

Nevada Department of Public Safety

Forensic Crime Lab

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Presentation to the
Research Division, Legislative
Counsel Bureau

Deputy Director Sheri Brueggemann
sbrueggemann@dps.state.nv.us





Vision for the State of Nevada's First Forensic Crime Lab

To be a leader in forensic science in quality, service, and innovation for the State of Nevada.

Nevada's first State Forensic Crime Lab will enhance public safety and multiply efforts to ensure the efficient and effective administration of public safety, justice and victim restoration.

What is a Forensic Crime Lab

- Forensic science according to the Department of Justice (DOJ) is a **critical element of the criminal justice system.**
- **Majority of state crime labs across the country are part of public safety agencies.**
- Forensic toxicology is considered a common forensic science laboratory discipline.
- Bureau of Justice Statistics (BJS) defines a forensic crime laboratory “as a scientific laboratory employing at least one full-time employee with a degree in the natural sciences that examines physical evidence in criminal matters and provides reports and opinion testimony with respect to such evidence in a court of law.”
- Forensic toxicology testing should be done in a secure environment that already has procedures and policies in place that provide for evidence handling and chain of custody integrity.

National Census Publicly Funded Crime Labs

The census found in 2020:

- 326 publicly funded forensic crime laboratories received 3.3 million requests for service.
- Controlled substances analysis requests accounted for 33% of testing requested.
- State-run crime labs received nearly 60% of all requests.
- Crime labs had a backlog of about 700,000 requests that had not been completed within 30 days of submission.

Source: *Census of Publicly Funded Forensic Crime Laboratories*
<https://bjs.ojp.gov/library/publications/publicly-funded-forensic-crime-laboratories-20>

State Forensic Crime Lab Purpose

- To meet the rising needs of forensic testing in the State.
- Work in concert with The Committee on Intoxication.
 - To establish criteria for alcohol and polydrug substance testing.
 - Establish current and evolving standards for quantitative testing of fentanyl and derivatives.

The Gap a State Crime Lab Fulfills

Capacity issues impact the County Lab's ability to prioritize State requests.

Case in point: Firearm needed fingerprinting and DNA testing completed, one lab refused, and another estimated a 6 month turn around time.

Addresses DPS testing needs not currently available by County Labs.

Fentanyl and derivative testing.

Cannabis Compliance Board testing.

Cannabis Compliance Board

Compliance Testing

1. Moisture content
2. Potency analysis
3. Terpene analysis
4. Foreign matter inspection
5. Mycotoxin screening
6. Heavy metal screening
7. Pesticide residue analysis
8. Herbicide screening
9. Growth regulator screening
10. Total yeast and mold
11. Total Enterobacteriaceae
12. Salmonella
13. Pathogenic E. coli
14. Aspergillus fumigatus
15. Aspergillus flavus
16. Aspergillus terreus
17. Aspergillus niger
18. Total coliform
19. Residual solvent test
20. Total aerobic count
21. Water activity or pH

Fulfills the needs of the Cannabis Compliance testing eliminating the need for a CCB specific lab.

SB 35- An Act relating to controlled substances

SB 35 reduced illicit fentanyl trafficking levels

Created concerns as to the State's ability to ascertain the amounts of manufactured fentanyl, any derivative of fentanyl or any mixture which contains illicitly manufactured fentanyl or any derivative of fentanyl.

A State Crime Lab can perform the necessary testing to quantitate the amount of fentanyl in a sample to ensure that those trafficking fentanyl are charged appropriately.

SB 412

Section 57.5

There is hereby appropriated from the State General Fund to the Department of Public Safety the sum of \$500,000 for the purpose of two machines that are capable of testing for fentanyl and its derivatives and measuring the content thereof and in mixtures.

**Determination of Legislative intent is still being explored.*

Ohio BCI Crime Lab

A recent tour of the Ohio Bureau of Criminal Investigation provided the DPS with ideas and suggestions to build Nevada's first State Forensic Crime Lab

The Ohio BCI Crime Lab processes over 200,000 items annually:

- Drug Chemistry including quantitative cannabis and fentanyl testing.
- Mitochondrial testing for image reconstruction
- Latent prints-Links crime scenes prints to people who made them.
- CODIS & DNA-Tests biological material in search of the source.
- Assisted by lab robotics reducing turn around time from days to hours.
- Firearm & Toolmarks-Matches evidence to the original tool or weapon.
- Trace Evidence- IDs physical evidence left at crime scenes.

They also provide:

- Expert testimony in court proceedings regarding evidence testing results.
- Internships & training to help guide the future of forensics.
- Instruction for law enforcement personnel about evidence handling in specific cases as well as general training.

State of Nevada Forensic Crime Lab Testing

Blood/alcohol & Polydrug toxicology	DNA & CODIS	Latent fingerprints	Ballistic/Firearm & Toolmarks
Drug Chemistry	GSR	Mitochondrial testing for image reconstruction	Cannabis Qualitative and Quantitative
Digital Forensics	Vehicle Forensics / Analysis	Arson Forensics	Assist other Labs with back-logs. Example: Sexual Assault Kits

Funding & Sustainability

- Start-up costs will be General Funds / Highway Funds.
- Cannabis testing to fund majority of lab costs supplemented by local requests.
- 50% of start up costs will be recovered from cannabis testing over a 5-year period.
- Funding model includes a 50/50 split.
- Private industry funding includes cannabis testing fees and surcharge for chemical analysis.

Current Laboratory Contract

****Forensic Crime Scene Investigation not included in LVMPD contract**

****Washoe County limits Forensic Crime Scene is limited to Northern Nevada**

LVMPD		WCSO	
	COST PER MONTH		COST PER MONTH
BREATH ALCOHOL	\$30,500.48	BREATH ALCOHOL	\$34,293.25
DNA	\$6,250.00	DNA	\$1,666.67
FORENSICS	\$1,833.33	FORENSICS**	\$21,745.56
TOXICOLOGY	\$19,003.17	TOXICOLOGY	\$13,333.33
TOTAL COST PER MONTH	\$57,586.98	TOTAL COST PER MONTH	\$71,038.81
TOTAL COST - 4 YEARS	\$2,764,175.04	TOTAL COST - 4 YEARS	\$3,409,862.88
TOTAL COST FOR BOTH LABS - 4 YEARS	\$6,174,037.92		

**The WCSO Forensics portion of the contract is proposed to be increased every year so these costs will increase.



Contact:
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