated managers;
- ❖ Sufficient personnel and equipment;²³
- ❖ Accreditation;
- ❖ Resources (federal/state/local) targeting to maximize efficiency and coordination and avoid duplication;
- ❖ Outreach to customers, particularly relating to evidence priorities and backlogs; and
- ❖ The existence of a direct working relationship with crime scene investigators, including training.

²¹ Customers can be considered both upstream users who make preliminary decisions regarding forensic evidence and what should be analyzed and downstream users presenting forensic evidence in a judicial setting. See *Id* at 1076; also, for a discussion of the risk associated with upstream evidence collection, see Horvath, Frank, and Meesig, Robert, "The Criminal Investigation Process and the Role of Forensic Evidence: A Review of Empirical Findings," *Journal of Forensic Sciences* 41 (1996): 963-969.

²² Shelton, Donald E., "The 'CSI Effect': Does It Really Exist?" *National Institute of Justice Journal* 259 (July 2008): 1-7.

²³ NAS Report, *supra* note 5, at 77.

CURRENT STATUTORILY CREATED STATE FORENSIC SCIENCE COMMISSIONS

Currently, only 10 states²⁴ and the District of Columbia have a legislatively created commission to provide support, guidance or oversight to state and local crime laboratories. In general, these commissions seek to address “... wide variability in capacity, oversight, staffing, certification, and accreditation...” within forensic laboratory systems.^{25,26} In some cases, commissions have followed working groups established by crime laboratory directors that include criminal justice stakeholders to address customer needs on an *ad hoc* basis. In such situations, the creation of state commissions may provide more permanent and recognizable entities that are more inclusive of stakeholders outside of forensic science.²⁷

In general, there are two primary models. Most state commissions work with the primary forensic provider: the state crime laboratory system. These commissions often serve to provide customer (user agency) feedback and may have a large scientific membership to review protocols and methodologies. Virginia and the District of Columbia have two commissions, one to address each aspect. Other states (*e.g.*, Maryland, Missouri, New York and Texas) oversee numerous state and local laboratories and focus more on oversight, accreditation and licensing. See Appendix 2 for more details on each state commission, its structure, and its statutory authorization.

PLANNING FOR A STATE FORENSIC SCIENCE COMMISSION

This review of existing and dormant state forensic science commissions provides some valuable lessons for states considering creating a commission. Several commissions appear to have discontinued because of a lack of funding and support. In other cases, commissions continue but lack the full range of authority necessary to meet the needs of forensic science oversight. For states considering the creation of a commission, one valuable strategy to move forward is to create a state forensic science *planning* commission. This may be achieved through legislation. Such an effort could require one to two years to accomplish, however it would ultimately help establish the standing commission for success.

The responsibilities and duties of existing commissions, developed by both statutory language and practice, include a wide range of activities, and the statutory language varies considerably. In general, these duties are framed to support a commission overseeing one primary state laboratory system or aspects of multiple state and local laboratories within its jurisdiction. In the former case, the commission tends to serve in an advisory capacity to the director of the state lab and often has fiscal

²⁴ Arkansas, Delaware, Maryland, Missouri, New York, North Carolina, Texas, Virginia, Rhode Island and Washington.

²⁵ NAS Report, *supra* note 5, at 14.

²⁶ In this paper, the term ‘accreditation’ is used to refer to accreditation gained from one of a number of accreditation bodies, including the American Association for Laboratory Accreditation (A2LA), ASCLD/LAB, and American National Standards Institute (ANSI)-American Society for Quality (ASQ) National Accreditation Board (ANAB).

²⁷ Prosecutors are also being encouraged to create Customer Working Groups. See Hamann, Kristine, “Customer Working Groups – Benefits for Directors of Public Forensic Laboratories,” *ASCLD Executive Education Digests* 3 (2014).

responsibilities. In contrast, in the latter case, the commission tends to be more involved and to have some level of oversight and pursue ongoing engagement with laboratories to identify issues for which mitigation measures may be helpful statewide. The planning process should include careful deliberation concerning the scope of responsibilities, duties, and independence of a new state forensic science commission.

The planning process represents an opportunity to involve criminal justice, legislative, and forensic science professionals (e.g, law enforcement, scientists, legal, advocate) in state commissions from the very beginning and, thus, foster buy-in and ensure that the commission is designed to meet the needs of the community. A planning commission also permits appropriate stakeholders to educate themselves on other states' models and identify issues important to their state. The planning effort produces recommendations for the standing commission, including legislative authority, membership, staffing, and other support.

This planning group should educate themselves about other commissions and survey existing forensic science laboratories (including forensic science units, which often include latent print services. If oversight responsibilities are recommended, crime laboratory directors and personnel will want input into the process so that their concerns are addressed.

The planning commission should focus on the collection of relevant data concerning forensic science services in the state. Items for discussion and drafting of the legislative language to create a standing forensic science commission should include the following:

- ❖ A survey of forensic science laboratories. This will necessarily include defining a forensic science laboratory. Latent print, crime scene and digital evidence units may work outside of traditional laboratories and may warrant separate definitions. The identification of forensic laboratories can be accomplished with the assistance of a state crime laboratory directors' organization.²⁸
- ❖ A survey of interested stakeholders and resources.
- ❖ Familiarity with existing state facilities. Consideration should be given to participation in tours of different facilities during meetings.
- ❖ Education. This should include aspects of laboratory management and quality assurance and a review of forensic science commissions that are active in other states. The identification and review of the literature in this area are also important.
- ❖ Opportunities for discussion. The Planning Commission should schedule a few open hearings at which interested community members, professional organizations and other stakeholders may make public comment. A dedicated opportunity for crime laboratory directors and managers and other personnel to address the group should also be provided.

²⁸ For an example of a comprehensive report including survey of laboratories and stakeholders, see the following report: Lockyer, Bill. State of California, Office of the Attorney General, August 2003. Retrieved from https://oag.ca.gov/sites/all/files/agweb/pdfs/publications/bfs_bookmarks.pdf

Legislative Models

Successful commissions rely on legislative language that provide clear direction concerning the scope of members' responsibilities. In Appendix 2, the reader can access citations to the enabling legislation for the current forensic science commissions. Virginia, Washington, North Carolina, Rhode Island and the District of Columbia have jurisdiction-wide laboratories. The guidance provided to the state laboratories regarding methodologies comes from technical groups (*e.g.*, Virginia's Scientific Advisory Committee and North Carolina's Forensic Advisory Board), and the commission may provide budgetary oversight (Washington).²⁹ A commission should distinguish between its agency oversight authority and the need for a laboratory director to manage personnel and day-to-day operations.

The enabling statute should also include language providing for rule-making authority if commission's duties include the investigation of complaints, accreditation or certification/licensure. Typically, states will require the commission to provide an annual report, which can be a mechanism to advocate for additional resources or other legislative action.

The statute should describe the composition of the commission, at least in general. When membership is contingent on holding a specific office, it should be recognized that continuity can be disrupted if too many members' appointments are subject to political changes. The Texas statute has undergone close legislative scrutiny and multiple amendments and may provide a useful example.³⁰ The statutory authorization for all existing commissions can be found in and additional background is provided in Appendix 1 and 2.

Membership Considerations

Most frequently, commission members are determined by gubernatorial appointment. In a few states, appointments are made by the Attorney General. To minimize the role of political considerations, statutes may require specific qualifications for appointees. Often, prosecution or defense members can be nominated by their professional organizations. Appointments can also be tied to areas of expertise in forensic science. Academic members are often appointed by the dean of their institutions, whereas law enforcement members are typically nominated by their departments or professional associations. Statutorily-defined qualifications permit the governor to know who might most effectively serve on a commission and may allow a nominating organization to have meaningful input. The request for nominations further provides an opportunity for the represented organizations to learn about the commission's work. Under this nomination structure, the appointed member periodically reports back to his or her organization, increasing the visibility of the commission, establishing useful lines of communication, and, thus, enhancing the ultimate buy-in to the commission's work.

The composition of a commission should relate to the functions for which it has been established. Most commissions will include forensic scientists, outside scientists, and stakeholders to be effective, either on one

²⁹ RCW Chapter 43.103.030, 2005.

³⁰ TFSC Fifth Annual Report. December 2015-November 2016. <http://www.fsc.texas.gov/misc-document/Fifth-annual-report>.

large commission or on two working commissions/boards/subcommittees New York's 14-member commission, which has a general responsibility to ensure accreditation across all forensic science laboratories, also has a distinct DNA subcommittee to oversee the accreditation of DNA laboratories and make binding recommendations to the full commission.³¹

Numerous commission members and staff stress the importance of a shared vision among members. Legislative provisions for term limits, reappointment, and restrictions on reappointment are designed to improve the long-term engagement and focus of commission members. Both continuity and occasional new members are needed to maintain commissions' effectiveness. Another relevant protection to consider is establishing a requirement that members provide a financial disclosure to minimize the potential for conflicts of interest.

Table 2 is a summary of the membership of current state forensic science commissions. The chart does not cover every member in every state but provides a picture of common representatives.

Specific Stakeholders and Partners

Key individuals to consider for commission membership and working partnerships associated with commissions (e.g., subcommittees, working groups, case review committees and investigative panels) include the following:

- ❖ Crime Laboratory Directors – Although only a few laboratory directors may serve as voting members of a commission, forensic science leaders should attend all state commission meetings. Forensic scientists are necessary to review and facilitate the adoption of specific methodologies and protocols.
- ❖ Medical Examiner/Coroner – This individual is the central figure in any death investigation and often manages both his or her office and the toxicology laboratory in his or her facility. Notably, the TFSC is currently chaired by a Medical Examiner.
- ❖ Prosecutor – This person can be either the elected/appointed prosecutor for a jurisdiction or an assistant but must have strong interest in and experience with forensic science.³²
- ❖ Defense Attorney – As above, this person must be willing and able to engage on forensic science issues.
- ❖ Law Enforcement – These individuals bring a customer perspective and may also represent various crime scene and latent print units that work outside of laboratory environments. Ideally, they would also be experienced in many collaborative efforts and community outreach.
- ❖ Judiciary – These individuals may be active or retired. Often, active judges have not participated in forensic science commissions because of ethical considerations. However, a recent change in Judicial Ethics has clarified that a judge can play an important role regarding the administration of justice.³³
- ❖ Academics – Individuals who are affiliated with academic institutions can provide a wealth of knowledge and resources. Their valuable contributions can include research, input and

³¹ New York Executive Law § 995-b (2-a).

³² Several prosecutors' offices are already engaged in forensic issues and have created Conviction Integrity Units. These prosecutors are well positioned to engage with the work of forensic science commissions.

³³ See Hammond, Larry A. "The Failure of Forensic Science Reform in Arizona," *Judicature* 93 (May-June 2010): 227-230.

guidance with respect to protocols and methodologies and student volunteer assistance with case reviews and research.³⁴ Independent academic scientists contribute different and valuable perspectives. Nominations can be made by the deans of institutions.

- ❖ Criminal Justice Agencies – These may include the state administrative agency that acts as the conduit for federal block grants (including Coverdell grants). In Virginia, a member from the Virginia State Crime Commission, whose ability to access a prisoner database represents a useful resource, is included. Criminal justice participation is critical when, for example, the commission is developing notification protocols regarding results of discipline-specific case reviews, such as those being performed on hair microscopy in numerous jurisdictions.
- ❖ Departments of Public Health – These agencies are generally responsible for the accreditation of public laboratories and are very experienced with quality assurance programs.
- ❖ Legislators – These individuals are important during the planning stages and can pave the way for needed legislation. The identification of legislators with a background and specific interest in forensic work is critical. In Texas, interested legislators were engaged early in the process of creating the TSFC and have updated the statute to address emerging needs.³⁵

Other Less-traditional Members and Partners to Consider

- ❖ Allied Professionals – Health professionals that provide care and expertise in a forensic setting such as physicians, nurses, dentists, and emergency response providers.
- ❖ Statistician – This position is becoming increasingly crucial as research on the validation of methodologies and computation of error rates continues. All 33 committees of the national OSAC process include a statistician, so it may be advisable to have that type of expertise available to a state forensic science commission. Academic institutions may be good sources for the recruitment of such members.
- ❖ Risk Management – The person with this responsibility should be able to work with and provide aid and resources to governmental agencies. A crime laboratory may not always keep up with ISO 17025 standards with respect to its equipment, maintenance, facilities or staffing levels. Any of these may create deficiencies in supervision or quality assurance and, thereby, put the system at risk. Risk managers can help agency heads to identify these risks and, at times, provide the funding and resources necessary to minimize them.
- ❖ Victim Assistance Representative – This person can provide an important voice and perspective, particularly when commissions undertake historical case reviews. This type of review may require notification of the parties involved in a case that has already been adjudicated. Victim assistance professionals have the relevant experience for these activities.
- ❖ Librarian – Some librarians have particular expertise in forensic science and in teaching professionals how to perform forensic science research. Although each state may not have

³⁴ The National Clearinghouse for Science, Technology and the Law is administratively located at Stetson University. One of its primary functions is to create and maintain a database of forensic science research. This work is primarily performed by students who receive credit. Virginia's Forensic Science Board also makes use of students to conduct preliminary work on discipline-specific case reviews.

³⁵ Texas State Senator Juan "Chey" Hinojosa (D-McAllen) is one example of legislative involvement. He has been a leader in strengthening forensic services and sponsored HB-1068, which created the TFSC. Delaware's Director of Forensic Science Dr. Rebecca Walker, who is a former state legislator, is another such example. The Delaware Forensic Science Commission also benefits from the engagement of the chairs of the Safety and Homeland Security Committees of both houses. Both of these legislators also have law enforcement experience.

access to librarians with such knowledge, relationships could be established with librarians associated with law schools. “The law librarian is poised to provide resources, create partnerships, and help to resolve complex legal research problems.” (Billie Jo Kaufman, Associate Dean for Library & Information Resources, Professor of Law, American University, Washington College of Law, Pence Law Library.)

STAFF AND COORDINATION

Budget, Staff and Partners

Everyone working with a state commission who was interviewed for this report believes that a dedicated budget and staff are necessary for the commission to examine forensic services statewide and ensure the level of effectiveness and efficiency required by our criminal justice system. At times, the commission must be able to respond appropriately and quickly to investigate issues. This may also mean hiring discipline-specific experts to assist in investigations or series of case reviews.

Staff will be needed to develop and disseminate commission documents, support meetings, and manage a commission web presence. Commission members may incur costs for meetings, inquiries and other commission business. Although these expenses may not be formally captured under the commission budget, the resource expenditures are real and should be anticipated.³⁶

Many commissions operate with minimal budgets to cover members’ travel costs, staff support, website expenses, and investigative expenses. Others, such as the Texas commission, have had dedicated budgets and staff since their inception. Established in 2005, the TFSC was set up as an independent body but was administratively placed within Sam Houston University for budgetary purposes. Initial funding of \$250,000 was established in 2007 and provided for a coordinator. The current staff of four is expected to increase with the 2015 addition of responsibilities of accreditation and the licensing of analysts, which will be required in Texas as of 2019. The current annual budget is \$500,000. The sustained work of the TCFS can most likely be attributed to a variety of factors. However, the funding of the Commission and its ability to hire dedicated staff beginning at its inception have certainly contributed.

When the New York State Commission on Forensic Science was established in 1994, it was administratively placed within the New York DCJS. The head of that Division is legislatively designated as the chair. Simultaneously, New York formed the Office of Forensic Services (OFS) within the DCJS to provide staff support for the Commission. OFS is also charged with the maintenance of the DNA database. Several members of that Commission reported that, for several weeks prior to their quarterly meeting, the OFS staff expends great effort to prepare for the meeting. Staff gathers, prepares and provides all necessary documents and materials for each member of the

³⁶ Every commission meeting observed involved an additional layer of attendees other than the commission members and staff, including general counsel for agencies, most crime laboratory managers in the state and other customers (*e.g.*, analysts, lawyers and criminal justice agency personnel) working directly or indirectly on the commissions’ subcommittees and projects. This type of attendance can promote effective and efficient communication.

Commission. In addition, if a complaint is filed regarding an analyst's misconduct or negligence, OFS conducts the investigation.

Most often, existing staff aid commissions in addition to their other duties. Although such staff may assist in *initiating* planning efforts, full-time, dedicated staff may be needed to supply the ongoing support needed by commissions and communication with members, interested professionals and the public.

Both California and Minnesota had a commission or task force, but they were discontinued because of a lack of budget and staff, among other issues. The Minnesota Forensic Laboratory Advisory Board published its last report in January 2011, but has not met for several years due to an absence of funding and staff. In 2012, the California Forensic Science Task Force published its recommendations and planned to publish a follow-up report regarding implementation the following year. Neither the task force nor a standing commission have been funded.

General Counsel

Based on first-hand observations of commission meetings and activities, an actively engaged general counsel can help the commission establish a solid reputation and, in general, contribute to the commission's success. First, they can provide important legal guidance to the commission and, thus, help keep it on track, effective and efficient. In addition, he or she can act as a conduit for reliable communication among all concerned parties. This helps the commission establish a reputation for accessibility and develop credibility with the judiciary and stakeholder associations (*e.g.*, prosecutors and public defenders).

A state commission may obtain legal advice from the Office of the Attorney General for the state. The individual providing this advice may be a single assistant attorney general (AAG) who will have numerous other clients and demands on his or her time. That individual may not have any forensic science background. Certainly, this person will provide legal advice regarding matters of statutory interpretation. Over time, if the assigned assistant works closely with the commission, can participate in educational opportunities, and gains a solid foundation in forensic science and crime laboratory issues, he or she could become a real asset.

The TFSC employs a general counsel who works closely with the Texas Criminal Justice Integrity Unit (TCJIU), which is an important partner in the Commission's endeavor.³⁷

The general counsel to a state's primary forensic science laboratory may play a similar role as the general counsel to a commission. For instance, the General Counsel to the Virginia DFS is involved with the state's Forensic Science Board, the Scientific Advisory Committee and numerous subcommittees involved with the Board's work. The VDFS General Counsel acts as the face of the Department with the public and professional organizations, speaking at judicial and attorney

³⁷ Judge Barbara Hervey, who serves on the Texas Court of Criminal Appeals, chairs this group. The TCJIU, which is focused on training and other systemic issues in the criminal justice (continued on next page) system, has worked with the TFSC on hosting Stakeholder Roundtable Discussions and providing training to hundreds of criminal justice professionals.

conferences about the work of both the Department and of the Board. The Arkansas State Crime Laboratory has recently added a general counsel to its staff.

Role of the Inspector General (IG)

Some states have an Office of the IG. This Office may, by statute, be responsible for complaints relating to state forensic science laboratories. Consideration should be given to developing an appropriate relationship between the IG and commission. Often, an IG's office will lack the expertise to perform investigations into technical matters in the forensic laboratory. The relationship between the state forensic science commission and the IG's office should be considered in the planning process to clearly define respective roles and responsibility for investigation. New York has an IG who has conducted investigations into allegations of professional misconduct and negligence, although the IG has established contracts with external experts to support investigations.

Administrative Home

A commission should be as independent as possible, but an administrative home can be beneficial to limit the infrastructure needed to support commission staff and activities. As discussed previously, the TFSC has an administrative home at Sam Houston University. The University provides budget and human resource support and office space. This administrative home also represents an opportunity for a valuable partnership with the academic institution for research, training and other opportunities.

Maryland's commission is located within the Department of Health and Mental Hygiene, Office of Quality Control. This state entity has experience with clinical laboratories and is currently developing ties with the forensic community.

Other commissions are structured within state administrative agencies that oversee federal Justice Assistance Grant monies or within existing state laboratory or Attorney General Offices. A commission should be located where it has the necessary support and opportunities to access valuable partners and is sufficiently neutral to establish its credibility and independence.

Policies and Procedures

A state forensic science commission will require the adoption of policies and procedures to govern its work. Policies and procedures may cover internal processes regarding the development of standards, protocols and methodologies and or commission oversight priorities. Clear structure and direction are critically important for oversight responsibilities. In particular, the complaint and investigation processes must be clear and transparent to ensure public confidence in the review of reports of misconduct or professional misconduct. Policies and procedures provide structure and guidance to members and the commission chair regarding their roles and responsibilities and the order of business of meetings. Roberts Rules of Order or another meeting management system may be required by the state or adopted by the commission.

Procedures should be developed early in the process of creating a commission and should include any state requirement regarding open meetings and necessary publications, expectation for meeting

agendas and how public input may be obtained by the commission. The issue of confidentiality also needs to be clarified. Certain personnel matters must remain confidential, at least during the pendency of an investigation. However, in general, commission meetings should be public. This issue itself is one reason why having a general counsel is helpful for a commission. During any meeting, a person must be available to provide guidance on matters that may require closed sessions.

The TFSC Policies and Procedures represent a working model that has been updated every few years as the Commission takes on additional responsibilities.³⁸

The Need to Educate Members

Before a commission tackles any of its responsibilities, sufficient time should be set aside to educate its members. The members of a state commission (or planning effort) will come to the table with a variety of levels of knowledge and experience. For this reason, the Rhode Island State Crime Laboratory Commission specifically requires new members to be trained within six months.³⁹

Topics that should be included in the educational agenda are as follows: ethics, quality assurance, the accreditation process, the certification of analysts, national work in progress, crime laboratory tours and contemporary issues facing forensic science (*e.g.*, the review of hair microscopy and the lack of research in some comparative disciplines). Other interested parties may be included in these training sessions, such as the following:

- ❖ crime lab managers or supervisors;
- ❖ general counsel to agencies that operate a laboratory;
- ❖ assistant attorneys general who will work with the commission;
- ❖ legislative members on committees responsible for criminal justice;
- ❖ representatives from any state agency responsible for criminal justice grants; and
- ❖ prosecutors and public defenders likely to work with the commission.

As much of the orientation material will be familiar to the forensic scientists, they may serve as instructors.

Annual Report

Publishing an annual report demonstrates to the public that a commission is involved and effective. Several existing commissions (*i.e.*, those in Missouri, Virginia and Texas) are required to provide an annual report. Other commissions may publish such a report as a matter of practice or post their meeting minutes on agency websites. Such documentation is valuable on a variety of levels: 1) It provides valuable information to the appointing authority (often the governor) and informs the appropriate legislative members of the commission's work. 2) It helps inform agency heads and interested members of the community and represents a critical part of the commission's transparency. 3) It permits members of the commission to observe progress in a very specific way

³⁸ See the TFSC website at <http://www.fsc.texas.gov>.

³⁹ R. I. Gen. Laws, Title 12 Criminal Procedure, § 12-1.1-8. (2006)

and helps to orient new members. Finally, 4) it can serve to support requests for appropriate funding for crime laboratories.

Website

Having a dedicated commission website elevates its visibility and transparency and provides the public with easy access to information. Features of a helpful website include: accessibility (easy to find); general description of the commission (structure, vision, mission, policy/procedures); information about upcoming meetings; live streaming of current meetings and archived videos of prior meetings; details of the complaint process, including a downloadable complaint form; availability of final reports upon investigation completion; and list of commissioners and relevant points of contact. Unique features include Virginia's development of a method of controlled access to Certificates of Analysis which is due to be piloted in 2017.

Meeting Schedule and Commission Maintenance

Enabling statutes generally provide minimum meeting requirements (often quarterly) for commissions. States can consider having meetings at different laboratories, particularly early during the planning effort, to assist in the education of all members. Some commissions stream meetings on a website and archive a recording to maximize the engagement of other professionals and interested community members. Some commissions (e.g., New Mexico) will allow additional meetings if the membership requests it. These avenues encourage greater involvement by other stakeholders and the community and add to the perception of transparency.

Most often, although reimbursement of actual or *per diem* costs is provided, statutes do not permit additional monetary compensation. Developing a consistent meeting schedule, selecting meeting locations with ample parking, limiting the length of meetings, providing materials in advance and giving members the ability to attend meetings by telephone are all aspects that have helped with continuity, engagement, and members working well together.

COMMISSION VISION AND MISSION

Values

Consistent themes regarding the composition of commissions and their values are summarized. Broadly expressed thoughts of commission members include:

"For our Commission or any Commission on Forensic Science to be effective, it is essential that members of the commission be prepared to come to the table with a willingness to put any personal agendas and allegiances aside and work with others."

Richard Alpert, Assistant Criminal District Attorney,
Tarrant County and member, TFSC

- ❖ Members must commit to work on a common mission, not their own self-interest.
- ❖ Transparency and confidentiality must be balanced as necessary and appropriate.
- ❖ Participation in the commission cannot be for personal gain.
- ❖ Trust and respect are critical.
- ❖ The overriding goal must be what is best for forensic science.

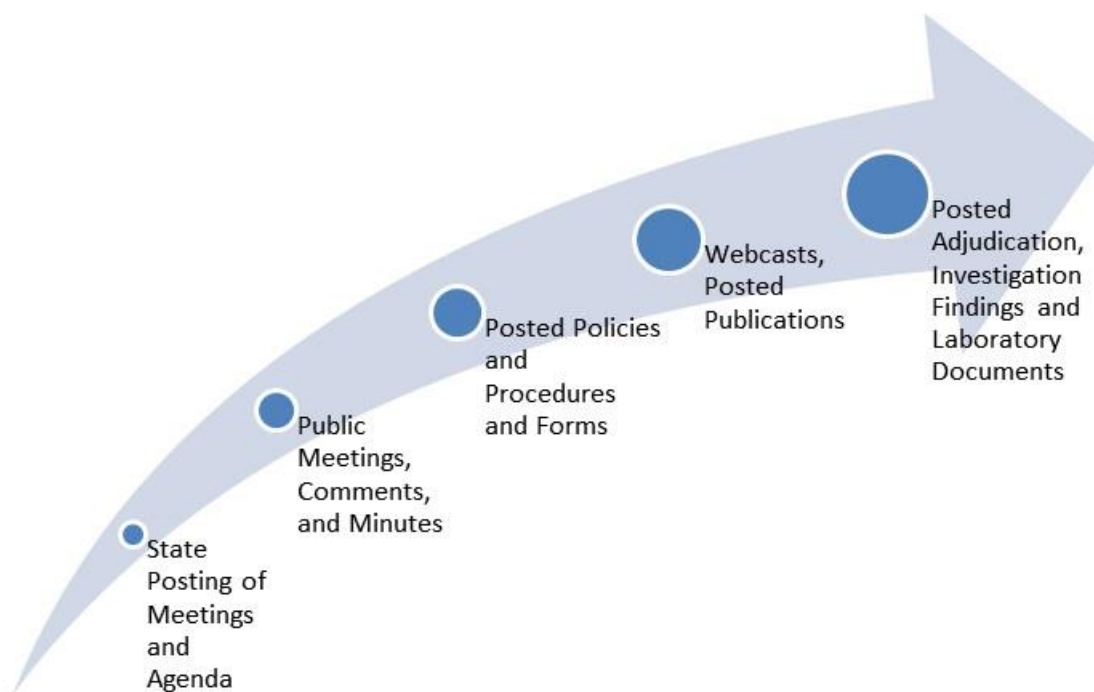
These are the hallmarks of a valuable and effective commission. The state legislature or appointing authority may choose to establish key values for the commission's business to contribute to a long-term vision that guides the members.

Transparency

Transparency is an important element to build confidence among the public and the criminal justice system regarding the professional and objective forensic work performed in a state. Indeed, it permits anyone who is interested to be informed and follow the work of a commission, observe the actual discussions on issues, and see what corrective action is taken. It provides a mechanism to assure the community that the commission has real substance.

However, merely stating that the process will be transparent is not sufficient, and there are numerous aspects and levels of transparency. For example, transparency will often mean some online presence for the commission, including publications, web broadcast and archive of meetings, and accreditation information. **Figure 1** is a continuum of transparency in the context of a state commission, beginning with posting of meetings and agendas and moving to higher levels of perceived transparency.

Figure 1. Possible Actions to Increase Transparency



Because the clear goal of the commission is to encourage good science, achieving an appropriate balance regarding disclosures and transparency is critically important. The commission should encourage the disclosure of problems and investigate them within its purview. However, laboratory directors and analysts may not cooperate as fully in an environment that feels punitive. For example,

total transparency that includes the identities of individual analysts may do more harm than good. The question then becomes how a commission can foster protected disclosure. Crime laboratory leaders are working to produce a culture in which random or systematic errors are understood to be a part of every physical measurement, including every forensic examination. Human errors should be expected and used to improve training and procedures in the laboratory. The state forensic science commission needs to contribute to a positive culture in crime laboratories while maintaining its role as an independent investigating body.

Assessing Capabilities and Needs

Many commissions are charged with assessing the capabilities and needs of existing state crime laboratories. This is a natural first step that helps commission members become acquainted with the facilities, managers and issues. One of the first tasks in this process is to determine a precise and useful definition of a crime laboratory or unit.⁴⁰ Many forensic science units will handle latent print comparisons, crime scene investigation, or digital evidence outside the traditional crime laboratory setting. Because of their size or location, these units may not be accredited, although they may fall under a state commission's responsibility under its authorizing law. Other critical terms that must be defined include 'forensic analyst' and 'forensic analysis'.

When identifying all their forensic science laboratories, some states have directed surveys to all state law enforcement agencies.⁴¹ Such surveys can include questions about the types of analysis performed, number of personnel, accreditation status of the laboratory, certification of personnel and facilities. It is equally important to consider including in the survey an opportunity for the agency to report any issues it is facing relating to its crime laboratory. The commission may also obtain reports from crime laboratory directors regarding budgets and the need for space, equipment and resources. The commission may also examine casework resource requirements and backlogs through a partnership with an academic institution. This research would quantify the minimum

⁴⁰ Texas Article 38.35 (a)(4) provides the following:

The term 'forensic analysis' is defined as a medical, chemical, toxicological, ballistic, or other expert examination or test performed on physical evidence, including DNA evidence, for the purpose of determining the connection of the evidence to a criminal action. The term includes an examination or test requested by a law enforcement agency, prosecutor, criminal suspect or defendant, or court. The term does not include:

- latent print examination;
- a test of a specimen of breath under Chapter 724, Transportation Code;
- digital evidence;
- an examination or test excluded by rule under § 411.0205(c), Government Code;
- a presumptive test performed for the purpose of determining compliance with a term or condition of community supervision or parole and conducted by or under contract with a community supervision and corrections department, the parole division of the Texas Department of Criminal Justice, or the Board of Pardons and Paroles; or
- an expert examination or test conducted principally for the purpose of scientific research, medical practice, civil or administrative litigation, or other purpose unrelated to determining the connection of physical evidence to a criminal action."

⁴¹ For a comprehensive look at the work conducted by the California Task Force on Forensic Services under the California Office of the Attorney General, see https://oag.ca.gov/sites/all/files/agweb/pdfs/publications/bfs_bookmarks.pdf. This material includes sample survey forms and a glossary.

requirements necessary to do the job that the criminal justice stakeholders and community expect crime laboratories to do. A commission may enable the adoption of new methodologies or requirements for accreditation and certification in this manner by a thorough, ongoing understanding of resource constraints and needs.

Data collection and analysis can begin a process of mutual collaboration that can contribute to increasing and maintaining laboratory efficiency, effectiveness and quality. Many states already have a crime laboratory managers' association and may have access to this information. The commission may use this and other information to determine the resources needed for crime laboratories to deliver reliable, scientific results. A commission's independence provides additional justification and support for a crime laboratory's request for equipment and personnel submitted to the funding authority.⁴²

One resource that is available to crime laboratory managers is Project FORESIGHT at West Virginia University. This NIJ-funded project collects data from more than 100 participating laboratories, and in return, the laboratories receive a customized report comparing their performance in each forensic investigative area to industry standards free of charge.⁴³ Additional laboratory management publications and resources are also available through this project.

Stewardship

Crime laboratory directors strive for excellence. They want to practice good science, have appropriate research results to support their methodologies, maintain professional excellence and move the state of forensic services forward. Many state commissions have responsibility for stewardship of crime laboratories in an oversight role. Oversight may include: 1) providing for state accreditation by piggybacking on an existing accreditation body (*e.g.*, New York and Texas), 2) providing an additional and separate licensing process (*e.g.*, Maryland), and 3) receiving and investigating complaints of serious professional negligence and misconduct.

When a separate audit (in addition to that completed by an accreditation entity) is not required by a state, oversight is accomplished primarily through the commission's review of reports regarding misconduct and professional negligence. Crime laboratories are required to send those reports to their accreditation entity.

State-level accreditation may be considered after a commission reviews the forensic laboratories' past performance.⁴⁴ Texas adds an additional layer of oversight by administering a self-disclosure program that permits the TFSC to review all reports of misconduct and professional negligence in a

⁴² For a study reporting that increased personnel in the field is the number one need of the forensic science community, see NIJ. (2006). *Status and needs of forensic science service providers, a report to congress*. Retrieved from <https://www.ncjrs.gov/pdffiles1/nij/213420.pdf>

⁴³ West Virginia University. (n.d.). *FORESIGHT overview*. Retrieved from <http://www.be.wvu.edu/forensic/foresight.htm>

⁴⁴ For a discussion of the potential problems presented by state oversight commissions, please refer to the testimony of Peter M. Marone before the U.S. House of Representatives on the "Reauthorization and Improvement of DNA Initiatives of the Justice For All Act of 2004." *Supra* note 4, at 28. Mr. Marone is the former director of the Virginia DFS.

timely manner. The U.K. combines its Forensic Science Regulator with a Forensic Science Advisory Council, which was created in 2007, to provide a more formalized model.⁴⁵ “This can be viewed as the culmination of a new approach to quality in forensic science which can be traced back to numerous high profile miscarriages of justice in the 1990s.”⁴⁶

Complaints and Investigations

A state forensic science commission may be the entity assigned to investigate complaints filed by individuals or attorneys and the self-disclosure of professional misconduct and negligence by crime laboratories themselves. States and crime laboratories receiving Coverdell grants must have an external and independent governmental entity to investigate allegations of serious negligence and misconduct. State commissions may fulfill this requirement.

Prior to accepting any complaint, decisions should be made regarding the required process, including the creation of a complaint form, development of the investigative process, and considerations relating to notification and issues of confidentiality. The complaint process should be detailed and part of a commission’s published policies and procedures.

Complaint forms may be published on a commission’s website. In Texas, once jurisdiction is determined by the full commission based on the recommendation of the Complaint Review Subcommittee, complaints are investigated by a panel of three commissioners. If an independent analyst in the discipline under consideration appears necessary, additional funding may be required to retain that individual.

After a complaint has been concluded, if professional misconduct or negligence is found, a decision regarding who is to be notified of the finding must be made. At times, prosecutors and defense attorneys must be notified, in addition to the complainant. Depending on the nature of the complaint and the result of the investigation, the information may be subject to discovery.⁴⁷ A complaint disposition form is used by Texas and includes the following language: “As described in FSC policies and procedures §4.0(d), a finding is not a comment upon the guilt or innocence of any individual and is not necessarily a basis for relief in litigation or in any other forum. Any final report itself is not prima facie evidence of the information or findings contained in the report.”⁴⁸

Accreditation

Several states require the accreditation of crime laboratories. This requirement may be part of the duties and responsibilities of a commission by statute, or it may result from legislation that makes accreditation a necessary requirement for the introduction of reports or testimony in a criminal

⁴⁵ *Terms of reference for the Forensic Science Advisory Council*. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/505098/fsac-terms-of-ref-290612.pdf

⁴⁶ Comment from Dr. Jeff Adams, Forensic Science Regulation Unit, Home Office, United Kingdom.

⁴⁷ See *Brady v. Maryland*, 373 U.S. 83 (1963), which held that the prosecution must disclose any evidence that is material to the guilt or punishment of a defendant.

⁴⁸ See the TFSC website at <http://www.fsc.texas.gov>

trial.⁴⁹ Some states that require accreditation (*i.e.*, New York, Texas, Missouri and Maryland) allow this requirement to be satisfied primarily through an independent accreditation body.⁵⁰

The state may require that laboratories submit all correspondence with the accrediting agency to the commission. This would alert the commission to the need for corrective action or allegations of misconduct or professional negligence. The commission may examine if systemic issues exist, investigate specific incidents or take any other appropriate action. The knowledge that a review body exists that will ask questions when necessary increases the community's confidence in the system.

Today, most state crime laboratories (approximately 85 percent) are accredited. Nevertheless, whether accreditation should be part of a commission's responsibilities is worthy of discussion.^{51, 52} If a state is to require its own accreditation process, then its standards should be sufficiently different to warrant a separate audit and must not merely duplicate the accreditation entity's audit. Commissioners must recognize that accreditation by external accreditation bodies is expensive and that the personnel resources required for such audits constitute additional costs to the laboratories.

Although most state and large crime laboratories are currently accredited, many forensic science units — *e.g.*, latent print analysis, digital evidence units, firearms operability, breath alcohol and crime scene investigators— are contained within police departments and are, in general, not accredited. Many smaller law enforcement agencies may lack a crime laboratory but maintain a latent print and CSI unit. These units are often not accredited because compliance with ISO 17025 standards (the general requirements for the competence of testing and calibration laboratories) may not be possible.⁵³ Instead, some agencies have such units accredited under ISO 17020 (the general criteria for the operation of various types of bodies performing inspection). Another strategy to handle these smaller forensic units is to have all analysts certified, which can provide a certain level of confidence in the reliability of the work conducted.

Maryland has a unique program that requires all laboratories and latent units (state law does not yet cover CSI units) to be licensed. This state licensure is one of several requirements for a laboratory's accreditation. This strategy permits more frequent audits than required by the accreditation body. Any disclosures by the laboratory required by the accreditation body are maintained and then reviewed by the state annually. The four non-accredited latent print units in the state can still gain state licensure through an assessment and audit process, and on-site visits are conducted every three

⁴⁹ Texas Code of Criminal Procedures, Art. 38.35(c);

⁵⁰ Typically, accreditation is achieved through ASCLD/LAB, which requires laboratories to meet ISO/IEC 17025:2005 requirements and applicable ASCLD/LAB-International supplemental requirements. ASCLD. (n.d.). ANSI-ASQ National Accreditation Board (ANAB) is now the home of ASCLD/LAB. Retrieved from <http://www.asclcd-lab.org/> Other accrediting bodies include A2LA, the American Board of Forensic Toxicology, ANAB and the College of American Pathologists.

⁵¹ For a recent discussion of states requiring accreditation, see National Conference of State Legislatures. (2013). *State accreditation of forensic laboratories*. Retrieved from <http://www.ncsl.org/Documents/cj/AccreditationOfForensicLaboratories.pdf>

⁵² The accreditation process may include review of internal quality assurance programs, internal audits, management reviews, proficiency testing, on-site assessments (every four years), biannual site-visits, nonconformance reports, corrective actions, root-cause analysis, and annual summaries. Often a state commission receives copies of these documents at the time they are filed or annually.

⁵³ For a discussion of the importance of distinguishing these activities from those performed in crime laboratories, see John M. Collins and Jay Jarvis, *supra* note 4, at 28.

years. This program is operated by the Maryland DHMH, Office of Health Care Quality, which assesses all medical laboratories in Maryland. Although this may seem an unusual fit, the personnel have experience in medical laboratories and quality assurance. Additionally, they work with the Forensic Licensing Advisory Board (FLAB) in the development and implementation of standards for state licensure.⁵⁴

State-level accreditation may require more frequent oversight than would typically exist with an independent accreditation entity. Whereas independent accreditation audit teams typically visit every five years, a state's own accreditation process can result in a more frequent and visible relationship. This may increase transparency, accountability and public confidence. Furthermore, the commission can consider any additional accreditation requirements it feels are necessary and appropriate.

A commission will also need to identify any private laboratories, three out of 10 public laboratories outsource some work.⁵⁵ In Maryland, the state will issue a letter of acceptance to private laboratories if they are determined to be qualified per FLAB requirements. In Texas, the accreditation process includes private laboratories.

Certification/Licensure

A state forensic science commission may oversee requirements for the certification of forensic analysts, as is currently being advocated at the federal level.⁵⁶ No one certification exists for all disciplines; instead, certifications are discipline specific. Some disciplines, such as digital forensics, do not currently have a single universally accepted certification, and different certifications can be obtained from different entities and from the manufacturers of specific software tools.

The requirements for specific discipline certifications vary widely and may require years of experience before an analyst may even apply. Additionally, certification tests may vary significantly in cost and level of difficulty. Any certification process would be in addition to existing external and internal proficiency testing undertaken by laboratory analysts as part of accreditation and quality assurance protocols.

Requiring certification across the board is associated with other challenges, including union contracts and management operational issues (*e.g.*, what must be done when an employee fails to maintain his or her certification).

Many laboratories encourage but do not require certification. They may support it through incentives, such as paying for the certification or making it a prerequisite for salary increases and promotions. A commission must consider these issues before any statute is enacted that requires certification. For example, when adding a licensing program to the TFSC's responsibilities, the Texas legislature recognized that it would take time for a committee of scientists to create the

⁵⁴ The FLAB is composed of medical, clinical and forensic laboratory directors; two accreditation bodies; and personnel from the DHMH. Currently, its members are considering expanding or creating another group to include more laboratory directors and other customers to discuss issues of mutual concern.

⁵⁵ Census of Publicly Funded Forensic Crime Laboratories, *supra* note 12.

⁵⁶ See NCFS. (n.d.). *Views of the commission: Certification of forensic science practitioners*. Retrieved from <https://www.justice.gov/ncfs/file/888671/download>

requirements for such a program and provided a three-year time frame for the transition.⁵⁷ North Carolina has required the certification of analysts working at the NCSCL since June 2012.⁵⁸

Retroactive Reviews

Many states have initiated statewide reviews of certain cases or classes of forensic casework. This has happened in recent years regarding DNA mixture interpretation, hair microscopy and serology. The state commission may be well positioned to conduct these types of retroactive reviews.

The commission may appoint a subcommittee to identify scientists and appropriate stakeholders to meet and determine the methodology for retroactive reviews. These reviews reveal an important attribute of commissions: They should be flexible enough to establish subcommittees for specific projects/reviews and to request assistance from other professional scientists and stakeholders as appropriate for a project.

As a specific example, when the Virginia Forensic Science Board begins a discipline-specific case review, members of the Board and the Scientific Advisory Committee meet with other identified stakeholders and the general counsel to the Virginia DFS. The Virginia State Crime Commission and the Virginia Indigent Defense Commission are included on these review panels. The Virginia State Crime Commission can readily identify any defendants who are currently prisoners within the state correctional system. Additionally, investigators for the Virginia Indigent Defense Commission can assist in locating defendants or family members when necessary. This is a further example of how the early identification of assets and resources is very important to state commissions.

Texas has taken on several such reviews. For example, in collaboration with the State Fire Marshall, the state altered the use of methodologies in arson investigations. “In a December 7, 2015 statement, the International Association for Arson Investigators (IAAI), the largest professional organization of fire investigators in the world, endorsed Texas’ actions as a model for multidiscipline science review panels. Specifically, the IAAI supported Texas’ independent, multidisciplinary Science Advisory Workgroup. This is the group that conducted the postconviction review of arson convictions where there was a substantial and credible allegation that those convictions were based on outdated science or methodology. The IAAI encourages every state to follow the Texas model for review and, through IAAI’s Public Agency Advisory Committee, aids jurisdictions to help locate resources for reviews of the science and methodology underlying arson convictions.” For more information, see the white paper on this topic created by the TFSC.⁵⁹

On additional aspect of these case reviews, those regarding trial transcripts, is that the review team may also identify errors made by prosecutors and defense counsel regarding overstating the forensic analyst’s testimony in arguments to the jury. This is merely one example in which a state commission

⁵⁷ See TFSC. (n.d.). *Texas forensic science commission forensic analyst licensing program*. Retrieved from <http://www.fsc.texas.gov/texas-forensic-science-commission-forensic-analyst-licensing-program>

⁵⁸ North Carolina General Statutes. Chapter 114. Department of Justice; Article 9. North Carolina State Crime Laboratory; Session Law (S.L.) 2011-19; § 4. Amended the first time in S.L. 2011-307; § 8. Amended the final time in S.L. 2012-168; § 6.1

⁵⁹ See the TFSC website at <http://www.fsc.texas.gov>

would be in a good position to discuss systemic issues regarding the use of forensic science by stakeholder.

Training and Education

The NAS Report was clear on its recommendation for the education of prosecutors, defense attorneys and judges in forensic science. Some examples of educational efforts are as follows:

- ❖ **Arizona** does not have a statutorily created commission. It has, however, had a Forensic Science Advisory Committee since 2007. Operating under the authority of the Attorney General, this Committee includes dozens of stakeholders who attend meetings several times a year. In 2011, the Committee held its first Forensic Science Academy at the Maricopa County Medical Examiner's Office, and both prosecutors and defense attorneys were invited to attend. Since that time, the Committee has held a Basic Academy, an Advanced Academy and a Driving under the Influence (DUI), Domestic Violence, and DNA (3-D) Academy. Monies gained through tuition for the academies are used to bring in speakers from out of state to lecture on topics to provide continuing education to scientists several times a year. The Committee also works with Arizona's Judicial College to provide forensic science training for judges. To date, more than 9,800 hours of training have been provided to more than 1,100 individuals.
- ❖ **Montana** has a Forensic Science Laboratory Advisory Board that was established as a Coverdell-required independent investigative body. Although this Board generally only meets annually, it performs community outreach and training, including open houses hosted by the state laboratory for the public. Personnel also deliver numerous presentations and training to stakeholder organizations, including the sheriffs' association, chiefs of police, defense organization, county attorneys, judges and justices of the peace.
- ❖ The **TFSC** routinely works with the TCJIU as a partner to provide training for stakeholders.
- ❖ **Virginia's** Forensic Science Board and DFS jointly run a Forensic Academy for crime scene investigators from law enforcement agencies that submit evidence to crime laboratories for analysis. The CSIs can participate annually in continued training and engage in an alumni association. These activities are designed to improve collaboration between local agencies and the DFS, which handles most forensic analysis in the state.

Other Responsibilities

Many commissions use the scientists involved on a commission or subcommittee to assist in the review of new methodologies prior to their implementation. Such reviews may be organized through a state's forensic laboratory director's organization. The reviews may be connected to national-level efforts, including the work of the OSACs. In some cases, commissions may assign a commission member or staff person to act as the conduit to national reform efforts, other state commissions or professional organizations in the forensic sciences. These lines of communication may facilitate the transmittal of standards and guidelines from national programs to state and local forensic scientists.

Several states take on specific, ongoing projects regarding the identification of human remains.⁶⁰ Again, these projects require multidisciplinary involvement and benefit greatly from academic partnerships. Dialogue with federal agencies regarding requirements for DNA entries into databases and comparisons is crucial, and as for other projects, commission/boards are appropriate responsible institutions. The Rio Grande Project in Texas represents a commission taking on such a responsibility. Additionally, state commissions represent appropriate multidisciplinary bodies to participate in the National Missing and Unidentified Persons System (NamUs) program that provides NIJ support to assist in the use of DNA technology for missing persons and the identification of human remains.⁶¹

CONCLUSION

With 10 states having legislatively established commissions, several others with informal boards and still others (*i.e.*, Massachusetts) considering the creation of a forensic science commission, sufficient momentum and interest likely exist to create a National Association of Forensic Science Commissions. Such an association would facilitate the networking of commissions regarding issues that arise. Additionally, conferences would provide an opportunity to disseminate information on best practices regarding websites, policies and procedures, operational considerations, retroactive discipline case reviews and various other issues as they emerge. They also could serve as productive venues for subsets of commissions, such as crime laboratory directors, general counsel, statisticians and staff. States interested in creating a state commission would benefit from technical assistance, such as best practices, model policies and procedures and guided discussions during planning efforts to identify how best to meet specific states' needs.

Smaller states may consider combining their resources through a regional approach. Such an approach would be like that followed by North Carolina, whose board invited several scientists working in other states to participate. This relatively broad-based group provides the state with extensive expertise and resources.

Recognizing that more than 90 percent of crime laboratory services are provided by state and local laboratories; states are in an ideal position to impact the quality of forensic work and enhance the public confidence in the results. State forensic science commissions can provide stewardship and support to forensic science laboratories within their jurisdictions. State commissions can bring together forensic scientists, crime laboratory managers and customers in the criminal justice system. This multidisciplinary group can then identify and solve issues, learn from other states and foster continuous improvement.

This group of professionals focused on enhancing forensic work should ideally engage in a planning effort to describe and define the role and responsibilities their state commission should have. This planning effort also initiates the process of relationship building and the education of its participants to best identify current and potential issues facing crime laboratories and how they can be most appropriately addressed.

⁶⁰ See the TFSC website at <http://www.fsc.texas.gov>

⁶¹ U.S. DOJ. (n.d.). *NamUs: National missing and unidentified persons system*. Retrieved from <https://namus.gov/about.htm>

Because many of the duties and responsibilities of a state forensic science commission will have public interest, the transparency of its operations will increase public confidence regarding the integrity of the commission's process, forensic evidence and the criminal justice system. When the level of broad-based, proactive collaboration on a commission and its subcommittees is higher and when the public is more informed on the work being done, financial support and greater public awareness and support for laboratories will more likely be forthcoming.

APPENDIX 1. SUMMARY TABLES OF STATE FORENSIC SCIENCE COMMISSIONS

Table A-1. Originating Statute for Operating State Commissions

Commission			
State		Relevant Statute	Link
Arkansas	1991	<u>Arkansas Code 2015, § 12-12-302</u>	<u>http://law.justia.com/codes/arkansas/2015/title-12/subtitle-2/chapter-12/subchapter-3/section-12-12-302</u>
Delaware	2015	Delaware Code Title 29, Chapter 47 § 4714, 2015	<u>http://www.delcode.delaware.gov/title29/c047/index.shtml</u>
DC	2011	D.C. Code § 5-1501.11	<u>http://dcode.org/simple-2012/sections/5-1501.11.html</u>
Maryland	2009	MD Health-Gen Code § 17-217 (2013)	<u>http://law.justia.com/codes/maryland/2013/article-ghg/section-17-217/</u>
Missouri	2009	650.059. RSMO, 2009	<u>http://moga.mo.gov/mostatutes/stathtml/65000000591.html</u>
North Carolina	2011	North Carolina, General Statutes. Chapter 114. Article 9. § 114-61	<u>http://www.ncleg.net/EnactedLegislation/Statutes/PDF/ByArticle/Chapter_114/Article_9.pdf</u>
New York	1994	NY CLS 995-a	<u>http://ag.ca.gov/meetings/tf/pdf/ny.pdf</u>
Rhode Island	1978	Title 12 Criminal Procedures, Chapter 12-1.1 et seq.	<u>http://law.justia.com/codes/rhode-island/2012/title-12/chapter-12-1.1/</u>
Texas	2005	<u>Tex. Code Crim. Proc. art. 38.01 et seq.</u>	<u>http://www.statutes.legis.state.tx.us/Docs/CR/htm/CR.38.htm#38.01</u>
Virginia	2005	Va Code Ann. § 9.1-1109	<u>https://vacode.org/9.1-1109/</u>
Washington	1995	RCW Chapter 43.103	<u>http://apps.leg.wa.gov/rcw/default.aspx?cite=43.103</u>

Table A-2. Responsibilities for Operating State Commissions

State	Prescribe Qualifications, Duties of Lab Director	Fiscal Oversight	Guidance/ Programs/ Protocols	Reviews Complaints	Accreditation/ Licensing
Arkansas	X	X			
Delaware			X		
DC			X	X	
North Carolina			X	Ombudsman	
Rhode Island		X			
Virginia		X	X		
Washington	X	X	X		
Maryland					X
Missouri				X	
New York					X
Texas				X	X

Table A-3. Summary of the Membership of Current State Forensic Science Commissions

State/Body	Appointing Authority	Crime Lab Manager	Scientist	Prosecutor	Lawyer/AG	Defense	Judge	Legislator	Law Enforcement	Physician/ME	State Agency	Member-at-Large
Arkansas	Governor			X	X		X		X	X		X
Delaware	Governor				X	X		X	X		X	X
DC Science Advisory Board	Mayor	X	X									
DC Stakeholders Council	Mayor	X		X	AGO	X		X	X	X	X	
Maryland	Governor	X	X								X	
Missouri	Governor	X		X					X			
New York	Governor	X	X	X	X	X	X	X	X		X	X
North Carolina	Attorney General	X	X							X		
Rhode Island	Governor				X				X			X
Virginia Forensic Science Board	Governor	X	X	X	AGO	X		X	X	X	X	
Virginia Scientific Advisory Committee	Governor	X	X									
	Governor			X				X	X	X		

AGO: Representative of Attorney General's office in the state.

ME: Medical Examiner

APPENDIX 2. SNAPSHOT OF STATE FORENSIC SCIENCE COMMISSIONS

The information presented below is summarized; see the relevant statutes and points of contact for specific details.

Arkansas

In 1981, Arkansas took legislative action to remove the state laboratory from the Department of Public Safety and make it an independent agency. It is the primary lab for the state and accepts public defender cases. In 1991, Arkansas created an eight- member State Crime Laboratory Board as a policy board. Its membership - primarily considered to be its “customer” base - is tasked with prescribing responsibilities of the lab’s executive director and the appointment of the state’s medical examiner. The Board is authorized to accept gifts, grants or funds and enters into contracts. It has policy-making powers as to the operation of the Arkansas State Crime Laboratory.

Eight members who are gubernatorial appointments with seven-year terms:

- ❖ Active judge;
 - ❖ Practicing lawyer;
 - ❖ County Sheriff;
 - ❖ Chief of police;
 - ❖ Prosecutor;
 - ❖ Two physicians; and
 - ❖ Member-at-large.
- ❖ Statute: Arkansas State Crime Laboratory Board; Arkansas Code 2015, § 12-12-302, 1991

Contact: Kermit.Channell@crimelab.arkansas.gov

Arizona

Arizona’s Forensic Science Advisory Committee was not statutorily created. Instead, in 2008, the Arizona Attorney General created this group, which is administered by the Attorney General’s Office. This Committee is a relatively large group, and its membership includes all crime laboratory directors; representatives from the prosecution, defense, judiciary, Justice Project, law enforcement, and Arizona Criminal Justice Council; and a victim advocate. It has been chaired since its inception by a retired judge. The Committee has created a Forensic Science Academy to train prosecutors, defense attorneys, crime laboratory analysts and judges. It has also recently begun a hair microscopy review working group. The Committee operates informally and serves as the independent investigative body for Coverdell grants.⁶² The Office of the Attorney General provides staff support through a part-time coordinator.

⁶² The Paul Coverdell Forensic Science Improvement Grants Program (the Coverdell program) awards grants to states and units of local government to help improve the quality and timeliness of forensic science and medical examiner

California

California enacted legislation in 2007 creating the California Crime Laboratory Review Task Force to “make recommendations as to how best to configure, fund, and improve the delivery of state and local crime laboratory services in the future.”⁶³ A comprehensive survey was conducted and numerous public meetings held over two years at different crime laboratories. A comprehensive report was issued in 2009 recommending, among other items, the certification of analysts and accreditation of laboratories through existing accreditation bodies. They also recommended the creation of a statewide entity, stating that the most effective method of handling with the identified laboratory issues would be by means of inter-jurisdiction coordination and advocacy at the state level. The Task Force was to issue a supplemental report the following year. However, this report was never published, and the group no longer meets. No state commission was ever created.⁶⁴

Delaware

Delaware created its Forensic Science Commission in 2015. The mission of this Commission is to provide oversight and guidance to the Division of Forensic Science, which is within the Department of Safety and Homeland Security. Its 10 members include customers (i.e., law enforcement, prosecution and defense), legislators and forensic scientists.

Ten members, including some gubernatorial appointments:

- ❖ Secretary of Department of Health & Social Service;
 - ❖ Attorney General (or designee);
 - ❖ Chief Defender (or designee);
 - ❖ State Senate—Chair, Homeland Security;
 - ❖ House—Chair, Homeland Security;
 - ❖ Representative of the Chiefs of Police;
 - ❖ State Troopers Association or FOP (with forensic science training; list provided by the Secretary of Department of Safety & Homeland Security and the governor); and
 - ❖ Two members with forensic science expertise (gubernatorial appointments).
- ❖ Statute: Forensic Science Commission; Delaware Code Title 29, Chapter 47§4714, 2015

services. The program requires forensic laboratory recipients to certify that a government entity exists with a process in place to conduct an external and independent investigation of allegations of serious negligence and misconduct. More information can be found at NIJ. (n.d.). *Coverdell National Forensic Science Improvement Grants Program*. Retrieved from <http://www.nij.gov/topics/forensics/lab-operations/capacity/nfsia/pages/welcome.aspx>

⁶³ California Penal Code § 11062.

⁶⁴ Ryan Goldstein opined that California’s failure to implement a commission may have resulted from budget issues and resistance from forensic science organizations: Goldstein, Ryan, “Improving Forensic Science through State Oversight,” *Texas Law Review* 90 (2011-2012): 225.

District of Columbia

District of Columbia provided for two advisory and oversight bodies when it created the DCDFS in 2011. The Science Advisory Board is composed of nine experienced scientists, and the Director and Deputy Director of the DCDFS serve as *ex officio*, non-voting members. This Board serves to review and recommend matters related to the scientific operation of the Department. The second board is the Stakeholder Council, which consists of designated positions and has the Deputy Mayor for Public Safety serving as its chairperson. Its duties consist of identifying issues regarding the delivery of services and the effectiveness of DCDFS. It also advises the Mayor and the D.C. Council on matters relating to the Department.

Science Advisory Board

Nine members who are mayoral appointments with three-year terms, as well as two *ex-officio*, non-voting members:

- ❖ Five scientists with experience in scientific research and methodologies that are not currently employed by DCDFS, including one statistician and one member with expertise in quality assurance;
- ❖ Four forensic scientists who are not currently employed by the Department or by a law enforcement laboratory;
- ❖ Director of the DCDFS—non-voting *ex officio*; and
- ❖ Deputy Director of the DCDFS—non-voting *ex officio*.
- ❖ Statute: D.C. Code § 5-1501.11

Stakeholder Council

- ❖ Deputy Mayor for Public Safety and Justice;
- ❖ Chief of the Metropolitan Police Department;
- ❖ Chief Medical Examiner;
- ❖ Attorney General;
- ❖ US Attorney for D.C.;
- ❖ Director of the Public Defender Service for D.C.;
- ❖ Federal Public Defender for D.C.;
- ❖ Director of the Department of Health;
- ❖ Chief of the Fire and Emergency Medical Services Department;
- ❖ Director of the DCDFS;
- ❖ Head of any other government agency that regularly utilizes the forensic science services of the Department; and
- ❖ Chairperson of Judiciary Committee of the Council of D.C.—*ex officio*.

The DCDFS is accredited.

Statute: D.C. Code § 5-1501.13

Contact: contactDFS@dc.gov

Illinois

Illinois established a Laboratory Advisory Committee in 2005 to make recommendations regarding accreditation and quality assurance. This group has not met for the last five years.

Indiana

Indiana statutorily created a Commission on Forensic Sciences in 1959. This Commission was intended to establish and maintain a laboratory for scientific research and experimentation. However, this commission no longer appears to meet.

Maryland

Maryland developed a different model in 2009. In this state, the legislation placed oversight responsibility for the regulation of accredited and non-accredited forensic laboratories under the Department of Health and Mental Hygiene (DHMH), Office of Health Care Quality. This Department is the agency that regulates all clinical laboratories. The legislature focused on requiring crime laboratories to meet requirements relating to quality assurance and laboratory management and administration and to obtain a state license to conduct forensic work. The Maryland Forensic Laboratory Advisory Committee was established to advise the DHMH in the implementation of a licensing program. By 2012, it had published the program regulations and had begun licensing forensic laboratories using a “crosswalk” to bridge state-developed requirements with existing accreditation programs used by the laboratories. It requires frequent on-site survey visits and audits proficiency testing and the disclosure of professional misconduct or negligence. All full-service crime laboratories are accredited. Four non-accredited latent print laboratories, which are based in police departments, have also gained state licensure. These laboratories require a full on-site survey every three years in addition to annual proficiency testing and internal on-site audit reviews.

The Forensic Sciences Advisory Committee consists of ten members who are mostly gubernatorial appointments and have three-year terms:

- ❖ DHMH, Director of Laboratories Administration (or designee);
- ❖ DHMH, Director of Office of Health Care Quality (or designee);
- ❖ American Society for Clinical Laboratory Science;
- ❖ University of Maryland School of Medicine, Department of Medical Research and Technology;
- ❖ A2LA;
- ❖ AAFS;
- ❖ ASCLD/LAB;
- ❖ Director of a state forensic laboratory;
- ❖ Director of a county forensic laboratory; and
- ❖ Director of a municipal forensic laboratory.

The governor appoints the chair. This state requires accreditation.

Contact: Lori.dodson@maryland.gov

Statute: MD Health-General § 17-217, 2013

Minnesota

Minnesota had a very active Commission on Forensic Science that was created in 2006 for Coverdell compliance. This Commission's early work included a survey of the forensic work performed in the state, although there was a perception that this function was not well-defined. The members were all voluntary and lacked funding or formal authority or power. By 2012, this Commission was no longer meeting.

Missouri

Missouri's Crime Laboratory Review Commission, which was created in 2009 within the Department of Public Safety, is a very active commission and met nine times in 2015. This group has only five members: the Deputy Director for the Department of Public Safety, a crime laboratory manager, a chief of police, a prosecutor and a defense attorney.

Its mission is broad: It is to provide an independent review of state-funded laboratories and ("shall have the power to") do the following: 1) assess capabilities and needs, 2) authorize independent investigations into allegations of serious negligence or misconduct, 3) appoint investigative teams, 4) recommend changes for agencies found to be negligent, 5) assess the capabilities and needs of laboratories regarding quality and timely services, and 6) issue reports to the Director of the Department of Public Safety.

This Commission's annual reports summarize activities and suggestions to improve the reviewed laboratories. As of 2012, Missouri law requires that laboratory reports and testimony must be from accredited laboratories. This accreditation is to be provided by an organization approved by the Department of Public Safety.⁶⁵

The Crime Lab Review Commission has five members, most of whom are gubernatorial appointments:

- ❖ Director of the Department of Public Safety;
- ❖ Prosecutor;
- ❖ Defense attorney;
- ❖ Senior manager from an accredited crime laboratory; and
- ❖ Member of law enforcement in a management position.

⁶⁵ 650.060.1 RSMO.

This state requires accreditation.

Statute: 650.059. RSMO, 2009

Contact: the Missouri Crime Laboratory Review Commission at
<http://dps.mo.gov/dir/crimelabreviewcommission.php>

Montana

Montana has a Forensic Science Laboratory Advisory Board that was not statutorily created but was, instead, created as a Coverdell-required independent investigative body. Although this Board generally only meets annually, its major activities include community outreach and training.

New York

In 1994, New York became the first state commission mandating accreditation of forensic labs as an important foundation of sound forensic work. The legislation created the New York State Commission on Forensic Science to develop a program of accreditation for all forensic laboratories. This accreditation includes approval of laboratory methodologies and the establishment of minimum qualifications for laboratory directors. The goals of this enabling legislation included increasing the “effectiveness, efficiency, reliability and accuracy” of forensic work and promoting increased cooperation and coordination among forensic laboratories and other agencies in the criminal justice system.⁶⁶ The statute’s objectives also identified issues relating primarily to DNA, including the need to ensure compatibility with other state and federal laboratories to the extent necessary to share information, data and results of forensic analyses and tests. Administrative responsibility for the Commission was placed within the Division of Criminal Justice Services (DCJS), and the Office of Forensic Services was created within that Division. This office also oversees the DNA database. The Commission has 14 members who are scientists, criminal justice agency heads, academics and attorneys (both prosecution and defense.) The DNA Subcommittee, which was created at the same time as the Commission, was given sole authority over DNA laboratory accreditation and methodologies. This seven-member subcommittee is composed of all scientists with legislatively defined specific areas of expertise.

The State Commission on Forensic Science has 14 members, most of whom are gubernatorial appointments, have three-year terms, and are subject to reappointment:

- ❖ Commissioner of the New York DCJS (serves as Chair);
- ❖ *Ex officio* Commissioner of the Department of Health (or designee);
- ❖ Chair New York state crime laboratory committee;
- ❖ Director of a forensic laboratory in New York;
- ❖ Director of the Office of Forensic Services, DCJS;
- ❖ Two scientists with experience in laboratory standards or quality assurance (from the list provided by the Commissioner of Health);
- ❖ Law enforcement (from the list provided by the Commissioner of Criminal Justice Services);

⁶⁶ New York Executive Law § 995-b.

- ❖ Prosecution (from the list provided by the Commissioner of Criminal Justice Services);
- ❖ Public criminal defense bar (from the list provided by the public defense organization);
- ❖ Private criminal defense bar (from the list provided by the defense attorney organization);
- ❖ Two members-at-large: one recommended by the president of the senate and one recommended by the speaker of the assembly; and
- ❖ Attorney or judge with a background in privacy issues and biomedical ethics (from the list provided by the Chief Judge of the Court of Appeals).

The statutorily created DNA Subcommittee includes seven scientists, and its chair is appointed by the Commission Chair. This Subcommittee is the sole authority on DNA laboratory accreditation and methodologies.

This state requires accreditation.

Statute: NY CLS § 995-a

Contact: forensics@dcjs.ny.gov

North Carolina

North Carolina created the North Carolina Forensic Advisory Board in 2011. This Board consists of a group of scientists and academics, many from outside of the state, who advise the North Carolina State Crime Laboratory (NCSCL). Its members are appointed by the Attorney General. The composition of the forensic disciplines within the committee is specified in its enabling statute.

Administratively housed within the North Carolina Department of Justice Office of the Attorney General, the Board reviews new scientific programs and methods, protocols for testing, guidelines for court testimony and qualification standards for laboratory scientists. North Carolina provides community outreach through laboratory tours and observance of North Carolina's Forensic Science Week. It is also very transparent, providing all laboratory case files to its customers via a secure web-based program. Its Quality Assurance Manual, policies and procedures accreditation materials, and audit reports are all available online, as are its Annual Reports to the Joint Legislative Oversight Committee on Justice & Public Safety. The North Carolina statute provides that complaints are received and investigated by an ombudsman.

The Forensic Science Advisory Board has fifteen members appointed by the Attorney General with four-year, staggered terms:

- ❖ State Crime Laboratory Director;
- ❖ Forensic scientist with experience in quality assurance;
- ❖ Chief Medical Examiner;
- ❖ Forensic scientist in molecular biology;
- ❖ Forensic scientist in population genetics;
- ❖ Scientists in forensic chemistry;
- ❖ Scientists in forensic biology;
- ❖ Forensic scientist in trace evidence;
- ❖ Scientist in forensic toxicology;

- ❖ Member of IAI;
- ❖ Member of the Association of Firearms and Tool Mark Examiners;
- ❖ Member of International Association for Chemical Testing or American Chemical Society;
- ❖ Member of ASCLD;
- ❖ Member of AAFS; and
- ❖ Member of American Statistical Association.

This state requires accreditation. The North Carolina General Statute states that accreditation shall be by an “accrediting body that requires conformance to forensic specific requirements and which is a signatory to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement for Testing.” (ISO 17025 for testing laboratories). The current accrediting body for the NCSCL is ANAB.

North Carolina requires individual certification, and the North Carolina General Statute states: “Forensic Scientists I, II, and III, forensic science supervisors, and forensic scientist managers at the State Crime Laboratory shall be required to obtain individual certification consistent with international and ISO standards within 18 months of the date the scientist becomes eligible to seek certification according to the standards of the certifying entity...” There is no certification requirement for local laboratories.

Statute: North Carolina General Statutes. Chapter 114. Article 9. § 114-61

Contact: North Carolina Lab Director: John A. Byrd, jbyrd@ncdoj.gov

Oklahoma

Oklahoma has a Forensic Sciences Improvement Task Force hosted by the Oklahoma District Attorneys Council. This Task Force operates as the Coverdell independent investigative body and the committee for the Justice Assistance Grants to Oklahoma. The Task Force provides state plans for forensic laboratories to improve the quality, timeliness and credibility of forensic services. The Task Force also holds an Open House for attorneys and the public to improve their understanding of the forensic services in the state. As of 2005, Oklahoma requires the accreditation of public crime laboratories: 74 OK Stat § 74-150.37 (2014). This statute exempts alcohol/breath, CSI, digital, crime scene reconstruction, marijuana and latent print analysis. For latent print analysis to be admitted into evidence, it must be conducted by an International Association for Identification (IAI)-certified examiner.

Rhode Island

In 1978, Rhode Island was the first state to create a State Crime Laboratory Commission to oversee the state crime laboratory, which is located at the University of Rhode Island. This statutory authority is broad and specifically provides for oversight, including goals, priorities, budget, and monitoring and evaluation of the general operation of the state crime laboratory. The legislative purpose focused on the need for goals, objectives and standards for crime scene investigation (CSI) and the coordination of the state and local law enforcement agencies. The powers and duties include, among others, the budget functions of applying for grants and accepting appropriated funds.

The commission itself has five members, two of whom are *ex officio*. They are tasked with recommending legislation to the governor and legislature. The administration of the state crime laboratory, including budget and personnel, is the responsibility of an Executive Secretary, who is the Dean of the College of Pharmacy at the University of Rhode Island. This Executive Secretary provides reports of these operations to the commission.

The State Crime Laboratory Commission has five members who are gubernatorial appointments, have two-year terms and are subject to reappointment:

- ❖ Attorney General—*ex officio*;
- ❖ Superintendent of state police—*ex officio*;
- ❖ Rhode Island Police Chiefs Association representative; and
- ❖ Two public members.
- ❖ Statute: Title 12 Criminal Procedures, Chapter 12-1.1 et seq.

Contact: For the Attorney General, Ex Officio Chair: <http://riag.ri.gov>. The Dean of the College of Pharmacy at the University of Rhode Island is the Ex Officio Executive Secretary: <http://web.uri.edu/pharmacy/pharmacy-people>.

Texas

Texas currently has what some describe as the most robust state commission. This characterization is based on its staff (which currently includes general counsel and three other positions), budget and breadth of responsibilities. Created in 2005 as an oversight body, one of the Texas Forensic Science Commission's (TFSC) primary responsibilities is to investigate complaints of professional misconduct and negligence. The initial enabling legislation also provides for a program of self-disclosure through which all laboratories, facilities or entities that conduct forensic analyses report professional negligence or misconduct to the Commission. (§ 4(a)(m2) Texas Code of Criminal Procedure.) With this focus on oversight for forensic services in Texas and the passage of an omnibus bill on related criminal justice issues, the legislature also required forensic laboratories to be accredited and placed administrative responsibility for that program within the Department of Public Safety. Included in this legislation was the requirement that laboratories be accredited for their evidence to be admissible in a criminal action.

In 2015, the accreditation responsibility was transferred to the TFSC. Simultaneously, the TFSC was also given the responsibility of creating and administering a forensic analyst licensure program that mandates licensure for analysts in forensic disciplines subject to accreditation in Texas by 2019. Other areas of responsibility include: performing discipline-specific reviews; pursuing forensic development activities, such as staying current with national forensic reform work; educating criminal justice professionals; and conducting the Rio Grande Identification Project. The TFSC is an independent Commission but is administratively located within the Sam Houston University budget.

The TSFC has nine members who are gubernatorial appointments, have two-year staggered terms, and are subject to reappointment:

- ❖ Prosecuting attorney (from the list provided by the Texas District and County Attorneys Association);

- ❖ Defense attorney (from the list provided by the Texas Criminal Defense Lawyers Association);
- ❖ University of Texas (clinical laboratory medicine; from the list provided by the chancellor);
- ❖ Texas A&M University (clinical laboratory medicine; from the list provided by the chancellor);
- ❖ Texas Southern University (from the list provided by the chancellor);
- ❖ University of North Texas Health Science Center at Fort Worth Missing Persons DNA Database (director or division head); and
- ❖ Sam Houston State University College of Criminal Justice (expertise in forensic science or statistical analysis; from the list provided by the chancellor).

The governor designates the chair.

Standing Subcommittees:

- ❖ Forensic Development;
- ❖ Legislative Development;
- ❖ Complaint Screening;
- ❖ Rio Grande Identification Project;
- ❖ Licensing Advisory; and
- ❖ *Ad Hoc* Discipline Case Review Panels.

This state requires accreditation.

Statute: Tex. Code Crim. Proc. art. 38.01 et seq.

Contact: <http://www.fsc.texas.gov>

Virginia

Virginia created two boards by statute in 2005. The Forensic Science Board, which consists of 15 members, includes stakeholders, customer base and representatives from the state agencies, Supreme Court of Virginia and legislature and two members from the Scientific Advisory Committee. Serving as a policy board for the Virginia Department of Forensic Science (DFS), it is required (has the “power and duty”) to provide program and fiscal standards and goals; establish long-range programs for new technologies; advise the Governor, Director of the Department and the General Assembly on matters relating to the DFS in general; and act on recommendations of the Scientific Advisory Committee. (The DFS is the primary provider of public forensics in Virginia.) The Board also monitors funds and contracts, approves grants, and recommends actions to “foster and promote coordination and cooperation between the DFS and the user programs that are served.”⁶⁷

⁶⁷ Code of Virginia § 9.1-1110.

Forensic Science Board

Fifteen members who are gubernatorial appointments:

- ❖ Superintendent of Virginia State Police (or designee);
- ❖ Director of the Department of Criminal Justice (or designee);
- ❖ Chief Medical Examiner (or designee);
- ❖ Executive Director of the Board of Pharmacy (or designee);
- ❖ Attorney General (or designee);
- ❖ Executive Secretary of the Supreme Court of Virginia (or designee);
- ❖ Chair of the Virginia State Crime Committee (or designee);
- ❖ Director of the Division of Consolidated Laboratory Services (or designee);
- ❖ Chair of the Senate Committee for Courts of Justice (or designee);
- ❖ Chair of the House Committee for Courts of Justice (or designee);
- ❖ Two members of the Scientific Advisory Committee; and
- ❖ Three citizens (by gubernatorial appointment): a member of law enforcement, a member of the Virginia Commonwealth's Attorneys Association and a criminal defense attorney with forensic science expertise.

Virginia Scientific Advisory Committee

Thirteen members who are gubernatorial appointments:

- ❖ DFS Director; and
- ❖ 12 scientists (by gubernatorial appointment).

Discipline Case Review working groups are in existence.

Virginia's state laboratory, in the DFS, is accredited.

- ❖ Statute: Va Code Ann. § 9.1-1109 and § 9.1-1111

Contact: Secretary to the Forensic Science Board and Scientific Advisory Committee: Carisa Studer, carisa.studer@dfs.virginia.gov

Washington

Washington created its Forensic Investigation Council in 1983 focusing primarily on oversight of the state crime laboratories, the state toxicology laboratory and the funding of the death investigations system (Washington has a coroner system). Its powers and duties include the oversight of any state forensic pathology program and to recommend cost-efficient improvements to the death investigation system to the legislature. These responsibilities specifically relate to several of its legislative purposes including the funding of the death investigation system. The Council also establishes qualifications for the Director of the Bureau of Forensic Laboratory Services and assists in the appointment of the state toxicologist.

The Washington State Forensic Investigations Council has 13 members who are gubernatorial appointments:

- ❖ Coroner;
- ❖ Prosecutor;
- ❖ Prosecutor who also serves as *ex officio* county coroner;
- ❖ Medical Examiner;
- ❖ Sheriff;
- ❖ Chief of Police;
- ❖ Chief of Washington State Patrol;
- ❖ Two county legislators;
- ❖ Two city legislators;
- ❖ Private pathologist; and
- ❖ Criminal defense attorney.

Statute: 1983; RCW Chapter 43.103