

Original sponsors: Furnace, Martin,
Earnes, et al

Funding Information
General Fund \$ 402,000
Other Funds -0-
\$ 402,000

1 IN THE HOUSE

BY THE FINANCE COMMITTEE

2 CS FOR SPONSOR SUBSTITUTE FOR HOUSE BILL NO. 33 (Finance)

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 THIRTEENTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act making a special appropriation to the Depart-
7 ment of Transportation and Public Facilities for
8 design of a statewide crime lab facility in
9 Anchorage; and providing for an effective date."

10 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

11 * Section 1. The sum of \$402,000 is appropriated from the general fund
12 to the Department of Transportation and Public Facilities for design of a
13 statewide crime lab facility in Anchorage.

14 * Sec. 2. The appropriation made by this Act is for a capital project
15 and is subject to AS 37.25.020.

16 * Sec. 3. This Act takes effect July 1, 1983.
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The following individuals will testify on HB 33:

Representative Walt Furnace, prime sponsor

Robert Sundberg, Commissioner, Department of Public Safety
(Commissioner Sundberg may testify)

Jim Messick, Assistant to the Commissioner, Department of
Public Safety

John Bates, Deputy Commissioner, DOTPF

Available for questions:

Bob Schroeder, Fiscal Analyst, Legislative Finance

Dan Hickey, Chief Prosecutor, Department of Law

STATE OF ALASKA
FISCAL NOTE

Revision Date _____, 1983

I. REQUEST

Bill/Resolution No.: CS SS HB 33 (FIN)
 Title: Crime Lab
 Sponsor: Furnace
 Requestor: Senate Judiciary

II. FISCAL DETAIL

Agency Affected: Dept. of Public Safety
 Program Category Affected: Crime ID& Appre.
 BRU, Program of Subprogram(s) Affected: AST Support and Services

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
OPERATING						
100 PERSONAL SERVICES			360.1	381.7	404.6	428.9
200 TRAVEL			10.0	10.6	11.2	11.9
300 CONTRACTUAL			30.0	31.8	33.7	35.7
400 COMMODITIES			18.7	19.8	21.0	22.3
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC						
TOTAL OPERATING			418.8	443.9	470.5	498.8
CAPITAL			5641.0			
REVENUE						

FUNDING: (Thousands of Dollars)

	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
GENERAL FUND			6059.8	443.9	470.5	498.8
FEDERAL FUNDS						
OTHER (Specify Source)						

POSITIONS:

	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
FULL-TIME			7.1	7.1	7.1	7.1
PART-TIME						
TEMPORARY						

III. SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

Not identified.

IV. ANALYSIS: Attach a separate page for any Analysis

Prepared By: Francis C. Allan *F.C.A.*
 Division: Alaska State Troopers

Phone: 269-5691
 Date: 4-18-83

Approved by Commissioner: R.J. Sundberg *[Signature]*
 Department: Public Safety

Date: 4/26/83

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CS SS HB 33 FISCAL NOTE
Section IV Analysis

This legislation provides design and engineering funds for the construction of a 17,000 square foot Statewide Crime Laboratory in Anchorage. The attached Schedule 1 details the Capital Cost and Schedule 2 details the Operating Costs. The vast majority of the Operating Costs represent a shift in direction for the Crime Lab from a limited service A.S.T. facility to becoming a full-service operation designed to meet the needs of all law enforcement agencies in the state. Operating costs after FY'85 reflect an annual 6% inflation rate estimate.

An additional capital appropriation will be needed for the actual construction, equipment, and commodities costs as detailed on Schedule 1.

ANCHORAGE COMBINED FACILITY

CAPITAL COSTS

Schedule 1

1)	<u>Construction Costs</u>		
	Crime Lab - 17,000 sq. ft.	\$3,366.0	
	DOT/PF Overhead, Architect, Planning Contingency, etc.	\$1,100.0	
	CS SS HB 33	<u>(402.0)</u>	698.0
	Subtotal		\$4,064.0
2)	<u>Equipment</u>		859.0
3)	<u>Commodities</u> - Initial stock		71.0
4)	<u>Inflation</u> - Through construction		<u>647.0</u>
	TOTAL		<u>\$5,641.0</u>

ANCHORAGE COMBINED FACILITY

FY'85 OPERATING COSTS

Schedule 2

100 Personnel Services

Serologist - Range 19	\$ 38,124	
Trace Evidence Specialist - Range 19	38,124	
Fingerprint I.D. Specialist - Range 18	35,580	
Fingerprint I.D. Specialist - Range 18	35,580	
Firearms & Tool Marks Specialist - Range 19	38,124	
Forensic Chemist/Dep. Director - Range 21	44,508	
Administrative Ass't II - Range 14 & O.T.	29,133	
Subtotal	<u>259,173</u>	
Benefits for above	80,588	
Subtotal	<u>339,761</u>	

Subtotal - Above at 106% to reflect inflation through FY'85 \$360,147

200 Travel

In-state & out-of-state travel needed to attain and maintain professional expertise	10,000
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300 Contractual Services

Telephone	\$ 12,500	
Electricity	9,100	
Other Utilities	3,500	
Building Repairs & Maintenance	<u>4,900</u>	
Subtotal		30,000

400 Commodities

Heating Fuel	\$ 17,600	
Miscellaneous	<u>1,100</u>	
Subtotal		18,700
TOTAL		<u>\$418,847</u>

STATE OF ALASKA
FISCAL NOTE

Revision Date _____, 1983

210

I. REQUEST

Bill/Resolution No.: SS HB 33
 Title: Crime Lab
 Sponsor: Furnace
 Requestor: _____

II. FISCAL DETAIL

Agency Affected: Depr. of Public Safety
 Program Category Affected: Crime ID & Appre.
 BRU, Program of Subprogram(s) Affected: AST Support & Services

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
OPERATING						
100 PERSONAL SERVICES			360.1	381.7	404.6	428.9
200 TRAVEL			10.0	10.6	11.2	11.9
300 CONTRACTUAL			30.0	31.8	33.7	35.7
400 COMMODITIES			18.7	19.8	21.0	22.3
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC						
TOTAL OPERATING			418.8	443.9	470.5	498.8
CAPITAL						
REVENUE						

FUNDING: (Thousands of Dollars)

GENERAL FUND			418.8	443.9	470.5	498.8
FEDERAL FUNDS						
OTHER (Specify Source)						

POSITIONS:

FULL-TIME			7	7	7	7
PART-TIME						
TEMPORARY						

III. SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

Not identified.

IV. ANALYSIS: Attach a separate page for any Analysis

Prepared By: Francis C. Allan *F.C.A.* Phone: 269-5691
 Division: Alaska State Troopers Date: 4-4-83
 Approved by Commissioner: R. J. Sundberg *RJS* Date: 4/8/83
 Department: Public Safety

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3/8/83

SS HB 33 FISCAL NOTE
Section IV Analysis

This legislation provides funds for the construction of a 17,000 square foot Statewide Crime Laboratory in Anchorage. The attached Schedule 1 details the Capital Cost and Schedule 2 details the Operating Costs. The vast majority of the Operating Costs represents a shift in direction for the Crime Lab from being a limited service A.S.T. facility to becoming a full-service operation designed to meet the needs of all law enforcement agencies in the state. Operating costs after FY'85 reflect an annual 6% inflation rate estimate.

ANCHORAGE COMBINED FACILITY
CAPITAL COSTS

Schedule 1

1)	<u>Construction Costs</u>		
	Crime Lab - 17,000 sq. ft.	\$3,366.0	
	DOT/PF Overhead, Architect, Planning Contingency, etc.	<u>1,100.0</u>	
	Subtotal		\$4,466.0
2)	<u>Equipment</u>		859.0
3)	<u>Commodities</u> - Initial Stock		71.0
4)	<u>Inflation</u> - Through construction - 12% per DOT/PF		<u>647.0</u>
	TOTAL		<u>\$6,043.0</u>

ANCHORAGE COMBINED FACILITY
FY'85 OPERATING COSTS

Schedule 2

100 Personnel Services

Serologist - Range 19	\$ 38,124	
Trace Evidence Specialist - Range 19	38,124	
Fingerprint I.D. Specialist - Range 18	35,580	
Fingerprint I.D. Specialist - Range 18	35,580	
Firearms & Tool Marks Specialist - Range 19	38,124	
Forensic Chemist/Dep. Director - Range 21	44,508	
Administrative Ass't II - Range 14 & O.T.	29,133	
Subtotal	<u>259,173</u>	
Benefits for above	80,588	
Subtotal	<u>339,761</u>	

Subtotal - Above at 106% to reflect inflation through FY'85 \$360,147

200 Travel

In-state & out-of-state travel needed to attain and maintain professional expertise	10,000
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300 Contractual Services

Telephone	\$ 12,500	
Electricity	9,100	
Other Utilities	3,500	
Building Repairs & Maintenance	<u>4,900</u>	
Subtotal		30,000

400 Commodities

Heating Fuel	\$ 17,600	
Miscellaneous	<u>1,100</u>	
Subtotal		18,700
TOTAL		<u>\$418,847</u>

ca

FISCAL NOTE

Expenditure Type
 Revenue Type

I. REQUEST
Bill/Resolution No. House Bill No. 33
Title "An Act...for a State Trooper Facility"
Requested by House Senate Affairs Date 01/25/83

II. FISCAL DETAIL
Agency Affected Department of Public Safety
Program Category Affected Administration of Justice
BRU, Program, Or Subprogram(s) Affected AST Support & Services/Laboratory
(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL		-0-	484.9	514.0		

FUNDING (Thousands of Dollars)

	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
GENERAL FUND		-0-	484.9	514.0		
FEDERAL FUNDS						
OTHER (Specify Source)						

POSITIONS

	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
FULL TIME						
PART TIME						
TEMPORARY						

III. ANALYSIS (See Fiscal Note Preparation Instruction, Section III)

This legislation provides funds for the construction of a 30,000 sq. ft. public safety facility in Anchorage to house an expanded Statewide Crime Laboratory, the Anchorage Metropolitan Drug Enforcement Unit, and the local Alaska State Troopers and Fish & Wildlife Protection Detachments. This represents a shift in direction for the Crime Lab from being a limited service AST facility to becoming a full-service operation designed to meet the needs of all local law enforcement agencies in the State.

IV. DATE January 25, 1983 PREPARED BY Frank Allan Phone 269-56'
DIVISION AST Initials _____
Original: Legislative Finance DEPARTMENT OF PUBLIC SAFETY *(initials)* Initials _____
cc: Budget and Management
Prime Sponsor (First Legislator Named)
33-001: (Rev. 12/82)

DETAIL OF FISCAL DATA

		<u>FY 84</u>	<u>FY 85</u>	<u>FY 86</u>
100	Personal Services		416.6	441.6
200	Travel		10.0	10.6
300	Contractual		30.0	31.8
400	Commodities		28.3	30.0
500	Equipment			
600	Land & Structures			
700	Grants, Claims, etc.			
	TOTAL	-0-	484.9	514.0

POSITIONS

PFT			9	9
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ANCHORAGE COMBINED FACILITY
CAPITAL COSTS

Schedule 1

1) Construction Costs

Crime Lab - 17,000 sq. ft.	\$3,366.0	
A.S.T. & F.W.P. Posts - 11,000 sq. ft.	1,210.0	
Metro - 2,000 sq. ft.	220.0	
DOT/PF Overhead, Architect, Planning Contingency, etc.	<u>1,472.2</u>	
Subtotal		\$6,268.2

2) Equipment

Crime Lab	859.0	
A.S.T. & F.W.P. Posts	<u>37.5</u>	
Subtotal		896.5

3) Commodities

Crime Lab - Initial stock		71.0
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4) Inflation - through construction, start 864.3

TOTAL \$8,100.0

ANCHORAGE COMBINED FACILITY
FY'85 OPERATING COSTS

Schedule 2

100 Personnel Services

Serologist - Range 19	\$38,124	
Trace Evidence Specialist - Range 19	38,124	
Fingerprint I.D. Specialist - Range 18	35,580	
Fingerprint I.D. Specialist - Range 18	35,580	
Firearms & Tool Marks Specialist - Range 19	38,124	
Forensic Chemist/Dep. Director - Range 21	44,508	
Administrative Ass't II - Range 14 & O.T.	29,133	
Maintenance Worker - Range 54	22,380	
Janitor - Range 59	16,776	
	Subtotal	\$298,329
Benefits for above	94,662	
	Subtotal	\$392,991
Subtotal - Above at 10% to reflect inflation through FY'85		\$416,570

200 Travel

In-state & out-of-state travel needed to attain and maintain professional expertise	10,000
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300 Contractual Services

Telephone	\$12,500	
Electricity	9,100	
Other Utilities	3,500	
Building Repairs & Maintenance	4,900	
	Subtotal	30,000

400 Commodities

Heating Fuel	\$26,700	
Miscellaneous	1,600	
	Subtotal	28,300
	TOTAL	<u>\$484,870</u>

THE DEVELOPMENT OF A FORENSIC LABORATORY IN ALASKA

EXECUTIVE SUMMARY

Within the last decade or so, a series of Supreme Court decisions relative to search and seizure, interrogation, and confessions have had the effect of limiting the scope of permissible investigative activities by law enforcement agencies nationwide. This situation has resulted in the increased attention to the use of physical evidence in criminal investigations, and the subsequent development of state and regional crime laboratories throughout the country to analyze this evidence.

The application of the natural and physical sciences to items of evidence found at a crime scene is an increasing part of modern investigations and courtroom trials, and often becomes a crucial part of judicial proceedings. The increased reliance upon analysis of physical evidence also confers upon crime laboratories the responsibility for the highest degree of professionalism in their work.

The role of the forensic laboratory is to assist both the investigator and the prosecutor in their efforts to reconstruct and explain the crime, the crime scene and information about the possible offender. The results

* This paper summarizes the more extensive report issued by the Department of Public Safety in September 1982 entitled "The Development of a Full Service Forensic Laboratory for Law Enforcement in Alaska."

of crime lab tests provide facts contributing to the exoneration of the innocent and the establishment of proof of the guilty. The modern lab requires highly trained scientists and technicians who use costly materials and sophisticated instrumentation in an expensive environment, for there can be no compromise in the quality of the work they perform.

A modern, full-services Crime Lab presents a wide array of expertise. Some of these are:

- * Toxicology A Toxicologist detects and identifies the presence of drugs or poisons in body tissues, fluids and organs.
- * Firearms and Tool Marks Examination The Examiner can, for example, match a spent bullet to the gun that fired it by examination of the microscopic markings on the bullet caused by the irregularities on the inner surface of the gun barrel, among other capabilities. As a Tool Marks Specialist, he can identify the tire iron or other implement found in the suspect's car as the one that pried open the window or door of the victim's home by comparing and matching the microscopic nicks on the blade of the tire iron to the impressions left in the wooden window sill.
- * Forensic Serology The Forensic Serologist, through analyses of body fluids, semen, and saliva found at the crime scene, can limit the population group of the assailant to those within certain blood groups, thus eliminating persons with other blood groups and characteristics as suspects in a given crime.
- * Questioned Documents Examination The Questioned Documents Examiner can ascertain the source or authenticity of a document through the many characteristics of an individual's handwriting, as well as through the variations in typewriter letters as a function of the use and wear to the machine's moving parts, and through the analyses of inks and different types of paper.
- * Forensic Chemistry The Forensic Chemist tests and analyzes unknown substances. By testing substances thought to be illegal drugs, he can determine the type drug, its relative purity and the substances that may be mixed with the drug. He can also identify small amounts of accelerants from a suspected arson fire by testing charred and burned materials.

found at the fire, as well as numerous other related tasks requiring chemical analysis.

- * Trace Evidence Examination: The Trace Evidence Examiner can narrow the origin of minute bits of evidence such as human hair and fibers, that are exchanged during a violent confrontation, to a group that includes (or excludes) the suspect. The brown head hair found on the shirt of the suspect can be shown to match the hair of the victim of the assault.

- * Fingerprint Examination: The Fingerprint Examiner can match fingerprints found on a gun or some other surface to those of the suspect based upon the matching of the characteristics of the fingerprint ridges that are unique to each individual. (The Automated Fingerprint Identification System, funded during the 1982 session of the legislature, and now being developed, will be placed within the Crime Laboratory.)

It is the use of carefully gathered evidence, analyzed by the latest scientific methodologies of the numerous forensic disciplines that builds both a strong case against the accused, while eliminating other persons as suspects.

Unfortunately, state and local law enforcement agencies in Alaska do not have a laboratory with such capabilities. In fact, Alaska is the only State without a statewide crime lab. The rudimentary laboratory in the Troopers building in Anchorage is limited by space, personnel and budget to only narcotics testing, fingerprint identification and crime photography. These very limited services are performed at no cost to all law enforcement agencies in Alaska.

Historically Alaska has depended upon the FBI lab to perform criminalistics tests and has done so to a greater degree than any other state. While this dependence upon the FBI has worked reasonably well in the past, the FBI has recently suffered budget cuts as part of the general decrease

in federal government services and the widespread economic malaise throughout the Nation.) As a result, some test results may not be received for three to six months.) Since the Speedy Trial Rule in Alaska requires trial within 120 days of the arrest, test results may not be available by the time of trial, nor can additional investigation occur as a result of the outcome of the tests.) Complete investigation and prosecution is therefore adversely affected.

However, the FBI's continuing role of providing crime laboratory services may be changing. A 1980 report by the General Accounting Office charges that the Bureau's policy of providing free criminalistics services has acted to inhibit the growth of regional and state wide crime laboratories. The effect of this report creates doubt that Alaska, and the other states, can rely upon FBI lab testing to the extent they have in the past. Decreased availability of FBI laboratory services has already begun with a fee now being charged for certain services and a much closer screening of requests.) Most recently the FBI questioned the need for tests in a case that involved a double Homicide. Any further curtailment of service will be even more serious since Alaska is both increasing its population and experiencing a general crime increase while crime is generally decreasing nationwide.

While Alaska has, and continues to have some of its forensic tests performed by private laboratories elsewhere, this is not a good alternative for several reasons.) Alaskan law enforcement agencies have no control over the scheduling, priorities of the methodologies and techniques used by external facilities; nor is there any control over the caliber of personnel

performing the tests. Additionally, such tests are usually expensive, since a profit is being made. Finally, the state has to pay a fee for all tests performed plus the travel and expenses of the technicians from the "lower 48" states who testify during trial.]

That crime is increasing in Alaska appears obvious to the public. A few statistics show the extent of increase of crime:

- * Forcible rape increased from 51 cases per 100,000 population in 1978 to 88 cases per 100,000 population in 1982;
- * Robbery increased from 87 cases per 100,000 population in 1978 to 110 cases per 100,000 population in 1982.
- * Total violent crime increased from 399 cases per 100,000 population in 1978 to 556 cases per 100,000 population in 1982.

Public attitudes as measured by recent public opinion surveys seem to reflect the growing crime statistics. Survey conclusions were that most people in Alaska believe crime is increasing faster than the population. The public further believes a basic cause of crime in Alaska is the failure of the justice system to punish criminals. A statewide forensics lab would aid the justice system in better investigation and more effective prosecution.

Perhaps the most compelling reason for a full services crime lab is the high evidentiary value of the crime scene evidence that has been analyzed and tested, for the test results provide irrefutable information about the suspect to either link him to a crime, or to eliminate him from any further investigation. Laboratory test results can thus provide a high degree of proof of guilt.

Passage of legislation aimed at increasing interdiction of illicit drugs throws a further burden upon the existing, very limited laboratory at the Troopers headquarters. The addition of five more drug investigators funded by the legislature for 1982 has caused an increasing backlog of drug related tests to perform, while the number of forensic chemists remains the same.

The continuing lack of a crime lab to service Alaska's law enforcement efforts is affecting the decisions and perceptions of some police officers. Knowing there is no facility to perform certain tests and analyses in a timely and affordable manner, some officers place a decreasing value upon physical evidence found at the crime scene and therefore tend to rely upon other means to develop their case. Therefore their case will lack the high evidentiary value that often results from forensic examinations. Any future, long term lack of a statewide lab, in the face of reduced services from the FBI, will probably result in the emergence of several small efforts by local enforcement agencies to provide their own testing facilities. These will likely be of limited scope, overlapping, and fragmented efforts of unknown value. The smaller police departments, unable to afford their own limited facilities, and unable to pay the high costs charged by private labs elsewhere will simply do without forensic tests.

If the above reasons argue forcefully for the development of a statewide crime lab to provide services for all law enforcement agencies in Alaska, the next questions are how big a facility is needed, what services need to be provided and what are the costs involved?

The term full-services lab as proposed here means the hiring of scientific personnel to the extent that the level of need in Alaska justifies a given discipline. For example, a forensic chemist could be hired immediately on the basis that the present drug-testing workload, and that of the immediate future justifies another full time forensic chemist. By contrast, a Questioned Documents Examiner would not be hired now because the workload is not sufficient to support a full-time Examiner. Each of the other forensic disciplines would be similarly evaluated. Those forensic services of an infrequent nature, or that require sophisticated instrumentation that cannot be justified in Alaska would be referred by Alaska's lab to another facility in the "Lower 48 states." To avoid the problems associated with the use of other labs, these external resource agencies would be carefully screened, evaluated, and their proficiency periodically tested, to ensure that personnel, procedures and equipment utilized are the best possible. Sufficient workload exists now, and in the in the future, for the hiring of the following forensic scientists and support personnel:

1. An additional Forensic Chemist }
2. Serologist }
3. Trace Evidence Technician }
4. Firearms and Tool Marks Examiner }
5. Administrative Assistant }
6. Laboratory Director }

In short, the proposed Crime Lab would hire its scientific and support personnel when the existing and forecasted workload makes such action

cost-effective while contracting with other forensic facilities to perform the balance of the work.)

The lab would honor all requests by law enforcement agencies by either performing the work in house or through contract elsewhere. This central facility would be managed by the State Troopers, as the statewide law enforcement agency, for the benefit of the entire law enforcement community in the state. Tests and related services would continue to be provided by the lab at no cost to the requesting agencies.

The proposed lab would be constructed adjacent to the Troopers Headquarters in Anchorage, on state-owned land. Substantial assistance has been obtained from the FBI Forensic Research Laboratory in Quantico, Virginia, during an intensive on-site visit to obtain their recommendations for construction requirements, space needs for scientific personnel and instrumentation, and the factors that should be used in calculating overall construction costs. (These are presented in detail in the main lab report).

Using data recommended by the FBI to provide a Crime Lab with the above professional staff, plus the staff of the existing facility of the Troopers, necessary instrumentation and the numerous support requirements, plus some space for expansion in the years ahead will require a structure of about 17,000 square feet. FBI data indicates that cost per square foot is about 180% of the cost of commercial construction (\$110/sq ft, according to the Department of Transportation and Public Facilities) due to the unique plumbing, heating, ventilation and construction aspects required by a forensic laboratory. Construction would total about \$3.366 million, with

another \$1.1 million,* representing 30% of construction cost required by the State for building State buildings. Scientific instruments, furnishing and commodities will total another \$.930 million, for a total of \$5.396 million. A 12% inflation factor for construction in 1983 and 1984 brings the grand total to \$6.043 million.*

* The lab constitutes about 75% of the total cost of the FY'84 Public Safety Anchorage Combined Facility Capital Improvement Project request that has been under development through the normal budgeting process over the last four years, totaling \$8.1 million and 30,000 square feet.



ALASKA STATE LEGISLATURE
HOUSE OF REPRESENTATIVES
RESEARCH AGENCY

Pouch Y, State Capitol
Juneau, Alaska 99811
(907) 465-3991

January 24, 1983

MEMORANDUM

To: Representative Walt Furnace
From: Leonard Steinberg, Research Staff *L.S.*
Re: FBI Examination of Legal Evidence.
Research Request 83-11

Steve Levi of your office requested the following information:

- 1) The number of Alaska criminal cases which made use of the FBI crime lab in Washington D.C.;
- 2) How many legal cases went to court with FBI assistance;
- 3) How often the FBI's time for analysis exceeded Alaska's 120 day limitation for court appearances; and
- 4) What specific evidence has been sent to the FBI for analysis.

Our attempts to answer these questions involved contacting: the Federal Bureau of Investigation in Anchorage and in Washington D.C.; the State of Alaska's Chief Prosecutor and the Anchorage District Attorney; the Alaska State Troopers; and the municipal police in Anchorage and Fairbanks.

Number of Alaska Criminal Cases Involving the FBI's Crime Lab

The table below lists the number of Alaska cases and the number of different examinations of Alaska evidence that were performed by the FBI's crime lab in federal fiscal years 1980, 1981, and 1982. (The federal fiscal year runs from October 1 to September 30; FY 80, for example began October 1, 1979 and ended September 30, 1980.) This information was obtained from Manuel Marquez, of the Federal Bureau of Investigation in Washington D.C.

The number of examinations performed is many times larger than the number of cases because each case often includes many different items and each item may undergo numerous different examinations.

Representative Walt Furnace
January 24, 1983
Page Two

<u>Year</u>	<u>Number of Cases</u>	<u>Number of Examinations</u>
1980	181	10,744
1981	209	13,531
1982	236	19,510

Number of Legal Cases Which Went to Court With FBI Assistance

There are no records of the number of times the FBI's crime lab analysis has actually been used in court. Though FBI crime lab examiners frequently travel to Alaska to testify in criminal proceedings, only rough estimates of the number of visits are available.

According to Larry Nelson, the FBI's chief agent in Alaska, not a month goes by without one of the FBI's crime lab examiners traveling to Alaska to make a court appearance. Captain Smith, of the Anchorage Police Department, said he knew of at least 6 FBI crime lab examiners that visited Alaska during the last year.

The FBI in Washington D.C. may maintain records on number of visits examiners make to testify in Alaska courts, but the FBI declined to make that information available to us. The use of FBI examiners or laboratory analysis could be reconstructed by reviewing all the criminal files of the District Attorneys in Alaska, but doing so would require a substantial amount of time.

Excessive Time Required For FBI Analysis

Law enforcement authorities in Alaska are concerned that the FBI's crime lab will not analyze and return the evidence to Alaska in time to meet the requirement, unless waived by the defendant, that criminal trials take place within 120 days of an arrest.

There is little evidence of the FBI's laboratory analysis failing to arrive in time for a trial. The State Troopers have described one case (Alaska vs. Lewis, 1981) in which the trial court suppressed use of the FBI's lab report received the morning of the trial, but that case was complicated by other factors and the suppression was overturned on appeal.

No other specific cases of laboratory analysis too late for use in court have been cited. However, Fairbanks Police Chief Matthew Kiernan estimated that perhaps in one percent of his cases he was unable to use the

¹ Department of Public Safety. The Development of a Full Service Forensic Laboratory for Law Enforcement in Alaska. September 1982. Page 11.

Representative Walt Furnace
January 24, 1983
Page Three

FBI's laboratory analysis in court because of delays. Other Alaska law enforcement authorities indicated that, to their knowledge, evidence has always arrived in time, but not without the use of personal contacts between the law enforcement authorities in Alaska and FBI examiners in Washington D.C. Estimates of amount of time normally required for an FBI analysis ranged from two to six months.²

Specific Evidence Sent To The FBI For Analysis

It was not possible to obtain a list of the specific legal evidence which has been sent from Alaska to the FBI for analysis in the time available to complete this research request. All law enforcement authorities were contacted but regular records of what has been submitted for analysis have not been maintained.

The FBI crime lab in Washington D.C. may maintain records of what it has analyzed for Alaska, but this information was not made available to us. A list of the specific evidence sent to the FBI for analysis could be reconstructed by going through all the criminal files of the law enforcement authorities in Alaska, but doing so would require a substantial amount of time.

The FBI's crime lab conducts all known types of criminal analysis. Examples of Alaskan criminal evidence currently analyzed by the FBI include: questioned documents, body fluids, firearms, trace metals, voice prints, hair, fibers, and fingerprints.

Additional Information

Currently, all FBI service (analysis and expert witnesses) are available free of charge. The FBI crime lab's work is well respected and the examiners make excellent witnesses. However, many of Alaska's law enforcement officials spoke of the federal government's intention to cease providing lab services for state and local police.

The FBI, while supporting the development of regional criminal analysis laboratories, denies any intention of reducing services to state and local law enforcement authorities.

* * * * *

We hope this information is useful to you. Please let us know if we can be of any further assistance.

² Captain Smith of the Anchorage Police Department estimated normal FBI turnaround time at two months while Major Korhonen of the Alaska State Troopers estimated normal turnaround times of five to six months.



ALASKA STATE LEGISLATURE
HOUSE OF REPRESENTATIVES
RESEARCH AGENCY

Pouch Y, State Capitol
Juneau, Alaska 99811
(907) 465-3991

January 26, 1983

MEMORANDUM

To: Representative Walt Furnace

From: Leonard Steinberg, Research Staff *LS*

Re: Criminalistics Analysis--Additional Information On Costs
Research Request 83-11

Steve Levi of your office requested additional information on the costs of criminalistic analysis performed by both public and private institutions. Also included is an update on the FBI crime lab's involvement in court proceedings in Alaska and the specific analytical techniques used by the FBI.

Criminalistics Analysis Costs--Findings

Many different rate structures are used to establish the prices of criminalistics analysis services. Most prices are based on hourly rates, though some labs charge a flat fee for each individual service. In general, labs are reluctant to charge flat fees because there is considerable variability in the amount of time required to analyze different pieces of evidence. Apparently some tests, such as toxicology, are very routine and their costs are affected by economies of scale. Other examinations, however, such as firearm and toolmark identification, vary greatly in the amount of time required for each examination.

Hourly rates vary from twenty-three to one hundred dollars per hour with the public and non-profit facilities providing the lowest hourly rates. Most private criminalistics analysis organizations provide only limited services, primarily for defense counsel's rebuttal of a prosecutor's evidence. In fact, there are very few private laboratories; most of the private sector activity in criminalistics is from individuals formerly associated with a criminalistics lab who are experts in interpreting the laboratory data. The private laboratories which do exist are small and their costs are high, in part, due to their low volume.

Five public, one private non-profit, and three private for-profit criminalistics laboratories were sampled for the cost of their services. The results are listed below by each organization.

Representative Walt Furnace
January 26, 1983
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Contra Costa County Sheriff's Crime Lab

Like most counties in California, the Contra Costa County Sheriff's Crime Lab provides criminalistics analysis for all law enforcement agencies, municipal, county, state and federal, located in that county for no charge. The lab occasionally contracts to provide its services to public agencies outside the county, and charges only the additional costs it incurs in making these services available. In general, its extra costs are only labor; their labor rate has been estimated at \$23 per hour.

According to Gerald Mitosinko, the lab's director (415 ? ?466), the Contra Costa County Crime Lab has calculated the amount of time it has spent on various criminalistics procedures during the past several years. The average amounts of time required are listed below by different types of examinations. In parentheses is a rough approximation of the costs of these examinations, calculated on the basis of the time shown multiplied by the labor cost of \$23 per hour.

Amphetamines	.7 hours (\$16)	Heroin	1.36 hours (\$31)
Cocaine	.5 hours (\$12)	Marijuana	.39 hours (\$9)
Explosives	4.83 hours (\$111)	Document	2.84 hours (\$65)
Shoe/Tire Prints	4.17 hours (\$96)	Firearms ID	11.91 hours (\$274)
Fiber & Hair	5.18 hours (\$119)	Toolmarks ID	7.13 hours (\$164)

Dallas County -- Southwestern Institute of Forensic Sciences

The Southwestern Institute of Forensic Sciences is a Dallas County agency. According to Director Irving Stone (214 638-9980), the Institute charges a fixed rate by the type of service performed. The rates have been set on the assumption that labor rates are approximately \$50 per hour. In addition, the Institute charges a flat \$200 fee for testimony and travel. The Institute's fee schedule and background information is being sent in the mail, but examples of their charges are listed below.

Documents Exam	\$50	Fingerprint Exam	\$50
Bullet Exam	\$35	Typewriter Comparison	\$50
Serial Number Restoration	\$50	Search for Spermatzoa	\$15

Representative Walt Furnace
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Tool Mark Comparison	\$50	Search for Blood or Seminal Stains	\$15
Hair & Fiber Analysis	\$30	Analysis of ABO/RH From Dried Stains	\$40

Connecticut State Police Forensic Sciences Laboratory

Dr. Henry Lee, is the Chief of the Forensic Sciences Laboratory in the state of Connecticut (203 238-6324). Dr. Lee explained that in addition to providing criminalistic analysis services for law enforcement authorities throughout Connecticut for no charge, his lab charges law enforcement authorities in surrounding states only for the cost of materials used in criminalistic analysis and for the time required for testimony.

Dr. Lee said that his lab has twenty-six employees and an annual budget of approximately \$500,000.

Washington State Police Crime Lab

George Ishi is the Director of the Washington State Police Crime Lab (206 464-7073). According to Mr. Ishi, the Washington State Police Crime Lab does provide criminalistics analysis services to other public agencies under contract. The lab charges \$60 per hour plus any unusual expenses such as for special chemicals, special instruments, or testimony. Mr. Ishi is sending an analysis of the time spent by his lab on different types of criminalistic procedures.

Kansas City, MO, Regional Criminalistics Laboratory

According to Gary Howell of the Regional Criminalistics Laboratory in Kansas City, MO (816 234-5000), public sector laboratory that charges \$30 per hour to all public agencies within a surrounding five county region and \$45 per hour to other public agencies outside that five county region. Howell was careful to say that it is impossible to predict how much time any particular examination will require.

Howell said that time spent by his staff testifying is billed at the same rate as laboratory time. Howell calculated that his lab spends about 20,000 hours examining evidence each year. Howell is sending additional information in the mail.

Northern Illinois Police Crime Lab

The Northern Illinois Police Crime Lab is a private non-profit membership agency organized to provide criminalistics services to municipal

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January 26, 1983
Page Four

police departments throughout Northern Illinois, an area with a population of approximately 500,000. The lab's Director, Andrew Principe (312 432-8160), explained that each member municipality pays an annual assessment based on its population as illustrated in the table below.

<u>Population of City</u>	<u>Annual Fee</u>
1000	\$1500
3500	\$3100
20,000	\$11,500
50,000	\$25,800
70,000	\$29,800
100,000	\$35,800

The Northern Illinois Police Crime Lab also provides criminalistic analysis for non-member public organizations at a cost of \$75 per hour, with a one-hour minimum charge. In addition, when the lab's staff is required to testify, the charge for that service is \$200 for the first hour and \$50 per hour thereafter.

According to Mr. Principe, the lab's annual budget of about \$300,000, is primarily from the annual membership fees. The lab employs a staff of ten and the lab has \$500-600,000 worth of equipment.

Forensic Science Associates

Forensic Science Associates is a private for-profit criminalistics laboratory located in the San Francisco area that does not provide routine types of analysis; Forensic Science Associates does not do toxicology, blood alcohol analysis, or drug identification. Peter Barnett (415 653-3530) said that his firm's fee is \$70 per hour and the amount of time he spends on any one procedure varies considerably. Most of this firm's work is for private defense counsel.

Criminalistic Laboratory

Criminalistic Laboratory is also a private for-profit small volume lab in the San Francisco area. According to the lab's Chuck Morton (415 451-0767), some of their work is performed for public agencies, but most of their work is also for private defense counsel. Criminalistic Laboratory charges \$75-100 per hour depending on the analysis being conducted. In addition, Criminalistic Laboratory also has some

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fixed fees for standard procedures, such as paternity testing (\$70-80 per sample), blood grouping (\$75 per sample), saliva analysis (\$50 per sample) and others.

Western Laboratories

Western Laboratories, also in the San Francisco area, is primarily a private for-profit medical laboratory. However, Western Labs does perform toxicology, forensic alcohol, and autopsy service under contract to Alameda County. Dr. Paul Herman, head of the lab, said that fixed fees are charged for these services and is sending a fee schedule by mail. Dr. Herman warned, however, that Western's fees are expected to rise by about 20% in the near future.

FBI Crime Lab Update

According to Larry Nelson, the FBI's agent in charge in Alaska, in federal FY 82, FBI examiners made fifty-one trips to Alaska to testify in court. In forty-seven cases, testimony was actually given in court and four cases were resolved prior to the FBI examiner's scheduled court appearance.

The fifty-one trips made by FBI examiners to Alaska in FY 82 were to present testimony about the following analytical procedures.

<u>Type of Examination</u>	<u>Number of Examinations</u>
Firearm and Toolmark Identification	17
Hair and Fiber Analysis	15
Serology and Blood Type Examinations	13
Neutron Activation Tests	3
Paint Analysis	1
Metallurgy Analysis	1
Document Examination	1

STEVE LEVI, LEGISLATIVE AIDE
W. WALT FURNACE, STATE HOUSE
DEAU

MR. LEVI:

THANK YOU FOR YOUR INQUIRY REGARDING THE BREAKOUT OF THE \$8.1 MILLION FOR A
NEW LAB. THIS TOTAL INCLUDES \$6.043 MILLION FOR THE LAB WITH AN ADDITIONAL
\$2.057 MILLION FOR THE RELOCATION OF THE ANCHORAGE METRO DRUG UNIT, (WHICH IS
A COMBINED DRUG INTERDICTION TEAM OF STATE TROOPERS AND ANCHORAGE POLICE
OFFICERS); THE FISH AND WILDLIFE PROTECTION DIVISION, AND THE ANCHORAGE POST OF
STATE TROOPERS INTO NEW QUARTERS WITH ADEQUATE SPACE. THESE THREE AGENCIES
AND THE LAB WOULD BE COMBINED INTO A SINGLE FACILITY LOCATED ON STATE LAND
ADJACENT TO THE EXISTING TROOPERS HEADQUARTERS.

THE RELOCATION OF THESE THREE AGENCIES AND THE NEW LAB IS PART OF THE CAPITAL
IMPROVEMENT REQUEST UNDER DEVELOPMENT FOR THE PAST FOUR YEARS AS A COMBINED
PROJECT. THE LAB PLAN AND THE EXECUTIVE SUMMARY, OF COURSE, RELATE ONLY TO THE
NEW LAB. PAGES 104-110 DETAIL THE EXPECTED LAB-RELATED COSTS.

PLEASE CALL ME IF ANY ADDITIONAL INFORMATION IS NEEDED.

SINCERELY YOURS,
J. MESSICK / DD/SP11 \

MEMORANDUM

State of Alaska

TO: Colonel T. R. Anderson
Director
Alaska State Troopers

DATE: April 14, 1982

FILE NO:

TELEPHONE NO:

FROM: Lieutenant John Lucking *JL*
Acting Commander
Criminal Investigation Bureau

SUBJECT: FBI Lab Services

As a matter of information to you, be advised of the following recent events this past week.

In our homicide case I82-3203 (double murder) evidence was sent to the FBI Lab for analysis. This included some hair and fiber tests. We received a phone call from the lab in which they discussed the necessity of our requested examinations.

In our homicide case I81-50020 (double murder) evidence was sent to the FBI Lab for analysis. This also included hairs and fibers for testing. Again we received a phone call from the lab in which they discussed the necessity of our requested examinations.

I believe these events demonstrate the pressure the FBI Lab is under in attempting to accomodate all requests.

MEMORANDUM

State of Alaska Department of Transportation & Public Facilities

TO: All Facilities Planners
Facilities Planning
Central Region

DATE: January 7, 1983

FILE NO:

TELEPHONE NO:

FROM: Gary E. Cox *GEC*
Facilities Planning Supervisor
Central Region

SUBJECT: Construction Costs

The following costs and factors were provided by John Pierog on January 6, 1983. They are currently being used by Buildings and Harbors and are based on recent contractual experience, bids and estimates. These figures supersede the 1982 construction costs provided in a memo dated March 2, 1982.

The total costs of a project running between \$300,000 and \$2,000,000 are generally expected to be distributed as follows:

Construction Cost Estimate	74.0%
Bidding Contingency	6.3%
Change Order Reserve	5.6%
A/E Fees	8.0%
Work of Art	0.9%
In-house/Regulatory Agency Reviews	0.9%
DOT/PF Design Management	1.3%
DOT/PF Construction Management	3.0%
	<u>100.0%</u>

1983 Anchorage cost estimates for various type facilities are as follows:

Office Space	\$172/sq. ft.
Heated Storage	140 " "
Maintenance Shops	157 " "
Correctional Facility	250 " "
Hospital	314 " "
Airport Terminal and Support Facilities (no runway)	314 " "
Schools	180 " "

These square foot costs include all categories of work listed above. Areas outside of Anchorage must be further multiplied by the area factor.

GEC/jas

C310

Introduced: 1/17/83
Referred: State Affairs and Finance

Funding Information
General Fund \$ 8,100,000
Other Funds -0-
\$ 8,100,000

BY FURNACE, MARTIN,
BARNES, LINDAUER, ABOOD,
LISKA AND SZYMANSKI

1 IN THE HOUSE

2

HOUSE BILL NO. 33

3

IN THE LEGISLATURE OF THE STATE OF ALASKA

4

THIRTEENTH LEGISLATURE - FIRST SESSION

5

A BILL

6

For an Act entitled: "An Act making a special appropriation to the Department of Public Safety for a state trooper facility in Anchorage; and providing for an effective date."

7

8

9 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

10

* Section 1. The sum of \$8,100,000 is appropriated from the general fund to the Department of Public Safety for construction of a state trooper crime laboratory and office facility in Anchorage.

13

* Sec. 2. The appropriation made by this Act is for a capital project and is subject to AS 37.25.020.

14

15

* Sec. 3. This Act takes effect July 1, 1983.

Introduced: 3/30/83
Referred: Finance

Funding Information

General Fund	\$6,043,000
Other Funds	-0-
	<u>\$6,043,000</u>

BY FURNACE, MARTIN, BARNES, LINDAUER,
ABOOD, LISKA, SZYMANSKI, PESTINGER,
DAVIS AND BUSSELL

1 IN THE HOUSE

2 SPONSOR SUBSTITUTE FOR HOUSE BILL NO. 33

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 THIRTEENTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act making a special appropriation to the Depart-
7 ment of Public Safety for a state trooper facility in
8 Anchorage; and providing for an effective date."

9 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

10 * Section 1. The sum of \$6,043,000 is appropriated from the general
11 fund to the Department of Public Safety for construction of a state trooper
12 crime laboratory and office facility in Anchorage.

13 * Sec. 2. The appropriation made by this Act is for a capital project
14 and is subject to AS 37.25.020.

15 * Sec. 3. This Act takes effect July 1, 1983.

THE LEGISLATURE OF THE STATE OF ALASKA
THIRTEENTH LEGISLATURE

FISCAL NOTE

Expenditure Type
 Revenue Type

I. REQUEST

Bill/Resolution No. House Bill No. 33
Title "An Act...for a State Trooper Facility"
Requested by House Senate Affairs Date 01/25/83

II. FISCAL DETAIL

Agency Affected Department of Public Safety
Program Category Affected Administration of Justice
BRU, Program, Or Subprogram(s) Affected AST Support & Services/Laboratory
(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL		-0-	484.9	514.0		

FUNDING (Thousands of Dollars)

	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
GENERAL FUND			484.9	514.0		
FEDERAL FUNDS		-0-				
OTHER (Specify Source)						

POSITIONS

	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
FULL TIME						
PART TIME						
TEMPORARY						

III. ANALYSIS (See Fiscal Note Preparation Instruction, Section II)

This legislation provides funds for the construction of a 30,000 sq. ft. public safety facility in Anchorage to house an expanded Statewide Crime Laboratory, the Anchorage Metropolitan Drug Enforcement Unit, and the local Alaska State Troopers and Fish & Wildlife Protection Detachments. This represents a shift in direction for the Crime Lab from being a limited service AST facility to becoming a full-service operation designed to meet the needs of all local law enforcement agencies in the State.

IV. DATE January 25, 1983 PREPARED BY Frank Allan Phone 269-5691

Original: Legislative Finance DIVISION AST Initials [Signature]
cc: Budget and Management DEPARTMENT OF PUBLIC SAFETY Initials [Signature]
Prime Sponsor (First Legislator Named)

33-001 (Rev. 12/82)

OMB Reviewed by: Eric Laschever

Alaska House of Representatives
MEMO



Phone: 465-3725
Room: 214 Capitol

From the desk of CHIEF CLERK

TO: Finance DATE: 3/30/83

Please return HB 33- you now have the
committee substitute.

Kris

ARCHITECTS GDM &
ASSOCIATES INC.

March 8, 1984

Department of Public Safety
Pouch 6213-99502
670 Fireweed
Anchorage, AK 99503

ATTN: Jim Messick

RE: ANCHORAGE STATEWIDE FORENSIC LABORATORY
DOT/PF X-10023, GDM 83-70

Dear Jim,

During the week of March 5-9, 1984, Architects GDM met with our lab consultants to review and discuss the design development drawings of the proposed Anchorage Statewide Forensic Laboratory. We met with, at their facilities, Dave Lucas, Director, Center for Forensic Science, Toronto, Canada; Robert Gleason, Administrative Director, FBI Crime Laboratory, Washington, D.C.; Larry Cockrell, Director, Arkansas State Crime Laboratory, Little Rock, Arkansas; Victor Reeve, Director, California Department of Justice Crime Laboratory, Sacramento, California and Rex Wilkins, architect and laboratory consultant Little Rock, Arkansas. These people, their staff and their facilities are representative of the current state of the art in forensic laboratory planning and design.

During their reviews each remarked on the Alaska State Troopers fortunate opportunity to design a "full service" lab that would meet the professions functional and service needs in an efficient and secure manner. This "full service" aspect of the project was in their viewpoint vitally important, because it enhanced the opportunity and ability to investigate and examine a case more thoroughly and expediently. In addition, in its formal operation and design it could strengthen and maintain the integrity and preservation of evidence, which is an essential concern for the criminalists and the court.

While all our consultants had some personal philosophical and operational ideas slightly different from those of the Alaska State Troopers, they were unanimous in their concern over particular areas. In general it was felt with the opening of the new lab, the present caseload will increase greatly because of immediate accessibility for state and local agencies. More cases of a lesser degree will be brought in because the elimination of processing complexity and time delay from sending cases outside. This they felt will impact greatly what they thought was a conservatively sized laboratory.

Their major areas of concern were:

1. **Storage:** Because of our states vast size and dispersed population, our storage capabilities, even with policies designed to have individual police jurisdictions store their evidence, will be used-up very quickly.
2. **Serology:** Serology is the fastest growing area of Forensic Science. This was enumerated on by the FBI and verified by the Arkansas Crime Lab which has had a 250% increase in examinations of this type in the last 3 years. (See attached for Arkansas departmental breakdowns.) Serology space requirements will probably grow the fastest of any in the lab.
3. **Instrumentation:** While designed for programmed pieces of equipment, and with some growth in mind, the future inclusion of a second mass spectrometer, or a scanning electron microscope or other future pieces of larger equipment may render the space to small.
4. **Photography:** This is a very important function for the recording, preserving and comparison of evidence. It is used by all the Forensic Science disciplines. Present plans are for the simplest of manual methods for black and white film development and processing. Potential volume and the need for color processing could increase the required size of this area four fold.
5. **Office Space:** A large concern was the absence of office space for the criminalists. All the facilities we visited provided this type of work area. Given the amount of paperwork and quiet research the criminalist must perform, it was felt this type of work area was very important. Providing desk type areas in the labs - given their general demeanor - seemed as though it would detract from the needs of both lab work and report writing.
6. **Ballistics/Firearms/Toolmarks:** Due to the perceived Alaskan lifestyle it was considered that this area of investigation would assume a heavy workload, and could be larger. The intent primarily being to accommodate a growing firearms collection which is essential for the Firearm and Ballistics Expert.
7. **Records:** It is generally considered that an active case record file of three years needs to be immediately accessible. All the labs case records, like evidence, needs to be held in a secure manner. How they are accessed and the amount that can be stored at immediate hand and also long term needed to be further addressed in terms of procedure and more identifiable square feet.

March 8, 1984
Department of Public Safety
Page 3 of 3

The building's general design and organization received the approval of our consultants but it was obvious to them there were no excesses or luxuries. They were in agreement that the necessary functions had been accounted for in workable sized spaces. Their major comment was that, if anything, more area will eventually be needed.

Simultaneous with the development of the final arrangement of the lab we have been investigating future internal reorganizations and are allowing the means to do so in a manner consistent with our budget. The methods include an overhead interstitial space for electrical, plumbing, air handling and gases, etc.; careful disposition of fixed structural elements, and non-load bearing wall constructions that will be easily demountable. Similarly, conceptual scenarios for expansion have also been considered in the design. At present, of the 16,942 gross square feet planned for construction, 11,709 net square feet are directly assignable to programmed functions. This represents a net to gross efficiency of 70% which is very high for a laboratory building. The remainder of the square footage is taken up by corridors, bathrooms, mechanical and other ancillary spaces necessary for the total functioning of the building.

Sincerely,

Bruce Teel
Architects: GDM & Associates, Inc.

BT/djs

Enclosure: Summary page 4

cc: Jim Hutton, GDM
File

AGENCY'S OBJECTIVES, PERFORMANCE, AND OPERATIONS (CONTINUED)

A summary of the activity of the State Crime Laboratory for the three years ended June 30, 1983, is listed as follows:

	Year Ended June 30,		
	1983	1982	1981
MEDICAL EXAMINER			
Autopsies	541	545	600
TRACE EVIDENCE			
Cases Completed	629	482	219
Items of Evidence Received	2,772	1,928	2,364
Items Examined	2,711	2,414	2,080
DRUG ANALYSIS			
Cases Completed	4,781	3,909	4,124
Tests Performed	51,431	45,728	56,561
Samples Analyzed	14,540	7,790	7,948
FIREARMS/TOOLMARKS			
Items Received	6,341	3,880	3,212
Firearms Exams	378	301	265
Microscopic Exams	4,709	3,160	2,785
Serial Number Restoration	58	11	25
Toolmark Exams	166	117	164
Cases Completed	449	310	314
LATENT FINGERPRINTS			
Cases Completed	1,338	1,000	876
Items Processed for Latents	7,255	4,112	4,884
Suspects Compared	2,169	1,531	1,161
Identification from Latents	738	708	476
QUESTIONED DOCUMENTS			
Cases Completed	1,269	912	670
Documents Examined	26,447	17,899	16,856
PHOTOGRAPHY			
Work Orders Completed	1,368	782	652
Items Photographed	4,756	2,411	1,902
Exposures	11,507	4,356	4,055
Prints Processed	20,754	12,969	11,966
SEROLOGY			
Cases Completed	973	1,255	573
Tests Performed	42,422	30,407	16,993
Blood Groupings	17,744	12,074	4,756
Acid Phosphatase Exams	3,643	4,889	2,864
Sperm	2,766	2,269	2,379
TOXICOLOGY			
Cases Completed	1,670	909	875
Alcohols	1,651	1,029	812
Drug Screens	3,664	1,530	1,424
Specific Drugs	1,068	358	314

STATE OF ALASKA

DEPARTMENT OF PUBLIC SAFETY OFFICE OF THE COMMISSIONER

BILL SHEFFIELD, GOVERNOR

POUCH N
JUNEAU, ALASKA 99811
PHONE:

March 9, 1984

House Finance Committee
Alaska State Legislature
Pouch V
Juneau, AK 99811

Gentlemen,

This letter responds to the report of the House Finance Subcommittee from the last session relating to HB-33 which proposed \$8.1 million for a combined Public Safety Facility in Anchorage that included a Statewide Crime Lab, offices for the local Alaska State Troopers and Fish and Wildlife Protection Posts and the Metro Drug Unit. The post facilities included a garage and an indoor shooting range.

Although the existence of the Subcommittee report became known to me, and the Department of Public Safety, only a few days ago, it appears the Department has nonetheless complied with the Subcommittee's intent.

In brief, the Subcommittee recommended two things:

- (1) That only the Crime Lab portion of the combined facilities project be supported, and;
- (2) That a Finance Committee Substitute for HB-33 be prepared making an appropriation of \$402,000 to DOT/PF for the design of the Crime Lab.

In justification of these recommendations, the Subcommittee noted:

- (1) That it was not necessary to build a structure for any of the functions in HB-33, other than the lab, and;
- (2) That a better cost estimate for the lab could only be derived from the actual design, and;
- (3) That the 5,500 square feet proposed as expansion for future needs of the Crime Lab was not needed, bringing the original request of 17,000 square feet to 11,250 square feet remaining for the lab. (The original request of 11,250 sq. ft. and 5,500 sq. ft. was rounded to 17,000 sq. ft.; moreover, the 17,000 sq. ft. did not include space originally suggested for the multi-lane shooting range and garage as well)

The Legislature ultimately adopted the two recommendations of the Subcommittee, by appropriating \$402,000 for design work of just the Crime Lab. (Commissioner Sundberg's letter of March 7, agreed to deleting all but the Crime Lab portion from HB-33). Subsequently the firm of GDM Associates, of Anchorage, Fairbanks and Juneau, was contracted by DOT/PF to perform the design work. This aspect has progressed well and all work is on schedule. The final aspect of the architectural and engineering phase - the Construction Documents - will be completed April 20.

Representative Walt Furnace prefiled 2nd SSB-487 for this session, which contained funding for the construction of the Lab (\$5,603,000) and that portion of the operating expenses foreseen during FY85, (\$239,000). An identical measure was introduced into the Senate (SB-381) by Senator Faiks and others. Both measures have advanced to their respective Finance Committees.

Comments appear appropriate concerning the justification set for by the Subcommittee in their report last year.

The decision to not fund the other items requested in HB-33 is a matter of legislative discretion. That same decision was made by the Commissioner in favor of the Crime Lab being built.

The observation that a better cost estimate can be obtained after design work is completed, is of course true. At this time our original estimate appears accurate. Both the architectural firm and DOT/PF have substantially confirmed our figures.

The decision to eliminate the space in the Lab for expansion requires further discussion. The Subcommittee at no point intended that any forensic science discipline was to be eliminated - only that the portion anticipated for expansion was to be deleted. This has been done. However, the Combined Facility Project as originally envisioned in HB-33 contained several general use areas that would be shared by all of the occupants of the building. This was planned in order to obtain the best use of the requested funding. When all space other than the Lab itself was eliminated, the garage and the multi-lane shooting range which was also needed by the Crime Lab was dropped. The garage was anticipated to double as a vehicle inspection area and the range was to double as a ballistics testing area. In order to perform the types of testing proposed for the new Crime Lab, minimal areas must be included to perform these tests. Thus, the demise of the Combined Facilities concept in fact increased the space requirements of the Crime Lab as a 'stand alone' project. The classroom area, which was not included in our original space estimates was also included in the Lab. These three items alone account for about 2,000 sq. ft of the area in question. The balance represents the space required for supporting facilities, which in the same way the costs become more certain after the design work was completed, the actual amount of non-operational area became more certain as the design work progressed. As the Subcommittee correctly noted last

This was not made clear to the Subcommittee last year

year, there was little guidance provided regarding why particular amounts of space were needed. With the design work well along, the Department can now provide that information in the form of floor plan information developed by the architect.

The total area required for the forensic science disciplines proposed is 16,942 square feet. The following is a brief recap of the cost figures contained in the fiscal note:

I. Capital Cost - Total \$5,603,000		
A. <u>Construction</u>		
1.	FBI advised using 180% of local commercial construction cost which was determined to be \$125/sq. ft., yielding \$225/sq. ft. x 17,000 sq. ft. =	3,825.0
2.	DOT/PF overhead, H & E work, Planning and Contingency = 1,147.0 minus 402.0 already appropriated =	745.0
B. <u>Equipment & Furnishings</u>		
1.	Instrumentation 609.0 million, per listing in Lab Plan.	
2.	Furnishings 250.0 million. FBI said to use 15% of construction. To save costs, we used less than 10%.	
	859.0 million + 12% inflation =	962.0
C.	<u>Commodities</u> - Estimated at	071.0
	Total Construction (Million)	<u>\$5,603.0</u>
II. <u>Operating Costs</u> - (that portion estimated for FY'85)		
A.	<u>Personal Services</u> - Seven Criminalists to be hired at staggered times during the fiscal year =	\$195,403
B.	<u>Travel</u> - Estimate needed for training & related	7,500
C.	<u>Contractual</u> - Telephone, Electricity, other utilities, building repairs and maintenance. Estimated at	22,500
D.	<u>Commodities</u> - Heating fuel & Miscellaneous	14,025
		<u>\$239,428</u>

It is interesting to note that the cost per square foot of the proposed facility for the design, construction and equipping is \$330.71. The Subcommittee's estimate was very close to this figure although a bit higher - \$349.66.

House Finance Committee

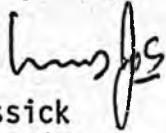
March 9, 1984

Page Four

To sum up, both recommendations made by the Subcommittee last year have been adopted. The Committee's recommendation to fund the forensic science disciplines originally proposed has been accomplished although requiring more support space than either of us envisioned, but at a slightly lesser cost per square foot than determined by the Subcommittee.

I'm sorry this response has been so lengthy, but it is the priority construction project of the Department of Public Safety, it has received extensive support from criminal justice agencies and individuals statewide, and is eagerly anticipated by law enforcement officials in federal, state and local agencies throughout Alaska.

Sincerely yours,



James Messick
Special Assistant

STATE OF ALASKA

BILL SHEFFIELD, GOVERNOR

DEPARTMENT OF PUBLIC SAFETY OFFICE OF THE COMMISSIONER

POUCH N
JUNEAU, ALASKA 99811
PHONE:

March 3, 1983

465-4322

*This only recaps what
has already been presented
in the Capital Budget + HB 33
Rd. 3/7/83*

The Honorable Al Adams
Chairman, House Finance Committee
Alaska State Legislature
Pouch V
Juneau, Alaska 99811

RECEIVED
3-4-83

Dear Representative Adams:

To follow-up on the information provided to you Tuesday, February 22, 1983 concerning House Bill 33, additional research has been done and hopefully this information will assist you in your decision making process.

The FY83 Capital Budget request included monies to build a Crime Laboratory. The total square footage in the FY83 request was 20,000. 10,000 square feet for the Crime Lab and 10,000 square feet for Alaska State Troopers, Fish & Wildlife Protection, Metro Unit, firing range, exercise area, and warm storage garage. Governor Hammond's priorities moved this FY83 request to FY84. Because of the additional time to fully research the Crime Lab needs, a more intensive study by Mr. Jim Messick identified a more exacting space need for the Crime Lab, which is now requested at 17,000 square feet.

HB 33 is referred to as the Crime Lab Bill and proposes funding of \$8.1 million, of which \$6.043 million is proposed for the laboratory and the balance for operational space for the Metro Unit, Fish & Wildlife Protection, and Anchorage Trooper Post along with space to accommodate the physical fitness area, warm storage area for emergency response team van, proficiency range, and evidence storage for Fish & Wildlife.

With regard to the lab, all space and construction costs we have used were obtained from the FBI, based upon their experience in completing their new forensic science laboratory in Quantico, Virginia. Mr. Jim Messick spent an intensive three days at the FBI lab with its Director reviewing their costs. Their information indicated that:

1. The total cost of a forensic lab building will be about 180% of the cost of commercial building construction due to the unusual and very intensive electrical requirements, air

March 3, 1983

- exchange to carry away noxious chemical fumes, extensive plumbing to support laboratory functions, etc.
2. Half of the total lab space should be for operational purposes; the other half for non-operational purposes (hallways, stairs, storage, etc.).
 3. Each lab analyst requires approximately 150 square feet of work space, tables, etc. with slightly less for clerical.
 4. Additionally, the FBI strongly recommends that new construction include space for expansion (their Quantico Lab utilizes their expansion area for training of Law Enforcement Officers).

Based upon these conclusions by the FBI, the space requirements for the proposed lab are:

Existing staff of 12, including clerical and photographic functions requires: 1,700 sq. ft.

Proposed new hires (11) based upon the existing level of need for lab services required: 1,700 sq. ft.

Common operational areas for equipment requires: 2,350 sq. ft.

Total operational area: 5,750 sq. ft.

Approximately same area for non-operational purposes: 5,500 sq. ft.

Expansion (to be used as classrooms): 5,500 sq. ft.

TOTAL 17,000 sq. ft.

Cost of construction using the above data yield:

17,000 sq. ft. X \$110 per sq. ft. (commercial space cost in Anchorage) X 180% = \$3.366 million.

Cost of instrumentation needs:

Although the FBI said their equipment cost about 75% of the building cost, we have calculated equipment required beyond that already on hand = \$.609 million (or substantially less than 75%).

The Honorable
Al Adams

-3-

March 3, 1983

Cost of furnishings:

Although the FBI said their furnishings amounted to about 15% of their building costs, we have used a lesser figure of \$.250.

Cost of commodities:

Our estimate of \$71,000

Recap (in millions)

Construction	\$3.366
30% DOT/PF	1.100
Instrumentation	.609
Furnishings	.250
Commodities	.071
Subtotal	<u>\$5.396</u>

12% inflation per DOT/PF .647

Grand Total \$6.043 for new crime lab

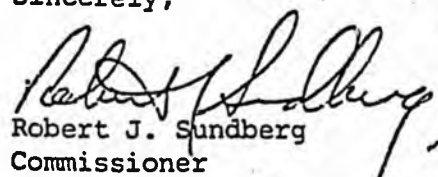
--The DOT/PF cost of 30% and the inflation of 12% were obtained from DOT/PF last year. Testimony seemed to indicate those figures were high. If the "overhead" required can be reduced to less than 30%, we would be happy to accept a lower figure. The recommended 12% inflation has dropped to a lower figure at present, although the economy could reflate by the time construction begins in 1984.

The second aspect of HB 33 relates to the construction of space for the Metro Unit, Fish & Wildlife Protection and the Anchorage Trooper Post.

Because of the need for the crime lab by law enforcement in Alaska, the Directors of both the Alaska State Troopers and Fish & Wildlife Protection have agreed, with my concurrence, to eliminate the space requested for those agencies.

Please call me if further information is required.

Sincerely,


Robert J. Sundberg
Commissioner

cc: Emil Notti
Legislative Assistant
Representative Bettisworth
Representative Furnace
Representative Hurlbert
Representative Duncan

COMMITTEE REPORT
SENATE

FURTHER:

5/27/83

Date: 5/27/83

Mr. President:

The Committee on FINANCE has had CS 33 (FIN)

Special appropriation to the Department of Transportation and Public Facilities for design of a statewide crime lab facility in Anchorage, Alaska.

under consideration and (a majority of the committee) (the committee) reports it back with the following recommendations:

- do pass do not pass
- do pass with attached amendments(s) same title
- replace with CS for _____ new title
- and recommends _____
- AND attaches a "Letter of Intent" New Fiscal Note
- reports it back without recommendation
- referred to the _____ Committee

MEMBERS SIGNING
DO PASS

MEMBERS HAVING
OTHER RECOMMENDATIONS:

CHAIRMAN

Offered: 4/6/83
Referred: Rules

Original sponsors: Furnace, Martin,
Barnes, et al

Funding Information

General Fund	\$ 402,000
Other Funds	-0-
	<u>\$ 402,000</u>

1 IN THE HOUSE BY THE FINANCE COMMITTEE

2 CS FOR SPONSOR SUBSTITUTE FOR HOUSE BILL NO. 33 (Finance)

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 THIRTEENTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act making a special appropriation to the Depart-
7 ment of Transportation and Public Facilities for
8 design of a statewide crime lab facility in
9 Anchorage; and providing for an effective date."

10 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

11 * Section 1. The sum of \$402,000 is appropriated from the general fund
12 to the Department of Transportation and Public Facilities for design of a
13 statewide crime lab facility in Anchorage.

14 * Sec. 2. The appropriation made by this Act is for a capital project
15 and is subject to AS 37.25.020.

16 * Sec. 3. This Act takes effect July 1, 1983.



ALASKA STATE LEGISLATURE
HOUSE OF REPRESENTATIVES
RESEARCH AGENCY

Pouch Y. State Capitol
Juneau, Alaska 99811
(907) 465-3991

January 24, 1983

MEMORANDUM

To: Representative Walt Furnace
From: Leonard Steinberg, Research Staff *L.S.*
Re: FBI Examination of Legal Evidence
Research Request 83-11

Steve Levi of your office requested the following information:

- 1) The number of Alaska criminal cases which made use of the FBI crime lab in Washington D.C.;
- 2) How many legal cases went to court with FBI assistance;
- 3) How often the FBI's time for analysis exceeded Alaska's 120 day limitation for court appearances; and
- 4) What specific evidence has been sent to the FBI for analysis.

Our attempts to answer these questions involved contacting: the Federal Bureau of Investigation in Anchorage and in Washington D.C.; the State of Alaska's Chief Prosecutor and the Anchorage District Attorney; the Alaska State Troopers; and the municipal police in Anchorage and Fairbanks.

Number of Alaska Criminal Cases Involving the FBI's Crime Lab

The table below lists the number of Alaska cases and the number of different examinations of Alaska evidence that were performed by the FBI's crime lab in federal fiscal years 1980, 1981, and 1982. (The federal fiscal year runs from October 1 to September 30; FY 80, for example began October 1, 1979 and ended September 30, 1980.) This information was obtained from Manuel Marquez, of the Federal Bureau of Investigation in Washington D.C.

The number of examinations performed is many times larger than the number of cases because each case often includes many different items and each item may undergo numerous different examinations.

Representative Walt Furnace
January 24, 1983
Page Two

<u>Year</u>	<u>Number of Cases</u>	<u>Number of Examinations</u>
1980	181	10,744
1981	209	13,531
1982	236	19,510

Number of Legal Cases Which Went to Court With FBI Assistance

There are no records of the number of times the FBI's crime lab analysis has actually been used in court. Though FBI crime lab examiners frequently travel to Alaska to testify in criminal proceedings, only rough estimates of the number of visits are available.

According to Larry Nelson, the FBI's chief agent in Alaska, not a month goes by without one of the FBI's crime lab examiners traveling to Alaska to make a court appearance. Captain Smith, of the Anchorage Police Department, said he knew of at least 6 FBI crime lab examiners that visited Alaska during the last year.

The FBI in Washington D.C. may maintain records on number of visits examiners make to testify in Alaska courts, but the FBI declined to make that information available to us. The use of FBI examiners or laboratory analysis could be reconstructed by reviewing all the criminal files of the District Attorneys in Alaska, but doing so would require a substantial amount of time.

Excessive Time Required For FBI Analysis

Law enforcement authorities in Alaska are concerned that the FBI's crime lab will not analyze and return the evidence to Alaska in time to meet the requirement, unless waived by the defendant, that criminal trials take place within 120 days of an arrest.

There is little evidence of the FBI's laboratory analysis failing to arrive in time for a trial. The State Troopers have described one case (Alaska vs. Lewis, 1981) in which the trial court suppressed use of the FBI's lab report received the morning of the trial, but that case was complicated by other factors and the suppression was overturned on appeal.

No other specific cases of laboratory analysis too late for use in court have been cited. However, Fairbanks Police Chief Matthew Kiernan estimated that perhaps in one percent of his cases he was unable to use the

¹ Department of Public Safety. The Development of a Full Service Forensic Laboratory for Law Enforcement in Alaska. September 1982. Page 11.

Representative Walt Furnace
January 24, 1983
Page Three

FBI's laboratory analysis in court because of delays. Other Alaska law enforcement authorities indicated that, to their knowledge, evidence has always arrived in time, but not without the use of personal contacts between the law enforcement authorities in Alaska and FBI examiners in Washington D.C. Estimates of amount of time normally required for an FBI analysis ranged from two to six months.²

Specific Evidence Sent To The FBI For Analysis

It was not possible to obtain a list of the specific legal evidence which has been sent from Alaska to the FBI for analysis in the time available to complete this research request. All law enforcement authorities were contacted but regular records of what has been submitted for analysis have not been maintained.

The FBI crime lab in Washington D.C. may maintain records of what it has analyzed for Alaska, but this information was not made available to us. A list of the specific evidence sent to the FBI for analysis could be reconstructed by going through all the criminal files of the law enforcement authorities in Alaska, but doing so would require a substantial amount of time.

The FBI's crime lab conducts all known types of criminal analysis. Examples of Alaskan criminal evidence currently analyzed by the FBI include: questioned documents, body fluids, firearms, trace metals, voice prints, hair, fibers, and fingerprints.

Additional Information

Currently, all FBI service (analysis and expert witnesses) are available free of charge. The FBI crime lab's work is well respected and the examiners make excellent witnesses. However, many of Alaska's law enforcement officials spoke of the federal government's intention to cease providing lab services for state and local police.

The FBI, while supporting the development of regional criminal analysis laboratories, denies any intention of reducing services to state and local law enforcement authorities.

* * * * *

We hope this information is useful to you. Please let us know if we can be of any further assistance.

² Captain Smith of the Anchorage Police Department estimated normal FBI turnaround time at two months while Major Korhonen of the Alaska State Troopers estimated normal turnaround times of five to six months.

STATE OF ALASKA

THE LEGISLATURE

BUDGET AND AUDIT COMMITTEE

FINANCE DIVISION
POUCH WF-STATE CAPITOL
JUNEAU, ALASKA 99811
PHONE: (907) 465-3795

MEMORANDUM

Date: February 11, 1983

To: Albert P. Adams, Chairman
House Finance Committee

From: Robert F. Schroeder, Fiscal Analyst
Legislative Finance Division

Subject: HB 33 State Trooper crime laboratory and office facility

To put the size of this project into perspective, the proposed building would be slightly larger than the combined square footage of the fourth and fifth floors of the state capitol building which contain approximately 14,500 square feet on each floor (this includes halls, elevator area, stairway and lavatories). The information provided by the Department of Public Safety shows the proposed facility will provide a 30,000 square foot building with 17,000 sq. ft. allocated for office and laboratory space for a full-service statewide crime lab. The other 13,000 square feet will house the Trooper and Fish & Wildlife enforcement posts, a three bay garage, an indoor shooting range and the metropolitan drug enforcement unit.

By using the fiscal note provided by the Department of Public Safety and dated January 25, 1983, in combination with the capital project proposal on pages 62-73 of the Department's capital budget the costs can be prorated by user and function as follows:

	<u>Crime Lab</u>	<u>AST + FWP Posts</u>	<u>Metro Unit</u>	<u>Total</u>
construction costs	3,366.0	1,210.0	220.0	4,796.0
DOT/PF overhead, architect, planning, contingency fund, etc. (30%)	1,033.2	371.4	67.6	1,472.2
commodities	71.0			71.0
equipment	859.0	37.5		896.5
Subtotal	5,329.2	1,618.9	287.6	7,235.7
Inflation (12%)	636.5	193.4	34.4	864.3
Total	5,965.7	1,812.3	322.0	8,100.0

It appears that the amount of the budget pertaining to the constructing and outfitting of the crime lab is approximately \$6,000,000. This amount includes a 30 per cent assessment on construction costs for Department of Transportation and Public Facilities overhead, architect, planning, contingency fund, and other costs. It also contains an amount for inflation of 12%.

BS/cb

THE DEVELOPMENT OF A FORENSIC LABORATORY IN ALASKA

EXECUTIVE SUMMARY

Within the last decade or so, a series of Supreme Court decisions relative to search and seizure, interrogation, and confessions have had the effect of limiting the scope of permissible investigative activities by law enforcement agencies nationwide. This situation has resulted in the increased attention to the use of physical evidence in criminal investigations, and the subsequent development of state and regional crime laboratories throughout the country to analyze this evidence.

The application of the natural and physical sciences to items of evidence found at a crime scene is an increasing part of modern investigations and courtroom trials, and often becomes a crucial part of judicial proceedings. The increased reliance upon analysis of physical evidence also confers upon crime laboratories the responsibility for the highest degree of professionalism in their work.

The role of the forensic laboratory is to assist both the investigator and the prosecutor in their efforts to reconstruct and explain the crime, the crime scene and information about the possible offender. The results

* This paper summarizes the more extensive report issued by the Department of Public Safety in September 1982 entitled "The Development of a Full Service Forensic Laboratory for Law Enforcement in Alaska."

of crime lab tests provide facts contributing to the exoneration of the innocent and the establishment of proof of the guilty. The modern lab requires highly trained scientists and technicians who use costly materials and sophisticated instrumentation in an expensive environment, for there can be no compromise in the quality of the work they perform.

A modern, full-services Crime Lab presents a wide array of expertise.

Some of these are:

- * Toxicology A Toxicologist detects and identifies the presence of drugs or poisons in body tissues, fluids and organs.
- * Firearms and Tool Marks Examination The Examiner can, for example, match a spent bullet to the gun that fired it by examination of the microscopic markings on the bullet caused by the irregularities on the inner surface of the gun barrel, among other capabilities. As a Tool Marks Specialist, he can identify the tire iron or other implement found in the suspect's car as the one that pried open the window or door of the victim's home by comparing and matching the microscopic nicks on the blade of the tire iron to the impressions left in the wooden window sill.
- * Forensic Serology The Forensic Serologist, through analyses of body fluids, semen, and saliva found at the crime scene, can limit the population group of the assailant to those within certain blood groups, thus eliminating persons with other blood groups and characteristics as suspects in a given crime.
- * Questioned Documents Examination The Questioned Documents Examiner can ascertain the source or authenticity of a document through the many characteristics of an individual's handwriting, as well as through the variations in typewriter letters as a function of the use and wear to the machine's moving parts, and through the analyses of inks and different types of paper.
- * Forensic Chemistry The Forensic Chemist tests and analyzes unknown substances. By testing substances thought to be illegal drugs, he can determine the type drug, its relative purity and the substances that may be mixed with the drug. He can also identify small amounts of accelerants from a suspected arson fire by testing charred and burned materials.

found at the fire, as well as numerous other related tasks requiring chemical analysis.

- * Trace Evidence Examination: The Trace Evidence Examiner can narrow the origin of minute bits of evidence such as human hair and fibers, that are exchanged during a violent confrontation, to a group that includes (or excludes) the suspect. The brown head hair found on the shirt of the suspect can be shown to match the hair of the victim of the assault.
- * Fingerprint Examination: The Fingerprint Examiner can match fingerprints found on a gun or some other surface to those of the suspect based upon the matching of the characteristics of the fingerprint ridges that are unique to each individual. (The Automated Fingerprint Identification System, funded during the 1987 session of the legislature, and now being developed, will be placed within the Crime Laboratory.)

It is the use of carefully gathered evidence, analyzed by the latest scientific methodologies of the numerous forensic disciplines that builds both a strong case against the accused, while eliminating other persons as suspects.

Unfortunately, state and local law enforcement agencies in Alaska do not have a laboratory with such capabilities. In fact, Alaska is the only State without a statewide crime lab. The rudimentary laboratory in the Troopers building in Anchorage is limited by space, personnel and budget to only narcotics testing, fingerprint identification and crime photography. These very limited services are performed at no cost to all law enforcement agencies in Alaska.

Historically Alaska has depended upon the FBI lab to perform criminalistics tests and has done so to a greater degree than any other state. While this dependence upon the FBI has worked reasonably well in the past, the FBI has recently suffered budget cuts as part of the general decrease.

in federal government services and the widespread economic malaise throughout the Nation.) As a result, some test results may not be received for three to six months.) Since the Speedy Trial Rule in Alaska requires trial within 120 days of the arrest, test results may not be available by the time of trial, nor can additional investigation occur as a result of the outcome of the tests.) Complete investigation and prosecution is therefore adversely affected.

However, the FBI's continuing role of providing crime laboratory services may be changing. A 1980 report by the General Accounting Office charges that the Bureau's policy of providing free criminalistics services has acted to inhibit the growth of regional and state wide crime laboratories. The effect of this report creates doubt that Alaska, and the other states, can rely upon FBI lab testing to the extent they have in the past. Decreased availability of FBI laboratory services has already begun with a fee now being charged for certain services and a much closer screening of requests.) Most recently the FBI questioned the need for tests in a case that involved a double Homicide. Any further curtailment of service will be even more serious since Alaska is both increasing its population and experiencing a general crime increase while crime is generally decreasing nationwide.

While Alaska has, and continues to have some of its forensic tests performed by private laboratories elsewhere, this is not a good alternative for several reasons. Alaskan law enforcement agencies have no control over the scheduling, priorities of the methodologies and techniques used by external facilities; nor is there any control over the caliber of personnel

performing the tests. Additionally, such tests are usually expensive, since a profit is being made. Finally, the state has to pay a fee for all tests performed plus the travel and expenses of the technicians from the "lower 48" states who testify during trial.

That crime is increasing in Alaska appears obvious to the public. A few statistics show the extent of increase of crime:

- * Forcible rape increased from 51 cases per 100,000 population in 1978 to 88 cases per 100,000 population in 1982;
- * Robbery increased from 87 cases per 100,000 population in 1978 to 110 cases per 100,000 population in 1982.
- * Total violent crime increased from 399 cases per 100,000 population in 1978 to 556 cases per 100,000 population in 1982.

Public attitudes as measured by recent public opinion surveys seem to reflect the growing crime statistics. Survey conclusions were that most people in Alaska believe crime is increasing faster than the population. The public further believes a basic cause of crime in Alaska is the failure of the justice system to punish criminals. A statewide forensics lab would aid the justice system in better investigation and more effective prosecution.

Perhaps the most compelling reason for a full services crime lab is the high evidentiary value of the crime scene evidence that has been analyzed and tested, for the test results provide irrefutable information about the suspect to either link him to a crime, or to eliminate him from any further investigation. Laboratory test results can thus provide a high degree of proof of guilt.

Passage of legislation aimed at increasing interdiction of illicit drugs throws a further burden upon the existing, very limited laboratory at the Troopers headquarters. The addition of five more drug investigators funded by the legislature for 1982 has caused an increasing backlog of drug related tests to perform, while the number of forensic chemists remains the same.

The continuing lack of a crime lab to service Alaska's law enforcement efforts is affecting the decisions and perceptions of some police officers. Knowing there is no facility to perform certain tests and analyses in a timely and affordable manner, some officers place a decreasing value upon physical evidence found at the crime scene and therefore tend to rely upon other means to develop their case. Therefore their case will lack the high evidentiary value that often results from forensic examinations. Any future, long term lack of a statewide lab, in the face of reduced services from the FBI, will probably result in the emergence of several small efforts by local enforcement agencies to provide their own testing facilities. These will likely be of limited scope, overlapping, and fragmented efforts of unknown value. The smaller police departments, unable to afford their own limited facilities, and unable to pay the high costs charged by private labs elsewhere will simply do without forensic tests.

If the above reasons argue forcefully for the development of a statewide crime lab to provide services for all law enforcement agencies in Alaska, the next questions are how big a facility is needed, what services need to be provided and what are the costs involved?

The term full-services lab as proposed here means the hiring of scientific personnel to the extent that the level of need in Alaska justifies a given discipline. For example, a forensic chemist could be hired immediately on the basis that the present drug-testing workload, and that of the immediate future justifies another full time forensic chemist. By contrast, a Questioned Documents Examiner would not be hired now because the workload is not sufficient to support a full-time Examiner. Each of the other forensic disciplines would be similarly evaluated. Those forensic services of an infrequent nature, or that require sophisticated instrumentation that cannot be justified in Alaska would be referred by Alaska's lab to another facility in the "Lower 48 states." To avoid the problems associated with the use of other labs, these external resource agencies would be carefully screened, evaluated, and their proficiency periodically tested, to ensure that personnel, procedures and equipment utilized are the best possible. Sufficient workload exists now, and in the in the future, for the hiring of the following forensic scientists and support personnel:

1. An additional Forensic Chemist }
2. Serologist }
3. Trace Evidence Technician }
4. Firearms and Tool Marks Examiner }
5. Administrative Assistant }
6. Laboratory Director }

In short, the proposed Crime Lab would hire its scientific and support personnel when the existing and forecasted workload makes such action

cost-effective while contracting with other forensic facilities to perform the balance of the work.)

The lab would honor all requests by law enforcement agencies, by either performing the work in house or through contract elsewhere. This central facility would be managed by the State Troopers, as the statewide law enforcement agency, for the benefit of the entire law enforcement community in the state. Tests and related services would continue to be provided by the lab at no cost to the requesting agencies.

The proposed lab would be constructed adjacent to the Troopers Headquarters in Anchorage, on state-owned land. Substantial assistance has been obtained from the FBI Forensic Research Laboratory in Quantico, Virginia, during an intensive on-site visit to obtain their recommendations for construction requirements, space needs for scientific personnel and instrumentation, and the factors that should be used in calculating overall construction costs. (These are presented in detail in the main lab report).

Using data recommended by the FBI to provide a Crime Lab with the above professional staff, plus the staff of the existing facility of the Troopers, necessary instrumentation and the numerous support requirements, plus some space for expansion in the years ahead will require a structure of about 17,000 square feet. FBI data indicates that cost per square foot is about 180% of the cost of commercial construction (\$110/sq ft, according to the Department of Transportation and Public Facilities) due to the unique plumbing, heating, ventilation and construction aspects required by a forensic laboratory. Construction would total about \$3.366 million, with

another \$1.1 million, representing 30% of construction cost required by the State for building State buildings. Scientific instruments, furnishing and commodities will total another \$930 million, for a total of \$5.396 million. A 12% inflation factor for construction in 1983 and 1984 brings the grand total to \$6.043 million.*

* The lab constitutes about 75% of the total cost of the FY'84 Public Safety Anchorage Combined Facility Capital Improvement Project request that has been under development through the normal budgeting process over the last four years, totaling \$8.1 million and 30,000 square feet.

. STEVE LEVI, LEGISLATIVE AIDE
N. WALT FURNACE, STATE HOUSE
NEAU

AR MR. LEVI:

ANK YOU FOR YOUR INQUIRY REGARDING THE BREAKOUT OF THE \$8.1 MILLION FOR A
IME LAB. THIS TOTAL INCLUDES \$6.043 MILLION FOR THE LAB WITH AN ADDITIONAL
.057 MILLION FOR THE RELOCATION OF THE ANCHORAGE METRO DRUG UNIT, (WHICH IS
E COMBINED DRUG INTERDICTION TEAM OF STATE TROOPERS AND ANCHORAGE POLICE
PT.), THE FISH AND WILDLIFE PROTECTION DIVISION, AND THE ANCHORAGE POST OF
E STATE TROOPERS INTO NEW QUARTERS WITH ADEQUATE SPACE. THESE THREE AGENCIES
D THE LAB WOULD BE COMBINED INTO A SINGLE FACILITY LOCATED ON STATE LAND
JACENT TO THE EXISTING TROOPERS HEADQUARTERS.

E RELOCATION OF THESE THREE AGENCIES AND THE NEW LAB IS PART OF THE CAPITAL
PROVEMENT REQUEST UNDER DEVELOPMENT FOR THE PAST FOUR YEARS AS A COMBINED
OJECT. THE LAB PLAN AND THE EXECUTIVE SUMMARY, OF COURSE, RELATE ONLY TO THE
W LAB. PAGES 104-110 DETAIL THE EXPECTED LAB-RELATED COSTS.

EASE CALL ME IF ANY ADDITIONAL INFORMATION IS NEEDED.

NCERELY YOURS,
J. MESSICK / DD/SP11 \

MEMORANDUM

State of Alaska

TO: Colonel T. R. Anderson
Director
Alaska State Troopers

DATE: April 14, 1982

FILE NO:

TELEPHONE NO:

FROM: Lieutenant John Lucking *JL*
Acting Commander
Criminal Investigation Bureau

SUBJECT: FBI Lab Services

As a matter of information to you, be advised of the following recent events this past week.

In our homicide case 182-3203 (double murder) evidence was sent to the FBI Lab for analysis. This included some hair and fiber tests. We received a phone call from the lab in which they discussed the necessity of our requested examinations.

In our homicide case 181-50020 (double murder) evidence was sent to the FBI Lab for analysis. This also included hairs and fibers for testing. Again we received a phone call from the lab in which they discussed the necessity of our requested examinations.

I believe these events demonstrate the pressure the FBI Lab is under in attempting to accomodate all requests.