

**State of Alaska  
FY2004 Governor's Operating Budget**

**Department of Public Safety  
Laboratory Services  
Component Budget Summary**

## Component: Laboratory Services

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### Component Mission

The mission of the Scientific Crime Detection Laboratory is to provide forensic science services to law enforcement agencies.

### Component Services Provided

1) The Alaska Scientific Crime Detection Laboratory is the only forensic facility available in Alaska to provide forensic services at no charge to all law enforcement agencies.

2) Forensic services include the scientific examination and detailed analysis of evidence in criminal cases and assistance with crime scene investigations. Laboratory staff provide expert testimony in court regarding the results of the testing of evidence. Staff also provide training to law enforcement officers regarding proper evidence collection and preservation according to the latest forensic techniques.

3) The crime laboratory's areas of expertise are latent fingerprints, trace evidence, footprint/tiretrack, controlled substances, blood alcohol analysis, serology, DNA, firearm/toolmark, crime scene investigations, and fish and wildlife examinations.

4) The crime laboratory administers the statewide breath alcohol program which provides law enforcement agencies with instruments for administering evidential breath tests. The crime laboratory repairs, calibrates, certifies, and ships breath instruments and keeps administrative records, including instrument calibration checks, training and certification of breath instrument operators along with a breath test database. The laboratory makes up and ships the alcohol controls used in every evidential test and trains contact personnel at each agency. Expert testimony in alcohol related court proceedings and support for non-evidential breath test devices is also provided.

5) The Alaska Scientific Crime Detection Laboratory maintains Alaska's DNA Identification System. DNA profiles obtained from blood or oral samples collected from convicted offenders are entered into the Combined DNA Index System (CODIS) and are searched against DNA profiles generated from crime scene evidence. CODIS can provide investigative leads to law enforcement by matching crime scene DNA profiles to a known convicted offender. CODIS can also link cases by matching DNA profiles collected from various crime scenes. DNA profiles are routinely uploaded into the National DNA Index System (NDIS) and searched against profiles submitted by other states.

6) Crime laboratory personnel are active members in several organizations that have the responsibility for setting the standards for training and certification of analysts nationally in the various forensic disciplines as well as accreditation standards for crime laboratories as follows:

- Scientific Working Group on DNA Analysis Methods since 1994
- Scientific Working Group on Friction Ridge Analysis Study and Technology since 1996
- Scientific Working Group on Firearms and Toolmarks since 1999
- American Society of Crime Laboratory Directors Laboratory Accreditation Board since 1996

### Component Goals and Strategies

The primary goal of the Alaska Scientific Crime Detection Laboratory is to provide professional forensic science services in a timely and cost effective manner. In order to provide these services, the laboratory must maintain a trained staff of experts.

A major goal of the crime lab for FY2003 is to provide more assistance to law enforcement in solving "no-suspect" cases

through increased utilization of the state's fingerprint and DNA computerized databases (AFIS and CODIS). The laboratory will direct resources to aggressively enter unidentified latent fingerprints and DNA profiles obtained from unsolved crime scenes. Latent fingerprints and DNA profiles entered into Alaska's databases are then routinely searched against other states' databases through the Western Identification Network and the National DNA Index System. To increase the number of submissions of such evidence to the Laboratory, additional training will be provided to law enforcement personnel that will emphasize proper recognition and collection techniques for gathering such evidence.

The laboratory will also focus on significantly decreasing the turnaround time of latent fingerprint, shoe print, and tire track cases submitted to the laboratory. A second analyst will be trained in the area of shoe and tire track evidence. It is also the goal of the laboratory to increase the number of DNA profiles generated and decrease the turnaround time of analyzing biological evidence submissions. This will be accomplished by using a more efficient process for DNA analysis and an improved work environment. The DNA section will be moving into a newly remodeled area of the laboratory that was vacated by the state medical examiner.

A significant decrease in the turnaround time of latent fingerprint and impression evidence cases will favorably impact performance measure #1 which is calculated based on turnaround time. Increased training provided to law enforcement personnel could also impact the crime lab's measures. Increasing officer awareness of physical evidence may result in many more submittals to the laboratory thus adding cases to the backlog and increasing turnaround time. On the other hand, those officers who use their evidence collection training to submit properly processed latent fingerprint evidence would generate cases which could be worked more rapidly and thus decrease the time.

As the laboratory has no control over how many and what kind of cases are submitted, there is no way to determine how performance measure #2 would be impacted. For instance, if the laboratory receives a significant number of simple drug or blood alcohol cases which can be worked rapidly, the average cost per case would go down. If the number of time consuming and complicated homicide or assault cases significantly increases, the average cost per case will go up.

The laboratory intends to begin a pilot project for the re-implementation of toxicology screening of blood and urine to indicate abuse of common drugs. This service was discontinued in FY1999 because of lack of personnel services' funding for a toxicology criminalist and the obsolescence of the testing equipment utilized for this purpose. Toxicology testing is generally accomplished in two stages, screening and confirmation. This pilot project will focus on implementing an initial toxicology screening for opiates, cocaine, methamphetamine, marijuana, and benzodiazepines (tranquilizers). Federal CLIP grant funds will be used to purchase new toxicology screening equipment. Through advances in technology and greater efficiency by expanding the use of laboratory technicians, it is believed that this goal can be accomplished cost effectively using the existing personnel of the Drug section. Law enforcement agencies would have to send those samples needing confirmation to a private vendor in the lower 48, as there are currently no toxicology laboratories offering confirmatory testing in Alaska.

The implementation of toxicology confirmation at the crime lab of those samples testing positive for drugs in the initial screening is more problematic. While the laboratory has the necessary equipment to perform confirmation testing, it is much more labor intensive. The laboratory will begin developing protocols to perform these confirmations in-house and will attempt to offer such service, time permitting. The demand for confirmations may exceed the laboratory's capacity. At this time, there are too many variables to determine to what extent the laboratory will be able to offer toxicology confirmations. These include the total number of toxicology samples submitted, the percentage of samples testing positive and requiring confirmation, and the number of solid dosage drug cases submitted to the Drug section of laboratory for analysis.

If the laboratory is successful in re-implementing toxicology screening, a significant number of new cases may be submitted to the laboratory. As these tests can be completed fairly rapidly, the overall turnaround time may decrease slightly.

### **Key Component Issues for FY2003 – 2004**

Consideration should be given to revising Alaska's current DNA database law (AS 44.41.035):

Because of the proven effectiveness of DNA databases, there is a growing trend throughout the country to expand state DNA database laws to include collecting samples from all convicted felons. Oregon expanded their DNA database law in 2001 and the state of Washington expanded their law in early 2002. On August 22, 2002, Illinois became the 23<sup>rd</sup> state to enact legislation requiring all criminals convicted of a felony to provide a DNA sample. This is a dramatic

increase from the seven states that were collecting from all felons in 2000.

States that have expanded their database have experienced the following benefits:

- more crimes solved
- more crimes prevented
- more innocent people exonerated
- greater cost-efficiencies realized

#### Computer Position Transferred to Alaska Public Safety Information Network (APSIN) Component

The crime lab's computer position has been vacant for seven years due to personal services' underfunding. In the interim, APSIN staff have provided information technology support when possible to the crime lab, but this has been difficult at times because of staff unavailability. The crime lab and APSIN staff mutually agreed that this position could provide services to the two components, and PCN 12-1671 was transferred to the APSIN component at the end of FY2002. This transfer allows for appropriate supervision of this position and provides necessary information technology support to the crime lab and the department. This position will provide services approximately half time to the crime lab under an RSA, which will fund up to 50% of its cost. The remaining 50% funding will be provided by APSIN.

#### Reorganization

In order to better utilize laboratory personnel and increase efficiency of the current positions, the crime lab is working with the Public Safety's human resources' office to create a new job classification which combines criminalists and latent fingerprint examiners. This new series, forensic scientists, will give the lab greater flexibility in hiring, training, and work assignments.

To address the increased workload problem of the crime lab's administrative services unit, the new laboratory technician assigned to the breath alcohol unit will assume the clerical duties for the statewide breath alcohol program. This position will also perform technician-level duties previously handled by a higher paid criminalist.

#### Multi-Jurisdictional Task Force Grant for Fingerprint Analysis

Funding for personnel services via a \$51.4 Multi-Jurisdictional Task Force Grant from the Alaska State Troopers will provide 75% of the cost of a laboratory position that performs latent fingerprint analysis on cases involving controlled substances as well as crime scene assistance. The Crime Laboratory will provide \$17.1 for the 25% matching funds.

#### Crime Scene Training for Law Enforcement

The Alaska Police Standards Council (APSC) sponsors forensic training presented by the crime laboratory to law enforcement in remote areas. This forensic training would not be available to rural law enforcement without this support, as most small rural Alaska police departments do not have the resources to attend classes in Anchorage. Interagency Receipts of \$9.6 from APSC will fund this training.

#### Crime Lab Improvement Program Federal Grant (Capital Budget Item)

The US Department of Justice awarded a \$1,250,000 federal grant for the Crime Laboratory Improvement Program (CLIP) to the Alaska Scientific Crime Detection Laboratory in FY2001 with state authority to expend this grant in FY2002. The CLIP grant, along with a general fund match (\$416,700) will continue to fund the purchase of lab equipment, training, DNA supplies, and remodel the old autopsy area into new DNA labs and office areas. The CLIP grant expiration date has been extended to September 30, 2003.

## **Major Component Accomplishments in 2002**

#### Accreditation

The State of Alaska Scientific Crime Detection Laboratory first achieved accreditation in September 1996, effective through September 2001. This accreditation was provided by the American Society of Crime Laboratory Directors/Laboratory Accreditation Board (ASCLD/LAB) and is a major achievement. Half of the crime laboratories nationally in states and cities with populations larger than Alaska have not reached this goal. The Crime Lab was inspected by ASCLD/LAB in June and November 2001 and passed the renewal inspection. Accreditation was renewed and is effective through September 2006 for controlled substances, trace evidence, serology, DNA, latent prints,

firearms/toolmarks, and toxicology (blood alcohol). Accreditation in crime scenes was added. The Alaska Scientific Crime Detection Laboratory is the first state laboratory system in the United States to be accredited in the crime scenes' discipline.

Alaska Convicted Offender Samples

The State of Alaska Scientific Crime Detection Laboratory received a federal grant from the National Institute of Justice in FY2001 in the amount of \$80,650 to reduce the backlog of Alaska's convicted offender samples needing DNA analysis for entry into CODIS, the Combined DNA Index System. A contract was awarded to a private DNA laboratory in Dallas, Texas. A total of 2,973 convicted offender samples have been sent out for testing since January 2001. Results from 2,865 samples have been reported back and uploaded into CODIS and the National DNA Index System. This grant ended July 31, 2002.

CODIS

Alaska's Combined DNA Index System, CODIS, experienced tremendous growth during fiscal year 2002. 2,295 convicted offender DNA profiles were added along with 104 forensic DNA profiles. 50 of these forensic profiles were from "no-suspect" cases. This compares with the 780 offender profiles and 15 "no-suspect" profiles from the 51 forensic profiles entered the prior fiscal year. Alaska's first CODIS hits were generated in fiscal year 2002. A total of nine hits, aiding 10 separate investigations, were reported. six of these hits linked a convicted offender to a crime scene sample and three were case-to-case hits, indicating that the same perpetrator was involved. Alaska's first hit with another state utilizing NDIS, the National DNA Index System, also occurred in FY 2002.

AFIS

While number of Alaska Automated Fingerprint Identification System (AFIS) hits remained nearly unchanged from last fiscal year, 39 as opposed to 41, the percentage of AFIS searches generating hits increased from 14.7% to 22.8%. This was accomplished despite a vacancy that existed for much of FY2002 due to the loss of an experienced latent print examiner who left state employment.

Services provided by the Scientific Crime Detection Laboratory during FY2002 include the following:

- 1) Criminalistics:
  - Number of case submittals 70
  - Number of reports issued 66
  - Remaining case submittals 53
- 2) Firearms/Toolmarks:
  - Number of case submittals 112
  - Number of reports issued 80
  - Remaining case submittals 73
- 3) Trace Evidence:
  - Number of case submittals 328
  - Number of reports issued 289
  - Remaining case submittals 146
- 4) Serology/DNA:
  - Number of case submittals 483
  - Number of reports issued 289
  - Remaining case submittals 221
- 5) DNA Identification System:
  - Number of convicted offender samples received 756
  - Number of samples sent to contract lab for analysis 2,121
  - Number of CODIS entries performed 2,298
- 6) Controlled Substances:
  - Number of case submittals 788
  - Number of reports issued 843
  - Remaining case submittals 7
- 7) Blood Alcohol:
  - Number of case submittals 157
  - Number of reports issued 172

Remaining case submittals	0
8) Latent Prints:	
Number of case submittals	683
Number of reports issued	573
Remaining case submittals	297
9) Crime Scene Investigations:	
Number of major scenes	34
Number of reports issued	21
Number of hours away from Lab	1,036
Remaining case submittals	5
10) Breath Alcohol Testing Program:	
Number of instruments in service	91
Number of Adult DWI tests	5,487
Number of Minors DWI tests	174
Number of trained instructors	104
Number of trained operators	1,122
11) Court:	
Number of times testified	179
Number of hours away from Lab	1,517
12) Instruction provided to Law Enforcement:	
Number of classes	19
Number of attendees	383
Number of hours away from Lab	1,165

### Statutory and Regulatory Authority

- 1) DPS - DNA ID System (AS 44.41.035)
- 2) DPS - Fingerprint System (AS 44.41.025)
- 3) DPS - Powers and duties of department (AS 44.41.020)
- 4) State Troopers - Department to assist Other Agencies (AS 18.65.090)
- 5) State Troopers - Fingerprint Information (AS 18.65.050)
- 6) DPS - Forensic Alcohol Testing Regulations (13 AAC 63)

**Laboratory Services**  
**Component Financial Summary**

*All dollars in thousands*

	FY2002 Actuals	FY2003 Authorized	FY2004 Governor
<b>Non-Formula Program:</b>			
<b>Component Expenditures:</b>			
71000 Personal Services	1,795.9	2,048.1	2,064.9
72000 Travel	32.9	48.0	48.0
73000 Contractual	383.1	318.6	374.1
74000 Supplies	256.1	154.2	154.2
75000 Equipment	28.1	2.0	2.0
76000 Land/Buildings	0.0	0.0	0.0
77000 Grants, Claims	0.0	0.0	0.0
78000 Miscellaneous	0.0	0.0	0.0
<b>Expenditure Totals</b>	<b>2,496.1</b>	<b>2,570.9</b>	<b>2,643.2</b>
<b>Funding Sources:</b>			
1002 Federal Receipts	69.1	80.7	80.7
1003 General Fund Match	12.9	13.1	13.3
1004 General Fund Receipts	2,357.6	2,414.7	2,485.0
1007 Inter-Agency Receipts	56.5	62.4	64.2
<b>Funding Totals</b>	<b>2,496.1</b>	<b>2,570.9</b>	<b>2,643.2</b>

**Laboratory Services**

**Proposed Changes in Levels of Service for FY2004**

The Crime Lab is hopeful it can re-implement toxicology screening for common drugs of abuse as a pilot project by the end of FY2004 with existing staff.

**Summary of Component Budget Changes**

**From FY2003 Authorized to FY2004 Governor**

*All dollars in thousands*

	<u>General Funds</u>	<u>Federal Funds</u>	<u>Other Funds</u>	<u>Total Funds</u>
<b>FY2003 Authorized</b>	<b>2,427.8</b>	<b>80.7</b>	<b>62.4</b>	<b>2,570.9</b>
<b>Adjustments which will continue current level of service:</b>				
-Annualize FY2003 COLA for General Government and Supervisory Bargaining Units	0.0	0.0	0.7	0.7
-Transfer from AST Detachments to Fund Telecommunication and Computer Svcs Billing Methodologies	29.5	0.0	0.0	29.5
<b>Proposed budget increases:</b>				
-Increased Variable Benefit Costs: Working Reserve and PERS Rates	41.0	0.0	1.1	42.1
<b>FY2004 Governor</b>	<b>2,498.3</b>	<b>80.7</b>	<b>64.2</b>	<b>2,643.2</b>



## Laboratory Services

### Personal Services Information

	Authorized Positions		Personal Services Costs	
	<u>FY2003</u> <u>Authorized</u>	<u>FY2004</u> <u>Governor</u>		
Full-time	30	29	Annual Salaries	1,478,818
Part-time	0	0	Premium Pay	27,897
Nonpermanent	0	0	Annual Benefits	600,626
			<i>Less 2.01% Vacancy Factor</i>	(42,441)
			Lump Sum Premium Pay	0
<b>Totals</b>	<b>30</b>	<b>29</b>	<b>Total Personal Services</b>	<b>2,064,900</b>

### Position Classification Summary

Job Class Title	Anchorage	Fairbanks	Juneau	Others	Total
Administrative Clerk II	1	0	0	0	1
Administrative Clerk III	1	0	0	0	1
Administrative Manager III	1	0	0	0	1
Criminalist I	1	0	0	0	1
Criminalist II	3	0	0	0	3
Criminalist III	9	0	0	0	9
Criminalist IV	4	0	0	0	4
Forensic Lab Supervisor	1	0	0	0	1
Laboratory Tech I	3	0	0	0	3
Laboratory Tech II	1	0	0	0	1
Latent Fingerprint Ex III	3	0	0	0	3
Maint Spec Bfc Jrny II/Lead	1	0	0	0	1
<b>Totals</b>	<b>29</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>29</b>