

**Crime Lab Improvement Program**

**FY2002 Request: \$1,459,600**  
**Reference No: 33968**

**AP/AL:** Appropriation  
**Category:** Public Protection  
**Location:** Anchorage Area-wide  
**Election District:** Anchorage Area-wide  
**Estimated Project Dates:** 07/01/2001 - 06/30/2003

**Project Type:** Renovation and Remodeling  
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**Brief Summary and Statement of Need:**

The U.S. Department of Justice will be awarding a \$1,250,000 federal grant for the Crime Lab Improvement Program (CLIP). The CLIP grant along with a portion the GF match will fund the purchase of lab equipment, training, DNA supplies and contract with private laboratories for DNA analysis. In addition to the purchase of equipment, supplies and services the Crime Lab will remodel the autopsy area once the Medical Examiner relocates to the new public health facility in January 2001.

**Funding:**

	FY2002	FY2003	FY2004	FY2005	FY2006	FY2007	Total
Fed Rcpts	\$1,250,000						\$1,250,000
G/F Match	\$209,600						\$209,600
<b>Total:</b>	<b>\$1,459,600</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,459,600</b>

<input checked="" type="checkbox"/> State Match Required	<input checked="" type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased Project	<input type="checkbox"/> On-Going Project
25% = Minimum State Match % Required	<input type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

**Operating & Maintenance Costs:**

	<u>Amount</u>	<u>Staff</u>
Total Operating Impact:	0	0
One-Time Startup Costs:	0	
Additional Estimated Annual O&M:	7,625	0

**Prior Funding History / Additional Information:**

The Department of Public Safety received an appropriation (Chapter 135, SLA 2000, page 18, line 19) for Crime Lab Replacement Equipment. It is the intent of the Department to request a reappropriation/language change to include the Autopsy Area Remodel since the federal grant will not pay for remodeling the vacated space. This request along with the FY2002 Governor's request will allow the Crime Lab to receive federal funds and utilize space efficiently.

This capital project request will provide funding for replacement forensic analysis equipment, training, contracting DNA analysis with private laboratories, facility and equipment repairs, and remodel of the autopsy area in the Scientific Crime Detection Laboratory in Anchorage. The \$1,250.0 in federal funds will be used for the replacement equipment, training and repairs. The \$209.6 GF match along with the \$207.1 appropriated in Chapter 135, SLA 2000, page 18, line 19 will be used for the federal funds match and the autopsy remodel.

**PROJECT NEED STATEMENT****Crime Lab Improvement Program Federal Grant - (\$1,250.0 Federal and \$65.9 GFM)**

The U.S. Department of Justice will be awarding the State of Alaska \$1,250.0 for replacement forensic analysis equipment, training, contracting DNA analysis with private laboratories, and facility and equipment repairs.

Training \$52.5

Criminalist and Latent Fingerprint Examiners will attend conference workshops and educational seminars to receive training in the latest technology in fingerprints, DNA, breath and blood alcohol, firearms, and tire impressions. Training will be contracted to be done at the Alaska Crime Lab for bloodstain screening, physical matching, and microscopy of trace evidence.

Equipment for Forensic Analysis \$1,005.6

New equipment will be purchased to replace aging or worn out laboratory equipment, i.e., scanning electron microscope, microspectrophotometer, gas chromatographs, microscopes, digital imaging equipment, fume hoods, 310 Genetic Analyzer, optical comparators, photo processor, light source system, and Laboratory Information Management System.

Supplies \$86.1

Various DNA analysis kits and supplies will be purchased along with standard reference material.

Contracting DNA analysis with private laboratories \$136.0

Unknown suspect DNA case samples will be sent to a private laboratory for analysis.

Equipment and Facility Repairs \$35.7

The Fourier Transform Infrared (FTIR) microscope and the firearm range backstop will be repaired. Flooring in Firearms and the screening room will be changed to tile to address biohazard concerns.

**Autopsy Area Remodel \$350.8 - (\$143.7 GFM and \$207.1 Ch. 135/SLA 2000)**

Since 1991 the State Medical Examiner's Office has occupied the 600 square foot autopsy area in the back of the Alaska Scientific Crime Detection Laboratory. The Department of Health and Social Services (DHSS) is constructing a new Medical Examiner and Public Health Laboratory facility that is due for completion in December 2000. Once the Medical Examiner has relocated, the Crime Laboratory will need to remodel the autopsy space to house the growing DNA unit. This remodeled area will provide adequate laboratory space for the analysis of DNA samples which includes: space for the extraction, amplification, typing, and report writing of forensic casework and convicted offender samples. The remodeled area will be designed to meet the requirements for a DNA facility set forth in the FBI's Quality Assurance Standards for Forensic DNA Testing Laboratories (Section 6). The facility design will provide adequate security and minimize contamination. The design will allow amplified DNA product to be generated, processed, and maintained in a room separate from the evidence examination, DNA extractions, and PCR set-up areas as required by national DNA guidelines. The four areas of the Scientific Crime Detection Laboratory that will be vacated by the DNA unit when it moves to the back of the Crime Laboratory will be utilized by the other overcrowded laboratory sections. Reasons and justification for remodeling the autopsy space within the Alaska Scientific Crime Detection Laboratory to be used by the DNA forensic staff includes the following:

- A second laminar flow hood is required. Currently there is one laminar flow hood in the laboratory for performing DNA extractions. A laminar flow hood keeps DNA particles from flowing back into the extraction workspace, thereby preventing contamination of other DNA samples. One laminar flow hood is insufficient for the three DNA analysts performing forensic casework and convicted offender samples analyses. An additional laminar flow hood is necessary to allow DNA analysts to maintain the productivity needed to meet casework demands, and space for a second laminar flow hood will also be necessary.

- Desk space must be separated from analysis areas. The Alaska Scientific Crime Detection Laboratory is an accredited laboratory. Accreditation requirements from the American Society of Crime Laboratory Directors/Laboratory Accreditation Board (ASCLD/LAB) and guidelines of the DNA Advisory Board (DAB) require that analysts desks are outside of the evidence processing area. To meet this requirement, the DNA analysts are currently working with desk space in the library of the Crime Laboratory. There is insufficient desk space in the laboratory currently for the DNA analysts.
- DNA laboratory space is limited and overcrowded. Currently, the extraction and amplification work areas are overcrowded. The space will be insufficient to maintain the level of productivity needed to meet casework demands.
- In the future, the Scientific Crime Detection Laboratory plans to offer mitochondrial DNA testing. Hair and bone evidence in forensic cases are good candidates for mitochondrial DNA analysis. The laboratory would need a completely separate section of the laboratory to offer mitochondrial DNA analysis due to contamination issues with this type of analysis.

**DOCUMENTATION OF ESTIMATED CAPITAL COST**

The Alaska Scientific Crime Detection Laboratory anticipates receiving a Crime Laboratory Improvement Program (CLIP) grant in the amount of \$1,250.0 from the National Institute of Justice in State FY2001. The grant requires 25% matching funds from the State of Alaska (\$416.7). The Crime Laboratory plans to utilize this federal grant in a two-year project to purchase new laboratory equipment to replace aging and outdated equipment, purchase supplies for DNA analysis, provide training to the Criminalist and Latent Fingerprint Examiners, to contract with a private laboratory to perform DNA analysis on non-suspect criminal case samples for entry into the national DNA data base.

In FY2001, the Scientific Crime Detection Laboratory received \$207.1 general funds for CIP project "Crime Lab Equipment Replacement (Ch 135, SLA 2000, page 18, line 19). The department intends to use this appropriation as part of the match requirement for the \$1,250.0 CLIP federal grant. A language change to this appropriation will be requested. The remaining \$209.6 needed for the rest of the 25% matching funds is being requested in the FY2002 capital budget.

The majority of this capital project (\$1,315.9) will be for the purchase of replacement forensic analysis equipment, training, contracting DNA analysis with private laboratories, and facility and equipment repairs.

- Training \$52.5
- Equipment for Forensic Analysis \$1,005.6
- DNA Analysis Supplies \$86.1
- Contracting DNA Analysis with Private Laboratories \$136.0
- Equipment and Facility Repairs \$35.7

The Department of Transportation and Public Facilities will advertise, award, and manage the autopsy area remodel project. The design phase (\$65.2) includes the design, pre-award audit, regulatory reviews, advertisement and award of professional services. The construction phase (\$285.6) includes the architectural, mechanical, electrical, construction administration, internal concurrent review, support services, and change order / contingency reserves.

**SUMMARY OF CAPITAL BUDGET REQUEST**

\$416.7	Matching funds required for \$1,250,000 federal grant
<u>(\$207.1)</u>	FY01 CIP funding provided as match (Ch135, SLA 2000, P18, L19)
\$209.6	FY02 CIP GF Match Request
<u>\$1,250.0</u>	FY02 CIP Federal Funds Request
\$1,459.6	FY02 Capital Request

**ANALYSIS OF ESTIMATED OPERATION COSTS**

Based on average building operation and maintenance costs of \$4.25 per square foot, this yields \$2,550 per year for utilities and normal maintenance. In addition, there should be capital renewal and replacement costs which would average \$5,075 per year based on a 25 year term (these costs would be much less in future years, rising as the building ages). These two amounts would yield an additional operating cost of \$7,625 per year.

**IDENTIFICATION OF ALTERNATIVES CONSIDERED**

Lease the additional space necessary. This would require space separate from the existing Alaska Scientific Crime Detection Laboratory which would impact from an efficiency standpoint and would be more expensive than the Crime Lab's operating budget could sustain.