



## Legislative Fiscal Bureau

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Joint Committee on Finance

Paper #459

### Crime Laboratory Analysts (Justice)

[LFB 2019-21 Budget Summary: Page 254, #10]

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#### CURRENT LAW

The Department of Justice's (DOJ) Crime Laboratory Bureau operates the state's three regional crime laboratories, located in Madison, Milwaukee, and Wausau. Under s. 165.75(3) (a) of the statutes, the purpose of the state crime laboratories is to "provide technical assistance to local law enforcement officers in the various fields of scientific investigation in the aid of law enforcement. ...[T]he laboratories shall maintain services and employ the necessary specialists, technical and scientific employees for the recognition and proper preservation, marking and scientific analysis of evidence material in the investigation and prosecution of crimes in such fields as firearms identification, the comparison and identification of toolmarks, chemistry, identification of questioned documents, metallurgy, comparative microscopy, instrumental detection of deception, the identification of fingerprints, toxicology, serology and forensic photography."

#### GOVERNOR

Provide \$376,600 GPR, \$207,800 PR in 2019-20 and \$502,100 GPR, \$477,100 PR in 2020-21, and 9.0 GPR and 5.0 PR positions annually for operations at the state crime laboratories and to increase digital forensic services provided to local law enforcement. These positions would consist of 5.0 PR DNA analysts, 3.0 GPR Crime Scene Response Examiners, 3.0 GPR Toxicologists, 2.0 GPR firearm and toolmark examiners, and 1.0 GPR evidence examiner. Program revenue positions would be funded from the crime laboratory and drug law enforcement surcharge. [This does not include 3.0 GPR positions for the digital forensics unit addressed in a separate LFB paper.]

## DISCUSSION POINTS

### Background

1. The state crime laboratories are responsible for providing scientific and technical assistance to state and local law enforcement agencies, upon their request. The budget in 2018-19 for the state crime laboratories (less amounts budgeted for deoxyribonucleic acid (DNA) analysis) totals \$14,921,300 (all funds) and 98.53 positions. The state crime laboratories' funding is comprised of \$6,752,200 GPR, \$8,157,500 PR, and \$11,600 FED, as well as 54.33 GPR, 44.0 PR, and 0.2 FED positions.

2. The three state crime laboratories are currently authorized the following types of specialists (excluding specialists for DNA analysis): (a) fingerprint and footwear examiners; (b) controlled substance analysts; (c) forensic program technicians; (d) toxicologists; (e) forensic imaging specialists; (f) firearms and toolmark examiners; (g) trace evidence examiners; (h) forensic science training coordinators; and (i) identification technicians. In addition to these specialist positions, additional supervisory and support positions include forensic scientist supervisors, office associates, forensic science program chiefs, justice supervisors, a crime laboratory director, information services personnel, and an executive staff assistant.

3. The state crime laboratories are also authorized positions for DNA analysis activities. These positions include: (a) DNA analysts; (b) forensic scientist supervisors; and (c) forensic program technicians. Table 1 identifies the caseload of the state crime laboratory analysts during 2017-18. Many cases referred to the state crime laboratories require more than one type of analysis. As a result, the total number of case types opened and completed by the crime laboratories, as identified in Table 1, is larger than the total number of distinct law enforcement cases referred to the crime laboratories.

**TABLE 1**

**Analyst Caseloads in 2017-18**

<u>Case Type</u>	<u>Opened</u>	<u>Completed</u>
DNA databank	30,606	30,518
DNA analysis	6,463	5,367
Controlled substances	5,772	5,617
Toxicology	2,205	2,184
Identification	1,622	1,182
DNA screening	996	914
Photo work order	747	737
Firearms	451	248
Trace evidence	143	133
Crime scene response	77	76
Field photo	64	61
Forensic imaging	47	37
Footwear or tire track	29	18
Toolmarks	16	1
Familial search	6	6
Bloodstain pattern analysis	<u>2</u>	<u>2</u>
Total	49,246	47,101

4. Employees of the state crime laboratories may undertake an investigation of criminal conduct only upon the request of a sheriff, coroner, medical examiner, district attorney, chief of police, warden or superintendent of any state prison, state agency head, the Attorney General or the Governor. The Department is authorized to decline laboratory services in any case that does not involve a potential felony charge. The state crime laboratories generally do not accept misdemeanor cases. Following such a request, the laboratories must collaborate fully in the complete investigation of criminal conduct and bring to bear the full range of their forensic skills.

5. As stated in the budget in brief, "the Wisconsin crime laboratories are a vital part of the criminal justice system, providing unbiased, factual information for police, prosecutors and the courts. Over the past eight years, backlogs at the crime laboratories have increased, jeopardizing investigations and delaying justice."

**Wisconsin State Crime Lab Needs Assessment**

6. In 2018, the Wisconsin State Department of Justice contracted the National Forensic Science Technology Center at Florida International University (NFSTC) to perform a needs assessment of the Wisconsin State Crime Laboratory Bureau (WSCLB). To improve the productivity and efficiency of analytical sections, a detailed analysis and review of the workflow from the time of evidence receipt through completion of analysis was performed.

7. The report presented "assessor observations of the Laboratory Bureau as a whole as well as individual observation from each laboratory site and/or pertaining to a specific discipline.

Observations reported are based upon direct review of data by an assessment team member or information provided by a staff member that is substantiated, where possible." Each observation was followed by a recommended course of action for consideration.

8. The requested additional position authority for crime scene response examiners and the evidence technician are based on the minimum recommendations in the NFSTC report. In addition, the report recommended 6.0 additional DNA lab technicians and 3.0 additional toxicology lab technicians. However, while recommending a similar number of positions in the same areas, the administration recommends 5.0 DNA analysts and 3.0 toxicologists. The administration indicates that providing position authority for additional analysts instead of lab technicians may allow DOJ greater flexibility when hiring. Where applicable, excerpts from the NFSTC report are included below.

### **Crime Scene Response Unit**

9. The Madison, Milwaukee and Wausau crime laboratories have a Crime Scene Response Unit (CSRU), which provides 24 hour, seven days a week crime scene investigation assistance to law enforcement agencies at major violent crime scenes and autopsy examinations investigations in all 72 counties. The CSRUs primarily respond to homicides, officer-involved shootings, and clandestine grave sites. In calendar year 2016, the CSRUs responded to 88 requests for assistance by law enforcement, while in 2017 the CRSUs responded to 91 requests with approximately 1,900 hours at these scenes. Depending on the type of scene, anywhere from three to five crime lab employees responded to each scene. In addition to responding to requests for assistance, the CSRUs also provide training to local officers in crime scene investigation techniques.

10. Volunteers for the CSRUs are drawn from the staff of various units within the WSCLB. Currently, there are twenty-two individuals employed by the WSCLB from multiple disciplines and all three Bureau locations that volunteer as members of the CSRU. These individuals receive specialized forensic training in crime scene photography, blood stain pattern, casting, body fluid collection, blood borne pathogens, fingerprint and footwear development and recovery, bullet trajectory, buried body recovery, and processing vehicles.

11. While these volunteers are on call, they earn \$2.25 per hour. When on a crime scene, employees are paid their normal hourly rate. The NFSTC report noted "There is little to no incentive to volunteer for the CSRU. On-call pay is low." In addition, the report noted that despite the amount of time an employee may spend on call their required caseload is not adjusted accordingly. Particularly the report noted that over time, the additional duties associated with working on the CSRU "not only prove to be a drain on the responding staff members, but also an additional burden on the staff within the individual units at the laboratory. At any given time, half of the staff of a unit may be responding to a crime scene that delays casework, technical reviews, validations and many other laboratory activities."

12. The report recommended creating positions, at least one at each lab, dedicated solely to the CSRU. The reported noted that this "could have a positive impact on limiting the amount of time other staff members have to spend on CRSU related responsibilities." In response, DOJ indicated that current crime lab position authority does not allow for dedicated CSRU staff, but that LTEs [limited-term employees] have been utilized."

## **Toxicology**

13. The crime laboratories provide forensic toxicology services for law enforcement agencies. Forensic toxicology is generally an analysis of bodily specimens to determine the presence of chemicals that are harmful or for which ingestion is in some way defined as a criminal offense. The laboratories identify and quantify the amount of drugs, alcohol, and poisons in biological specimens such as blood, urine, or tissue. The information is used by law enforcement to help determine if laws have been violated and if criminal charges are warranted. Forensic toxicologists also assist in postmortem investigations to establish cause or circumstances of death. Depending on the case, toxicology testing can range from a single blood alcohol test to a determination of the concentration of multiple drugs and their metabolites in a single biological sample. Testing for the presence and quantity of alcohol is the most common toxicological test performed by the crime labs.

14. Full toxicology services are provided by the Madison and Milwaukee Crime Laboratories. The Wausau Crime Laboratory provides toxicology services only as it relates to blood alcohol content. For other toxicological services, the Wausau region is served by the Madison crime laboratory. The Crime Lab currently has 8.0 toxicology positions. In 2017-18, the crime labs opened 2,205 toxicology cases, and completed 2,184 cases.

15. The report observed that toxicologists spend significant time on tasks that could be accomplished by a technician, which may limit the amount of time that can be spent on casework. Based on this observation, the report recommended that at least one technician position per laboratory be authorized. Technicians would assist with managing case workloads and prioritization, evidence returns, and prepping samples. Therefore, position authority for 3.0 toxicologists and related funding are recommended in the bill.

## **Evidence Specialist**

16. Evidence specialists complete work involving the proper receiving, storage, security and disposition of evidence submitted to the laboratory in compliance with crime lab accreditation requirements. Strict documentation of the evidence chain of custody is an integral part of this position. This position works closely with law enforcement personnel, District Attorneys and their office personnel, and crime laboratory analysts. There are currently 12.0 evidence examiners with four at each of the three laboratory locations.

17. The report observed that there are insufficient clerical or evidence positions at the Madison laboratory for the workload. Due to the inadequacy of staff, controlled substance and toxicology analysts have to retrieve their own evidence, put together case jackets, file their own cases and answer discovery and open letter requests, which takes analyst time away from casework. The report recommended that an additional evidence specialist for the Madison laboratory.

## **Firearms/Toolmarks**

18. This activity involves the examination of firearms and ammunition, as well as toolmarks and suspect tools, serial number restoration, and distance determination tests. To determine whether a firearm recovered in the case was the firearm that fired the bullets and cartridge cases that have been

recovered, the laboratory compares the recovered bullets and cartridge cases with laboratory fired bullets and cartridge cases from the suspected firearm. A subsequent microscopic examination permits a final determination to be made. Recovered firearms and cartridges may also be compared to other firearms cases in the Midwest through the use of the National Integrated Ballistic Information Network (NIBIN) computer system. The Milwaukee crime lab provides firearms analysis services for the entire state, though the Madison crime lab has the potential to provide this service as well. The Crime Labs currently employ five firearm and toolmark examiners.

19. The Department indicates that "although not in the assessment recommendations, there has been recent recognition of the impact the increasing turnaround times for firearms and toolmark evidence results is having on investigations and prosecutions throughout the state." Therefore, the bill recommends providing position authority for 2.0 firearms and toolmark examiners to assist in addressing the evidence backlog. The Department would use these positions to reopen the firearms examination laboratory in the Madison Crime Laboratory. The department indicates that opening the Unit in the Madison Crime Lab "will improve continuity of operations if operations at the Milwaukee Crime Laboratory are interrupted by an emergency or critical situation."

### **DNA Analysis**

20. *DNA/Serology.* This type of analysis involves the identification and characterization of biological materials, including blood, semen and other body fluids. Except for identical twins, each individual's genetic profile is unique. The genetic profile of a suspect developed from submitted biological material may be compared to the genetic profile developed from biological material collected from a crime scene to link a suspect to a crime. DNA/serology analysis services are provided by the Madison and Milwaukee crime labs. The Wausau crime lab region is served by Madison crime lab.

21. *DNA Databank.* The DNA Databank stores DNA profiles from samples on all convicted offenders and, beginning on April 1, 2015, the profiles of certain individuals arrested for violent felonies. The state system is connected to the national system to help identify suspects when unknown DNA is found at a crime scene. While the DNA databank is located at the Madison crime laboratory, the databank includes DNA profiles from samples which were analyzed and catalogued at the Milwaukee crime laboratory.

22. Table 2 below describes the main categories of persons that must have biological samples collected.

## TABLE 2

### Circumstances Requiring DNA Samples 1995 to Present

<u>Date</u>	<u>Circumstances</u>
Prior to January 1, 2000	Certain sex offenders and persons ordered by a judge following conviction or adjudication of certain serious crimes.
After January 1, 2000	Individuals who have either been found guilty of a felony or are in prison for any felony committed in Wisconsin.  Individuals committed as sexually violent persons.
After April 1, 2015	Individuals who have been found guilty of a misdemeanor.  Individuals who are arrested for or charged with a felony defined as a violent crime (the sample would be tested only after a probable cause determination).

23. Biological samples collected as a result of one of the reasons discussed above (except if the biological specimen is obtained from an individual at arrest, or when a juvenile is taken into custody, for a violent crime) are analyzed by the crime laboratories. The crime laboratories enter the data obtained from the DNA analysis into the DNA databank. The laboratories may compare the data obtained from one specimen with data obtained from other specimens. The laboratories may also make the data obtained from the analysis available to those in connection with criminal or delinquency investigations, including law enforcement agencies, prosecutors, defense attorneys, and the subject of the data.

24. In addition to analyzing biological specimens submitted as a requirement under state law, the crime laboratories must analyze the DNA in human biological specimens that are provided pursuant to any of the following requests: (a) a law enforcement agency regarding an investigation; (b) a defense attorney regarding his or her client's specimen, pursuant to a court order; and (c) an individual regarding his or her own specimen, subject to rules established by the Department. The laboratories may compare the DNA data from the provided specimen with data obtained from other specimens. The laboratories may also make this data available to those in connection with criminal or delinquency investigations, including law enforcement agencies, prosecutors, defense attorneys, and the subject of the data. The data obtained from one of these provided specimens may be used in a criminal or delinquency proceeding. However, the DNA data obtained from a specimen provided pursuant to one of the requests enumerated above may not be included in the DNA databank.

25. To handle the volume of DNA analysis, the crime labs employ 69 DNA analysts. As of July 1, 2018, there were 278,150 DNA profiles in the state's convicted offender database, comprised of 266,318 offender profiles and 11,832 arrestee profiles. "Casework" DNA profiles are developed from biological specimens from crime scenes that are not tied to a specific individual. As DNA profiles are added to the convicted offender DNA database, DOJ is increasingly able to match

"casework" DNA profiles with either known profiles in the convicted offender DNA database or with other "casework" profiles in the casework index. As of July 1, 2018, there were 18,703 casework DNA profiles in the state database.

26. Convicted offender DNA profiles and "casework" DNA profiles are both stored on the same computer server. This server currently has a storage capacity for up to 5,000,000 DNA profiles. Approximately 2,200 DNA profiles are added to the DNA databank every month from casework, criminal offenders, and violent felony arrest sample submissions, however this number varies significantly.

27. The report observed that the number of staff completing DNA analysis is not sufficient. The report further observed that since DNA staff conduct technical duties, volunteer for crime scene response, conduct technical reviews, or are involved in validations (review of other analysts or third-party lab work to verify findings) in addition to casework, these staff may have insufficient time for casework. Therefore, while staff are efficient, they are unable to complete a sufficient number of cases for the caseload.

28. The report recommended hiring three DNA technicians for each of the two DNA units for a total of six additional positions. These technicians would assist with managing case workloads and prioritization, evidence returns, and prepping samples. The report also suggested that the DNA section would benefit from identifying a validation team and a CSRU. This ensures that validations are completed in a more timely manner.

29. The crime lab responded by stating that WSCLB began to conduct pilots to streamline processes associated with DNA analysis. In addition, DOJ hired 5.0 LTE forensic biologists positions to assist with DNA analysis workflows. The biologists are responsible for evidence preparation for the analysts, which keeps the analysts focused on casework. Due to the limitations of LTE positions, DOJ was unable to retain these trained LTE employees at the WSCLB.

30. As a result of the various report recommendations, the administration recommends hiring 5.0 PR DNA analysts. The administration intends for program revenue funding to be supported from a transfer of monies from DOJ's CLDLE and DNA surcharge fund. Under the bill, the fund is projected to have an opening balance of \$5,111,100 and to conclude the 2019-21 biennium with a balance of \$128,700. It should also be noted that, under the bill, the fund is estimated to operate in a structural deficit during the 2019-21 biennium. In 2019-20, total obligations (\$17,270,600) are estimated to exceed annual revenue (\$15,200,000) by \$2,070,600, and in 2020-21, total obligations (\$18,111,800) are estimated to exceed annual revenue (\$15,200,000) by \$2,911,800.

31. The administration indicates that second year of expenses for PR DNA analysts was miscalculated. Therefore, the in the second year \$282,100 PR is recommended to support these 5.0 PR positions rather than \$477,100 PR. With this correction the DOJ's CLDLE and DNA surcharge fund conclude the 2019-21 biennium with a balance of \$323,700.

### **Provisions Under the Bill**

32. Given the recommendations in the NFSTC report, the Committee may wish to provide

the recommended positions and funding. [Alternatives A1 and B1] These two alternatives would provide \$376,600 GPR, \$207,800 PR in 2019-20 and \$502,100 GPR, \$282,100 PR in 2020-21, and 9.0 GPR and 5.0 PR positions annually for operations at the state crime laboratories and to increase digital forensic services provided to local law enforcement.

33. One of the focuses of the NFSTC report was using analyst positions as much as possible for casework and moving other tasks to more technical positions more suited for the combination of administrative and scientific tasks that take analyst time away from casework. In order to accomplish this goal, the entire number of suggested positions may not be needed. If the Committee wishes to provide additional support for the crime labs, but do so in a way that will allow the assessment of caseloads at a middle point, a reduced number of positions may be provided. [Alternative A2 and/or B2] This combination of alternatives would provide \$282,200 GPR, \$108,000 PR in 2019-20 and \$376,300 GPR, \$146,600 PR in 2020-21, and 6.4 GPR and 2.6 PR positions annually for operations at the state crime laboratories and to increase digital forensic services provided to local law enforcement. These positions would consist of 1.6 GPR Crime Analysts, 1.6 GPR Crime Scene Response Examiners, 1.6 GPR Toxicologists, 1.0 GPR firearm and toolmark examiner, 0.6 GPR evidence examiner, and 2.6 PR DNA analysts. Note that part-time positions are provided in 0.6 position increments instead of 0.5 increments to ensure that part-time positions qualify for benefits. Alternative B2 would result in a concluding 2020-21 with an estimated revenue balance of \$787,200.

34. Given the condition of the DOJ's CLDLE and DNA surcharge fund, the Committee could consider funding the DNA analysts or a portion of the positions with GPR instead of PR [Alternative B3 or B4] This alternative would provide either 5.0 or 2.6 GPR DNA analyst positions. Further, provision of GPR would allow for a stable revenue source for positions for which demand has remained consistently strong.

35. Given that DOJ has managed caseloads through the use of LTE positions, the Committee may not wish to provide additional positions. [Alternative A3 and B5]

## ALTERNATIVES

### A. GPR Positions

1. Provide \$376,600 GPR in 2019-20 and \$502,100 GPR, in 2020-21, and 9.0 GPR annually for operations at the state crime laboratories to increase services provided to local law enforcement. These positions would consist of 3.0 GPR Crime Scene Response Examiners, 3.0 GPR Toxicologists, 2.0 GPR firearm and toolmark examiners, and 1.0 GPR evidence examiner.

ALT A1	Change to Base		Change to Bill	
	Funding	Positions	Funding	Positions
GPR	\$878,700	9.00	\$0	0.00

2. Provide \$200,500 GPR in 2019-20 and \$267,300 GPR in 2020-21, and 4.8 GPR positions annually for operations at the state crime laboratories to increase services provided to local

law enforcement. These positions would consist of 1.6 GPR Crime Analysts, 1.6 GPR Crime Scene Response Examiners, 1.6 GPR Toxicologists, 1.0 GPR firearm and toolmark examiner, and 0.6 GPR evidence examiner.

ALT A2	Change to Base		Change to Bill	
	Funding	Positions	Funding	Positions
GPR	\$467,800	6.40	- \$577,700	- 5.60

3. Take no action.

ALT A3	Change to Base		Change to Bill	
	Funding	Positions	Funding	Positions
GPR	\$0	0.00	- \$1,236,200	- 12.00

**B. DNA Analysts**

1. Provide \$207,800 PR in 2019-20 and \$282,100 PR in 2020-21, and 5.0 PR DNA analyst positions annually for operations at the state crime laboratories.

ALT B1	Change to Base		Change to Bill	
	Funding	Positions	Funding	Positions
PR	\$489,900	5.00	- \$195,000	0.00

2. Provide \$108,000 PR in 2019-20 and \$146,600 PR in 2020-21, and 2.6 PR DNA analyst positions annually for operations at the state crime laboratories.

ALT B2	Change to Base		Change to Bill	
	Funding	Positions	Funding	Positions
PR	\$254,600	2.60	- \$430,300	- 2.40

3. Provide \$207,800 GPR in 2019-20 and \$282,100 GPR in 2020-21, and 5.0 GPR DNA analyst positions annually for operations at the state crime laboratories.

ALT B3	Change to Base		Change to Bill	
	Funding	Positions	Funding	Positions
GPR	\$489,900	5.00	\$489,900	5.00
PR	<u>0</u>	<u>0.00</u>	<u>- 684,900</u>	<u>- 5.00</u>
Total	\$489,900	5.00	- \$195,000	0.00

4. Provide \$108,000 GPR in 2019-20 and \$146,600 GPR in 2020-21, and 2.6 GPR DNA

analyst positions annually for operations at the state crime laboratories.

ALT B4	Change to Base		Change to Bill	
	Funding	Positions	Funding	Positions
GPR	\$254,600	2.60	\$254,600	2.60
PR	<u>0</u>	<u>0.00</u>	<u>- 684,900</u>	<u>- 5.00</u>
Total	\$254,600	2.60	- \$430,300	- 2.40

5. Take no action.

ALT B5	Change to Base		Change to Bill	
	Funding	Positions	Funding	Positions
PR	\$0	\$0.00	- \$684,900	- 5.00

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